

## Independent invariants to the special total affine transformation of the vector fields up the order 9

The weight is the number of edges of all types. The structure are the numbers of the moments of the individual orders in one term, e.g. structure: 4,2 means that each term contains fourth moments of the second order and two moments of the third order. The generating graph is given by the list of edges, e.g. the column  $\begin{matrix} 1 \\ 2 \end{matrix}$  means an edge connecting the nodes 1 and 2. The connections of the edges and nodes of the second type are labeled by a letter V, so, the column  $\begin{matrix} V1 \\ V2 \end{matrix}$  is an edge of the second type and  $\begin{matrix} V1 \\ 2 \end{matrix}$  (oriented up) or  $\begin{matrix} 1 \\ V2 \end{matrix}$  (oriented down) are edges of the third type.

### Invariants of the order 2

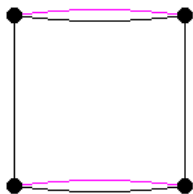
$$Z_1 = -(\mu_{20}^{(1)})^2(\mu_{02}^{(2)})^2 + 4\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{11}^{(2)}\mu_{02}^{(2)} + 2\mu_{20}^{(1)}\mu_{02}^{(1)}\mu_{20}^{(2)}\mu_{02}^{(2)} - 4\mu_{20}^{(1)}\mu_{02}^{(1)}(\mu_{11}^{(2)})^2 - 4(\mu_{11}^{(1)})^2\mu_{20}^{(2)}\mu_{02}^{(2)} + 4\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)} - (\mu_{02}^{(1)})^2(\mu_{20}^{(2)})^2$$

weight=6

structure: 4

Generating graph:

|   |    |   |    |   |   |
|---|----|---|----|---|---|
| 1 | V1 | 1 | V2 | 2 | 3 |
| 2 | V3 | 3 | V4 | 4 | 4 |



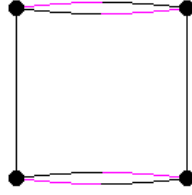
$$Z_2 = 2\mu_{20}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)}\mu_{02}^{(2)} - (\mu_{20}^{(1)})^2(\mu_{02}^{(2)})^2 - 2\mu_{20}^{(1)}(\mu_{11}^{(2)})^3 + 2\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{11}^{(2)}\mu_{02}^{(2)} + 2\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{02}^{(2)} - 2\mu_{20}^{(1)}(\mu_{02}^{(1)})^2\mu_{11}^{(2)} - 2\mu_{11}^{(1)}(\mu_{20}^{(2)})^2\mu_{02}^{(2)} + 2\mu_{11}^{(1)}\mu_{20}^{(2)}(\mu_{11}^{(2)})^2 - 2(\mu_{11}^{(1)})^3\mu_{02}^{(2)} + 2(\mu_{11}^{(1)})^2\mu_{02}^{(1)}\mu_{11}^{(2)} - 2\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)} + (\mu_{02}^{(1)})^2(\mu_{20}^{(2)})^2$$

weight=6

structure: 4

Generating graph:

|   |    |    |    |    |   |
|---|----|----|----|----|---|
| 1 | 1  | V1 | V2 | 2  | 3 |
| 2 | V3 | 3  | 4  | V4 | 4 |



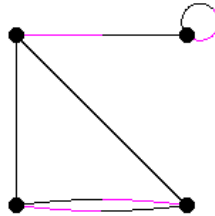
$$\begin{aligned}
Z_3 = & (\mu_{20}^{(2)})^3 \mu_{02}^{(2)} - (\mu_{20}^{(2)})^2 (\mu_{11}^{(2)})^2 - \mu_{20}^{(1)} (\mu_{11}^{(2)})^3 + 3\mu_{20}^{(1)} \mu_{02}^{(1)} (\mu_{11}^{(2)})^2 - 3\mu_{20}^{(1)} (\mu_{02}^{(1)})^2 \mu_{11}^{(2)} \\
& + \mu_{20}^{(1)} (\mu_{02}^{(1)})^3 - 3\mu_{11}^{(1)} (\mu_{20}^{(2)})^2 \mu_{02}^{(2)} + 5\mu_{11}^{(1)} \mu_{20}^{(2)} (\mu_{11}^{(2)})^2 + 3(\mu_{11}^{(1)})^2 \mu_{20}^{(2)} \mu_{02}^{(2)} - 4(\mu_{11}^{(1)})^2 (\mu_{11}^{(2)})^2 \\
& - (\mu_{11}^{(1)})^3 \mu_{02}^{(2)} + 5(\mu_{11}^{(1)})^2 \mu_{02}^{(1)} \mu_{11}^{(2)} - (\mu_{11}^{(1)})^2 (\mu_{02}^{(1)})^2 - 4\mu_{11}^{(1)} \mu_{02}^{(1)} \mu_{20}^{(2)} \mu_{11}^{(2)} \\
& - \mu_{11}^{(1)} (\mu_{02}^{(1)})^2 \mu_{20}^{(2)} - \mu_{02}^{(1)} (\mu_{20}^{(2)})^2 \mu_{11}^{(2)} + 2(\mu_{02}^{(1)})^2 (\mu_{20}^{(2)})^2
\end{aligned}$$

weight=6

structure: 4

Generating graph:

|   |    |    |   |    |    |
|---|----|----|---|----|----|
| 1 | 1  | V1 | 2 | V2 | V4 |
| 2 | V3 | 3  | 3 | 4  | 4  |



### Invariants of the order 3

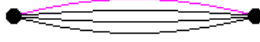
$$Z_4 = \mu_{30}^{(1)} \mu_{03}^{(2)} - 3\mu_{21}^{(1)} \mu_{12}^{(2)} + 3\mu_{12}^{(1)} \mu_{21}^{(2)} - \mu_{03}^{(1)} \mu_{30}^{(2)}$$

weight=4

structure: 0,2

Generating graph:

|    |   |   |   |
|----|---|---|---|
| V1 | 1 | 1 | 1 |
| V2 | 2 | 2 | 2 |



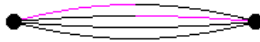
$$Z_5 = -\mu_{30}^{(2)} \mu_{12}^{(2)} + \mu_{30}^{(1)} \mu_{03}^{(2)} + (\mu_{21}^{(2)})^2 - 2\mu_{21}^{(1)} \mu_{12}^{(2)} - \mu_{21}^{(1)} \mu_{03}^{(1)} + \mu_{12}^{(1)} \mu_{21}^{(2)} + (\mu_{12}^{(1)})^2$$

weight=4

structure: 0,2

Generating graph:

$$\begin{array}{cccc} V1 & 1 & 1 & 1 \\ & 2 & V2 & 2 & 2 \end{array}$$



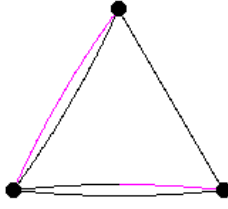
$$\begin{aligned} Z_6 = & -\mu_{20}^{(1)} \mu_{11}^{(2)} \mu_{12}^{(2)} - \mu_{20}^{(1)} \mu_{12}^{(1)} \mu_{02}^{(2)} + \mu_{20}^{(1)} \mu_{02}^{(2)} \mu_{21}^{(2)} + \mu_{20}^{(1)} \mu_{03}^{(1)} \mu_{11}^{(2)} \\ & + \mu_{11}^{(1)} \mu_{20}^{(2)} \mu_{12}^{(2)} + \mu_{11}^{(1)} \mu_{21}^{(1)} \mu_{02}^{(2)} - \mu_{11}^{(1)} \mu_{02}^{(2)} \mu_{30}^{(2)} - \mu_{11}^{(1)} \mu_{03}^{(1)} \mu_{20}^{(2)} \\ & - \mu_{02}^{(1)} \mu_{20}^{(2)} \mu_{21}^{(2)} - \mu_{02}^{(1)} \mu_{21}^{(1)} \mu_{11}^{(2)} + \mu_{02}^{(1)} \mu_{11}^{(2)} \mu_{30}^{(2)} + \mu_{02}^{(1)} \mu_{12}^{(1)} \mu_{20}^{(2)} \end{aligned}$$

weight=5

structure: 2,1

Generating graph:

$$\begin{array}{cccccc} V1 & 1 & 1 & 1 & 2 \\ V2 & 2 & V3 & 3 & 3 \end{array}$$



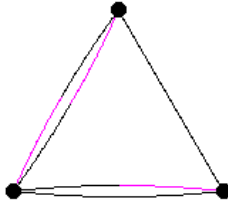
$$\begin{aligned}
Z_7 = & \mu_{21}^{(1)} \mu_{20}^{(2)} \mu_{02}^{(2)} - \mu_{21}^{(1)} (\mu_{11}^{(2)})^2 - \mu_{20}^{(1)} \mu_{12}^{(1)} \mu_{02}^{(2)} - \mu_{20}^{(2)} \mu_{02}^{(2)} \mu_{30}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{02}^{(2)} \mu_{21}^{(2)} - \mu_{20}^{(1)} \mu_{02}^{(1)} \mu_{12}^{(2)} + \mu_{20}^{(1)} \mu_{02}^{(1)} \mu_{03}^{(1)} + (\mu_{11}^{(2)})^2 \mu_{30}^{(2)} \\
& - 2\mu_{11}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} + 2\mu_{11}^{(1)} \mu_{12}^{(1)} \mu_{11}^{(2)} + (\mu_{11}^{(1)})^2 \mu_{12}^{(2)} - (\mu_{11}^{(1)})^2 \mu_{03}^{(1)} + \mu_{02}^{(1)} \mu_{20}^{(2)} \mu_{21}^{(2)} \\
& - \mu_{02}^{(1)} \mu_{12}^{(1)} \mu_{20}^{(2)}
\end{aligned}$$

weight=5

structure: 2,1

Generating graph:

$$\begin{array}{cccc}
V1 & 1 & 1 & 1 & 2 \\
& 2 & V2 & V3 & 3 & 3
\end{array}$$



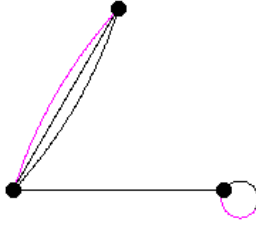
$$\begin{aligned}
Z_8 = & -\mu_{30}^{(1)} \mu_{11}^{(2)} \mu_{02}^{(2)} + \mu_{21}^{(1)} \mu_{20}^{(2)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{20}^{(2)} \mu_{03}^{(2)} + 2\mu_{21}^{(1)} (\mu_{11}^{(2)})^2 \\
& + \mu_{20}^{(1)} \mu_{11}^{(2)} \mu_{12}^{(2)} + \mu_{20}^{(1)} \mu_{11}^{(1)} \mu_{03}^{(2)} - \mu_{20}^{(1)} \mu_{02}^{(1)} \mu_{12}^{(2)} - 3\mu_{12}^{(1)} \mu_{20}^{(1)} \mu_{11}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{20}^{(2)} \mu_{12}^{(2)} - \mu_{11}^{(1)} \mu_{21}^{(1)} \mu_{02}^{(2)} - 2\mu_{11}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} + 2\mu_{11}^{(1)} \mu_{12}^{(1)} \mu_{11}^{(2)} \\
& - 2(\mu_{11}^{(1)})^2 \mu_{12}^{(2)} - \mu_{11}^{(1)} \mu_{03}^{(1)} \mu_{20}^{(2)} + 3\mu_{11}^{(1)} \mu_{02}^{(1)} \mu_{21}^{(2)} + \mu_{02}^{(1)} \mu_{30}^{(1)} \mu_{02}^{(2)} + \mu_{03}^{(1)} (\mu_{20}^{(2)})^2 \\
& - \mu_{02}^{(1)} \mu_{20}^{(2)} \mu_{21}^{(2)} - 2\mu_{02}^{(1)} \mu_{21}^{(1)} \mu_{11}^{(2)} + \mu_{02}^{(1)} \mu_{11}^{(2)} \mu_{30}^{(2)} + \mu_{02}^{(1)} \mu_{12}^{(1)} \mu_{20}^{(2)} \\
& - (\mu_{02}^{(1)})^2 \mu_{30}^{(2)}
\end{aligned}$$

weight=5

structure: 2,1

Generating graph:

$$\begin{array}{cccc}
V1 & 1 & 1 & 1 & V3 \\
V2 & 2 & 2 & 3 & 3
\end{array}$$



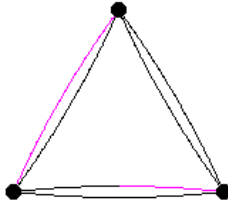
$$\begin{aligned}
Z_9 = & \mu_{30}^{(1)} \mu_{21}^{(2)} \mu_{03}^{(2)} - \mu_{30}^{(1)} (\mu_{12}^{(2)})^2 + \mu_{30}^{(1)} \mu_{12}^{(1)} \mu_{03}^{(2)} - \mu_{30}^{(1)} \mu_{03}^{(1)} \mu_{12}^{(2)} \\
& - \mu_{21}^{(1)} \mu_{30}^{(2)} \mu_{03}^{(2)} + \mu_{21}^{(1)} \mu_{21}^{(2)} \mu_{12}^{(2)} - (\mu_{21}^{(1)})^2 \mu_{03}^{(2)} + \mu_{21}^{(1)} \mu_{12}^{(1)} \mu_{12}^{(2)} \\
& + \mu_{21}^{(1)} \mu_{03}^{(1)} \mu_{21}^{(2)} + \mu_{12}^{(1)} \mu_{30}^{(2)} \mu_{12}^{(2)} - \mu_{12}^{(1)} (\mu_{21}^{(2)})^2 - (\mu_{12}^{(1)})^2 \mu_{21}^{(2)}
\end{aligned}$$

weight=6

structure: 0,3

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 2 & 2 \\
V2 & 2 & V3 & 3 & 3 & 3
\end{array}$$



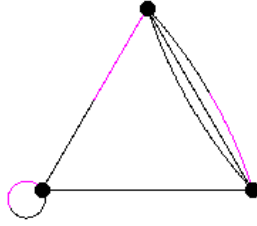
$$\begin{aligned}
Z_{10} = & -(\mu_{30}^{(2)})^2 \mu_{03}^{(2)} + 3\mu_{30}^{(2)} \mu_{21}^{(2)} \mu_{12}^{(2)} - \mu_{30}^{(1)} (\mu_{12}^{(2)})^2 + 2\mu_{30}^{(1)} \mu_{03}^{(1)} \mu_{12}^{(2)} - \mu_{30}^{(1)} (\mu_{03}^{(1)})^2 \\
& + 2\mu_{21}^{(1)} \mu_{30}^{(2)} \mu_{03}^{(2)} - 2(\mu_{21}^{(2)})^3 + \mu_{21}^{(1)} \mu_{21}^{(2)} \mu_{12}^{(2)} - (\mu_{21}^{(1)})^2 \mu_{03}^{(2)} + \mu_{21}^{(1)} \mu_{12}^{(1)} \mu_{12}^{(2)} \\
& + 3\mu_{21}^{(1)} \mu_{12}^{(1)} \mu_{03}^{(1)} - 5\mu_{21}^{(1)} \mu_{03}^{(1)} \mu_{21}^{(2)} - 5\mu_{12}^{(1)} \mu_{30}^{(2)} \mu_{12}^{(2)} + 2\mu_{12}^{(1)} (\mu_{21}^{(2)})^2 + 2(\mu_{12}^{(1)})^2 \mu_{21}^{(2)} \\
& - 2(\mu_{12}^{(1)})^3 + \mu_{12}^{(1)} \mu_{03}^{(1)} \mu_{30}^{(2)} + \mu_{03}^{(1)} \mu_{30}^{(2)} \mu_{21}^{(2)}
\end{aligned}$$

weight=6

structure: 0,3

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 2 & 2 & 2 \\
1 & V2 & 3 & V3 & 3 & 3
\end{array}$$



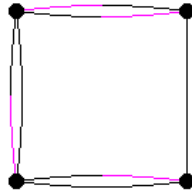
$$\begin{aligned}
Z_{11} = & \mu_{20}^{(1)} \mu_{21}^{(1)} \mu_{11}^{(2)} \mu_{03}^{(2)} - \mu_{20}^{(1)} \mu_{21}^{(1)} \mu_{03}^{(1)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{11}^{(2)} \mu_{30}^{(2)} \mu_{03}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} \mu_{12}^{(2)} - 2\mu_{20}^{(1)} \mu_{12}^{(1)} \mu_{11}^{(2)} \mu_{12}^{(2)} + \mu_{20}^{(1)} (\mu_{12}^{(1)})^2 \mu_{02}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{02}^{(2)} \mu_{30}^{(2)} \mu_{12}^{(2)} - \mu_{20}^{(1)} \mu_{02}^{(2)} (\mu_{21}^{(2)})^2 + \mu_{20}^{(1)} \mu_{03}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} \\
& - \mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{02}^{(2)} \mu_{12}^{(2)} + \mu_{11}^{(1)} \mu_{30}^{(1)} \mu_{03}^{(2)} \mu_{02}^{(2)} + \mu_{11}^{(1)} \mu_{20}^{(2)} \mu_{30}^{(2)} \mu_{03}^{(2)} \\
& - \mu_{11}^{(1)} \mu_{20}^{(2)} \mu_{21}^{(2)} \mu_{12}^{(2)} - \mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{20}^{(2)} \mu_{03}^{(2)} - \mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{12}^{(2)} \mu_{02}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{02}^{(2)} \mu_{21}^{(2)} + 2\mu_{11}^{(1)} \mu_{12}^{(1)} \mu_{20}^{(2)} \mu_{12}^{(2)} - \mu_{11}^{(1)} \mu_{12}^{(1)} \mu_{02}^{(2)} \mu_{30}^{(2)} \\
& - \mu_{11}^{(1)} \mu_{03}^{(2)} \mu_{20}^{(2)} \mu_{21}^{(2)} + \mu_{02}^{(1)} \mu_{30}^{(2)} \mu_{11}^{(2)} \mu_{12}^{(2)} - \mu_{02}^{(1)} \mu_{30}^{(1)} \mu_{03}^{(2)} \mu_{11}^{(2)} \\
& - \mu_{02}^{(1)} \mu_{20}^{(2)} \mu_{30}^{(2)} \mu_{12}^{(2)} + \mu_{02}^{(1)} \mu_{20}^{(2)} (\mu_{21}^{(2)})^2 - 2\mu_{02}^{(1)} \mu_{21}^{(2)} \mu_{11}^{(2)} \mu_{21}^{(2)} \\
& + \mu_{02}^{(1)} \mu_{21}^{(2)} \mu_{12}^{(2)} \mu_{11}^{(2)} + \mu_{02}^{(1)} \mu_{21}^{(1)} \mu_{03}^{(2)} \mu_{20}^{(2)} + \mu_{02}^{(1)} \mu_{12}^{(1)} \mu_{11}^{(2)} \mu_{30}^{(2)} \\
& - \mu_{02}^{(1)} (\mu_{12}^{(1)})^2 \mu_{20}^{(2)}
\end{aligned}$$

weight=7

structure: 2,2

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & V2 & 2 & 3 \\
& 2 & 2 & V3 & 3 & 4 & V4 & 4
\end{array}$$



**Invariants of the order 4**

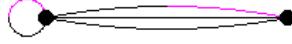
$$\begin{aligned}
Z_{12} = & \mu_{31}^{(1)} \mu_{02}^{(2)} - \mu_{20}^{(2)} \mu_{22}^{(2)} - 2\mu_{22}^{(1)} \mu_{11}^{(2)} + \mu_{20}^{(1)} \mu_{13}^{(2)} - \mu_{20}^{(1)} \mu_{04}^{(1)} + 2\mu_{11}^{(2)} \mu_{31}^{(2)} \\
& + \mu_{13}^{(1)} \mu_{20}^{(2)} - 2\mu_{11}^{(1)} \mu_{22}^{(2)} + 2\mu_{11}^{(1)} \mu_{13}^{(2)} - \mu_{02}^{(2)} \mu_{40}^{(2)} + \mu_{02}^{(1)} \mu_{31}^{(2)} - \mu_{02}^{(1)} \mu_{22}^{(1)}
\end{aligned}$$

weight=4

structure: 1,0,1

Generating graph:

$$\begin{array}{cccc} V1 & 1 & 1 & 1 \\ & 1 & V2 & 2 & 2 \end{array}$$



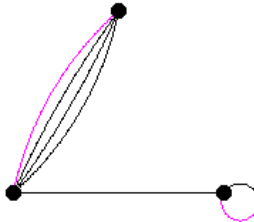
$$\begin{aligned} Z_{13} = & -\mu_{40}^{(1)(2)(2)} \mu_{11}^{(2)(2)} \mu_{03}^{(2)} + \mu_{31}^{(1)(2)(2)} \mu_{20}^{(2)(2)} \mu_{03}^{(2)} + \mu_{30}^{(1)(2)(2)} \mu_{20}^{(2)(2)} \mu_{04}^{(2)} + 3\mu_{31}^{(1)(2)(2)} \mu_{11}^{(2)(2)} \mu_{12}^{(2)} \\ & -\mu_{30}^{(1)(2)(2)} \mu_{11}^{(2)(2)} \mu_{13}^{(2)} - 3\mu_{22}^{(1)(2)(2)} \mu_{20}^{(2)(2)} \mu_{12}^{(2)} - 3\mu_{21}^{(1)(2)(2)} \mu_{20}^{(2)(2)} \mu_{13}^{(2)} - 3\mu_{22}^{(1)(2)(2)} \mu_{11}^{(2)(2)} \mu_{21}^{(2)} \\ & + 3\mu_{21}^{(1)(2)(2)} \mu_{11}^{(2)(2)} \mu_{22}^{(2)} - \mu_{11}^{(1)(1)(2)} \mu_{31}^{(1)(2)} \mu_{03}^{(2)} - \mu_{11}^{(1)(1)(2)} \mu_{30}^{(1)(2)} \mu_{04}^{(2)} + 3\mu_{13}^{(1)(2)(2)} \mu_{20}^{(2)(2)} \mu_{21}^{(2)} \\ & + 3\mu_{12}^{(1)(2)(2)} \mu_{20}^{(2)(2)} \mu_{22}^{(2)} + 3\mu_{11}^{(1)(1)(2)} \mu_{22}^{(1)(2)} \mu_{12}^{(2)} + 3\mu_{11}^{(1)(1)(2)} \mu_{21}^{(1)(2)} \mu_{13}^{(2)} + \mu_{13}^{(1)(2)(2)} \mu_{11}^{(2)(2)} \mu_{30}^{(2)} \\ & - 3\mu_{12}^{(1)(2)(2)} \mu_{11}^{(2)(2)} \mu_{31}^{(2)} - 3\mu_{11}^{(1)(1)(2)} \mu_{13}^{(1)(2)} \mu_{21}^{(2)} - 3\mu_{11}^{(1)(1)(2)} \mu_{12}^{(1)(2)} \mu_{22}^{(2)} + \mu_{11}^{(1)(1)(2)} \mu_{04}^{(1)(2)} \mu_{30}^{(2)} \\ & + \mu_{11}^{(1)(1)(2)} \mu_{03}^{(1)(2)} \mu_{31}^{(2)} + \mu_{02}^{(1)(1)(2)} \mu_{40}^{(1)(2)} \mu_{03}^{(2)} - 3\mu_{02}^{(1)(1)(2)} \mu_{31}^{(1)(2)} \mu_{12}^{(2)} + \mu_{02}^{(1)(1)(2)} \mu_{30}^{(1)(2)} \mu_{13}^{(2)} \\ & - \mu_{04}^{(1)(2)(2)} \mu_{20}^{(2)(2)} \mu_{30}^{(2)} - \mu_{03}^{(1)(2)(2)} \mu_{20}^{(2)(2)} \mu_{31}^{(2)} + 3\mu_{02}^{(1)(1)(2)} \mu_{22}^{(1)(2)} \mu_{21}^{(2)} - 3\mu_{02}^{(1)(1)(2)} \mu_{21}^{(1)(2)} \mu_{22}^{(2)} \\ & + \mu_{03}^{(1)(2)(2)} \mu_{11}^{(2)(2)} \mu_{40}^{(2)} - \mu_{02}^{(1)(1)(2)} \mu_{13}^{(1)(2)} \mu_{30}^{(2)} + 3\mu_{02}^{(1)(1)(2)} \mu_{12}^{(1)(2)} \mu_{31}^{(2)} - \mu_{02}^{(1)(1)(2)} \mu_{03}^{(1)(2)} \mu_{40}^{(2)} \end{aligned}$$

weight=6

structure: 1,1,1

Generating graph:

$$\begin{array}{cccccc} V1 & 1 & 1 & 1 & 1 & V3 \\ V2 & 2 & 2 & 2 & 3 & 3 \end{array}$$



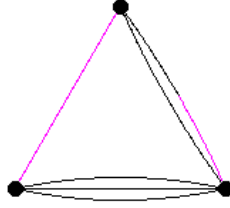
$$\begin{aligned}
Z_{14} = & \mu_{30}^{(1)} \mu_{20}^{(2)} \mu_{04}^{(2)} - \mu_{30}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} + \mu_{30}^{(1)} \mu_{13}^{(1)} \mu_{02}^{(2)} - \mu_{30}^{(1)} \mu_{04}^{(1)} \mu_{11}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{30}^{(2)} \mu_{04}^{(2)} - 3\mu_{21}^{(1)} \mu_{20}^{(2)} \mu_{13}^{(2)} + 3\mu_{20}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} - 3\mu_{21}^{(1)} \mu_{22}^{(1)} \mu_{02}^{(2)} \\
& + 3\mu_{21}^{(1)} \mu_{11}^{(2)} \mu_{22}^{(2)} - 3\mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} + 3\mu_{21}^{(1)} \mu_{13}^{(1)} \mu_{11}^{(2)} + \mu_{20}^{(1)} \mu_{03}^{(2)} \mu_{31}^{(2)} \\
& + \mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{13}^{(2)} + 3\mu_{12}^{(1)} \mu_{31}^{(1)} \mu_{02}^{(2)} - \mu_{11}^{(1)} \mu_{31}^{(1)} \mu_{03}^{(2)} + 3\mu_{12}^{(1)} \mu_{20}^{(2)} \mu_{22}^{(2)} \\
& - 3\mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{22}^{(2)} - 3\mu_{12}^{(1)} \mu_{22}^{(1)} \mu_{11}^{(2)} + 3\mu_{11}^{(1)} \mu_{22}^{(1)} \mu_{12}^{(2)} - 3\mu_{12}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} \\
& + 3\mu_{11}^{(1)} \mu_{12}^{(2)} \mu_{31}^{(2)} - 3\mu_{11}^{(1)} \mu_{13}^{(1)} \mu_{21}^{(2)} - \mu_{11}^{(1)} \mu_{03}^{(2)} \mu_{40}^{(2)} + \mu_{11}^{(1)} \mu_{04}^{(1)} \mu_{30}^{(2)} \\
& - \mu_{03}^{(1)} \mu_{40}^{(2)} \mu_{02}^{(2)} + \mu_{02}^{(1)} \mu_{40}^{(1)} \mu_{03}^{(2)} + \mu_{03}^{(1)} \mu_{31}^{(1)} \mu_{11}^{(2)} - 3\mu_{02}^{(1)} \mu_{31}^{(1)} \mu_{12}^{(2)} \\
& - \mu_{03}^{(1)} \mu_{20}^{(2)} \mu_{31}^{(2)} + 3\mu_{02}^{(1)} \mu_{22}^{(1)} \mu_{21}^{(2)} + \mu_{03}^{(1)} \mu_{11}^{(2)} \mu_{40}^{(2)} - \mu_{02}^{(1)} \mu_{13}^{(1)} \mu_{30}^{(2)}
\end{aligned}$$

weight=6

structure: 1,1,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 2 & 2 \\
V2 & 3 & 3 & 3 & V3 & 3
\end{array}$$



$$\begin{aligned}
Z_{15} = & \mu_{40}^{(1)} \mu_{11}^{(2)} \mu_{03}^{(2)} - 3\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{12}^{(2)} - \mu_{30}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} + \mu_{30}^{(1)} \mu_{13}^{(1)} \mu_{02}^{(2)} \\
& + \mu_{20}^{(2)} \mu_{30}^{(2)} \mu_{13}^{(2)} - \mu_{20}^{(1)} \mu_{30}^{(2)} \mu_{04}^{(2)} - 3\mu_{20}^{(2)} \mu_{21}^{(2)} \mu_{22}^{(2)} + 3\mu_{20}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} \\
& - 3\mu_{21}^{(1)} \mu_{22}^{(1)} \mu_{02}^{(2)} + 3\mu_{20}^{(2)} \mu_{12}^{(2)} \mu_{31}^{(2)} + 3\mu_{22}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} + 3\mu_{21}^{(1)} \mu_{11}^{(2)} \mu_{22}^{(2)} \\
& - 3\mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} - \mu_{20}^{(2)} \mu_{03}^{(2)} \mu_{40}^{(2)} + \mu_{20}^{(1)} \mu_{03}^{(2)} \mu_{31}^{(2)} + 3\mu_{12}^{(1)} \mu_{31}^{(1)} \mu_{02}^{(2)} \\
& - \mu_{11}^{(1)} \mu_{31}^{(1)} \mu_{03}^{(2)} + \mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{04}^{(2)} + 3\mu_{11}^{(1)} \mu_{22}^{(1)} \mu_{12}^{(2)} - 3\mu_{11}^{(1)} \mu_{21}^{(1)} \mu_{13}^{(2)} \\
& - \mu_{13}^{(1)} \mu_{11}^{(2)} \mu_{30}^{(2)} - 3\mu_{12}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} - 3\mu_{11}^{(1)} \mu_{13}^{(1)} \mu_{21}^{(2)} + 3\mu_{11}^{(1)} \mu_{12}^{(1)} \mu_{22}^{(2)} \\
& + \mu_{11}^{(1)} \mu_{04}^{(1)} \mu_{30}^{(2)} - \mu_{11}^{(1)} \mu_{03}^{(1)} \mu_{31}^{(2)} - \mu_{03}^{(1)} \mu_{40}^{(1)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{30}^{(1)} \mu_{04}^{(2)} \\
& + 3\mu_{02}^{(1)} \mu_{21}^{(1)} \mu_{13}^{(1)} + \mu_{03}^{(1)} \mu_{11}^{(2)} \mu_{40}^{(2)} - 3\mu_{02}^{(1)} \mu_{12}^{(1)} \mu_{22}^{(2)} + \mu_{02}^{(1)} \mu_{03}^{(1)} \mu_{31}^{(2)}
\end{aligned}$$

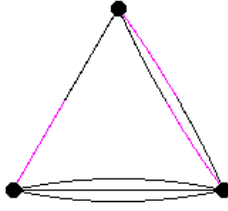
weight=6

structure: 1,1,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & V2 & 2 \\
& & 2 & 3 & 3 & 3 & V3 & 3
\end{array}$$





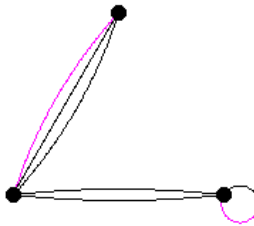
$$\begin{aligned}
Z_{16} = & -\mu_{40}^{(1)} \mu_{02}^{(2)} \mu_{12}^{(2)} + 2\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{12}^{(2)} + 2\mu_{31}^{(1)} \mu_{02}^{(2)} \mu_{21}^{(2)} + \mu_{20}^{(1)} \mu_{30}^{(2)} \mu_{04}^{(2)} \\
& -\mu_{22}^{(1)} \mu_{20}^{(2)} \mu_{12}^{(2)} - 2\mu_{20}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} + \mu_{21}^{(1)} \mu_{22}^{(1)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{21}^{(1)} \mu_{04}^{(2)} \\
& -4\mu_{22}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} + \mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} - 2\mu_{21}^{(1)} \mu_{13}^{(1)} \mu_{11}^{(2)} + 2\mu_{20}^{(1)} \mu_{12}^{(1)} \mu_{13}^{(2)} \\
& -\mu_{22}^{(1)} \mu_{02}^{(2)} \mu_{30}^{(2)} + \mu_{21}^{(1)} \mu_{04}^{(1)} \mu_{20}^{(2)} - \mu_{20}^{(1)} \mu_{03}^{(1)} \mu_{22}^{(2)} - 2\mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{13}^{(2)} \\
& -2\mu_{12}^{(1)} \mu_{31}^{(1)} \mu_{02}^{(2)} + 2\mu_{13}^{(1)} \mu_{20}^{(2)} \mu_{21}^{(2)} + 4\mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{22}^{(2)} + 4\mu_{12}^{(1)} \mu_{22}^{(1)} \mu_{11}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{21}^{(1)} \mu_{13}^{(2)} + 2\mu_{13}^{(1)} \mu_{11}^{(2)} \mu_{30}^{(2)} - 2\mu_{11}^{(1)} \mu_{12}^{(2)} \mu_{31}^{(2)} - 2\mu_{12}^{(1)} \mu_{13}^{(1)} \mu_{20}^{(2)} \\
& -4\mu_{11}^{(1)} \mu_{12}^{(1)} \mu_{22}^{(2)} + 2\mu_{11}^{(1)} \mu_{03}^{(1)} \mu_{31}^{(2)} + \mu_{03}^{(1)} \mu_{40}^{(1)} \mu_{02}^{(2)} + \mu_{02}^{(1)} \mu_{30}^{(2)} \mu_{22}^{(2)} \\
& -2\mu_{03}^{(1)} \mu_{31}^{(1)} \mu_{11}^{(2)} - \mu_{04}^{(1)} \mu_{20}^{(2)} \mu_{30}^{(2)} - 2\mu_{02}^{(1)} \mu_{21}^{(2)} \mu_{31}^{(2)} + \mu_{03}^{(1)} \mu_{22}^{(1)} \mu_{20}^{(2)} \\
& -\mu_{02}^{(1)} \mu_{21}^{(1)} \mu_{22}^{(2)} + \mu_{02}^{(1)} \mu_{12}^{(2)} \mu_{40}^{(2)} + 2\mu_{02}^{(1)} \mu_{12}^{(1)} \mu_{31}^{(2)} - \mu_{02}^{(1)} \mu_{03}^{(1)} \mu_{40}^{(2)}
\end{aligned}$$

weight=6

structure: 1,1,1

Generating graph:

|    |   |   |   |   |   |    |
|----|---|---|---|---|---|----|
| V1 | 1 | 1 | 1 | 1 | 1 | V3 |
| V2 | 2 | 2 | 3 | 3 | 3 |    |



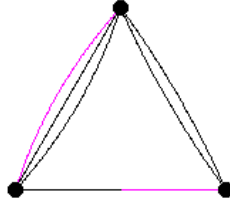
$$\begin{aligned}
Z_{17} = & -\mu_{40}^{(1)} \mu_{02}^{(2)} \mu_{12}^{(2)} + \mu_{30}^{(1)} \mu_{20}^{(2)} \mu_{04}^{(2)} + 2\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{12}^{(2)} - 2\mu_{30}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} \\
& + 2\mu_{31}^{(1)} \mu_{02}^{(2)} \mu_{21}^{(2)} + \mu_{30}^{(1)} \mu_{02}^{(2)} \mu_{22}^{(2)} - \mu_{22}^{(1)} \mu_{20}^{(2)} \mu_{12}^{(2)} - 2\mu_{21}^{(1)} \mu_{20}^{(2)} \mu_{13}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{22}^{(2)} \mu_{03}^{(2)} - \mu_{20}^{(1)} \mu_{21}^{(2)} \mu_{04}^{(2)} - 4\mu_{22}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} + 4\mu_{21}^{(1)} \mu_{11}^{(2)} \mu_{22}^{(2)} \\
& - 2\mu_{20}^{(1)} \mu_{13}^{(2)} \mu_{12}^{(2)} + 2\mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{13}^{(2)} - \mu_{22}^{(1)} \mu_{02}^{(2)} \mu_{30}^{(2)} - 2\mu_{21}^{(1)} \mu_{02}^{(2)} \mu_{31}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{04}^{(2)} \mu_{21}^{(2)} - \mu_{20}^{(1)} \mu_{03}^{(2)} \mu_{22}^{(2)} - 2\mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{03}^{(2)} + 2\mu_{13}^{(1)} \mu_{20}^{(2)} \mu_{21}^{(2)} \\
& + \mu_{12}^{(1)} \mu_{20}^{(2)} \mu_{22}^{(2)} + 4\mu_{11}^{(1)} \mu_{22}^{(2)} \mu_{12}^{(2)} + 2\mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} + 2\mu_{13}^{(1)} \mu_{11}^{(2)} \mu_{30}^{(2)} \\
& - 2\mu_{12}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} - 2\mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{21}^{(2)} - 4\mu_{11}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} + \mu_{12}^{(1)} \mu_{02}^{(2)} \mu_{40}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{03}^{(2)} \mu_{31}^{(2)} + \mu_{02}^{(1)} \mu_{40}^{(2)} \mu_{03}^{(2)} - 2\mu_{02}^{(1)} \mu_{31}^{(2)} \mu_{12}^{(2)} - \mu_{04}^{(1)} \mu_{20}^{(2)} \mu_{30}^{(2)} \\
& + \mu_{02}^{(1)} \mu_{22}^{(2)} \mu_{21}^{(2)} - \mu_{02}^{(1)} \mu_{21}^{(2)} \mu_{22}^{(2)} + 2\mu_{02}^{(1)} \mu_{12}^{(2)} \mu_{31}^{(2)} - \mu_{02}^{(1)} \mu_{03}^{(2)} \mu_{40}^{(2)}
\end{aligned}$$

weight=6

structure: 1,1,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 2 & 2 \\
V2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



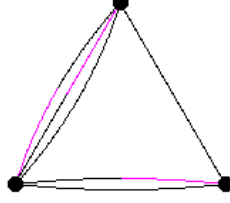
$$\begin{aligned}
Z_{18} = & -\mu_{40}^{(1)} \mu_{11}^{(2)} \mu_{03}^{(2)} + \mu_{40}^{(1)} \mu_{02}^{(2)} \mu_{12}^{(2)} + \mu_{31}^{(1)} \mu_{20}^{(2)} \mu_{03}^{(2)} + \mu_{30}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} \\
& - \mu_{31}^{(1)} \mu_{02}^{(2)} \mu_{21}^{(2)} - \mu_{30}^{(1)} \mu_{02}^{(2)} \mu_{22}^{(2)} + \mu_{20}^{(2)} \mu_{21}^{(2)} \mu_{22}^{(2)} - \mu_{22}^{(2)} \mu_{20}^{(2)} \mu_{12}^{(2)} \\
& - \mu_{21}^{(1)} \mu_{20}^{(2)} \mu_{13}^{(2)} - \mu_{20}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} + \mu_{21}^{(1)} \mu_{22}^{(2)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{22}^{(2)} \mu_{03}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{21}^{(2)} \mu_{04}^{(2)} - \mu_{20}^{(2)} \mu_{12}^{(2)} \mu_{31}^{(2)} + \mu_{22}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} + \mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} \\
& - \mu_{21}^{(1)} \mu_{13}^{(2)} \mu_{11}^{(2)} + \mu_{20}^{(1)} \mu_{13}^{(2)} \mu_{12}^{(2)} - \mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{13}^{(2)} - \mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{04}^{(2)} \\
& + \mu_{21}^{(1)} \mu_{02}^{(2)} \mu_{31}^{(2)} + \mu_{20}^{(1)} \mu_{03}^{(2)} \mu_{13}^{(2)} - \mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{22}^{(2)} + \mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{13}^{(2)} \\
& - \mu_{12}^{(1)} \mu_{31}^{(2)} \mu_{02}^{(2)} + \mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{03}^{(2)} - \mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{04}^{(2)} + \mu_{12}^{(1)} \mu_{20}^{(2)} \mu_{22}^{(2)} \\
& + \mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{04}^{(2)} + \mu_{11}^{(1)} \mu_{12}^{(2)} \mu_{40}^{(2)} - \mu_{12}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} - \mu_{11}^{(1)} \mu_{12}^{(2)} \mu_{31}^{(2)} \\
& + \mu_{12}^{(1)} \mu_{13}^{(2)} \mu_{20}^{(2)} - \mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{21}^{(2)} + \mu_{11}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} - \mu_{11}^{(1)} \mu_{03}^{(2)} \mu_{22}^{(2)} \\
& + \mu_{02}^{(2)} \mu_{30}^{(2)} \mu_{31}^{(2)} - \mu_{02}^{(1)} \mu_{30}^{(2)} \mu_{22}^{(2)} + \mu_{03}^{(1)} \mu_{31}^{(2)} \mu_{11}^{(2)} - \mu_{02}^{(1)} \mu_{31}^{(2)} \mu_{12}^{(2)} \\
& + \mu_{02}^{(1)} \mu_{30}^{(2)} \mu_{13}^{(2)} - \mu_{02}^{(2)} \mu_{21}^{(2)} \mu_{40}^{(2)} + \mu_{02}^{(1)} \mu_{21}^{(2)} \mu_{31}^{(2)} - \mu_{03}^{(1)} \mu_{22}^{(2)} \mu_{20}^{(2)} \\
& + \mu_{02}^{(1)} \mu_{22}^{(2)} \mu_{21}^{(2)} - \mu_{02}^{(1)} \mu_{21}^{(2)} \mu_{22}^{(2)} - \mu_{02}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} + \mu_{02}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)}
\end{aligned}$$

weight=6

structure: 1,1,1

Generating graph:

$$\begin{array}{cccccc} V1 & 1 & 1 & 1 & 1 & 2 \\ & 2 & V2 & 2 & V3 & 3 & 3 \end{array}$$



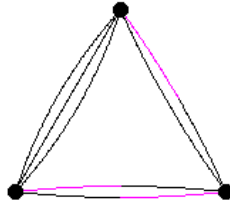
$$\begin{aligned} Z_{19} = & \mu_{40}^{(1)} \mu_{21}^{(2)} \mu_{04}^{(2)} - \mu_{40}^{(1)} \mu_{04}^{(1)} \mu_{12}^{(2)} - \mu_{30}^{(2)} \mu_{40}^{(2)} \mu_{04}^{(2)} + 4\mu_{30}^{(2)} \mu_{31}^{(2)} \mu_{13}^{(2)} \\ & - 3\mu_{30}^{(2)} (\mu_{22}^{(2)})^2 - 4\mu_{31}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} + 4\mu_{31}^{(1)} \mu_{13}^{(1)} \mu_{12}^{(2)} + \mu_{21}^{(1)} \mu_{40}^{(2)} \mu_{04}^{(2)} \\ & - 4\mu_{21}^{(1)} \mu_{31}^{(2)} \mu_{13}^{(2)} + 6\mu_{22}^{(1)} \mu_{21}^{(2)} \mu_{22}^{(2)} + 3\mu_{21}^{(1)} (\mu_{22}^{(2)})^2 - 3(\mu_{22}^{(1)})^2 \mu_{12}^{(2)} - \mu_{12}^{(1)} \mu_{40}^{(1)} \mu_{04}^{(2)} \\ & + 4\mu_{12}^{(1)} \mu_{31}^{(1)} \mu_{13}^{(2)} - 4\mu_{13}^{(1)} \mu_{21}^{(2)} \mu_{31}^{(2)} - 6\mu_{12}^{(1)} \mu_{22}^{(1)} \mu_{22}^{(2)} + 4\mu_{12}^{(1)} \mu_{13}^{(1)} \mu_{31}^{(2)} \\ & - \mu_{12}^{(1)} \mu_{04}^{(1)} \mu_{40}^{(2)} + \mu_{03}^{(1)} \mu_{40}^{(1)} \mu_{04}^{(1)} - 4\mu_{03}^{(1)} \mu_{31}^{(1)} \mu_{13}^{(1)} + \mu_{04}^{(1)} \mu_{21}^{(1)} \mu_{40}^{(2)} \\ & + 3\mu_{03}^{(1)} (\mu_{22}^{(1)})^2 \end{aligned}$$

weight=7

structure: 0,1,2

Generating graph:

$$\begin{array}{cccccc} 1 & 1 & 1 & V1 & 1 & V2 & 2 \\ & 2 & 2 & 2 & 3 & V3 & 3 & 3 \end{array}$$



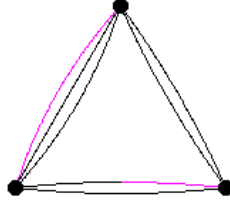
$$\begin{aligned} Z_{20} = & \mu_{40}^{(1)} \mu_{21}^{(2)} \mu_{04}^{(2)} - \mu_{40}^{(1)} \mu_{12}^{(2)} \mu_{13}^{(2)} - \mu_{31}^{(1)} \mu_{30}^{(2)} \mu_{04}^{(2)} - 2\mu_{31}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} \\ & + 3\mu_{31}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} + 3\mu_{22}^{(1)} \mu_{30}^{(1)} \mu_{13}^{(2)} + \mu_{21}^{(1)} \mu_{31}^{(1)} \mu_{04}^{(2)} - 3\mu_{21}^{(1)} \mu_{22}^{(1)} \mu_{13}^{(2)} \\ & - 3\mu_{22}^{(1)} \mu_{12}^{(2)} \mu_{31}^{(2)} + 3\mu_{21}^{(1)} \mu_{13}^{(1)} \mu_{22}^{(2)} - \mu_{21}^{(1)} \mu_{04}^{(1)} \mu_{31}^{(2)} - \mu_{12}^{(1)} \mu_{40}^{(1)} \mu_{04}^{(2)} \\ & - 3\mu_{13}^{(1)} \mu_{30}^{(2)} \mu_{22}^{(2)} + 2\mu_{12}^{(1)} \mu_{31}^{(1)} \mu_{13}^{(2)} + 2\mu_{13}^{(1)} \mu_{21}^{(2)} \mu_{31}^{(2)} + \mu_{13}^{(1)} \mu_{12}^{(2)} \mu_{40}^{(2)} \\ & - 2\mu_{12}^{(1)} \mu_{13}^{(1)} \mu_{31}^{(2)} + \mu_{12}^{(1)} \mu_{04}^{(1)} \mu_{40}^{(2)} + \mu_{03}^{(1)} \mu_{40}^{(1)} \mu_{13}^{(2)} + \mu_{04}^{(1)} \mu_{30}^{(1)} \mu_{31}^{(2)} \\ & - 3\mu_{03}^{(1)} \mu_{31}^{(1)} \mu_{22}^{(2)} - \mu_{04}^{(1)} \mu_{21}^{(2)} \mu_{40}^{(2)} + 3\mu_{03}^{(1)} \mu_{22}^{(1)} \mu_{31}^{(2)} - \mu_{03}^{(1)} \mu_{13}^{(1)} \mu_{40}^{(2)} \end{aligned}$$

weight=7

structure: 0,1,2

Generating graph:

|    |   |   |    |   |   |   |
|----|---|---|----|---|---|---|
| V1 | 1 | 1 | 1  | 1 | 2 | 2 |
| V2 | 2 | 2 | V3 | 3 | 3 | 3 |



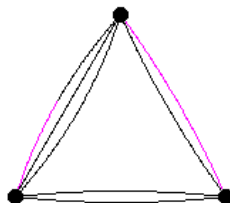
$$\begin{aligned}
 Z_{21} = & -\mu_{40}^{(1)} \mu_{21}^{(2)} \mu_{04}^{(2)} + 2\mu_{40}^{(1)} \mu_{12}^{(2)} \mu_{13}^{(2)} + \mu_{40}^{(1)} \mu_{13}^{(1)} \mu_{03}^{(2)} - \mu_{40}^{(1)} \mu_{03}^{(2)} \mu_{22}^{(2)} \\
 & -\mu_{40}^{(1)} \mu_{04}^{(1)} \mu_{12}^{(2)} + \mu_{31}^{(1)} \mu_{30}^{(2)} \mu_{04}^{(2)} - \mu_{30}^{(1)} \mu_{31}^{(2)} \mu_{04}^{(2)} + \mu_{30}^{(1)} \mu_{22}^{(2)} \mu_{13}^{(2)} \\
 & -\mu_{31}^{(1)} \mu_{22}^{(1)} \mu_{03}^{(2)} + \mu_{30}^{(1)} \mu_{22}^{(1)} \mu_{04}^{(2)} - 3\mu_{31}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} - 2\mu_{31}^{(1)} \mu_{13}^{(1)} \mu_{12}^{(2)} \\
 & -2\mu_{30}^{(1)} \mu_{13}^{(1)} \mu_{13}^{(2)} + 2\mu_{31}^{(1)} \mu_{03}^{(2)} \mu_{31}^{(2)} + 3\mu_{31}^{(1)} \mu_{04}^{(1)} \mu_{21}^{(2)} + \mu_{30}^{(1)} \mu_{04}^{(1)} \mu_{22}^{(2)} \\
 & + \mu_{21}^{(1)} \mu_{40}^{(2)} \mu_{04}^{(2)} - 2\mu_{22}^{(1)} \mu_{30}^{(2)} \mu_{13}^{(2)} + 2\mu_{21}^{(1)} \mu_{31}^{(2)} \mu_{13}^{(2)} - 2\mu_{21}^{(1)} \mu_{31}^{(1)} \mu_{04}^{(2)} \\
 & + 3\mu_{22}^{(1)} \mu_{21}^{(2)} \mu_{22}^{(2)} - 3\mu_{21}^{(1)} (\mu_{22}^{(2)})^2 + 3(\mu_{22}^{(1)})^2 \mu_{12}^{(2)} + 3\mu_{21}^{(1)} \mu_{22}^{(1)} \mu_{13}^{(2)} - 3\mu_{22}^{(1)} \mu_{13}^{(1)} \mu_{21}^{(2)} \\
 & -\mu_{22}^{(1)} \mu_{03}^{(2)} \mu_{40}^{(2)} - 2\mu_{22}^{(1)} \mu_{04}^{(1)} \mu_{30}^{(2)} - \mu_{21}^{(1)} \mu_{04}^{(1)} \mu_{31}^{(2)} - 3\mu_{12}^{(1)} \mu_{40}^{(2)} \mu_{13}^{(2)} \\
 & + \mu_{12}^{(1)} \mu_{40}^{(1)} \mu_{04}^{(2)} + \mu_{13}^{(1)} \mu_{30}^{(2)} \mu_{22}^{(2)} + 3\mu_{12}^{(1)} \mu_{31}^{(2)} \mu_{22}^{(2)} - 2\mu_{13}^{(1)} \mu_{21}^{(2)} \mu_{31}^{(2)} \\
 & - 3\mu_{12}^{(1)} \mu_{22}^{(1)} \mu_{22}^{(2)} + \mu_{13}^{(1)} \mu_{12}^{(2)} \mu_{40}^{(2)} + 2(\mu_{13}^{(1)})^2 \mu_{30}^{(2)} + 2\mu_{12}^{(1)} \mu_{13}^{(1)} \mu_{31}^{(2)} \\
 & + 2\mu_{03}^{(1)} \mu_{40}^{(2)} \mu_{22}^{(2)} - \mu_{03}^{(1)} \mu_{40}^{(1)} \mu_{13}^{(2)} - 2\mu_{03}^{(1)} (\mu_{31}^{(2)})^2 + 2\mu_{03}^{(1)} \mu_{31}^{(1)} \mu_{22}^{(2)} \\
 & - \mu_{03}^{(1)} \mu_{22}^{(1)} \mu_{31}^{(2)}
 \end{aligned}$$

weight=7

structure: 0,1,2

Generating graph:

|    |   |   |   |   |    |   |
|----|---|---|---|---|----|---|
| V1 | 1 | 1 | 1 | 1 | V2 | 2 |
|    | 2 | 2 | 2 | 3 | V3 | 3 |



## Invariants of the order 5

$$\begin{aligned}
 Z_{22} = & \mu_{41}^{(1)} \mu_{03}^{(2)} + \mu_{30}^{(2)} \mu_{23}^{(2)} - 3\mu_{32}^{(1)} \mu_{12}^{(2)} - \mu_{30}^{(1)} \mu_{14}^{(2)} + \mu_{30}^{(1)} \mu_{05}^{(1)} - 3\mu_{21}^{(2)} \mu_{32}^{(2)} \\
 & + 3\mu_{23}^{(1)} \mu_{21}^{(2)} + 3\mu_{21}^{(1)} \mu_{23}^{(2)} - 3\mu_{21}^{(1)} \mu_{14}^{(1)} + 3\mu_{12}^{(2)} \mu_{41}^{(2)} - \mu_{14}^{(1)} \mu_{30}^{(2)} - 3\mu_{12}^{(1)} \mu_{32}^{(2)} \\
 & + 3\mu_{12}^{(1)} \mu_{23}^{(1)} - \mu_{03}^{(2)} \mu_{50}^{(2)} + \mu_{03}^{(1)} \mu_{41}^{(2)} - \mu_{03}^{(1)} \mu_{32}^{(1)}
 \end{aligned}$$

weight=5

structure: 0,1,0,1

Generating graph:

$$\begin{array}{cccccc}
 V1 & 1 & 1 & 1 & 1 & \\
 & 1 & V2 & 2 & 2 & 2
 \end{array}$$



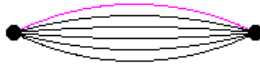
$$Z_{23} = \mu_{50}^{(1)} \mu_{05}^{(2)} - 5\mu_{41}^{(1)} \mu_{14}^{(2)} + 10\mu_{32}^{(1)} \mu_{23}^{(2)} - 10\mu_{23}^{(1)} \mu_{32}^{(2)} + 5\mu_{14}^{(1)} \mu_{41}^{(2)} - \mu_{05}^{(1)} \mu_{50}^{(2)}$$

weight=6

structure: 0,0,0,2

Generating graph:

$$\begin{array}{cccccc}
 V1 & 1 & 1 & 1 & 1 & 1 \\
 V2 & 2 & 2 & 2 & 2 & 2
 \end{array}$$



$$\begin{aligned}
 Z_{24} = & -\mu_{50}^{(2)} \mu_{14}^{(2)} + \mu_{50}^{(1)} \mu_{05}^{(2)} + 4\mu_{41}^{(2)} \mu_{23}^{(2)} - 4\mu_{41}^{(1)} \mu_{14}^{(2)} - \mu_{41}^{(1)} \mu_{05}^{(1)} - 3(\mu_{32}^{(2)})^2 + 6\mu_{32}^{(1)} \mu_{23}^{(2)} \\
 & + 4\mu_{32}^{(1)} \mu_{14}^{(1)} - 4\mu_{23}^{(1)} \mu_{32}^{(2)} - 3(\mu_{23}^{(1)})^2 + \mu_{14}^{(1)} \mu_{41}^{(2)}
 \end{aligned}$$

weight=6

structure: 0,0,0,2

Generating graph:

$$\begin{array}{cccccc} V1 & 1 & 1 & 1 & 1 & 1 \\ & 2 & V2 & 2 & 2 & 2 \end{array}$$



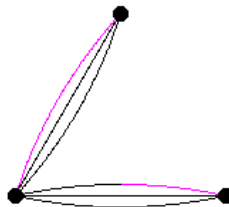
$$\begin{aligned} Z_{25} = & \mu_{50}^{(1)}(\mu_{02}^{(2)})^2 - 4\mu_{41}^{(1)}\mu_{11}^{(2)}\mu_{02}^{(2)} + 2\mu_{32}^{(1)}\mu_{20}^{(2)}\mu_{02}^{(2)} + 4\mu_{32}^{(1)}(\mu_{11}^{(2)})^2 - 4\mu_{23}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)} \\ & - \mu_{20}^{(1)}\mu_{20}^{(2)}\mu_{14}^{(2)} - \mu_{20}^{(1)}\mu_{23}^{(1)}\mu_{02}^{(2)} + (\mu_{20}^{(1)})^2\mu_{05}^{(2)} + 2\mu_{20}^{(1)}\mu_{11}^{(2)}\mu_{23}^{(2)} \\ & + 2\mu_{20}^{(1)}\mu_{14}^{(1)}\mu_{11}^{(2)} - 4\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{14}^{(2)} - \mu_{20}^{(1)}\mu_{02}^{(2)}\mu_{32}^{(2)} - \mu_{20}^{(1)}\mu_{05}^{(1)}\mu_{20}^{(2)} \\ & + 2\mu_{20}^{(1)}\mu_{02}^{(1)}\mu_{23}^{(2)} + 2\mu_{11}^{(1)}\mu_{32}^{(1)}\mu_{02}^{(2)} + \mu_{14}^{(1)}(\mu_{20}^{(2)})^2 + 2\mu_{11}^{(1)}\mu_{20}^{(2)}\mu_{23}^{(2)} \\ & - 4\mu_{11}^{(1)}\mu_{23}^{(1)}\mu_{11}^{(2)} - 4\mu_{11}^{(1)}\mu_{11}^{(2)}\mu_{32}^{(2)} + 2\mu_{11}^{(1)}\mu_{14}^{(1)}\mu_{20}^{(2)} + 4(\mu_{11}^{(1)})^2\mu_{23}^{(2)} \\ & + 2\mu_{11}^{(1)}\mu_{02}^{(2)}\mu_{41}^{(2)} - 4\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{32}^{(2)} - \mu_{02}^{(1)}\mu_{41}^{(1)}\mu_{02}^{(2)} + 2\mu_{02}^{(1)}\mu_{32}^{(1)}\mu_{11}^{(2)} \\ & - \mu_{02}^{(1)}\mu_{20}^{(2)}\mu_{32}^{(2)} - \mu_{02}^{(1)}\mu_{23}^{(1)}\mu_{20}^{(2)} + 2\mu_{02}^{(1)}\mu_{11}^{(2)}\mu_{41}^{(2)} - \mu_{02}^{(1)}\mu_{02}^{(2)}\mu_{50}^{(2)} \\ & + (\mu_{02}^{(1)})^2\mu_{41}^{(2)} \end{aligned}$$

weight=6

structure: 2,0,0,1

Generating graph:

$$\begin{array}{cccccc} V1 & 1 & 1 & 1 & 1 & 1 \\ & 2 & 2 & V3 & 3 & 3 \end{array}$$



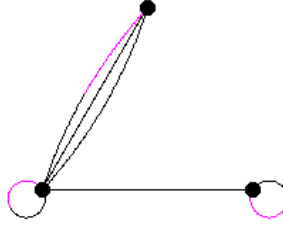
$$\begin{aligned}
Z_{26} = & -\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{02}^{(2)} + \mu_{32}^{(1)} \mu_{20}^{(2)} \mu_{02}^{(2)} + 2\mu_{32}^{(1)} (\mu_{11}^{(2)})^2 - (\mu_{20}^{(2)})^2 \mu_{23}^{(2)} - 3\mu_{23}^{(1)} \mu_{20}^{(2)} \mu_{11}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{20}^{(2)} \mu_{14}^{(2)} + 3\mu_{20}^{(2)} \mu_{11}^{(2)} \mu_{32}^{(2)} - \mu_{20}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} + \mu_{20}^{(1)} \mu_{14}^{(1)} \mu_{11}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{11}^{(1)} \mu_{14}^{(2)} + \mu_{20}^{(1)} \mu_{11}^{(1)} \mu_{05}^{(2)} - \mu_{20}^{(2)} \mu_{02}^{(2)} \mu_{41}^{(2)} - \mu_{20}^{(1)} \mu_{05}^{(1)} \mu_{20}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{02}^{(1)} \mu_{23}^{(2)} - \mu_{20}^{(1)} \mu_{02}^{(1)} \mu_{14}^{(2)} - \mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{02}^{(2)} + \mu_{14}^{(1)} (\mu_{20}^{(2)})^2 \\
& - \mu_{11}^{(1)} \mu_{20}^{(2)} \mu_{23}^{(2)} - 2(\mu_{11}^{(2)})^2 \mu_{41}^{(2)} + \mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{20}^{(2)} + 2(\mu_{11}^{(1)})^2 \mu_{23}^{(2)} - 2(\mu_{11}^{(1)})^2 \mu_{14}^{(1)} \\
& + \mu_{11}^{(2)} \mu_{02}^{(2)} \mu_{50}^{(2)} + \mu_{11}^{(1)} \mu_{02}^{(2)} \mu_{41}^{(2)} - 3\mu_{11}^{(1)} \mu_{02}^{(1)} \mu_{32}^{(2)} + 3\mu_{11}^{(1)} \mu_{02}^{(1)} \mu_{23}^{(1)} \\
& + \mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{32}^{(1)} \mu_{11}^{(2)} + \mu_{02}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} - \mu_{02}^{(1)} \mu_{02}^{(2)} \mu_{50}^{(2)} \\
& + (\mu_{02}^{(1)})^2 \mu_{41}^{(2)} - (\mu_{02}^{(1)})^2 \mu_{32}^{(1)}
\end{aligned}$$

weight=6

structure: 2,0,0,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 1 & V3 \\
& 1 & V2 & 2 & 2 & 3 & 3
\end{array}$$



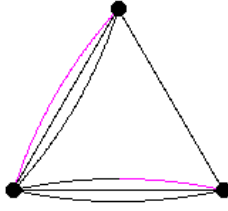
$$\begin{aligned}
Z_{27} = & -\mu_{30}^{(1)} \mu_{21}^{(2)} \mu_{14}^{(2)} + \mu_{30}^{(1)} \mu_{23}^{(1)} \mu_{03}^{(2)} + 2\mu_{30}^{(1)} \mu_{12}^{(2)} \mu_{23}^{(2)} - 2\mu_{30}^{(1)} \mu_{14}^{(1)} \mu_{12}^{(2)} \\
& - \mu_{30}^{(1)} \mu_{03}^{(2)} \mu_{32}^{(2)} + \mu_{30}^{(1)} \mu_{05}^{(1)} \mu_{21}^{(2)} + \mu_{21}^{(1)} \mu_{30}^{(2)} \mu_{14}^{(2)} - 2\mu_{21}^{(1)} \mu_{32}^{(1)} \mu_{03}^{(2)} \\
& + 3\mu_{21}^{(1)} \mu_{23}^{(1)} \mu_{12}^{(2)} - 3\mu_{21}^{(1)} \mu_{12}^{(2)} \mu_{32}^{(2)} + 2\mu_{21}^{(1)} \mu_{03}^{(2)} \mu_{41}^{(2)} - \mu_{21}^{(1)} \mu_{05}^{(1)} \mu_{30}^{(2)} \\
& + \mu_{12}^{(1)} \mu_{41}^{(1)} \mu_{03}^{(2)} - 2\mu_{12}^{(1)} \mu_{30}^{(2)} \mu_{23}^{(2)} + 3\mu_{12}^{(1)} \mu_{21}^{(2)} \mu_{32}^{(2)} - 3\mu_{12}^{(1)} \mu_{23}^{(1)} \mu_{21}^{(2)} \\
& + 2\mu_{12}^{(1)} \mu_{14}^{(1)} \mu_{30}^{(2)} - \mu_{12}^{(1)} \mu_{03}^{(2)} \mu_{50}^{(2)} - \mu_{03}^{(1)} \mu_{41}^{(1)} \mu_{12}^{(2)} + \mu_{03}^{(1)} \mu_{30}^{(1)} \mu_{32}^{(2)} \\
& + 2\mu_{03}^{(1)} \mu_{32}^{(1)} \mu_{21}^{(2)} - 2\mu_{03}^{(1)} \mu_{21}^{(2)} \mu_{41}^{(2)} - \mu_{03}^{(1)} \mu_{23}^{(1)} \mu_{30}^{(2)} + \mu_{03}^{(1)} \mu_{12}^{(2)} \mu_{50}^{(2)}
\end{aligned}$$

weight=7

structure: 0,2,0,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 2 \\
V2 & 2 & 2 & V3 & 3 & 3 & 3
\end{array}$$



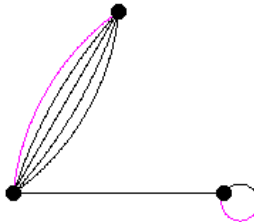
$$\begin{aligned}
Z_{28} = & -\mu_{50}^{(1)} \mu_{11}^{(2)} \mu_{04}^{(2)} + \mu_{41}^{(1)} \mu_{20}^{(2)} \mu_{04}^{(2)} - \mu_{40}^{(1)} \mu_{20}^{(2)} \mu_{05}^{(2)} + 4\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} \\
& + \mu_{40}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} - 4\mu_{32}^{(1)} \mu_{20}^{(2)} \mu_{13}^{(2)} + 4\mu_{31}^{(1)} \mu_{20}^{(2)} \mu_{14}^{(2)} - 6\mu_{32}^{(1)} \mu_{11}^{(2)} \mu_{22}^{(2)} \\
& - 4\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} + 6\mu_{23}^{(1)} \mu_{20}^{(2)} \mu_{22}^{(2)} - 6\mu_{22}^{(1)} \mu_{20}^{(2)} \mu_{23}^{(2)} + 4\mu_{23}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} \\
& + 6\mu_{22}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} - \mu_{11}^{(1)} \mu_{41}^{(2)} \mu_{04}^{(2)} + \mu_{11}^{(1)} \mu_{40}^{(2)} \mu_{05}^{(2)} + 4\mu_{11}^{(1)} \mu_{32}^{(2)} \mu_{13}^{(2)} \\
& - 4\mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{14}^{(2)} - 4\mu_{14}^{(1)} \mu_{20}^{(2)} \mu_{31}^{(2)} + 4\mu_{13}^{(1)} \mu_{20}^{(2)} \mu_{32}^{(2)} - 6\mu_{11}^{(1)} \mu_{23}^{(2)} \mu_{22}^{(2)} \\
& + 6\mu_{11}^{(1)} \mu_{22}^{(2)} \mu_{23}^{(2)} - \mu_{14}^{(1)} \mu_{11}^{(2)} \mu_{40}^{(2)} - 4\mu_{13}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} + 4\mu_{11}^{(1)} \mu_{14}^{(2)} \mu_{31}^{(2)} \\
& - 4\mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{32}^{(2)} - \mu_{11}^{(1)} \mu_{05}^{(2)} \mu_{40}^{(2)} + \mu_{11}^{(1)} \mu_{04}^{(2)} \mu_{41}^{(2)} + \mu_{02}^{(1)} \mu_{50}^{(2)} \mu_{04}^{(2)} \\
& - 4\mu_{02}^{(1)} \mu_{41}^{(2)} \mu_{13}^{(2)} - \mu_{02}^{(1)} \mu_{40}^{(2)} \mu_{14}^{(2)} + 6\mu_{02}^{(1)} \mu_{32}^{(2)} \mu_{22}^{(2)} + 4\mu_{02}^{(1)} \mu_{31}^{(2)} \mu_{23}^{(2)} \\
& + \mu_{05}^{(1)} \mu_{20}^{(2)} \mu_{40}^{(2)} - \mu_{04}^{(1)} \mu_{20}^{(2)} \mu_{41}^{(2)} - 4\mu_{02}^{(1)} \mu_{23}^{(2)} \mu_{31}^{(2)} - 6\mu_{02}^{(1)} \mu_{22}^{(2)} \mu_{32}^{(2)} \\
& + \mu_{04}^{(1)} \mu_{11}^{(2)} \mu_{50}^{(2)} + \mu_{02}^{(1)} \mu_{14}^{(2)} \mu_{40}^{(2)} + 4\mu_{02}^{(1)} \mu_{13}^{(2)} \mu_{41}^{(2)} - \mu_{02}^{(1)} \mu_{04}^{(2)} \mu_{50}^{(2)}
\end{aligned}$$

weight=7

structure: 1,0,1,1

Generating graph:

|    |   |   |   |   |   |    |
|----|---|---|---|---|---|----|
| V1 | 1 | 1 | 1 | 1 | 1 | V3 |
| V2 | 2 | 2 | 2 | 2 | 3 | 3  |





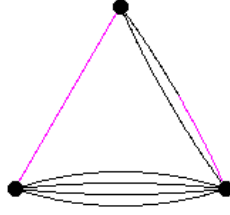
$$\begin{aligned}
Z_{29} = & \mu_{40}^{(1)} \mu_{20}^{(2)} \mu_{05}^{(2)} - \mu_{40}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} + \mu_{40}^{(1)} \mu_{14}^{(1)} \mu_{02}^{(2)} - \mu_{40}^{(1)} \mu_{05}^{(1)} \mu_{11}^{(2)} \\
& - 4\mu_{31}^{(1)} \mu_{20}^{(2)} \mu_{14}^{(2)} - 4\mu_{31}^{(1)} \mu_{23}^{(1)} \mu_{02}^{(2)} + 4\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} + 4\mu_{31}^{(1)} \mu_{14}^{(1)} \mu_{11}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{40}^{(2)} \mu_{05}^{(2)} + 4\mu_{20}^{(1)} \mu_{31}^{(2)} \mu_{14}^{(2)} + 6\mu_{22}^{(1)} \mu_{32}^{(1)} \mu_{02}^{(2)} + 6\mu_{22}^{(1)} \mu_{20}^{(2)} \mu_{23}^{(2)} \\
& - 6\mu_{20}^{(1)} \mu_{22}^{(2)} \mu_{23}^{(2)} - 6\mu_{22}^{(1)} \mu_{23}^{(1)} \mu_{11}^{(2)} - 6\mu_{22}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} + 4\mu_{20}^{(1)} \mu_{13}^{(1)} \mu_{32}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{04}^{(2)} \mu_{41}^{(2)} + \mu_{11}^{(1)} \mu_{40}^{(2)} \mu_{14}^{(2)} - 4\mu_{13}^{(1)} \mu_{41}^{(1)} \mu_{02}^{(2)} + \mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{04}^{(2)} \\
& - 4\mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{23}^{(2)} + 4\mu_{13}^{(1)} \mu_{32}^{(1)} \mu_{11}^{(2)} - 4\mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{13}^{(2)} - 4\mu_{13}^{(1)} \mu_{20}^{(2)} \mu_{32}^{(2)} \\
& + 6\mu_{11}^{(1)} \mu_{22}^{(2)} \mu_{32}^{(2)} + 6\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{22}^{(2)} + 4\mu_{13}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} - 4\mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{41}^{(2)} \\
& - 4\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{31}^{(2)} + \mu_{11}^{(1)} \mu_{04}^{(2)} \mu_{50}^{(2)} + \mu_{11}^{(1)} \mu_{05}^{(1)} \mu_{40}^{(2)} + \mu_{04}^{(1)} \mu_{50}^{(1)} \mu_{02}^{(2)} \\
& - \mu_{02}^{(1)} \mu_{50}^{(1)} \mu_{04}^{(2)} - \mu_{04}^{(1)} \mu_{41}^{(1)} \mu_{11}^{(2)} + 4\mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{13}^{(2)} - 6\mu_{02}^{(1)} \mu_{32}^{(1)} \mu_{22}^{(2)} \\
& + \mu_{04}^{(1)} \mu_{20}^{(2)} \mu_{41}^{(2)} + 4\mu_{02}^{(1)} \mu_{23}^{(1)} \mu_{31}^{(2)} - \mu_{04}^{(1)} \mu_{11}^{(2)} \mu_{50}^{(2)} - \mu_{02}^{(1)} \mu_{14}^{(1)} \mu_{40}^{(2)}
\end{aligned}$$

weight=7

structure: 1,0,1,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 1 & 2 & 2 \\
V2 & 3 & 3 & 3 & 3 & V3 & 3
\end{array}$$



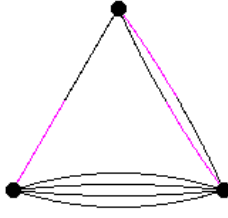
$$\begin{aligned}
Z_{30} = & -\mu_{50}^{(1)} \mu_{11}^{(2)} \mu_{04}^{(2)} + 4\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} - \mu_{40}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} + \mu_{40}^{(1)} \mu_{14}^{(1)} \mu_{02}^{(2)} \\
& - 4\mu_{31}^{(1)} \mu_{23}^{(1)} \mu_{02}^{(2)} - 6\mu_{32}^{(1)} \mu_{11}^{(2)} \mu_{22}^{(2)} + 4\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} + \mu_{20}^{(2)} \mu_{40}^{(2)} \mu_{14}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{40}^{(2)} \mu_{05}^{(2)} - 4\mu_{20}^{(2)} \mu_{31}^{(2)} \mu_{23}^{(2)} + 4\mu_{20}^{(1)} \mu_{31}^{(2)} \mu_{14}^{(2)} + 6\mu_{22}^{(1)} \mu_{32}^{(1)} \mu_{02}^{(2)} \\
& + 6\mu_{20}^{(2)} \mu_{22}^{(2)} \mu_{32}^{(2)} - 6\mu_{20}^{(2)} \mu_{22}^{(1)} \mu_{23}^{(2)} - 4\mu_{20}^{(2)} \mu_{13}^{(2)} \mu_{41}^{(2)} + 4\mu_{23}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} \\
& - 6\mu_{22}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} + 4\mu_{20}^{(1)} \mu_{13}^{(2)} \mu_{32}^{(2)} + \mu_{20}^{(2)} \mu_{04}^{(2)} \mu_{50}^{(2)} - \mu_{20}^{(1)} \mu_{04}^{(2)} \mu_{41}^{(2)} \\
& - 4\mu_{13}^{(1)} \mu_{41}^{(1)} \mu_{02}^{(2)} + \mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{04}^{(2)} + \mu_{11}^{(1)} \mu_{40}^{(1)} \mu_{05}^{(2)} - 4\mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{13}^{(2)} \\
& - 4\mu_{11}^{(1)} \mu_{31}^{(1)} \mu_{14}^{(2)} + 6\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{22}^{(2)} + 6\mu_{11}^{(1)} \mu_{22}^{(1)} \mu_{23}^{(2)} - \mu_{14}^{(1)} \mu_{11}^{(2)} \mu_{40}^{(2)} \\
& + 4\mu_{13}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} - 4\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{31}^{(2)} - 4\mu_{11}^{(1)} \mu_{13}^{(1)} \mu_{32}^{(2)} + \mu_{11}^{(1)} \mu_{05}^{(1)} \mu_{40}^{(2)} \\
& + \mu_{11}^{(1)} \mu_{04}^{(1)} \mu_{41}^{(2)} + \mu_{04}^{(1)} \mu_{50}^{(1)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{40}^{(1)} \mu_{05}^{(2)} + 4\mu_{02}^{(1)} \mu_{31}^{(1)} \mu_{14}^{(2)} \\
& - 6\mu_{02}^{(1)} \mu_{22}^{(1)} \mu_{23}^{(2)} - \mu_{04}^{(1)} \mu_{11}^{(2)} \mu_{50}^{(2)} + 4\mu_{02}^{(1)} \mu_{13}^{(1)} \mu_{32}^{(2)} - \mu_{02}^{(1)} \mu_{04}^{(1)} \mu_{41}^{(2)}
\end{aligned}$$

weight=7

structure: 1,0,1,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 1 & V2 & 2 \\
& 2 & 3 & 3 & 3 & 3 & V3
\end{array}$$



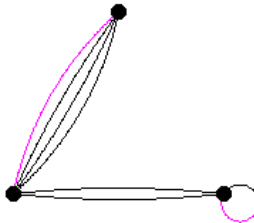
$$\begin{aligned}
Z_{31} = & -\mu_{50}^{(1)} \mu_{12}^{(2)} \mu_{03}^{(2)} + 2\mu_{41}^{(1)} \mu_{21}^{(2)} \mu_{03}^{(2)} + 3\mu_{41}^{(1)} (\mu_{12}^{(2)})^2 - \mu_{32}^{(1)} \mu_{30}^{(2)} \mu_{03}^{(2)} \\
& -\mu_{30}^{(1)} \mu_{30}^{(2)} \mu_{05}^{(2)} - 9\mu_{32}^{(1)} \mu_{21}^{(2)} \mu_{12}^{(2)} + 2\mu_{30}^{(1)} \mu_{21}^{(2)} \mu_{14}^{(2)} + \mu_{30}^{(1)} \mu_{21}^{(1)} \mu_{05}^{(2)} \\
& -\mu_{30}^{(1)} \mu_{12}^{(2)} \mu_{23}^{(2)} - 2\mu_{30}^{(1)} \mu_{12}^{(1)} \mu_{14}^{(2)} + \mu_{30}^{(1)} \mu_{03}^{(1)} \mu_{23}^{(2)} + 4\mu_{23}^{(1)} \mu_{30}^{(2)} \mu_{12}^{(2)} \\
& + 3\mu_{21}^{(1)} \mu_{30}^{(2)} \mu_{14}^{(2)} + \mu_{21}^{(1)} \mu_{32}^{(1)} \mu_{03}^{(2)} + 6\mu_{23}^{(1)} (\mu_{21}^{(2)})^2 - 6\mu_{21}^{(1)} \mu_{21}^{(2)} \mu_{23}^{(2)} \\
& - 3\mu_{21}^{(1)} \mu_{23}^{(1)} \mu_{12}^{(2)} - 3(\mu_{21}^{(1)})^2 \mu_{14}^{(2)} + 3\mu_{21}^{(1)} \mu_{12}^{(2)} \mu_{32}^{(2)} + 3\mu_{21}^{(1)} \mu_{14}^{(1)} \mu_{21}^{(2)} \\
& + 9\mu_{21}^{(1)} \mu_{12}^{(1)} \mu_{23}^{(2)} - \mu_{21}^{(1)} \mu_{05}^{(1)} \mu_{30}^{(2)} - 4\mu_{21}^{(1)} \mu_{03}^{(1)} \mu_{32}^{(2)} - 2\mu_{12}^{(1)} \mu_{41}^{(1)} \mu_{03}^{(2)} \\
& - 5\mu_{14}^{(1)} \mu_{30}^{(2)} \mu_{21}^{(2)} - 3\mu_{12}^{(1)} \mu_{30}^{(2)} \mu_{23}^{(2)} + 6\mu_{12}^{(1)} \mu_{32}^{(1)} \mu_{12}^{(2)} + 6\mu_{12}^{(1)} \mu_{21}^{(2)} \mu_{32}^{(2)} \\
& - 6\mu_{12}^{(1)} \mu_{23}^{(1)} \mu_{21}^{(2)} - 3\mu_{12}^{(1)} \mu_{12}^{(2)} \mu_{41}^{(2)} + 2\mu_{12}^{(1)} \mu_{14}^{(1)} \mu_{30}^{(2)} - 6(\mu_{12}^{(1)})^2 \mu_{32}^{(2)} \\
& + 5\mu_{12}^{(1)} \mu_{03}^{(1)} \mu_{41}^{(2)} + \mu_{03}^{(1)} \mu_{50}^{(1)} \mu_{03}^{(2)} - 3\mu_{03}^{(1)} \mu_{41}^{(1)} \mu_{12}^{(2)} + \mu_{05}^{(1)} (\mu_{30}^{(2)})^2 \\
& + \mu_{03}^{(1)} \mu_{30}^{(2)} \mu_{32}^{(2)} + 3\mu_{03}^{(1)} \mu_{32}^{(1)} \mu_{21}^{(2)} - 2\mu_{03}^{(1)} \mu_{21}^{(2)} \mu_{41}^{(2)} - \mu_{03}^{(1)} \mu_{23}^{(1)} \mu_{30}^{(2)} \\
& + \mu_{03}^{(1)} \mu_{12}^{(2)} \mu_{50}^{(2)} - (\mu_{03}^{(1)})^2 \mu_{50}^{(2)}
\end{aligned}$$

weight=7

structure: 0,2,0,1

Generating graph:

|    |   |   |   |   |   |    |
|----|---|---|---|---|---|----|
| V1 | 1 | 1 | 1 | 1 | 1 | V3 |
| V2 | 2 | 2 | 2 | 3 | 3 | 3  |



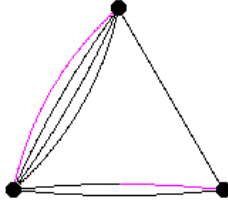
$$\begin{aligned}
Z_{32} = & -\mu_{50}^{(1)} \mu_{11}^{(2)} \mu_{04}^{(2)} + \mu_{50}^{(1)} \mu_{02}^{(2)} \mu_{13}^{(2)} + \mu_{41}^{(1)} \mu_{20}^{(2)} \mu_{04}^{(2)} + 2\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} \\
& -\mu_{40}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} - 3\mu_{41}^{(1)} \mu_{02}^{(2)} \mu_{22}^{(2)} + \mu_{40}^{(1)} \mu_{02}^{(2)} \mu_{23}^{(2)} - 3\mu_{32}^{(1)} \mu_{20}^{(2)} \mu_{13}^{(2)} \\
& + \mu_{31}^{(1)} \mu_{20}^{(2)} \mu_{14}^{(2)} + 2\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} + 3\mu_{32}^{(1)} \mu_{02}^{(2)} \mu_{31}^{(2)} - 3\mu_{31}^{(1)} \mu_{02}^{(2)} \mu_{32}^{(2)} \\
& -\mu_{20}^{(1)} \mu_{32}^{(2)} \mu_{04}^{(2)} - \mu_{20}^{(1)} \mu_{31}^{(2)} \mu_{05}^{(2)} + 3\mu_{23}^{(1)} \mu_{20}^{(2)} \mu_{22}^{(2)} - 3\mu_{22}^{(1)} \mu_{20}^{(2)} \mu_{23}^{(2)} \\
& + 3\mu_{20}^{(1)} \mu_{23}^{(2)} \mu_{13}^{(2)} + 3\mu_{20}^{(1)} \mu_{22}^{(2)} \mu_{14}^{(2)} - 2\mu_{23}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} - 3\mu_{20}^{(1)} \mu_{14}^{(2)} \mu_{22}^{(2)} \\
& - 3\mu_{20}^{(1)} \mu_{13}^{(2)} \mu_{23}^{(2)} - \mu_{23}^{(1)} \mu_{02}^{(2)} \mu_{40}^{(2)} + 3\mu_{22}^{(1)} \mu_{02}^{(2)} \mu_{41}^{(2)} + \mu_{20}^{(1)} \mu_{05}^{(2)} \mu_{31}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{04}^{(2)} \mu_{32}^{(2)} + \mu_{11}^{(1)} \mu_{41}^{(2)} \mu_{04}^{(2)} + \mu_{11}^{(1)} \mu_{40}^{(2)} \mu_{05}^{(2)} - 2\mu_{11}^{(1)} \mu_{32}^{(2)} \mu_{13}^{(2)} \\
& - 2\mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{14}^{(2)} - \mu_{14}^{(1)} \mu_{20}^{(2)} \mu_{31}^{(2)} + 3\mu_{13}^{(1)} \mu_{20}^{(2)} \mu_{32}^{(2)} + \mu_{14}^{(1)} \mu_{11}^{(2)} \mu_{40}^{(2)} \\
& - 2\mu_{13}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} + 2\mu_{11}^{(1)} \mu_{14}^{(2)} \mu_{31}^{(2)} + 2\mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{32}^{(2)} - \mu_{13}^{(1)} \mu_{02}^{(2)} \mu_{50}^{(2)} \\
& - \mu_{11}^{(1)} \mu_{05}^{(2)} \mu_{40}^{(2)} - \mu_{11}^{(1)} \mu_{04}^{(2)} \mu_{41}^{(2)} - \mu_{02}^{(1)} \mu_{41}^{(2)} \mu_{13}^{(2)} - \mu_{02}^{(1)} \mu_{40}^{(2)} \mu_{14}^{(2)} \\
& + 3\mu_{02}^{(1)} \mu_{32}^{(2)} \mu_{22}^{(2)} + 3\mu_{02}^{(1)} \mu_{31}^{(2)} \mu_{23}^{(2)} - \mu_{04}^{(1)} \mu_{20}^{(2)} \mu_{41}^{(2)} - 3\mu_{02}^{(1)} \mu_{23}^{(2)} \mu_{31}^{(2)} \\
& - 3\mu_{02}^{(1)} \mu_{22}^{(2)} \mu_{32}^{(2)} + \mu_{04}^{(1)} \mu_{11}^{(2)} \mu_{50}^{(2)} + \mu_{02}^{(1)} \mu_{14}^{(2)} \mu_{40}^{(2)} + \mu_{02}^{(1)} \mu_{13}^{(2)} \mu_{41}^{(2)}
\end{aligned}$$

weight=7

structure: 1,0,1,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 2 \\
V2 & 2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



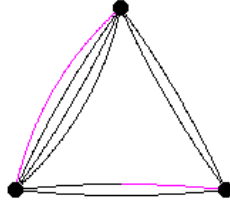
$$\begin{aligned}
Z_{33} = & \mu_{50}^{(1)} \mu_{21}^{(2)} \mu_{05}^{(2)} - 3\mu_{50}^{(1)} \mu_{12}^{(2)} \mu_{14}^{(2)} + 2\mu_{50}^{(1)} \mu_{03}^{(2)} \mu_{23}^{(2)} - \mu_{41}^{(1)} \mu_{30}^{(2)} \mu_{05}^{(2)} \\
& + \mu_{41}^{(1)} \mu_{21}^{(2)} \mu_{14}^{(2)} + 6\mu_{41}^{(1)} \mu_{12}^{(2)} \mu_{23}^{(2)} - 6\mu_{41}^{(1)} \mu_{03}^{(2)} \mu_{32}^{(2)} + 2\mu_{32}^{(1)} \mu_{30}^{(2)} \mu_{14}^{(2)} \\
& + 2\mu_{30}^{(1)} \mu_{32}^{(2)} \mu_{05}^{(2)} - 8\mu_{32}^{(1)} \mu_{21}^{(2)} \mu_{23}^{(2)} - 6\mu_{30}^{(1)} \mu_{23}^{(2)} \mu_{14}^{(2)} + 6\mu_{30}^{(1)} \mu_{14}^{(2)} \mu_{23}^{(2)} \\
& + 6\mu_{32}^{(1)} \mu_{03}^{(2)} \mu_{41}^{(2)} - 2\mu_{30}^{(1)} \mu_{05}^{(2)} \mu_{32}^{(2)} - 3\mu_{21}^{(1)} \mu_{41}^{(2)} \mu_{05}^{(2)} + 6\mu_{21}^{(1)} \mu_{32}^{(2)} \mu_{14}^{(2)} \\
& + 8\mu_{23}^{(1)} \mu_{21}^{(2)} \mu_{32}^{(2)} - 6\mu_{23}^{(1)} \mu_{12}^{(2)} \mu_{41}^{(2)} - 6\mu_{21}^{(1)} \mu_{14}^{(2)} \mu_{32}^{(2)} - 2\mu_{23}^{(1)} \mu_{03}^{(2)} \mu_{50}^{(2)} \\
& + 3\mu_{21}^{(1)} \mu_{05}^{(2)} \mu_{41}^{(2)} + \mu_{12}^{(1)} \mu_{50}^{(2)} \mu_{05}^{(2)} + \mu_{12}^{(1)} \mu_{41}^{(2)} \mu_{14}^{(2)} - 2\mu_{14}^{(1)} \mu_{30}^{(2)} \mu_{32}^{(2)} \\
& - 8\mu_{12}^{(1)} \mu_{32}^{(2)} \mu_{23}^{(2)} - \mu_{14}^{(1)} \mu_{21}^{(2)} \mu_{41}^{(2)} + 8\mu_{12}^{(1)} \mu_{23}^{(2)} \mu_{32}^{(2)} + 3\mu_{14}^{(1)} \mu_{12}^{(2)} \mu_{50}^{(2)} \\
& - \mu_{12}^{(1)} \mu_{14}^{(2)} \mu_{41}^{(2)} - \mu_{12}^{(1)} \mu_{05}^{(2)} \mu_{50}^{(2)} - \mu_{03}^{(1)} \mu_{50}^{(2)} \mu_{14}^{(2)} + 2\mu_{03}^{(1)} \mu_{41}^{(2)} \mu_{23}^{(2)} \\
& + \mu_{05}^{(1)} \mu_{30}^{(2)} \mu_{41}^{(2)} - \mu_{05}^{(1)} \mu_{21}^{(2)} \mu_{50}^{(2)} - 2\mu_{03}^{(1)} \mu_{23}^{(2)} \mu_{41}^{(2)} + \mu_{03}^{(1)} \mu_{14}^{(2)} \mu_{50}^{(2)}
\end{aligned}$$

weight=8

structure: 0,1,0,2

Generating graph:

V1 1 1 1 1 1 2 2  
V2 2 2 2 V3 3 3 3



### Invariants of the order 6

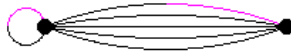
$$\begin{aligned}
Z_{34} = & \mu_{51}^{(1)} \mu_{04}^{(2)} - \mu_{40}^{(2)} \mu_{24}^{(2)} - 4\mu_{42}^{(1)} \mu_{13}^{(2)} + \mu_{40}^{(1)} \mu_{15}^{(2)} - \mu_{40}^{(1)} \mu_{06}^{(1)} + 4\mu_{31}^{(2)} \mu_{33}^{(2)} \\
& + 6\mu_{33}^{(1)} \mu_{22}^{(2)} - 4\mu_{31}^{(1)} \mu_{24}^{(2)} + 4\mu_{31}^{(1)} \mu_{15}^{(1)} - 6\mu_{22}^{(2)} \mu_{42}^{(2)} - 4\mu_{24}^{(1)} \mu_{31}^{(2)} + 6\mu_{22}^{(1)} \mu_{33}^{(2)} \\
& - 6\mu_{22}^{(1)} \mu_{24}^{(1)} + 4\mu_{13}^{(2)} \mu_{51}^{(2)} + \mu_{15}^{(1)} \mu_{40}^{(2)} - 4\mu_{13}^{(1)} \mu_{42}^{(2)} + 4\mu_{13}^{(1)} \mu_{33}^{(1)} - \mu_{04}^{(2)} \mu_{60}^{(2)} \\
& + \mu_{04}^{(1)} \mu_{51}^{(2)} - \mu_{04}^{(1)} \mu_{42}^{(1)}
\end{aligned}$$

weight=6

structure: 0,0,1,0,1

Generating graph:

V1 1 1 1 1 1  
1 V2 2 2 2 2



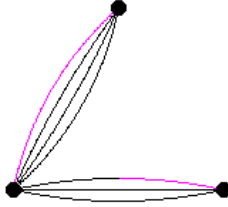
$$\begin{aligned}
Z_{35} = & \mu_{60}^{(1)} \mu_{02}^{(2)} \mu_{03}^{(2)} - 2\mu_{51}^{(1)} \mu_{11}^{(2)} \mu_{03}^{(2)} - 3\mu_{51}^{(1)} \mu_{02}^{(2)} \mu_{12}^{(2)} + \mu_{42}^{(1)} \mu_{20}^{(2)} \mu_{03}^{(2)} \\
& + 6\mu_{42}^{(1)} \mu_{11}^{(2)} \mu_{12}^{(2)} + 3\mu_{42}^{(1)} \mu_{02}^{(2)} \mu_{21}^{(2)} - 3\mu_{33}^{(1)} \mu_{20}^{(2)} \mu_{12}^{(2)} + \mu_{30}^{(1)} \mu_{20}^{(2)} \mu_{15}^{(2)} \\
& - 6\mu_{33}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} - 2\mu_{30}^{(1)} \mu_{11}^{(2)} \mu_{24}^{(2)} - \mu_{33}^{(1)} \mu_{02}^{(2)} \mu_{30}^{(2)} + \mu_{30}^{(1)} \mu_{02}^{(2)} \mu_{33}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{33}^{(2)} \mu_{03}^{(2)} - \mu_{20}^{(1)} \mu_{30}^{(2)} \mu_{06}^{(2)} + 3\mu_{24}^{(1)} \mu_{20}^{(2)} \mu_{21}^{(2)} - 3\mu_{21}^{(1)} \mu_{20}^{(2)} \mu_{24}^{(2)} \\
& + 3\mu_{20}^{(1)} \mu_{24}^{(2)} \mu_{12}^{(2)} + 3\mu_{20}^{(1)} \mu_{21}^{(2)} \mu_{15}^{(2)} + 2\mu_{24}^{(1)} \mu_{11}^{(2)} \mu_{30}^{(2)} + 6\mu_{21}^{(1)} \mu_{11}^{(2)} \mu_{33}^{(2)} \\
& - 3\mu_{20}^{(1)} \mu_{15}^{(2)} \mu_{21}^{(2)} - 3\mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{24}^{(2)} - 3\mu_{21}^{(1)} \mu_{02}^{(2)} \mu_{42}^{(2)} + \mu_{20}^{(1)} \mu_{06}^{(2)} \mu_{30}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{03}^{(2)} \mu_{33}^{(2)} + 2\mu_{11}^{(1)} \mu_{42}^{(2)} \mu_{03}^{(2)} - 6\mu_{11}^{(1)} \mu_{33}^{(2)} \mu_{12}^{(2)} + 2\mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{15}^{(2)} \\
& - \mu_{15}^{(1)} \mu_{20}^{(2)} \mu_{30}^{(2)} + 3\mu_{12}^{(1)} \mu_{20}^{(2)} \mu_{33}^{(2)} + 6\mu_{11}^{(1)} \mu_{24}^{(2)} \mu_{21}^{(2)} - 6\mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{24}^{(2)} \\
& - 6\mu_{12}^{(1)} \mu_{11}^{(2)} \mu_{42}^{(2)} - 2\mu_{11}^{(1)} \mu_{15}^{(2)} \mu_{30}^{(2)} + 6\mu_{11}^{(1)} \mu_{12}^{(2)} \mu_{33}^{(2)} + 3\mu_{12}^{(1)} \mu_{02}^{(2)} \mu_{51}^{(2)} \\
& - 2\mu_{11}^{(1)} \mu_{03}^{(2)} \mu_{42}^{(2)} - \mu_{02}^{(1)} \mu_{51}^{(2)} \mu_{03}^{(2)} + 3\mu_{02}^{(1)} \mu_{42}^{(2)} \mu_{12}^{(2)} - 3\mu_{02}^{(1)} \mu_{33}^{(2)} \mu_{21}^{(2)} \\
& - \mu_{02}^{(1)} \mu_{30}^{(2)} \mu_{24}^{(2)} - \mu_{03}^{(1)} \mu_{20}^{(2)} \mu_{42}^{(2)} + \mu_{02}^{(1)} \mu_{24}^{(2)} \mu_{30}^{(2)} + 3\mu_{02}^{(1)} \mu_{21}^{(2)} \mu_{33}^{(2)} \\
& + 2\mu_{03}^{(1)} \mu_{11}^{(2)} \mu_{51}^{(2)} - 3\mu_{02}^{(1)} \mu_{12}^{(2)} \mu_{42}^{(2)} - \mu_{03}^{(1)} \mu_{02}^{(2)} \mu_{60}^{(2)} + \mu_{02}^{(1)} \mu_{03}^{(2)} \mu_{51}^{(2)}
\end{aligned}$$

weight=7

structure: 1,1,0,0,1

Generating graph:

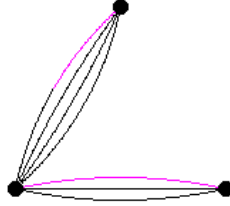
$$\begin{array}{ccccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 1 \\
V2 & 2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



$$\begin{aligned}
Z_{36} = & \mu_{60}^{(1)} \mu_{02}^{(2)} \mu_{03}^{(2)} - 2\mu_{51}^{(1)} \mu_{11}^{(2)} \mu_{03}^{(2)} - 3\mu_{51}^{(1)} \mu_{02}^{(2)} \mu_{12}^{(2)} + \mu_{42}^{(1)} \mu_{20}^{(2)} \mu_{03}^{(2)} \\
& + 6\mu_{42}^{(1)} \mu_{11}^{(2)} \mu_{12}^{(2)} + 3\mu_{42}^{(1)} \mu_{02}^{(2)} \mu_{21}^{(2)} - 3\mu_{33}^{(1)} \mu_{20}^{(2)} \mu_{12}^{(2)} + \mu_{30}^{(1)} \mu_{24}^{(2)} \mu_{02}^{(2)} \\
& - 6\mu_{33}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} - 2\mu_{30}^{(1)} \mu_{15}^{(2)} \mu_{11}^{(2)} - \mu_{33}^{(1)} \mu_{02}^{(2)} \mu_{30}^{(2)} + \mu_{30}^{(1)} \mu_{06}^{(2)} \mu_{20}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{30}^{(2)} \mu_{15}^{(2)} - 3\mu_{21}^{(1)} \mu_{33}^{(2)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{30}^{(2)} \mu_{06}^{(2)} + 3\mu_{24}^{(1)} \mu_{20}^{(2)} \mu_{21}^{(2)} \\
& - 3\mu_{20}^{(1)} \mu_{21}^{(2)} \mu_{24}^{(2)} + 6\mu_{21}^{(1)} \mu_{24}^{(2)} \mu_{11}^{(2)} + 3\mu_{20}^{(1)} \mu_{21}^{(2)} \mu_{15}^{(2)} + 2\mu_{24}^{(1)} \mu_{11}^{(2)} \mu_{30}^{(2)} \\
& + 3\mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{33}^{(2)} - 3\mu_{21}^{(1)} \mu_{15}^{(2)} \mu_{20}^{(2)} - 3\mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{24}^{(2)} - \mu_{20}^{(1)} \mu_{03}^{(2)} \mu_{42}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{03}^{(2)} \mu_{33}^{(2)} + 3\mu_{12}^{(1)} \mu_{42}^{(2)} \mu_{02}^{(2)} - 2\mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{24}^{(2)} - 6\mu_{12}^{(1)} \mu_{33}^{(2)} \mu_{11}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{15}^{(2)} - \mu_{15}^{(1)} \mu_{20}^{(2)} \mu_{30}^{(2)} + 6\mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{33}^{(2)} + 3\mu_{12}^{(1)} \mu_{24}^{(2)} \mu_{20}^{(2)} \\
& - 6\mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{24}^{(2)} - 6\mu_{11}^{(1)} \mu_{12}^{(2)} \mu_{42}^{(2)} + 6\mu_{11}^{(1)} \mu_{12}^{(2)} \mu_{33}^{(2)} + 2\mu_{11}^{(1)} \mu_{03}^{(2)} \mu_{51}^{(2)} \\
& - 2\mu_{11}^{(1)} \mu_{03}^{(2)} \mu_{42}^{(2)} - \mu_{03}^{(1)} \mu_{51}^{(2)} \mu_{02}^{(2)} + 2\mu_{03}^{(1)} \mu_{42}^{(2)} \mu_{11}^{(2)} + \mu_{02}^{(1)} \mu_{30}^{(2)} \mu_{33}^{(2)} \\
& - \mu_{03}^{(1)} \mu_{33}^{(2)} \mu_{20}^{(2)} - \mu_{02}^{(1)} \mu_{30}^{(2)} \mu_{24}^{(2)} - 3\mu_{02}^{(1)} \mu_{21}^{(2)} \mu_{42}^{(2)} + 3\mu_{02}^{(1)} \mu_{21}^{(2)} \mu_{33}^{(2)} \\
& + 3\mu_{02}^{(1)} \mu_{12}^{(2)} \mu_{51}^{(2)} - 3\mu_{02}^{(1)} \mu_{12}^{(2)} \mu_{42}^{(2)} - \mu_{02}^{(1)} \mu_{03}^{(2)} \mu_{60}^{(2)} + \mu_{02}^{(1)} \mu_{03}^{(2)} \mu_{51}^{(2)}
\end{aligned}$$

weight=7  
structure: 1,1,0,0,1  
Generating graph:

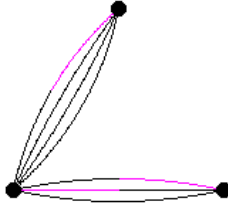
$$\begin{array}{cccccc} 1 & 1 & 1 & 1 & V1 & 1 & 1 \\ V2 & 2 & 2 & 2 & V3 & 3 & 3 \end{array}$$



$$\begin{aligned} Z_{37} = & \mu_{60}^{(1)(2)(2)} - \mu_{51}^{(1)(2)(2)} - 3\mu_{51}^{(1)(2)(2)} + 3\mu_{42}^{(1)(2)(2)} \\ & + 3\mu_{42}^{(1)(2)(2)} + \mu_{30}^{(1)(2)(2)} + \mu_{30}^{(1)(1)(2)} - 3\mu_{33}^{(1)(2)(2)} \\ & - \mu_{30}^{(1)(2)(2)} - \mu_{30}^{(1)(1)(2)} - \mu_{33}^{(1)(2)(2)} - \mu_{20}^{(2)(2)(2)} \\ & + \mu_{20}^{(1)(2)(2)} - 3\mu_{21}^{(1)(1)(2)} - \mu_{20}^{(1)(1)(2)} + 3\mu_{20}^{(2)(2)(2)} \\ & - 3\mu_{21}^{(1)(2)(2)} - 3\mu_{20}^{(1)(2)(2)} + 3\mu_{21}^{(1)(1)(2)} + 3\mu_{20}^{(1)(1)(2)} \\ & - 3\mu_{20}^{(2)(2)(2)} + \mu_{24}^{(1)(2)(2)} + 3\mu_{21}^{(1)(2)(2)} + 3\mu_{20}^{(1)(2)(2)} \\ & - 3\mu_{20}^{(1)(1)(2)} + \mu_{20}^{(2)(2)(2)} - \mu_{20}^{(1)(2)(2)} + \mu_{20}^{(1)(1)(2)} \\ & + 3\mu_{12}^{(1)(1)(2)} + \mu_{11}^{(1)(1)(2)} + \mu_{11}^{(2)(2)(2)} - \mu_{11}^{(1)(2)(2)} \\ & - 3\mu_{12}^{(1)(1)(2)} - 3\mu_{11}^{(1)(1)(2)} + \mu_{11}^{(1)(1)(2)} + \mu_{11}^{(1)(1)(1)} \\ & - 3\mu_{11}^{(2)(2)(2)} + 3\mu_{12}^{(1)(2)(2)} + 3\mu_{11}^{(1)(2)(2)} + 3\mu_{11}^{(1)(1)(2)} \\ & - 3\mu_{11}^{(1)(1)(2)} - 3\mu_{11}^{(1)(1)(1)} + 3\mu_{11}^{(2)(2)(2)} - 3\mu_{12}^{(1)(2)(2)} \\ & - 3\mu_{11}^{(1)(2)(2)} - \mu_{11}^{(1)(1)(2)} + 3\mu_{11}^{(1)(1)(2)} + 3\mu_{11}^{(1)(1)(1)} \\ & - \mu_{11}^{(2)(2)(2)} + \mu_{11}^{(1)(2)(2)} - \mu_{11}^{(1)(1)(2)} - \mu_{11}^{(1)(1)(1)} \\ & - \mu_{03}^{(1)(1)(2)} - \mu_{02}^{(1)(1)(2)} + \mu_{03}^{(1)(1)(2)} + 3\mu_{02}^{(1)(1)(2)} \\ & - 3\mu_{02}^{(1)(1)(2)} - \mu_{02}^{(1)(1)(1)} - \mu_{03}^{(1)(2)(2)} + \mu_{02}^{(1)(1)(2)} \\ & + 3\mu_{02}^{(1)(1)(1)} + \mu_{03}^{(1)(2)(2)} - 3\mu_{02}^{(1)(1)(1)} + \mu_{02}^{(1)(1)(1)} \end{aligned}$$

weight=7  
structure: 1,1,0,0,1  
Generating graph:

$$\begin{array}{cccccc} 1 & 1 & 1 & 1 & 1 & V1 & 1 \\ V2 & 2 & 2 & 2 & V3 & 3 & 3 \end{array}$$



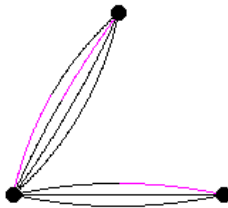
$$\begin{aligned}
Z_{38} = & \mu_{60}^{(1)(2)(2)} \mu_{02}^{(2)} \mu_{03}^{(2)} - 2\mu_{51}^{(1)(2)(2)} \mu_{11}^{(2)} \mu_{03}^{(2)} - 2\mu_{51}^{(1)(2)(2)} \mu_{02}^{(2)} \mu_{12}^{(2)} + \mu_{42}^{(1)(2)(2)} \mu_{20}^{(2)} \mu_{03}^{(2)} \\
& + 4\mu_{42}^{(1)(2)(2)} \mu_{11}^{(2)} \mu_{12}^{(2)} + \mu_{42}^{(1)(2)(2)} \mu_{02}^{(2)} \mu_{21}^{(2)} - 2\mu_{33}^{(1)(2)(2)} \mu_{20}^{(2)} \mu_{12}^{(2)} + \mu_{30}^{(1)(2)(2)} \mu_{20}^{(2)} \mu_{15}^{(2)} \\
& - 2\mu_{33}^{(1)(2)(2)} \mu_{11}^{(2)} \mu_{21}^{(2)} - 2\mu_{30}^{(1)(2)(2)} \mu_{11}^{(2)} \mu_{24}^{(2)} + \mu_{30}^{(1)(2)(2)} \mu_{02}^{(2)} \mu_{33}^{(2)} - \mu_{20}^{(2)(2)(2)} \mu_{30}^{(2)} \mu_{24}^{(2)} \\
& + \mu_{20}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{15}^{(2)} - \mu_{21}^{(1)(1)(2)} \mu_{33}^{(2)} \mu_{02}^{(2)} - \mu_{20}^{(1)(1)(2)} \mu_{33}^{(2)} \mu_{03}^{(2)} - \mu_{20}^{(1)(1)(2)} \mu_{30}^{(2)} \mu_{06}^{(2)} \\
& + 2\mu_{20}^{(2)(2)(2)} \mu_{21}^{(2)} \mu_{33}^{(2)} + \mu_{24}^{(1)(2)(2)} \mu_{20}^{(2)} \mu_{21}^{(2)} - 2\mu_{21}^{(1)(2)(2)} \mu_{20}^{(2)} \mu_{24}^{(2)} - 2\mu_{20}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{24}^{(2)} \\
& + 2\mu_{21}^{(1)(1)(2)} \mu_{24}^{(2)} \mu_{11}^{(2)} + 2\mu_{20}^{(1)(1)(2)} \mu_{24}^{(2)} \mu_{12}^{(2)} + 2\mu_{20}^{(1)(1)(2)} \mu_{21}^{(2)} \mu_{15}^{(2)} + \mu_{20}^{(1)(1)(2)} \mu_{21}^{(2)} \mu_{06}^{(2)} \\
& - \mu_{20}^{(2)(2)(2)} \mu_{12}^{(2)} \mu_{42}^{(2)} + 4\mu_{21}^{(1)(2)(2)} \mu_{11}^{(2)} \mu_{33}^{(2)} + \mu_{20}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{33}^{(2)} - \mu_{21}^{(1)(1)(2)} \mu_{15}^{(2)} \mu_{20}^{(2)} \\
& - \mu_{20}^{(1)(1)(2)} \mu_{15}^{(2)} \mu_{21}^{(2)} - \mu_{20}^{(1)(1)(2)} \mu_{12}^{(2)} \mu_{24}^{(2)} - 2\mu_{20}^{(1)(1)(1)} \mu_{12}^{(2)} \mu_{15}^{(2)} - 2\mu_{21}^{(1)(2)(2)} \mu_{02}^{(2)} \mu_{42}^{(2)} \\
& + \mu_{20}^{(1)(1)(1)} \mu_{03}^{(2)} \mu_{24}^{(2)} + 2\mu_{12}^{(1)(1)(2)} \mu_{42}^{(2)} \mu_{02}^{(2)} + 2\mu_{11}^{(1)(1)(2)} \mu_{42}^{(2)} \mu_{03}^{(2)} + 2\mu_{11}^{(2)(2)(2)} \mu_{30}^{(2)} \mu_{33}^{(2)} \\
& - 2\mu_{11}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{24}^{(2)} - 4\mu_{12}^{(1)(1)(2)} \mu_{33}^{(2)} \mu_{11}^{(2)} - 4\mu_{11}^{(1)(1)(2)} \mu_{33}^{(2)} \mu_{12}^{(2)} + 2\mu_{11}^{(1)(1)(2)} \mu_{30}^{(2)} \mu_{15}^{(2)} \\
& - 4\mu_{11}^{(2)(2)(2)} \mu_{21}^{(2)} \mu_{42}^{(2)} + \mu_{12}^{(1)(2)(2)} \mu_{20}^{(2)} \mu_{33}^{(2)} + 4\mu_{11}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{33}^{(2)} + 2\mu_{12}^{(1)(1)(2)} \mu_{24}^{(2)} \mu_{20}^{(2)} \\
& + 2\mu_{11}^{(1)(1)(2)} \mu_{24}^{(2)} \mu_{21}^{(2)} - 4\mu_{11}^{(1)(1)(2)} \mu_{21}^{(2)} \mu_{24}^{(2)} - 2\mu_{11}^{(1)(1)(1)} \mu_{21}^{(2)} \mu_{15}^{(2)} + 2\mu_{11}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{51}^{(2)} \\
& - 2\mu_{12}^{(1)(2)(2)} \mu_{11}^{(2)} \mu_{42}^{(2)} - 2\mu_{11}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{42}^{(2)} + 2\mu_{11}^{(1)(1)(2)} \mu_{12}^{(2)} \mu_{33}^{(2)} + 4\mu_{11}^{(1)(1)(2)} \mu_{12}^{(2)} \mu_{24}^{(2)} \\
& + \mu_{12}^{(1)(2)(2)} \mu_{02}^{(2)} \mu_{51}^{(2)} - 2\mu_{11}^{(1)(1)(1)} \mu_{03}^{(2)} \mu_{33}^{(2)} - \mu_{03}^{(1)(1)(2)} \mu_{51}^{(2)} \mu_{02}^{(2)} - \mu_{02}^{(1)(1)(2)} \mu_{51}^{(2)} \mu_{03}^{(2)} \\
& + 2\mu_{03}^{(1)(1)(2)} \mu_{42}^{(2)} \mu_{11}^{(2)} + 2\mu_{02}^{(1)(1)(2)} \mu_{42}^{(2)} \mu_{12}^{(2)} - \mu_{02}^{(2)(2)(2)} \mu_{30}^{(2)} \mu_{42}^{(2)} + \mu_{02}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{33}^{(2)} \\
& - \mu_{03}^{(1)(1)(2)} \mu_{33}^{(2)} \mu_{20}^{(2)} - \mu_{02}^{(1)(1)(2)} \mu_{33}^{(2)} \mu_{21}^{(2)} - \mu_{02}^{(1)(1)(2)} \mu_{30}^{(2)} \mu_{24}^{(2)} + 2\mu_{02}^{(2)(2)(2)} \mu_{21}^{(2)} \mu_{51}^{(2)} \\
& - 2\mu_{02}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{42}^{(2)} + 2\mu_{02}^{(1)(1)(2)} \mu_{21}^{(2)} \mu_{33}^{(2)} + \mu_{02}^{(1)(1)(1)} \mu_{21}^{(2)} \mu_{24}^{(2)} - \mu_{02}^{(2)(2)(2)} \mu_{12}^{(2)} \mu_{60}^{(2)} \\
& + \mu_{02}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{51}^{(2)} - \mu_{02}^{(1)(1)(2)} \mu_{12}^{(2)} \mu_{42}^{(2)} - 2\mu_{02}^{(1)(1)(1)} \mu_{12}^{(2)} \mu_{33}^{(2)} + \mu_{02}^{(1)(1)(1)} \mu_{03}^{(2)} \mu_{42}^{(2)}
\end{aligned}$$

weight=7

structure: 1,1,0,0,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & V2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



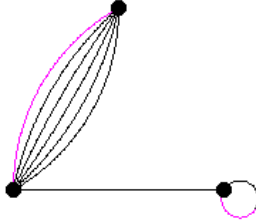
$$\begin{aligned}
Z_{39} = & -\mu_{60}^{(1)(2)} \mu_{11}^{(2)} \mu_{05}^{(2)} + \mu_{51}^{(1)(2)} \mu_{20}^{(2)} \mu_{05}^{(2)} + \mu_{50}^{(1)} \mu_{20}^{(2)} \mu_{06}^{(2)} + 5\mu_{51}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} \\
& -\mu_{50}^{(1)} \mu_{11}^{(2)} \mu_{15}^{(2)} - 5\mu_{42}^{(1)} \mu_{20}^{(2)} \mu_{14}^{(2)} - 5\mu_{41}^{(1)} \mu_{20}^{(2)} \mu_{15}^{(2)} - 10\mu_{42}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} \\
& + 5\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{24}^{(2)} + 10\mu_{33}^{(1)} \mu_{20}^{(2)} \mu_{23}^{(2)} + 10\mu_{32}^{(1)} \mu_{20}^{(2)} \mu_{24}^{(2)} + 10\mu_{33}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} \\
& - 10\mu_{32}^{(1)} \mu_{11}^{(2)} \mu_{33}^{(2)} - 10\mu_{24}^{(1)} \mu_{20}^{(2)} \mu_{32}^{(2)} - 10\mu_{23}^{(1)} \mu_{20}^{(2)} \mu_{33}^{(2)} - 5\mu_{24}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} \\
& + 10\mu_{23}^{(1)} \mu_{11}^{(2)} \mu_{42}^{(2)} - \mu_{11}^{(1)} \mu_{51}^{(2)} \mu_{05}^{(2)} - \mu_{11}^{(1)} \mu_{50}^{(2)} \mu_{06}^{(2)} + 5\mu_{11}^{(1)} \mu_{42}^{(2)} \mu_{14}^{(2)} \\
& + 5\mu_{11}^{(1)} \mu_{41}^{(2)} \mu_{15}^{(2)} - 10\mu_{11}^{(1)} \mu_{33}^{(2)} \mu_{23}^{(2)} - 10\mu_{11}^{(1)} \mu_{32}^{(2)} \mu_{24}^{(2)} + 5\mu_{15}^{(1)} \mu_{20}^{(2)} \mu_{41}^{(2)} \\
& + 5\mu_{14}^{(1)} \mu_{20}^{(2)} \mu_{42}^{(2)} + 10\mu_{11}^{(1)} \mu_{24}^{(2)} \mu_{32}^{(2)} + 10\mu_{11}^{(1)} \mu_{23}^{(2)} \mu_{33}^{(2)} + \mu_{15}^{(1)} \mu_{11}^{(2)} \mu_{50}^{(2)} \\
& - 5\mu_{14}^{(1)} \mu_{11}^{(2)} \mu_{51}^{(2)} - 5\mu_{11}^{(1)} \mu_{15}^{(2)} \mu_{41}^{(2)} - 5\mu_{11}^{(1)} \mu_{14}^{(2)} \mu_{42}^{(2)} + \mu_{11}^{(1)} \mu_{06}^{(2)} \mu_{50}^{(2)} \\
& + \mu_{11}^{(1)} \mu_{05}^{(2)} \mu_{51}^{(2)} + \mu_{02}^{(1)} \mu_{60}^{(2)} \mu_{05}^{(2)} - 5\mu_{02}^{(1)} \mu_{51}^{(2)} \mu_{14}^{(2)} + \mu_{02}^{(1)} \mu_{50}^{(2)} \mu_{15}^{(2)} \\
& + 10\mu_{02}^{(1)} \mu_{42}^{(2)} \mu_{23}^{(2)} - 5\mu_{02}^{(1)} \mu_{41}^{(2)} \mu_{24}^{(2)} - 10\mu_{02}^{(1)} \mu_{33}^{(2)} \mu_{32}^{(2)} + 10\mu_{02}^{(1)} \mu_{32}^{(2)} \mu_{33}^{(2)} \\
& - \mu_{06}^{(1)} \mu_{20}^{(2)} \mu_{50}^{(2)} - \mu_{05}^{(1)} \mu_{20}^{(2)} \mu_{51}^{(2)} + 5\mu_{02}^{(1)} \mu_{24}^{(2)} \mu_{41}^{(2)} - 10\mu_{02}^{(1)} \mu_{23}^{(2)} \mu_{42}^{(2)} \\
& + \mu_{05}^{(1)} \mu_{11}^{(2)} \mu_{60}^{(2)} - \mu_{02}^{(1)} \mu_{15}^{(2)} \mu_{50}^{(2)} + 5\mu_{02}^{(1)} \mu_{14}^{(2)} \mu_{51}^{(2)} - \mu_{02}^{(1)} \mu_{05}^{(2)} \mu_{60}^{(2)}
\end{aligned}$$

weight=8

structure: 1,0,0,1,1

Generating graph:

$$\begin{array}{cccccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 1 & V3 \\
V2 & 2 & 2 & 2 & 2 & 2 & 3 & 3
\end{array}$$



$$\begin{aligned}
Z_{40} = & \mu_{50}^{(1)} \mu_{20}^{(2)} \mu_{06}^{(2)} - \mu_{50}^{(1)} \mu_{11}^{(2)} \mu_{15}^{(2)} + \mu_{50}^{(1)} \mu_{15}^{(2)} \mu_{02}^{(2)} - \mu_{50}^{(1)} \mu_{06}^{(2)} \mu_{11}^{(2)} \\
& - 5\mu_{41}^{(1)} \mu_{20}^{(2)} \mu_{15}^{(2)} - 5\mu_{41}^{(1)} \mu_{24}^{(2)} \mu_{02}^{(2)} + 5\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{24}^{(2)} + 5\mu_{41}^{(1)} \mu_{15}^{(2)} \mu_{11}^{(2)} \\
& + 10\mu_{32}^{(1)} \mu_{33}^{(2)} \mu_{02}^{(2)} + 10\mu_{32}^{(1)} \mu_{20}^{(2)} \mu_{24}^{(2)} - 10\mu_{32}^{(1)} \mu_{24}^{(2)} \mu_{11}^{(2)} - 10\mu_{32}^{(1)} \mu_{11}^{(2)} \mu_{33}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{50}^{(2)} \mu_{06}^{(2)} + 5\mu_{20}^{(1)} \mu_{41}^{(2)} \mu_{15}^{(2)} - 10\mu_{23}^{(1)} \mu_{42}^{(2)} \mu_{02}^{(2)} - 10\mu_{20}^{(1)} \mu_{32}^{(2)} \mu_{24}^{(2)} \\
& + 10\mu_{23}^{(1)} \mu_{33}^{(2)} \mu_{11}^{(2)} - 10\mu_{23}^{(1)} \mu_{20}^{(2)} \mu_{33}^{(2)} + 10\mu_{20}^{(1)} \mu_{23}^{(2)} \mu_{33}^{(2)} + 10\mu_{23}^{(1)} \mu_{11}^{(2)} \mu_{42}^{(2)} \\
& - 5\mu_{20}^{(1)} \mu_{14}^{(2)} \mu_{42}^{(2)} + \mu_{20}^{(1)} \mu_{05}^{(2)} \mu_{51}^{(2)} + \mu_{11}^{(1)} \mu_{50}^{(2)} \mu_{15}^{(2)} + 5\mu_{14}^{(1)} \mu_{51}^{(2)} \mu_{02}^{(2)} \\
& - \mu_{11}^{(1)} \mu_{51}^{(2)} \mu_{05}^{(2)} - 5\mu_{11}^{(1)} \mu_{41}^{(2)} \mu_{24}^{(2)} - 5\mu_{14}^{(1)} \mu_{42}^{(2)} \mu_{11}^{(2)} + 5\mu_{11}^{(1)} \mu_{42}^{(2)} \mu_{14}^{(2)} \\
& + 10\mu_{11}^{(1)} \mu_{32}^{(2)} \mu_{33}^{(2)} - 10\mu_{11}^{(1)} \mu_{33}^{(2)} \mu_{23}^{(2)} + 5\mu_{14}^{(1)} \mu_{20}^{(2)} \mu_{42}^{(2)} - 10\mu_{11}^{(1)} \mu_{23}^{(2)} \mu_{42}^{(2)} \\
& + 10\mu_{11}^{(1)} \mu_{24}^{(2)} \mu_{32}^{(2)} - 5\mu_{14}^{(1)} \mu_{11}^{(2)} \mu_{51}^{(2)} + 5\mu_{11}^{(1)} \mu_{14}^{(2)} \mu_{51}^{(2)} - 5\mu_{11}^{(1)} \mu_{15}^{(2)} \mu_{41}^{(2)} \\
& - \mu_{11}^{(1)} \mu_{05}^{(2)} \mu_{60}^{(2)} + \mu_{11}^{(1)} \mu_{06}^{(2)} \mu_{50}^{(2)} - \mu_{05}^{(1)} \mu_{60}^{(2)} \mu_{02}^{(2)} + \mu_{02}^{(1)} \mu_{60}^{(2)} \mu_{05}^{(2)} \\
& + \mu_{05}^{(1)} \mu_{51}^{(2)} \mu_{11}^{(2)} - 5\mu_{02}^{(1)} \mu_{51}^{(2)} \mu_{14}^{(2)} + 10\mu_{02}^{(1)} \mu_{42}^{(2)} \mu_{23}^{(2)} - 10\mu_{02}^{(1)} \mu_{33}^{(2)} \mu_{32}^{(2)} \\
& - \mu_{05}^{(1)} \mu_{20}^{(2)} \mu_{51}^{(2)} + 5\mu_{02}^{(1)} \mu_{24}^{(2)} \mu_{41}^{(2)} + \mu_{05}^{(1)} \mu_{11}^{(2)} \mu_{60}^{(2)} - \mu_{02}^{(1)} \mu_{15}^{(2)} \mu_{50}^{(2)}
\end{aligned}$$

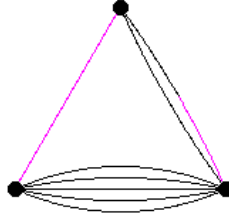


weight=8

structure: 1,0,0,1,1

Generating graph:

|    |   |   |   |   |   |    |   |
|----|---|---|---|---|---|----|---|
| V1 | 1 | 1 | 1 | 1 | 1 | 2  | 2 |
| V2 | 3 | 3 | 3 | 3 | 3 | V3 | 3 |



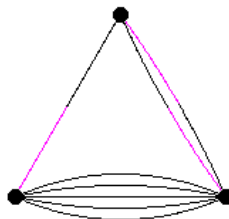
$$\begin{aligned}
 Z_{41} = & \mu_{60}^{(1)} \mu_{11}^{(2)} \mu_{05}^{(2)} - 5\mu_{51}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} - \mu_{50}^{(1)} \mu_{11}^{(2)} \mu_{15}^{(2)} + \mu_{50}^{(1)} \mu_{15}^{(1)} \mu_{02}^{(2)} \\
 & - 5\mu_{41}^{(1)} \mu_{24}^{(1)} \mu_{02}^{(2)} + 10\mu_{42}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} + 5\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{24}^{(2)} + 10\mu_{32}^{(1)} \mu_{33}^{(1)} \mu_{02}^{(2)} \\
 & - 10\mu_{33}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} - 10\mu_{32}^{(1)} \mu_{11}^{(2)} \mu_{33}^{(2)} + \mu_{20}^{(2)} \mu_{50}^{(2)} \mu_{15}^{(2)} - \mu_{20}^{(1)} \mu_{50}^{(2)} \mu_{06}^{(2)} \\
 & - 5\mu_{20}^{(2)} \mu_{41}^{(2)} \mu_{24}^{(2)} + 5\mu_{20}^{(1)} \mu_{41}^{(2)} \mu_{15}^{(2)} - 10\mu_{23}^{(1)} \mu_{42}^{(1)} \mu_{02}^{(2)} + 10\mu_{20}^{(2)} \mu_{32}^{(2)} \mu_{33}^{(2)} \\
 & - 10\mu_{20}^{(1)} \mu_{32}^{(2)} \mu_{24}^{(2)} - 10\mu_{20}^{(2)} \mu_{23}^{(2)} \mu_{42}^{(2)} + 10\mu_{20}^{(1)} \mu_{23}^{(2)} \mu_{33}^{(2)} + 5\mu_{20}^{(2)} \mu_{14}^{(2)} \mu_{51}^{(2)} \\
 & + 5\mu_{24}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} + 10\mu_{23}^{(1)} \mu_{11}^{(2)} \mu_{42}^{(2)} - 5\mu_{20}^{(1)} \mu_{14}^{(2)} \mu_{42}^{(2)} - \mu_{20}^{(2)} \mu_{05}^{(2)} \mu_{60}^{(2)} \\
 & + \mu_{20}^{(1)} \mu_{05}^{(2)} \mu_{51}^{(2)} + 5\mu_{14}^{(1)} \mu_{51}^{(2)} \mu_{02}^{(2)} - \mu_{11}^{(1)} \mu_{51}^{(1)} \mu_{05}^{(2)} + \mu_{11}^{(1)} \mu_{50}^{(1)} \mu_{06}^{(2)} \\
 & + 5\mu_{11}^{(1)} \mu_{42}^{(1)} \mu_{14}^{(2)} - 5\mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{15}^{(2)} - 10\mu_{11}^{(1)} \mu_{33}^{(1)} \mu_{23}^{(2)} + 10\mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{24}^{(2)} \\
 & + 10\mu_{11}^{(1)} \mu_{24}^{(1)} \mu_{32}^{(2)} - 10\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{33}^{(2)} - \mu_{15}^{(1)} \mu_{11}^{(2)} \mu_{50}^{(2)} - 5\mu_{14}^{(1)} \mu_{11}^{(2)} \mu_{51}^{(2)} \\
 & - 5\mu_{11}^{(1)} \mu_{15}^{(1)} \mu_{41}^{(2)} + 5\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{42}^{(2)} + \mu_{11}^{(1)} \mu_{06}^{(1)} \mu_{50}^{(2)} - \mu_{11}^{(1)} \mu_{05}^{(1)} \mu_{51}^{(2)} \\
 & - \mu_{05}^{(1)} \mu_{60}^{(1)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{50}^{(1)} \mu_{06}^{(2)} + 5\mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{15}^{(2)} - 10\mu_{02}^{(1)} \mu_{32}^{(1)} \mu_{24}^{(2)} \\
 & + 10\mu_{02}^{(1)} \mu_{23}^{(1)} \mu_{33}^{(2)} + \mu_{05}^{(1)} \mu_{11}^{(2)} \mu_{60}^{(2)} - 5\mu_{02}^{(1)} \mu_{14}^{(1)} \mu_{42}^{(2)} + \mu_{02}^{(1)} \mu_{05}^{(1)} \mu_{51}^{(2)}
 \end{aligned}$$

weight=8

structure: 1,0,0,1,1

Generating graph:

|    |   |   |   |   |   |    |    |
|----|---|---|---|---|---|----|----|
| V1 | 1 | 1 | 1 | 1 | 1 | V2 | 2  |
|    | 2 | 3 | 3 | 3 | 3 | 3  | V3 |



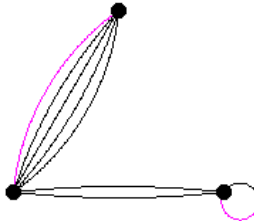
$$\begin{aligned}
Z_{42} = & -\mu_{60}^{(1)} \mu_{12}^{(2)} \mu_{04}^{(2)} + 2\mu_{51}^{(1)} \mu_{21}^{(2)} \mu_{04}^{(2)} + 4\mu_{51}^{(1)} \mu_{12}^{(2)} \mu_{13}^{(2)} - \mu_{42}^{(1)} \mu_{30}^{(2)} \mu_{04}^{(2)} \\
& + \mu_{40}^{(1)} \mu_{30}^{(2)} \mu_{06}^{(2)} - 8\mu_{42}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} - 2\mu_{40}^{(1)} \mu_{21}^{(2)} \mu_{15}^{(2)} - 6\mu_{42}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} \\
& + \mu_{40}^{(1)} \mu_{12}^{(2)} \mu_{24}^{(2)} + 4\mu_{33}^{(1)} \mu_{30}^{(2)} \mu_{13}^{(2)} - 4\mu_{31}^{(1)} \mu_{30}^{(2)} \mu_{15}^{(2)} + 12\mu_{33}^{(1)} \mu_{21}^{(2)} \mu_{22}^{(2)} \\
& + 8\mu_{31}^{(1)} \mu_{21}^{(2)} \mu_{24}^{(2)} + 4\mu_{33}^{(1)} \mu_{12}^{(2)} \mu_{31}^{(2)} - 4\mu_{31}^{(1)} \mu_{12}^{(2)} \mu_{33}^{(2)} + \mu_{21}^{(1)} \mu_{42}^{(2)} \mu_{04}^{(2)} \\
& - \mu_{21}^{(1)} \mu_{40}^{(2)} \mu_{06}^{(2)} - 6\mu_{24}^{(1)} \mu_{30}^{(2)} \mu_{22}^{(2)} + 6\mu_{22}^{(1)} \mu_{30}^{(2)} \mu_{24}^{(2)} - 4\mu_{21}^{(1)} \mu_{33}^{(2)} \mu_{13}^{(2)} \\
& + 4\mu_{21}^{(1)} \mu_{31}^{(2)} \mu_{15}^{(2)} - 8\mu_{24}^{(1)} \mu_{21}^{(2)} \mu_{31}^{(2)} - 12\mu_{22}^{(1)} \mu_{21}^{(2)} \mu_{33}^{(2)} + 6\mu_{21}^{(1)} \mu_{24}^{(2)} \mu_{22}^{(2)} \\
& - 6\mu_{21}^{(1)} \mu_{22}^{(2)} \mu_{24}^{(2)} - \mu_{24}^{(1)} \mu_{12}^{(2)} \mu_{40}^{(2)} + 6\mu_{22}^{(1)} \mu_{12}^{(2)} \mu_{42}^{(2)} - 4\mu_{21}^{(1)} \mu_{15}^{(2)} \mu_{31}^{(2)} \\
& + 4\mu_{21}^{(1)} \mu_{13}^{(2)} \mu_{33}^{(2)} + \mu_{21}^{(1)} \mu_{06}^{(2)} \mu_{40}^{(2)} - \mu_{21}^{(1)} \mu_{04}^{(2)} \mu_{42}^{(2)} - 2\mu_{12}^{(1)} \mu_{51}^{(2)} \mu_{04}^{(2)} \\
& + 8\mu_{12}^{(1)} \mu_{42}^{(2)} \mu_{13}^{(2)} + 2\mu_{12}^{(1)} \mu_{40}^{(2)} \mu_{15}^{(2)} + 4\mu_{15}^{(1)} \mu_{30}^{(2)} \mu_{31}^{(2)} - 4\mu_{13}^{(1)} \mu_{30}^{(2)} \mu_{33}^{(2)} \\
& - 12\mu_{12}^{(1)} \mu_{33}^{(2)} \mu_{22}^{(2)} - 8\mu_{12}^{(1)} \mu_{31}^{(2)} \mu_{24}^{(2)} + 2\mu_{15}^{(1)} \mu_{21}^{(2)} \mu_{40}^{(2)} + 8\mu_{13}^{(1)} \mu_{21}^{(2)} \mu_{42}^{(2)} \\
& + 8\mu_{12}^{(1)} \mu_{24}^{(2)} \mu_{31}^{(2)} + 12\mu_{12}^{(1)} \mu_{22}^{(2)} \mu_{33}^{(2)} - 4\mu_{13}^{(1)} \mu_{12}^{(2)} \mu_{51}^{(2)} - 2\mu_{12}^{(1)} \mu_{15}^{(2)} \mu_{40}^{(2)} \\
& - 8\mu_{12}^{(1)} \mu_{13}^{(2)} \mu_{42}^{(2)} + 2\mu_{12}^{(1)} \mu_{04}^{(2)} \mu_{51}^{(2)} + \mu_{03}^{(1)} \mu_{60}^{(2)} \mu_{04}^{(2)} - 4\mu_{03}^{(1)} \mu_{51}^{(2)} \mu_{13}^{(2)} \\
& + 6\mu_{03}^{(1)} \mu_{42}^{(2)} \mu_{22}^{(2)} - \mu_{03}^{(1)} \mu_{40}^{(2)} \mu_{24}^{(2)} - \mu_{06}^{(1)} \mu_{30}^{(2)} \mu_{40}^{(2)} + \mu_{04}^{(1)} \mu_{30}^{(2)} \mu_{42}^{(2)} \\
& - 4\mu_{03}^{(1)} \mu_{33}^{(2)} \mu_{31}^{(2)} + 4\mu_{03}^{(1)} \mu_{31}^{(2)} \mu_{33}^{(2)} - 2\mu_{04}^{(1)} \mu_{21}^{(2)} \mu_{51}^{(2)} + \mu_{03}^{(1)} \mu_{24}^{(2)} \mu_{40}^{(2)} \\
& - 6\mu_{03}^{(1)} \mu_{22}^{(2)} \mu_{42}^{(2)} + \mu_{04}^{(1)} \mu_{12}^{(2)} \mu_{60}^{(2)} + 4\mu_{03}^{(1)} \mu_{13}^{(2)} \mu_{51}^{(2)} - \mu_{03}^{(1)} \mu_{04}^{(2)} \mu_{60}^{(2)}
\end{aligned}$$

weight=8

structure: 0,1,1,0,1

Generating graph:

|    |   |   |   |   |   |   |    |
|----|---|---|---|---|---|---|----|
| V1 | 1 | 1 | 1 | 1 | 1 | 1 | V3 |
| V2 | 2 | 2 | 2 | 2 | 3 | 3 | 3  |



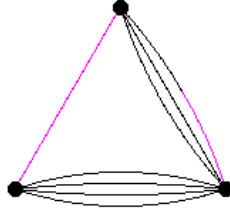
$$\begin{aligned}
Z_{43} = & \mu_{40}^{(1)} \mu_{30}^{(2)} \mu_{06}^{(2)} - 2\mu_{40}^{(1)} \mu_{21}^{(2)} \mu_{15}^{(2)} - \mu_{40}^{(1)} \mu_{24}^{(1)} \mu_{03}^{(2)} + \mu_{40}^{(1)} \mu_{12}^{(2)} \mu_{24}^{(2)} \\
& + 2\mu_{40}^{(1)} \mu_{15}^{(1)} \mu_{12}^{(2)} - \mu_{40}^{(1)} \mu_{06}^{(1)} \mu_{21}^{(2)} - \mu_{30}^{(1)} \mu_{40}^{(2)} \mu_{06}^{(2)} - 4\mu_{31}^{(1)} \mu_{30}^{(2)} \mu_{15}^{(2)} \\
& + 4\mu_{30}^{(1)} \mu_{31}^{(2)} \mu_{15}^{(2)} + 4\mu_{31}^{(1)} \mu_{33}^{(1)} \mu_{03}^{(2)} + 8\mu_{31}^{(1)} \mu_{21}^{(2)} \mu_{24}^{(2)} - 6\mu_{30}^{(1)} \mu_{22}^{(2)} \mu_{24}^{(2)} \\
& - 8\mu_{31}^{(1)} \mu_{24}^{(1)} \mu_{12}^{(2)} - 4\mu_{31}^{(1)} \mu_{12}^{(2)} \mu_{33}^{(2)} + 4\mu_{30}^{(1)} \mu_{13}^{(2)} \mu_{33}^{(2)} + 4\mu_{31}^{(1)} \mu_{15}^{(1)} \mu_{21}^{(2)} \\
& - \mu_{30}^{(1)} \mu_{04}^{(2)} \mu_{42}^{(2)} + 2\mu_{21}^{(1)} \mu_{40}^{(2)} \mu_{15}^{(2)} - 6\mu_{22}^{(1)} \mu_{42}^{(1)} \mu_{03}^{(2)} + \mu_{21}^{(1)} \mu_{42}^{(1)} \mu_{04}^{(2)} \\
& + 6\mu_{22}^{(1)} \mu_{30}^{(2)} \mu_{24}^{(2)} - 8\mu_{21}^{(1)} \mu_{31}^{(2)} \mu_{24}^{(2)} + 12\mu_{22}^{(1)} \mu_{33}^{(1)} \mu_{12}^{(2)} - 4\mu_{21}^{(1)} \mu_{33}^{(1)} \mu_{13}^{(2)} \\
& - 12\mu_{22}^{(1)} \mu_{21}^{(2)} \mu_{33}^{(2)} + 12\mu_{21}^{(1)} \mu_{22}^{(2)} \mu_{33}^{(2)} - 6\mu_{22}^{(1)} \mu_{24}^{(1)} \mu_{21}^{(2)} + 6\mu_{21}^{(1)} \mu_{24}^{(1)} \mu_{22}^{(2)} \\
& + 6\mu_{22}^{(1)} \mu_{12}^{(2)} \mu_{42}^{(2)} - 8\mu_{21}^{(1)} \mu_{13}^{(2)} \mu_{42}^{(2)} - 4\mu_{21}^{(1)} \mu_{15}^{(1)} \mu_{31}^{(2)} + 2\mu_{21}^{(1)} \mu_{04}^{(2)} \mu_{51}^{(2)} \\
& + \mu_{21}^{(1)} \mu_{06}^{(1)} \mu_{40}^{(2)} + 4\mu_{13}^{(1)} \mu_{51}^{(1)} \mu_{03}^{(2)} - 2\mu_{12}^{(1)} \mu_{51}^{(1)} \mu_{04}^{(2)} - \mu_{12}^{(1)} \mu_{40}^{(2)} \mu_{24}^{(2)} \\
& - 8\mu_{13}^{(1)} \mu_{42}^{(1)} \mu_{12}^{(2)} + 8\mu_{12}^{(1)} \mu_{42}^{(1)} \mu_{13}^{(2)} - 4\mu_{13}^{(1)} \mu_{30}^{(2)} \mu_{33}^{(2)} + 4\mu_{12}^{(1)} \mu_{31}^{(2)} \mu_{33}^{(2)} \\
& + 4\mu_{13}^{(1)} \mu_{33}^{(1)} \mu_{21}^{(2)} - 12\mu_{12}^{(1)} \mu_{33}^{(1)} \mu_{22}^{(2)} + 8\mu_{13}^{(1)} \mu_{21}^{(2)} \mu_{42}^{(2)} - 6\mu_{12}^{(1)} \mu_{22}^{(2)} \mu_{42}^{(2)} \\
& + 8\mu_{12}^{(1)} \mu_{24}^{(1)} \mu_{31}^{(2)} - 4\mu_{13}^{(1)} \mu_{12}^{(2)} \mu_{51}^{(2)} + 4\mu_{12}^{(1)} \mu_{13}^{(2)} \mu_{51}^{(2)} - 2\mu_{12}^{(1)} \mu_{15}^{(1)} \mu_{40}^{(2)} \\
& - \mu_{12}^{(1)} \mu_{04}^{(2)} \mu_{60}^{(2)} - \mu_{04}^{(1)} \mu_{60}^{(1)} \mu_{03}^{(2)} + \mu_{03}^{(1)} \mu_{60}^{(1)} \mu_{04}^{(2)} + 2\mu_{04}^{(1)} \mu_{51}^{(1)} \mu_{12}^{(2)} \\
& - 4\mu_{03}^{(1)} \mu_{51}^{(1)} \mu_{13}^{(2)} - \mu_{04}^{(1)} \mu_{42}^{(1)} \mu_{21}^{(2)} + 6\mu_{03}^{(1)} \mu_{42}^{(1)} \mu_{22}^{(2)} + \mu_{04}^{(1)} \mu_{30}^{(2)} \mu_{42}^{(2)} \\
& - 4\mu_{03}^{(1)} \mu_{33}^{(1)} \mu_{31}^{(2)} - 2\mu_{04}^{(1)} \mu_{21}^{(2)} \mu_{51}^{(2)} + \mu_{03}^{(1)} \mu_{24}^{(1)} \mu_{40}^{(2)} + \mu_{04}^{(1)} \mu_{12}^{(2)} \mu_{60}^{(2)}
\end{aligned}$$

weight=8

structure: 0,1,1,0,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 1 & 2 & 2 & 2 \\
V2 & 3 & 3 & 3 & 3 & V3 & 3 & 3
\end{array}$$



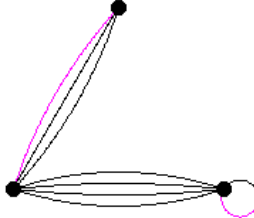
$$\begin{aligned}
Z_{44} = & -\mu_{60}^{(1)} \mu_{02}^{(2)} \mu_{14}^{(2)} + 2\mu_{51}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} + 4\mu_{51}^{(1)} \mu_{02}^{(2)} \mu_{23}^{(2)} - \mu_{42}^{(1)} \mu_{20}^{(2)} \mu_{14}^{(2)} \\
& + \mu_{41}^{(1)} \mu_{24}^{(1)} \mu_{02}^{(2)} - 8\mu_{42}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} - 2\mu_{41}^{(1)} \mu_{15}^{(1)} \mu_{11}^{(2)} - 6\mu_{42}^{(1)} \mu_{02}^{(2)} \mu_{32}^{(2)} \\
& + \mu_{41}^{(1)} \mu_{06}^{(1)} \mu_{20}^{(2)} - 4\mu_{32}^{(1)} \mu_{33}^{(1)} \mu_{02}^{(2)} + 4\mu_{33}^{(1)} \mu_{20}^{(2)} \mu_{23}^{(2)} + 8\mu_{32}^{(1)} \mu_{24}^{(1)} \mu_{11}^{(2)} \\
& + 12\mu_{33}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} - 4\mu_{32}^{(1)} \mu_{15}^{(1)} \mu_{20}^{(2)} + 4\mu_{33}^{(1)} \mu_{02}^{(2)} \mu_{41}^{(2)} + \mu_{20}^{(1)} \mu_{50}^{(2)} \mu_{06}^{(2)} \\
& - 4\mu_{20}^{(1)} \mu_{41}^{(2)} \mu_{15}^{(2)} + 6\mu_{23}^{(1)} \mu_{42}^{(1)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{41}^{(1)} \mu_{06}^{(2)} + 6\mu_{20}^{(1)} \mu_{32}^{(2)} \mu_{24}^{(2)} \\
& - 12\mu_{23}^{(1)} \mu_{33}^{(1)} \mu_{11}^{(2)} + 4\mu_{20}^{(1)} \mu_{32}^{(1)} \mu_{15}^{(2)} - 6\mu_{24}^{(1)} \mu_{20}^{(2)} \mu_{32}^{(2)} - 4\mu_{20}^{(1)} \mu_{23}^{(2)} \mu_{33}^{(2)} \\
& + 6\mu_{23}^{(1)} \mu_{24}^{(1)} \mu_{20}^{(2)} - 6\mu_{20}^{(1)} \mu_{23}^{(2)} \mu_{24}^{(2)} - 8\mu_{24}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} + \mu_{20}^{(1)} \mu_{14}^{(2)} \mu_{42}^{(2)} \\
& + 4\mu_{20}^{(1)} \mu_{14}^{(1)} \mu_{33}^{(2)} - \mu_{24}^{(1)} \mu_{02}^{(2)} \mu_{50}^{(2)} - \mu_{20}^{(1)} \mu_{05}^{(1)} \mu_{42}^{(2)} - 2\mu_{11}^{(1)} \mu_{50}^{(2)} \mu_{15}^{(2)} \\
& - 4\mu_{14}^{(1)} \mu_{51}^{(1)} \mu_{02}^{(2)} + 8\mu_{11}^{(1)} \mu_{41}^{(2)} \mu_{24}^{(2)} + 8\mu_{14}^{(1)} \mu_{42}^{(1)} \mu_{11}^{(2)} + 2\mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{15}^{(2)} \\
& - 12\mu_{11}^{(1)} \mu_{32}^{(2)} \mu_{33}^{(2)} - 4\mu_{14}^{(1)} \mu_{33}^{(1)} \mu_{20}^{(2)} - 8\mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{24}^{(2)} + 4\mu_{15}^{(1)} \mu_{20}^{(2)} \mu_{41}^{(2)} \\
& + 8\mu_{11}^{(1)} \mu_{23}^{(2)} \mu_{42}^{(2)} + 12\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{33}^{(2)} + 2\mu_{15}^{(1)} \mu_{11}^{(2)} \mu_{50}^{(2)} - 2\mu_{11}^{(1)} \mu_{14}^{(2)} \mu_{51}^{(2)} \\
& - 8\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{42}^{(2)} + 2\mu_{11}^{(1)} \mu_{05}^{(1)} \mu_{51}^{(2)} + \mu_{05}^{(1)} \mu_{60}^{(1)} \mu_{02}^{(2)} + \mu_{02}^{(1)} \mu_{50}^{(2)} \mu_{24}^{(2)} \\
& - 2\mu_{05}^{(1)} \mu_{51}^{(1)} \mu_{11}^{(2)} - 4\mu_{02}^{(1)} \mu_{41}^{(2)} \mu_{33}^{(2)} + \mu_{05}^{(1)} \mu_{42}^{(1)} \mu_{20}^{(2)} - \mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{24}^{(2)} \\
& + 6\mu_{02}^{(1)} \mu_{32}^{(2)} \mu_{42}^{(2)} + 4\mu_{02}^{(1)} \mu_{32}^{(1)} \mu_{33}^{(2)} - \mu_{06}^{(1)} \mu_{20}^{(2)} \mu_{50}^{(2)} - 4\mu_{02}^{(1)} \mu_{23}^{(2)} \mu_{51}^{(2)} \\
& - 6\mu_{02}^{(1)} \mu_{23}^{(1)} \mu_{42}^{(2)} + \mu_{02}^{(1)} \mu_{14}^{(2)} \mu_{60}^{(2)} + 4\mu_{02}^{(1)} \mu_{14}^{(1)} \mu_{51}^{(2)} - \mu_{02}^{(1)} \mu_{05}^{(1)} \mu_{60}^{(2)}
\end{aligned}$$

weight=8

structure: 1,0,0,1,1

Generating graph:

|    |   |   |   |   |   |   |    |
|----|---|---|---|---|---|---|----|
| V1 | 1 | 1 | 1 | 1 | 1 | 1 | V3 |
| V2 | 2 | 2 | 3 | 3 | 3 | 3 | 3  |



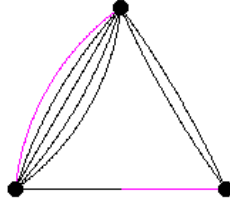
$$\begin{aligned}
Z_{45} = & -\mu_{60}^{(1)} \mu_{02}^{(2)} \mu_{14}^{(2)} + \mu_{50}^{(1)} \mu_{20}^{(2)} \mu_{06}^{(2)} + 2\mu_{51}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} - 2\mu_{50}^{(1)} \mu_{11}^{(2)} \mu_{15}^{(2)} \\
& + 4\mu_{51}^{(1)} \mu_{02}^{(2)} \mu_{23}^{(2)} + \mu_{50}^{(1)} \mu_{02}^{(2)} \mu_{24}^{(2)} - \mu_{42}^{(1)} \mu_{20}^{(2)} \mu_{14}^{(2)} - 4\mu_{41}^{(1)} \mu_{20}^{(2)} \mu_{15}^{(2)} \\
& - 8\mu_{42}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} + 8\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{24}^{(2)} - 6\mu_{42}^{(1)} \mu_{02}^{(2)} \mu_{32}^{(2)} - 4\mu_{41}^{(1)} \mu_{02}^{(2)} \mu_{33}^{(2)} \\
& + 4\mu_{33}^{(1)} \mu_{20}^{(2)} \mu_{23}^{(2)} + 6\mu_{32}^{(1)} \mu_{20}^{(2)} \mu_{24}^{(2)} + 12\mu_{33}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} - 12\mu_{32}^{(1)} \mu_{11}^{(2)} \mu_{33}^{(2)} \\
& + 4\mu_{33}^{(1)} \mu_{02}^{(2)} \mu_{41}^{(2)} + 6\mu_{32}^{(1)} \mu_{02}^{(2)} \mu_{42}^{(2)} + \mu_{20}^{(1)} \mu_{42}^{(1)} \mu_{05}^{(2)} - \mu_{20}^{(1)} \mu_{41}^{(1)} \mu_{06}^{(2)} \\
& - 4\mu_{20}^{(1)} \mu_{33}^{(1)} \mu_{14}^{(2)} + 4\mu_{20}^{(1)} \mu_{32}^{(1)} \mu_{15}^{(2)} - 6\mu_{24}^{(1)} \mu_{20}^{(2)} \mu_{32}^{(2)} - 4\mu_{23}^{(1)} \mu_{20}^{(2)} \mu_{33}^{(2)} \\
& + 6\mu_{20}^{(1)} \mu_{24}^{(1)} \mu_{23}^{(2)} - 6\mu_{20}^{(1)} \mu_{23}^{(1)} \mu_{24}^{(2)} - 8\mu_{24}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} + 8\mu_{23}^{(1)} \mu_{11}^{(2)} \mu_{42}^{(2)} \\
& - 4\mu_{20}^{(1)} \mu_{15}^{(1)} \mu_{32}^{(2)} + 4\mu_{20}^{(1)} \mu_{14}^{(1)} \mu_{33}^{(2)} - \mu_{24}^{(1)} \mu_{02}^{(2)} \mu_{50}^{(2)} - 4\mu_{23}^{(1)} \mu_{02}^{(2)} \mu_{51}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{06}^{(1)} \mu_{41}^{(2)} - \mu_{20}^{(1)} \mu_{05}^{(1)} \mu_{42}^{(2)} - 2\mu_{11}^{(1)} \mu_{51}^{(1)} \mu_{05}^{(2)} + 8\mu_{11}^{(1)} \mu_{42}^{(1)} \mu_{14}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{15}^{(2)} - 12\mu_{11}^{(1)} \mu_{33}^{(1)} \mu_{23}^{(2)} - 8\mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{24}^{(2)} + 4\mu_{15}^{(1)} \mu_{20}^{(2)} \mu_{41}^{(2)} \\
& + \mu_{14}^{(1)} \mu_{20}^{(2)} \mu_{42}^{(2)} + 8\mu_{11}^{(1)} \mu_{24}^{(1)} \mu_{32}^{(2)} + 12\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{33}^{(2)} + 2\mu_{15}^{(1)} \mu_{11}^{(2)} \mu_{50}^{(2)} \\
& - 2\mu_{14}^{(1)} \mu_{11}^{(2)} \mu_{51}^{(2)} - 2\mu_{11}^{(1)} \mu_{15}^{(1)} \mu_{41}^{(2)} - 8\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{42}^{(2)} + \mu_{14}^{(1)} \mu_{02}^{(2)} \mu_{60}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{05}^{(1)} \mu_{51}^{(2)} + \mu_{02}^{(1)} \mu_{60}^{(1)} \mu_{05}^{(2)} - 4\mu_{02}^{(1)} \mu_{51}^{(1)} \mu_{14}^{(2)} + 6\mu_{02}^{(1)} \mu_{42}^{(1)} \mu_{23}^{(2)} \\
& - \mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{24}^{(2)} - 4\mu_{02}^{(1)} \mu_{33}^{(1)} \mu_{32}^{(2)} + 4\mu_{02}^{(1)} \mu_{32}^{(1)} \mu_{33}^{(2)} - \mu_{06}^{(1)} \mu_{20}^{(2)} \mu_{50}^{(2)} \\
& + \mu_{02}^{(1)} \mu_{24}^{(1)} \mu_{41}^{(2)} - 6\mu_{02}^{(1)} \mu_{23}^{(1)} \mu_{42}^{(2)} + 4\mu_{02}^{(1)} \mu_{14}^{(1)} \mu_{51}^{(2)} - \mu_{02}^{(1)} \mu_{05}^{(1)} \mu_{60}^{(2)}
\end{aligned}$$

weight=8

structure: 1,0,0,1,1

Generating graph:

$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 \\
V2 & 2 & 2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



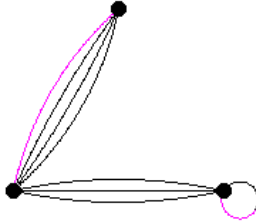
$$\begin{aligned}
Z_{46} = & -\mu_{60}^{(1)} \mu_{03}^{(2)} \mu_{13}^{(2)} + 3\mu_{51}^{(1)} \mu_{12}^{(2)} \mu_{13}^{(2)} + 3\mu_{51}^{(1)} \mu_{03}^{(2)} \mu_{22}^{(2)} - 3\mu_{42}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} \\
& -9\mu_{42}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} - 3\mu_{42}^{(1)} \mu_{03}^{(2)} \mu_{31}^{(2)} + \mu_{30}^{(1)} \mu_{40}^{(2)} \mu_{06}^{(2)} + \mu_{33}^{(1)} \mu_{30}^{(2)} \mu_{13}^{(2)} \\
& -3\mu_{30}^{(1)} \mu_{31}^{(2)} \mu_{15}^{(2)} - \mu_{31}^{(1)} \mu_{33}^{(1)} \mu_{03}^{(2)} - \mu_{30}^{(1)} \mu_{31}^{(1)} \mu_{06}^{(2)} + 9\mu_{33}^{(1)} \mu_{21}^{(2)} \mu_{22}^{(2)} \\
& + 3\mu_{30}^{(1)} \mu_{22}^{(2)} \mu_{24}^{(2)} + 3\mu_{31}^{(1)} \mu_{24}^{(1)} \mu_{12}^{(2)} + 3\mu_{30}^{(1)} \mu_{22}^{(1)} \mu_{15}^{(2)} + 9\mu_{33}^{(1)} \mu_{12}^{(1)} \mu_{31}^{(2)} \\
& -\mu_{30}^{(1)} \mu_{13}^{(2)} \mu_{33}^{(2)} - 3\mu_{31}^{(1)} \mu_{15}^{(1)} \mu_{21}^{(2)} - 3\mu_{30}^{(1)} \mu_{13}^{(1)} \mu_{24}^{(2)} + \mu_{33}^{(1)} \mu_{03}^{(2)} \mu_{40}^{(2)} \\
& + \mu_{31}^{(1)} \mu_{06}^{(1)} \mu_{30}^{(2)} + \mu_{30}^{(1)} \mu_{04}^{(1)} \mu_{33}^{(2)} - 3\mu_{21}^{(1)} \mu_{40}^{(2)} \mu_{15}^{(2)} + 3\mu_{22}^{(1)} \mu_{42}^{(1)} \mu_{03}^{(2)} \\
& -3\mu_{24}^{(1)} \mu_{30}^{(2)} \mu_{22}^{(2)} + 9\mu_{21}^{(1)} \mu_{31}^{(2)} \mu_{24}^{(2)} - 9\mu_{22}^{(1)} \mu_{33}^{(1)} \mu_{12}^{(2)} + 3\mu_{21}^{(1)} \mu_{31}^{(1)} \mu_{15}^{(2)} \\
& -9\mu_{24}^{(1)} \mu_{21}^{(2)} \mu_{31}^{(2)} - 9\mu_{21}^{(1)} \mu_{22}^{(2)} \mu_{33}^{(2)} + 9\mu_{22}^{(1)} \mu_{24}^{(1)} \mu_{21}^{(2)} - 9\mu_{21}^{(1)} \mu_{22}^{(1)} \mu_{24}^{(2)} \\
& -3\mu_{24}^{(1)} \mu_{12}^{(2)} \mu_{40}^{(2)} + 3\mu_{21}^{(1)} \mu_{13}^{(2)} \mu_{42}^{(2)} - 3\mu_{22}^{(1)} \mu_{15}^{(1)} \mu_{30}^{(2)} + 9\mu_{21}^{(1)} \mu_{13}^{(1)} \mu_{33}^{(2)} \\
& -3\mu_{21}^{(1)} \mu_{04}^{(1)} \mu_{42}^{(2)} - 3\mu_{13}^{(1)} \mu_{51}^{(1)} \mu_{03}^{(2)} + 3\mu_{12}^{(1)} \mu_{40}^{(1)} \mu_{24}^{(2)} + 9\mu_{13}^{(1)} \mu_{42}^{(1)} \mu_{12}^{(2)} \\
& + 3\mu_{15}^{(1)} \mu_{30}^{(2)} \mu_{31}^{(2)} - 9\mu_{12}^{(1)} \mu_{31}^{(2)} \mu_{33}^{(2)} - 9\mu_{13}^{(1)} \mu_{33}^{(1)} \mu_{21}^{(2)} - 3\mu_{12}^{(1)} \mu_{31}^{(1)} \mu_{24}^{(2)} \\
& + 3\mu_{15}^{(1)} \mu_{21}^{(2)} \mu_{40}^{(2)} + 9\mu_{12}^{(1)} \mu_{22}^{(2)} \mu_{42}^{(2)} + 3\mu_{13}^{(1)} \mu_{24}^{(1)} \mu_{30}^{(2)} + 9\mu_{12}^{(1)} \mu_{22}^{(1)} \mu_{33}^{(2)} \\
& -3\mu_{12}^{(1)} \mu_{13}^{(2)} \mu_{51}^{(2)} - 9\mu_{12}^{(1)} \mu_{13}^{(1)} \mu_{42}^{(2)} + 3\mu_{12}^{(1)} \mu_{04}^{(1)} \mu_{51}^{(2)} + \mu_{04}^{(1)} \mu_{60}^{(1)} \mu_{03}^{(2)} \\
& -3\mu_{04}^{(1)} \mu_{51}^{(1)} \mu_{12}^{(2)} - \mu_{03}^{(1)} \mu_{40}^{(2)} \mu_{33}^{(2)} + 3\mu_{04}^{(1)} \mu_{42}^{(1)} \mu_{21}^{(2)} - \mu_{06}^{(1)} \mu_{30}^{(2)} \mu_{40}^{(2)} \\
& + 3\mu_{03}^{(1)} \mu_{31}^{(2)} \mu_{42}^{(2)} - \mu_{04}^{(1)} \mu_{33}^{(1)} \mu_{30}^{(2)} + \mu_{03}^{(1)} \mu_{31}^{(1)} \mu_{33}^{(2)} - 3\mu_{03}^{(1)} \mu_{22}^{(2)} \mu_{51}^{(2)} \\
& -3\mu_{03}^{(1)} \mu_{22}^{(1)} \mu_{42}^{(2)} + \mu_{03}^{(1)} \mu_{13}^{(2)} \mu_{60}^{(2)} + 3\mu_{03}^{(1)} \mu_{13}^{(1)} \mu_{51}^{(2)} - \mu_{03}^{(1)} \mu_{04}^{(1)} \mu_{60}^{(2)}
\end{aligned}$$

weight=8

structure: 0,1,1,0,1

Generating graph:

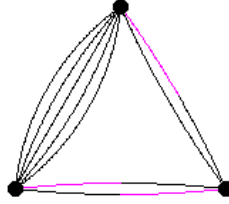
|    |   |   |   |   |   |   |   |    |
|----|---|---|---|---|---|---|---|----|
| V1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | V3 |
| V2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |    |



$$\begin{aligned}
Z_{47} = & \mu_{60}^{(1)} \mu_{21}^{(2)} \mu_{06}^{(2)} - \mu_{60}^{(1)} \mu_{06}^{(1)} \mu_{12}^{(2)} - 6\mu_{51}^{(1)} \mu_{21}^{(2)} \mu_{15}^{(2)} + 6\mu_{51}^{(1)} \mu_{15}^{(1)} \mu_{12}^{(2)} \\
& + 15\mu_{42}^{(1)} \mu_{21}^{(2)} \mu_{24}^{(2)} - 15\mu_{42}^{(1)} \mu_{24}^{(1)} \mu_{12}^{(2)} - \mu_{30}^{(2)} \mu_{60}^{(2)} \mu_{06}^{(2)} + 6\mu_{30}^{(2)} \mu_{51}^{(2)} \mu_{15}^{(2)} \\
& - 15\mu_{30}^{(2)} \mu_{42}^{(2)} \mu_{24}^{(2)} + 10\mu_{30}^{(2)} (\mu_{33}^{(2)})^2 + 10(\mu_{33}^{(1)})^2 \mu_{12}^{(2)} - 20\mu_{33}^{(1)} \mu_{21}^{(2)} \mu_{33}^{(2)} + \mu_{21}^{(1)} \mu_{60}^{(2)} \mu_{06}^{(2)} \\
& - 6\mu_{21}^{(1)} \mu_{51}^{(2)} \mu_{15}^{(2)} + 15\mu_{21}^{(1)} \mu_{42}^{(1)} \mu_{24}^{(2)} - 10\mu_{21}^{(1)} (\mu_{33}^{(2)})^2 + 15\mu_{24}^{(1)} \mu_{21}^{(2)} \mu_{42}^{(2)} \\
& - \mu_{12}^{(1)} \mu_{60}^{(1)} \mu_{06}^{(2)} + 6\mu_{12}^{(1)} \mu_{51}^{(1)} \mu_{15}^{(2)} - 15\mu_{12}^{(1)} \mu_{42}^{(1)} \mu_{24}^{(2)} + 20\mu_{12}^{(1)} \mu_{33}^{(1)} \mu_{33}^{(2)} \\
& - 6\mu_{15}^{(1)} \mu_{21}^{(2)} \mu_{51}^{(2)} - 15\mu_{12}^{(1)} \mu_{24}^{(1)} \mu_{42}^{(2)} + 6\mu_{12}^{(1)} \mu_{15}^{(1)} \mu_{51}^{(2)} - \mu_{12}^{(1)} \mu_{06}^{(1)} \mu_{60}^{(2)} \\
& + \mu_{03}^{(1)} \mu_{60}^{(1)} \mu_{06}^{(2)} - 6\mu_{03}^{(1)} \mu_{51}^{(1)} \mu_{15}^{(2)} + 15\mu_{03}^{(1)} \mu_{42}^{(1)} \mu_{24}^{(2)} - 10\mu_{03}^{(1)} (\mu_{33}^{(2)})^2 \\
& + \mu_{06}^{(1)} \mu_{21}^{(2)} \mu_{60}^{(2)}
\end{aligned}$$

weight=9  
structure: 0,1,0,0,2  
Generating graph:

|   |   |   |   |   |    |    |    |   |
|---|---|---|---|---|----|----|----|---|
| 1 | 1 | 1 | 1 | 1 | V1 | 1  | V2 | 2 |
| 2 | 2 | 2 | 2 | 2 | 3  | V3 | 3  | 3 |



### Invariants of the order 7

$$\begin{aligned}
Z_{48} = & \mu_{61}^{(1)} \mu_{05}^{(2)} + \mu_{50}^{(2)} \mu_{25}^{(2)} - 5\mu_{52}^{(1)} \mu_{14}^{(2)} - \mu_{50}^{(1)} \mu_{16}^{(2)} + \mu_{50}^{(1)} \mu_{07}^{(1)} - 5\mu_{41}^{(2)} \mu_{34}^{(2)} \\
& + 10\mu_{43}^{(1)} \mu_{23}^{(2)} + 5\mu_{41}^{(1)} \mu_{25}^{(2)} - 5\mu_{41}^{(1)} \mu_{16}^{(1)} + 10\mu_{32}^{(2)} \mu_{43}^{(2)} - 10\mu_{34}^{(1)} \mu_{32}^{(2)} - 10\mu_{32}^{(1)} \mu_{34}^{(2)} \\
& + 10\mu_{32}^{(1)} \mu_{25}^{(1)} - 10\mu_{23}^{(2)} \mu_{52}^{(2)} + 5\mu_{25}^{(1)} \mu_{41}^{(2)} + 10\mu_{23}^{(1)} \mu_{43}^{(2)} - 10\mu_{23}^{(1)} \mu_{34}^{(1)} + 5\mu_{14}^{(2)} \mu_{61}^{(2)} \\
& - \mu_{16}^{(1)} \mu_{50}^{(2)} - 5\mu_{14}^{(1)} \mu_{52}^{(2)} + 5\mu_{14}^{(1)} \mu_{43}^{(1)} - \mu_{05}^{(2)} \mu_{70}^{(2)} + \mu_{05}^{(1)} \mu_{61}^{(2)} - \mu_{05}^{(1)} \mu_{52}^{(1)}
\end{aligned}$$

weight=7  
structure: 0,0,0,1,0,1  
Generating graph:

|    |    |   |   |   |   |   |
|----|----|---|---|---|---|---|
| V1 | 1  | 1 | 1 | 1 | 1 | 1 |
| 1  | V2 | 2 | 2 | 2 | 2 | 2 |



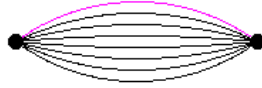
$$\begin{aligned}
Z_{49} = & \mu_{70}^{(1)} \mu_{07}^{(2)} - 7\mu_{61}^{(1)} \mu_{16}^{(2)} + 21\mu_{52}^{(1)} \mu_{25}^{(2)} - 35\mu_{43}^{(1)} \mu_{34}^{(2)} + 35\mu_{34}^{(1)} \mu_{43}^{(2)} - 21\mu_{25}^{(1)} \mu_{52}^{(2)} \\
& + 7\mu_{16}^{(1)} \mu_{61}^{(2)} - \mu_{07}^{(1)} \mu_{70}^{(2)}
\end{aligned}$$

weight=8

structure: 0,0,0,0,2

Generating graph:

|    |   |   |   |   |   |   |   |
|----|---|---|---|---|---|---|---|
| V1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| V2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |



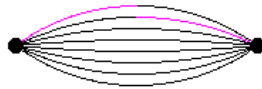
$$\begin{aligned}
 Z_{50} = & -\mu_{70}^{(2)} \mu_{16}^{(2)} + \mu_{70}^{(1)} \mu_{07}^{(2)} + 6\mu_{61}^{(2)} \mu_{25}^{(2)} - 6\mu_{61}^{(1)} \mu_{16}^{(2)} - \mu_{61}^{(1)} \mu_{07}^{(1)} - 15\mu_{52}^{(2)} \mu_{34}^{(2)} \\
 & + 15\mu_{52}^{(1)} \mu_{25}^{(2)} + 6\mu_{52}^{(1)} \mu_{16}^{(1)} + 10(\mu_{43}^{(2)})^2 - 20\mu_{43}^{(1)} \mu_{34}^{(2)} - 15\mu_{43}^{(1)} \mu_{25}^{(1)} + 15\mu_{34}^{(1)} \mu_{43}^{(2)} + 10(\mu_{34}^{(1)})^2 \\
 & - 6\mu_{25}^{(1)} \mu_{52}^{(2)} + \mu_{16}^{(1)} \mu_{61}^{(2)}
 \end{aligned}$$

weight=8

structure: 0,0,0,0,2

Generating graph:

|      |   |   |   |   |   |   |   |
|------|---|---|---|---|---|---|---|
| V1   | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 V2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |





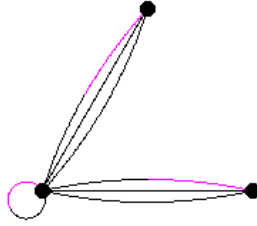
$$\begin{aligned}
Z_{51} = & \mu_{61}^{(1)} (\mu_{02}^{(2)})^2 - 4\mu_{52}^{(1)} \mu_{11}^{(2)} \mu_{02}^{(2)} + 2\mu_{43}^{(1)} \mu_{20}^{(2)} \mu_{02}^{(2)} + 4\mu_{43}^{(1)} (\mu_{11}^{(2)})^2 - 4\mu_{34}^{(1)} \mu_{20}^{(2)} \mu_{11}^{(2)} \\
& - 2\mu_{20}^{(1)} \mu_{34}^{(1)} \mu_{02}^{(2)} - (\mu_{20}^{(2)})^2 \mu_{34}^{(2)} + \mu_{25}^{(1)} (\mu_{20}^{(2)})^2 + 2\mu_{20}^{(1)} \mu_{20}^{(2)} \mu_{25}^{(2)} + 4\mu_{20}^{(1)} \mu_{25}^{(1)} \mu_{11}^{(2)} \\
& - (\mu_{20}^{(1)})^2 \mu_{16}^{(2)} + (\mu_{20}^{(1)})^2 \mu_{07}^{(1)} + 4\mu_{20}^{(2)} \mu_{11}^{(2)} \mu_{43}^{(2)} - 4\mu_{20}^{(1)} \mu_{11}^{(2)} \mu_{34}^{(2)} - 2\mu_{20}^{(1)} \mu_{16}^{(1)} \mu_{20}^{(2)} \\
& + 4\mu_{20}^{(1)} \mu_{11}^{(1)} \mu_{25}^{(2)} - 4\mu_{20}^{(1)} \mu_{11}^{(1)} \mu_{16}^{(1)} - 2\mu_{20}^{(2)} \mu_{02}^{(2)} \mu_{52}^{(2)} + 2\mu_{20}^{(1)} \mu_{02}^{(1)} \mu_{43}^{(2)} \\
& - 2\mu_{20}^{(1)} \mu_{02}^{(1)} \mu_{34}^{(2)} + 2\mu_{20}^{(1)} \mu_{02}^{(1)} \mu_{25}^{(1)} + 4\mu_{11}^{(1)} \mu_{43}^{(1)} \mu_{02}^{(2)} - 8\mu_{11}^{(1)} \mu_{34}^{(1)} \mu_{11}^{(2)} \\
& - 4\mu_{11}^{(1)} \mu_{20}^{(2)} \mu_{34}^{(2)} + 4\mu_{11}^{(1)} \mu_{25}^{(1)} \mu_{20}^{(2)} - 4(\mu_{11}^{(2)})^2 \mu_{52}^{(2)} + 8\mu_{11}^{(1)} \mu_{11}^{(2)} \mu_{43}^{(2)} - 4(\mu_{11}^{(1)})^2 \mu_{34}^{(2)} \\
& + 4(\mu_{11}^{(1)})^2 \mu_{25}^{(1)} + 4\mu_{11}^{(2)} \mu_{02}^{(2)} \mu_{61}^{(1)} - 4\mu_{11}^{(1)} \mu_{02}^{(1)} \mu_{52}^{(2)} + 4\mu_{11}^{(1)} \mu_{02}^{(1)} \mu_{43}^{(2)} \\
& - 4\mu_{11}^{(1)} \mu_{02}^{(1)} \mu_{34}^{(1)} - 2\mu_{02}^{(1)} \mu_{52}^{(1)} \mu_{02}^{(2)} + 4\mu_{02}^{(1)} \mu_{43}^{(1)} \mu_{11}^{(2)} - 2\mu_{02}^{(1)} \mu_{34}^{(1)} \mu_{20}^{(2)} \\
& + 2\mu_{02}^{(1)} \mu_{20}^{(2)} \mu_{43}^{(2)} - 4\mu_{02}^{(1)} \mu_{11}^{(2)} \mu_{52}^{(2)} - (\mu_{02}^{(2)})^2 \mu_{70}^{(2)} + 2\mu_{02}^{(1)} \mu_{02}^{(2)} \mu_{61}^{(1)} - (\mu_{02}^{(1)})^2 \mu_{52}^{(2)} \\
& + (\mu_{02}^{(1)})^2 \mu_{43}^{(1)}
\end{aligned}$$

weight=7

structure: 2,0,0,0,0,1

Generating graph:

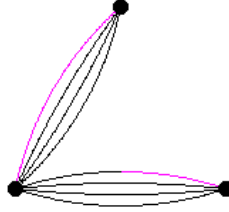
$$\begin{array}{cccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 1 \\
& 1 & V2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



$$\begin{aligned}
Z_{52} = & \mu_{70}^{(1)} (\mu_{03}^{(2)})^2 - 6\mu_{61}^{(1)} \mu_{12}^{(2)} \mu_{03}^{(2)} + 6\mu_{52}^{(1)} \mu_{21}^{(2)} \mu_{03}^{(2)} + 9\mu_{52}^{(1)} (\mu_{12}^{(2)})^2 - 2\mu_{43}^{(1)} \mu_{30}^{(2)} \mu_{03}^{(2)} \\
& - 18\mu_{43}^{(1)} \mu_{21}^{(2)} \mu_{12}^{(2)} + 6\mu_{34}^{(1)} \mu_{30}^{(2)} \mu_{12}^{(2)} - \mu_{30}^{(1)} \mu_{30}^{(2)} \mu_{16}^{(2)} + \mu_{30}^{(1)} \mu_{34}^{(1)} \mu_{03}^{(2)} \\
& + (\mu_{30}^{(1)})^2 \mu_{07}^{(2)} + 9\mu_{34}^{(1)} (\mu_{21}^{(2)})^2 + 3\mu_{30}^{(1)} \mu_{21}^{(2)} \mu_{25}^{(2)} - 3\mu_{30}^{(1)} \mu_{25}^{(1)} \mu_{12}^{(2)} - 6\mu_{30}^{(1)} \mu_{21}^{(1)} \mu_{16}^{(2)} \\
& - 3\mu_{30}^{(1)} \mu_{12}^{(2)} \mu_{34}^{(2)} + 3\mu_{30}^{(1)} \mu_{16}^{(1)} \mu_{21}^{(2)} + 6\mu_{30}^{(1)} \mu_{12}^{(1)} \mu_{25}^{(2)} + \mu_{30}^{(1)} \mu_{03}^{(2)} \mu_{43}^{(2)} \\
& - \mu_{30}^{(1)} \mu_{07}^{(1)} \mu_{30}^{(2)} - 2\mu_{30}^{(1)} \mu_{03}^{(1)} \mu_{34}^{(2)} - 3\mu_{21}^{(1)} \mu_{43}^{(1)} \mu_{03}^{(2)} - 6\mu_{25}^{(1)} \mu_{30}^{(2)} \mu_{21}^{(2)} \\
& + 3\mu_{21}^{(1)} \mu_{30}^{(2)} \mu_{25}^{(2)} + 9\mu_{21}^{(1)} \mu_{34}^{(1)} \mu_{12}^{(2)} - 9\mu_{21}^{(1)} \mu_{21}^{(2)} \mu_{34}^{(2)} - 9\mu_{21}^{(1)} \mu_{25}^{(1)} \mu_{21}^{(2)} \\
& + 9(\mu_{21}^{(1)})^2 \mu_{25}^{(2)} + 9\mu_{21}^{(1)} \mu_{12}^{(2)} \mu_{43}^{(2)} + 3\mu_{21}^{(1)} \mu_{16}^{(1)} \mu_{30}^{(2)} - 18\mu_{21}^{(1)} \mu_{12}^{(1)} \mu_{34}^{(2)} \\
& - 3\mu_{21}^{(1)} \mu_{03}^{(2)} \mu_{52}^{(2)} + 6\mu_{21}^{(1)} \mu_{03}^{(1)} \mu_{43}^{(2)} + 3\mu_{12}^{(1)} \mu_{52}^{(1)} \mu_{03}^{(2)} - 9\mu_{12}^{(1)} \mu_{43}^{(1)} \mu_{12}^{(2)} \\
& + \mu_{16}^{(1)} (\mu_{30}^{(2)})^2 - 3\mu_{12}^{(1)} \mu_{30}^{(2)} \mu_{34}^{(2)} + 9\mu_{12}^{(1)} \mu_{34}^{(1)} \mu_{21}^{(2)} + 9\mu_{12}^{(1)} \mu_{21}^{(1)} \mu_{43}^{(2)} \\
& - 3\mu_{12}^{(1)} \mu_{25}^{(1)} \mu_{30}^{(2)} - 9\mu_{12}^{(1)} \mu_{12}^{(2)} \mu_{52}^{(2)} + 9(\mu_{12}^{(1)})^2 \mu_{43}^{(2)} + 3\mu_{12}^{(1)} \mu_{03}^{(2)} \mu_{61}^{(2)} \\
& - 6\mu_{12}^{(1)} \mu_{03}^{(1)} \mu_{52}^{(2)} - \mu_{03}^{(1)} \mu_{61}^{(1)} \mu_{03}^{(2)} + 3\mu_{03}^{(1)} \mu_{52}^{(1)} \mu_{12}^{(2)} - 3\mu_{03}^{(1)} \mu_{43}^{(1)} \mu_{21}^{(2)} \\
& + \mu_{03}^{(1)} \mu_{30}^{(2)} \mu_{43}^{(2)} + \mu_{03}^{(1)} \mu_{34}^{(1)} \mu_{30}^{(2)} - 3\mu_{03}^{(1)} \mu_{21}^{(2)} \mu_{52}^{(2)} + 3\mu_{03}^{(1)} \mu_{12}^{(1)} \mu_{61}^{(2)} \\
& - \mu_{03}^{(1)} \mu_{03}^{(2)} \mu_{70}^{(2)} + (\mu_{03}^{(1)})^2 \mu_{61}^{(2)}
\end{aligned}$$

weight=8  
structure: 0,2,0,0,0,1  
Generating graph:

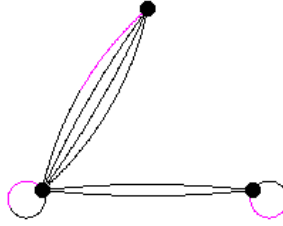
|    |   |   |   |    |   |   |   |
|----|---|---|---|----|---|---|---|
| V1 | 1 | 1 | 1 | 1  | 1 | 1 | 1 |
| V2 | 2 | 2 | 2 | V3 | 3 | 3 | 3 |



$$\begin{aligned}
Z_{53} = & -\mu_{61}^{(1)} \mu_{12}^{(2)} \mu_{03}^{(2)} + 2\mu_{52}^{(1)} \mu_{21}^{(2)} \mu_{03}^{(2)} + 3\mu_{52}^{(1)} (\mu_{12}^{(2)})^2 - \mu_{43}^{(1)} \mu_{30}^{(2)} \mu_{03}^{(2)} \\
& -9\mu_{43}^{(1)} \mu_{21}^{(2)} \mu_{12}^{(2)} - (\mu_{30}^{(2)})^2 \mu_{25}^{(2)} + 4\mu_{34}^{(1)} \mu_{30}^{(2)} \mu_{12}^{(2)} + \mu_{30}^{(1)} \mu_{30}^{(2)} \mu_{16}^{(2)} \\
& +5\mu_{30}^{(2)} \mu_{21}^{(2)} \mu_{34}^{(2)} + 6\mu_{34}^{(1)} (\mu_{21}^{(2)})^2 - 2\mu_{30}^{(1)} \mu_{21}^{(2)} \mu_{25}^{(2)} - \mu_{30}^{(1)} \mu_{25}^{(1)} \mu_{12}^{(2)} \\
& -\mu_{30}^{(1)} \mu_{21}^{(1)} \mu_{16}^{(2)} + \mu_{30}^{(1)} \mu_{21}^{(1)} \mu_{07}^{(1)} - 4\mu_{30}^{(2)} \mu_{12}^{(2)} \mu_{43}^{(2)} + \mu_{30}^{(1)} \mu_{12}^{(2)} \mu_{34}^{(2)} \\
& +2\mu_{30}^{(1)} \mu_{16}^{(1)} \mu_{21}^{(2)} + 2\mu_{30}^{(1)} \mu_{12}^{(1)} \mu_{25}^{(2)} - 2\mu_{30}^{(1)} \mu_{12}^{(1)} \mu_{16}^{(1)} + \mu_{30}^{(1)} \mu_{03}^{(1)} \mu_{52}^{(2)} \\
& -\mu_{30}^{(1)} \mu_{07}^{(1)} \mu_{30}^{(2)} - \mu_{30}^{(1)} \mu_{03}^{(1)} \mu_{34}^{(2)} + \mu_{30}^{(1)} \mu_{03}^{(1)} \mu_{25}^{(1)} + \mu_{21}^{(1)} \mu_{43}^{(1)} \mu_{03}^{(2)} \\
& -5\mu_{25}^{(1)} \mu_{30}^{(2)} \mu_{21}^{(2)} - 2\mu_{21}^{(1)} \mu_{30}^{(2)} \mu_{25}^{(2)} - 6(\mu_{21}^{(2)})^2 \mu_{43}^{(2)} + 3\mu_{21}^{(1)} \mu_{21}^{(2)} \mu_{34}^{(2)} \\
& -3\mu_{21}^{(1)} \mu_{25}^{(1)} \mu_{21}^{(2)} + 3(\mu_{21}^{(1)})^2 \mu_{25}^{(2)} - 3(\mu_{21}^{(1)})^2 \mu_{16}^{(1)} + 9\mu_{21}^{(2)} \mu_{12}^{(2)} \mu_{52}^{(2)} + 2\mu_{21}^{(1)} \mu_{16}^{(1)} \mu_{30}^{(2)} \\
& -9\mu_{21}^{(1)} \mu_{12}^{(1)} \mu_{34}^{(2)} + 9\mu_{21}^{(1)} \mu_{12}^{(1)} \mu_{25}^{(1)} - 2\mu_{21}^{(2)} \mu_{03}^{(2)} \mu_{61}^{(2)} - \mu_{21}^{(1)} \mu_{03}^{(2)} \mu_{52}^{(2)} \\
& +4\mu_{21}^{(1)} \mu_{03}^{(1)} \mu_{43}^{(2)} - 4\mu_{21}^{(1)} \mu_{03}^{(1)} \mu_{34}^{(2)} - 2\mu_{12}^{(1)} \mu_{52}^{(1)} \mu_{03}^{(2)} + 3\mu_{12}^{(1)} \mu_{43}^{(1)} \mu_{12}^{(2)} \\
& +\mu_{16}^{(1)} (\mu_{30}^{(2)})^2 + \mu_{12}^{(1)} \mu_{30}^{(2)} \mu_{34}^{(2)} - \mu_{12}^{(1)} \mu_{25}^{(1)} \mu_{30}^{(2)} - 3(\mu_{12}^{(2)})^2 \mu_{61}^{(2)} - 3\mu_{12}^{(1)} \mu_{12}^{(2)} \mu_{52}^{(2)} \\
& +6(\mu_{12}^{(1)})^2 \mu_{43}^{(2)} - 6(\mu_{12}^{(1)})^2 \mu_{34}^{(1)} + \mu_{12}^{(2)} \mu_{03}^{(2)} \mu_{70}^{(2)} + 2\mu_{12}^{(1)} \mu_{03}^{(2)} \mu_{61}^{(2)} - 5\mu_{12}^{(1)} \mu_{03}^{(1)} \mu_{52}^{(2)} \\
& +5\mu_{12}^{(1)} \mu_{03}^{(1)} \mu_{43}^{(2)} + \mu_{03}^{(1)} \mu_{61}^{(1)} \mu_{03}^{(2)} - 2\mu_{03}^{(1)} \mu_{52}^{(1)} \mu_{12}^{(2)} + \mu_{03}^{(1)} \mu_{43}^{(1)} \mu_{21}^{(2)} \\
& -\mu_{03}^{(1)} \mu_{21}^{(2)} \mu_{52}^{(2)} + 2\mu_{03}^{(1)} \mu_{12}^{(2)} \mu_{61}^{(2)} - \mu_{03}^{(1)} \mu_{03}^{(2)} \mu_{70}^{(2)} + (\mu_{03}^{(1)})^2 \mu_{61}^{(2)} - (\mu_{03}^{(1)})^2 \mu_{52}^{(1)}
\end{aligned}$$

weight=8  
structure: 0,2,0,0,0,1  
Generating graph:

|    |    |   |   |   |   |   |    |
|----|----|---|---|---|---|---|----|
| V1 | 1  | 1 | 1 | 1 | 1 | 1 | V3 |
| 1  | V2 | 2 | 2 | 2 | 3 | 3 | 3  |



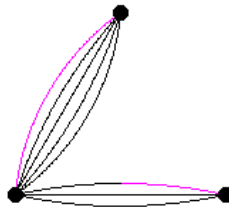
$$\begin{aligned}
Z_{54} = & \mu_{70}^{(1)} \mu_{02}^{(2)} \mu_{04}^{(2)} - 2\mu_{61}^{(1)} \mu_{11}^{(2)} \mu_{04}^{(2)} - 4\mu_{61}^{(1)} \mu_{02}^{(2)} \mu_{13}^{(2)} + \mu_{52}^{(1)} \mu_{20}^{(2)} \mu_{04}^{(2)} \\
& + 8\mu_{52}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} + 6\mu_{52}^{(1)} \mu_{02}^{(2)} \mu_{22}^{(2)} - 4\mu_{43}^{(1)} \mu_{20}^{(2)} \mu_{13}^{(2)} - \mu_{40}^{(1)} \mu_{20}^{(2)} \mu_{16}^{(2)} \\
& - 12\mu_{43}^{(1)} \mu_{11}^{(2)} \mu_{22}^{(2)} + 2\mu_{40}^{(1)} \mu_{11}^{(2)} \mu_{25}^{(2)} - 4\mu_{43}^{(1)} \mu_{02}^{(2)} \mu_{31}^{(2)} - \mu_{40}^{(1)} \mu_{02}^{(2)} \mu_{34}^{(2)} \\
& + 6\mu_{34}^{(1)} \mu_{20}^{(2)} \mu_{22}^{(2)} + 4\mu_{31}^{(1)} \mu_{20}^{(2)} \mu_{25}^{(2)} + 8\mu_{34}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} - 8\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{34}^{(2)} \\
& + \mu_{34}^{(1)} \mu_{02}^{(2)} \mu_{40}^{(2)} + 4\mu_{31}^{(1)} \mu_{02}^{(2)} \mu_{43}^{(2)} - \mu_{20}^{(1)} \mu_{43}^{(1)} \mu_{04}^{(2)} + \mu_{20}^{(1)} \mu_{40}^{(1)} \mu_{07}^{(2)} \\
& + 4\mu_{20}^{(1)} \mu_{34}^{(1)} \mu_{13}^{(2)} - 4\mu_{20}^{(1)} \mu_{31}^{(1)} \mu_{16}^{(2)} - 4\mu_{25}^{(1)} \mu_{20}^{(1)} \mu_{31}^{(2)} - 6\mu_{22}^{(1)} \mu_{20}^{(1)} \mu_{34}^{(2)} \\
& - 6\mu_{20}^{(1)} \mu_{25}^{(1)} \mu_{22}^{(2)} + 6\mu_{20}^{(1)} \mu_{22}^{(1)} \mu_{25}^{(2)} - 2\mu_{25}^{(1)} \mu_{11}^{(1)} \mu_{40}^{(2)} + 12\mu_{22}^{(1)} \mu_{11}^{(1)} \mu_{43}^{(2)} \\
& + 4\mu_{20}^{(1)} \mu_{16}^{(1)} \mu_{31}^{(2)} - 4\mu_{20}^{(1)} \mu_{13}^{(1)} \mu_{34}^{(2)} - 6\mu_{22}^{(1)} \mu_{02}^{(1)} \mu_{52}^{(2)} - \mu_{20}^{(1)} \mu_{07}^{(1)} \mu_{40}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{04}^{(1)} \mu_{43}^{(2)} + 2\mu_{11}^{(1)} \mu_{52}^{(1)} \mu_{04}^{(2)} - 8\mu_{11}^{(1)} \mu_{43}^{(1)} \mu_{13}^{(2)} - 2\mu_{11}^{(1)} \mu_{40}^{(1)} \mu_{16}^{(2)} \\
& + 12\mu_{11}^{(1)} \mu_{34}^{(1)} \mu_{22}^{(2)} + 8\mu_{11}^{(1)} \mu_{31}^{(1)} \mu_{25}^{(2)} + \mu_{16}^{(1)} \mu_{20}^{(1)} \mu_{40}^{(2)} + 4\mu_{13}^{(1)} \mu_{20}^{(1)} \mu_{43}^{(2)} \\
& - 8\mu_{11}^{(1)} \mu_{25}^{(1)} \mu_{31}^{(2)} - 12\mu_{11}^{(1)} \mu_{22}^{(1)} \mu_{34}^{(2)} - 8\mu_{13}^{(1)} \mu_{11}^{(1)} \mu_{52}^{(2)} + 2\mu_{11}^{(1)} \mu_{16}^{(1)} \mu_{40}^{(2)} \\
& + 8\mu_{11}^{(1)} \mu_{13}^{(1)} \mu_{43}^{(2)} + 4\mu_{13}^{(1)} \mu_{02}^{(1)} \mu_{61}^{(2)} - 2\mu_{11}^{(1)} \mu_{04}^{(1)} \mu_{52}^{(2)} - \mu_{02}^{(1)} \mu_{61}^{(1)} \mu_{04}^{(2)} \\
& + 4\mu_{02}^{(1)} \mu_{52}^{(1)} \mu_{13}^{(2)} - 6\mu_{02}^{(1)} \mu_{43}^{(1)} \mu_{22}^{(2)} + \mu_{02}^{(1)} \mu_{40}^{(1)} \mu_{25}^{(2)} + 4\mu_{02}^{(1)} \mu_{34}^{(1)} \mu_{31}^{(2)} \\
& - 4\mu_{02}^{(1)} \mu_{31}^{(1)} \mu_{34}^{(2)} - \mu_{04}^{(1)} \mu_{20}^{(1)} \mu_{52}^{(2)} - \mu_{02}^{(1)} \mu_{25}^{(1)} \mu_{40}^{(2)} + 6\mu_{02}^{(1)} \mu_{22}^{(1)} \mu_{43}^{(2)} \\
& + 2\mu_{04}^{(1)} \mu_{11}^{(1)} \mu_{61}^{(2)} - 4\mu_{02}^{(1)} \mu_{13}^{(1)} \mu_{52}^{(2)} - \mu_{04}^{(1)} \mu_{02}^{(1)} \mu_{70}^{(2)} + \mu_{02}^{(1)} \mu_{04}^{(1)} \mu_{61}^{(2)}
\end{aligned}$$

weight=8

structure: 1,0,1,0,0,1

Generating graph:

|    |   |   |   |   |    |   |   |
|----|---|---|---|---|----|---|---|
| V1 | 1 | 1 | 1 | 1 | 1  | 1 | 1 |
| V2 | 2 | 2 | 2 | 2 | V3 | 3 | 3 |



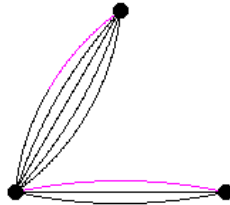
$$\begin{aligned}
Z_{55} = & \mu_{70}^{(1)} \mu_{02}^{(2)} \mu_{04}^{(2)} - 2\mu_{61}^{(1)} \mu_{11}^{(2)} \mu_{04}^{(2)} - 4\mu_{61}^{(1)} \mu_{02}^{(2)} \mu_{13}^{(2)} + \mu_{52}^{(1)} \mu_{20}^{(2)} \mu_{04}^{(2)} \\
& + 8\mu_{52}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} + 6\mu_{52}^{(1)} \mu_{02}^{(2)} \mu_{22}^{(2)} - 4\mu_{43}^{(1)} \mu_{20}^{(2)} \mu_{13}^{(2)} - \mu_{40}^{(1)} \mu_{25}^{(1)} \mu_{02}^{(2)} \\
& - 12\mu_{43}^{(1)} \mu_{11}^{(2)} \mu_{22}^{(2)} + 2\mu_{40}^{(1)} \mu_{16}^{(1)} \mu_{11}^{(2)} - 4\mu_{43}^{(1)} \mu_{02}^{(2)} \mu_{31}^{(2)} - \mu_{40}^{(1)} \mu_{07}^{(1)} \mu_{20}^{(2)} \\
& + 4\mu_{31}^{(1)} \mu_{34}^{(1)} \mu_{02}^{(2)} + 6\mu_{34}^{(1)} \mu_{20}^{(2)} \mu_{22}^{(2)} - 8\mu_{31}^{(1)} \mu_{25}^{(1)} \mu_{11}^{(2)} + 8\mu_{34}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} \\
& + 4\mu_{31}^{(1)} \mu_{16}^{(1)} \mu_{20}^{(2)} + \mu_{34}^{(1)} \mu_{02}^{(2)} \mu_{40}^{(2)} - \mu_{20}^{(1)} \mu_{40}^{(2)} \mu_{16}^{(2)} - 6\mu_{22}^{(1)} \mu_{43}^{(1)} \mu_{02}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{40}^{(1)} \mu_{07}^{(2)} + 4\mu_{20}^{(1)} \mu_{31}^{(2)} \mu_{25}^{(2)} + 12\mu_{22}^{(1)} \mu_{34}^{(1)} \mu_{11}^{(2)} - 4\mu_{20}^{(1)} \mu_{31}^{(1)} \mu_{16}^{(2)} \\
& - 4\mu_{25}^{(1)} \mu_{20}^{(2)} \mu_{31}^{(2)} - 6\mu_{20}^{(1)} \mu_{22}^{(2)} \mu_{34}^{(2)} - 6\mu_{22}^{(1)} \mu_{25}^{(1)} \mu_{20}^{(2)} + 6\mu_{20}^{(1)} \mu_{22}^{(2)} \mu_{25}^{(2)} \\
& - 2\mu_{25}^{(1)} \mu_{11}^{(2)} \mu_{40}^{(2)} + 4\mu_{20}^{(1)} \mu_{13}^{(2)} \mu_{43}^{(2)} - 4\mu_{20}^{(1)} \mu_{13}^{(1)} \mu_{34}^{(2)} - \mu_{20}^{(1)} \mu_{04}^{(2)} \mu_{52}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{04}^{(1)} \mu_{43}^{(2)} + 4\mu_{13}^{(1)} \mu_{52}^{(1)} \mu_{02}^{(2)} + 2\mu_{11}^{(1)} \mu_{40}^{(2)} \mu_{25}^{(2)} - 8\mu_{13}^{(1)} \mu_{43}^{(1)} \mu_{11}^{(2)} \\
& - 2\mu_{11}^{(1)} \mu_{40}^{(1)} \mu_{16}^{(2)} - 8\mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{34}^{(2)} + 4\mu_{13}^{(1)} \mu_{34}^{(1)} \mu_{20}^{(2)} + 8\mu_{11}^{(1)} \mu_{31}^{(1)} \mu_{25}^{(2)} \\
& + \mu_{16}^{(1)} \mu_{20}^{(2)} \mu_{40}^{(2)} + 12\mu_{11}^{(1)} \mu_{22}^{(2)} \mu_{43}^{(2)} - 12\mu_{11}^{(1)} \mu_{22}^{(1)} \mu_{34}^{(2)} - 8\mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{52}^{(2)} \\
& + 8\mu_{11}^{(1)} \mu_{13}^{(1)} \mu_{43}^{(2)} + 2\mu_{11}^{(1)} \mu_{04}^{(2)} \mu_{61}^{(2)} - 2\mu_{11}^{(1)} \mu_{04}^{(1)} \mu_{52}^{(2)} - \mu_{04}^{(1)} \mu_{61}^{(1)} \mu_{02}^{(2)} \\
& + 2\mu_{04}^{(1)} \mu_{52}^{(1)} \mu_{11}^{(2)} - \mu_{02}^{(1)} \mu_{40}^{(2)} \mu_{34}^{(2)} - \mu_{04}^{(1)} \mu_{43}^{(1)} \mu_{20}^{(2)} + \mu_{02}^{(1)} \mu_{40}^{(1)} \mu_{25}^{(2)} \\
& + 4\mu_{02}^{(1)} \mu_{31}^{(2)} \mu_{43}^{(2)} - 4\mu_{02}^{(1)} \mu_{31}^{(1)} \mu_{34}^{(2)} - 6\mu_{02}^{(1)} \mu_{22}^{(2)} \mu_{52}^{(2)} + 6\mu_{02}^{(1)} \mu_{22}^{(1)} \mu_{43}^{(2)} \\
& + 4\mu_{02}^{(1)} \mu_{13}^{(2)} \mu_{61}^{(2)} - 4\mu_{02}^{(1)} \mu_{13}^{(1)} \mu_{52}^{(2)} - \mu_{02}^{(1)} \mu_{04}^{(2)} \mu_{70}^{(2)} + \mu_{02}^{(1)} \mu_{04}^{(1)} \mu_{61}^{(2)}
\end{aligned}$$

weight=8

structure: 1,0,1,0,0,1

Generating graph:

$$\begin{array}{ccccccccc}
1 & 1 & 1 & 1 & 1 & V1 & 1 & 1 & \\
V2 & 2 & 2 & 2 & 2 & V3 & 3 & 3 & 
\end{array}$$



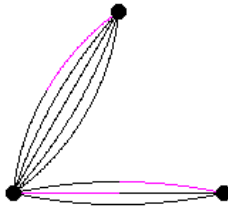
$$\begin{aligned}
Z_{56} = & \mu_{70}^{(1)} \mu_{02}^{(2)} \mu_{04}^{(2)} - \mu_{61}^{(1)} \mu_{11}^{(2)} \mu_{04}^{(2)} - 4\mu_{61}^{(1)} \mu_{02}^{(2)} \mu_{13}^{(2)} + 4\mu_{52}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} \\
& + 6\mu_{52}^{(1)} \mu_{02}^{(2)} \mu_{22}^{(2)} - \mu_{40}^{(1)} \mu_{20}^{(2)} \mu_{16}^{(2)} - \mu_{40}^{(1)} \mu_{25}^{(1)} \mu_{02}^{(2)} - 6\mu_{43}^{(1)} \mu_{11}^{(2)} \mu_{22}^{(2)} \\
& + \mu_{40}^{(1)} \mu_{11}^{(2)} \mu_{25}^{(2)} + \mu_{40}^{(1)} \mu_{16}^{(1)} \mu_{11}^{(2)} - 4\mu_{43}^{(1)} \mu_{02}^{(2)} \mu_{31}^{(2)} + 4\mu_{31}^{(1)} \mu_{34}^{(1)} \mu_{02}^{(2)} \\
& + 4\mu_{31}^{(1)} \mu_{20}^{(2)} \mu_{25}^{(2)} - 4\mu_{31}^{(1)} \mu_{25}^{(1)} \mu_{11}^{(2)} + 4\mu_{34}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} - 4\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{34}^{(2)} \\
& + \mu_{34}^{(1)} \mu_{02}^{(2)} \mu_{40}^{(2)} + \mu_{20}^{(2)} \mu_{40}^{(2)} \mu_{25}^{(2)} - \mu_{20}^{(1)} \mu_{40}^{(2)} \mu_{16}^{(2)} - 6\mu_{22}^{(1)} \mu_{43}^{(1)} \mu_{02}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{40}^{(1)} \mu_{07}^{(2)} - 4\mu_{20}^{(2)} \mu_{31}^{(2)} \mu_{34}^{(2)} + 4\mu_{20}^{(1)} \mu_{31}^{(2)} \mu_{25}^{(2)} + 6\mu_{22}^{(1)} \mu_{34}^{(1)} \mu_{11}^{(2)} \\
& - 4\mu_{20}^{(1)} \mu_{31}^{(1)} \mu_{16}^{(2)} + 6\mu_{20}^{(2)} \mu_{22}^{(2)} \mu_{43}^{(2)} - 6\mu_{22}^{(1)} \mu_{20}^{(2)} \mu_{34}^{(2)} - 6\mu_{20}^{(2)} \mu_{22}^{(2)} \mu_{34}^{(2)} \\
& + 6\mu_{20}^{(1)} \mu_{22}^{(1)} \mu_{25}^{(2)} - 4\mu_{20}^{(2)} \mu_{13}^{(2)} \mu_{52}^{(2)} - \mu_{25}^{(1)} \mu_{11}^{(2)} \mu_{40}^{(2)} + 6\mu_{22}^{(1)} \mu_{11}^{(2)} \mu_{43}^{(2)} \\
& + 4\mu_{20}^{(1)} \mu_{13}^{(2)} \mu_{43}^{(2)} - 4\mu_{20}^{(1)} \mu_{13}^{(1)} \mu_{34}^{(2)} + \mu_{20}^{(2)} \mu_{04}^{(2)} \mu_{61}^{(2)} - \mu_{20}^{(1)} \mu_{04}^{(2)} \mu_{52}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{04}^{(1)} \mu_{43}^{(2)} + 4\mu_{13}^{(1)} \mu_{52}^{(1)} \mu_{02}^{(2)} + \mu_{11}^{(1)} \mu_{52}^{(1)} \mu_{04}^{(2)} - \mu_{11}^{(2)} \mu_{40}^{(2)} \mu_{34}^{(2)} \\
& + \mu_{11}^{(1)} \mu_{40}^{(2)} \mu_{25}^{(2)} - 4\mu_{13}^{(1)} \mu_{43}^{(1)} \mu_{11}^{(2)} - 4\mu_{11}^{(1)} \mu_{43}^{(1)} \mu_{13}^{(2)} - \mu_{11}^{(1)} \mu_{40}^{(1)} \mu_{16}^{(2)} \\
& - \mu_{11}^{(1)} \mu_{40}^{(1)} \mu_{07}^{(2)} + 4\mu_{11}^{(2)} \mu_{31}^{(2)} \mu_{43}^{(2)} - 4\mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{34}^{(2)} + 6\mu_{11}^{(1)} \mu_{34}^{(1)} \mu_{22}^{(2)} \\
& + 4\mu_{11}^{(1)} \mu_{31}^{(1)} \mu_{25}^{(2)} + 4\mu_{11}^{(1)} \mu_{31}^{(1)} \mu_{16}^{(1)} - 6\mu_{11}^{(2)} \mu_{22}^{(2)} \mu_{52}^{(2)} + 4\mu_{13}^{(1)} \mu_{20}^{(2)} \mu_{43}^{(2)} \\
& + 6\mu_{11}^{(1)} \mu_{22}^{(2)} \mu_{43}^{(2)} - 4\mu_{11}^{(1)} \mu_{25}^{(1)} \mu_{31}^{(2)} - 6\mu_{11}^{(1)} \mu_{22}^{(1)} \mu_{34}^{(2)} - 6\mu_{11}^{(1)} \mu_{22}^{(1)} \mu_{25}^{(1)} \\
& + 4\mu_{11}^{(2)} \mu_{13}^{(2)} \mu_{61}^{(2)} - 4\mu_{13}^{(1)} \mu_{11}^{(2)} \mu_{52}^{(2)} - 4\mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{52}^{(2)} + \mu_{11}^{(1)} \mu_{16}^{(1)} \mu_{40}^{(2)} \\
& + 4\mu_{11}^{(1)} \mu_{13}^{(1)} \mu_{43}^{(2)} + 4\mu_{11}^{(1)} \mu_{13}^{(1)} \mu_{34}^{(1)} - \mu_{11}^{(2)} \mu_{04}^{(2)} \mu_{70}^{(2)} + \mu_{11}^{(1)} \mu_{04}^{(2)} \mu_{61}^{(2)} \\
& - \mu_{11}^{(1)} \mu_{04}^{(1)} \mu_{52}^{(2)} - \mu_{11}^{(1)} \mu_{04}^{(1)} \mu_{43}^{(1)} - \mu_{04}^{(1)} \mu_{61}^{(1)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{61}^{(1)} \mu_{04}^{(2)} \\
& + \mu_{04}^{(1)} \mu_{52}^{(1)} \mu_{11}^{(2)} + 4\mu_{02}^{(1)} \mu_{52}^{(1)} \mu_{13}^{(2)} - 6\mu_{02}^{(1)} \mu_{43}^{(1)} \mu_{22}^{(2)} + \mu_{02}^{(1)} \mu_{40}^{(1)} \mu_{16}^{(2)} \\
& + 4\mu_{02}^{(1)} \mu_{34}^{(1)} \mu_{31}^{(2)} - 4\mu_{02}^{(1)} \mu_{31}^{(1)} \mu_{25}^{(1)} - \mu_{04}^{(1)} \mu_{20}^{(2)} \mu_{52}^{(2)} - \mu_{02}^{(1)} \mu_{25}^{(1)} \mu_{40}^{(2)} \\
& + 6\mu_{02}^{(1)} \mu_{22}^{(1)} \mu_{34}^{(1)} + \mu_{04}^{(1)} \mu_{11}^{(2)} \mu_{61}^{(2)} - 4\mu_{02}^{(1)} \mu_{13}^{(1)} \mu_{43}^{(1)} + \mu_{02}^{(1)} \mu_{04}^{(1)} \mu_{52}^{(1)}
\end{aligned}$$

weight=8

structure: 1,0,1,0,0,1

Generating graph:

$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & V1 & 1 \\
V2 & 2 & 2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



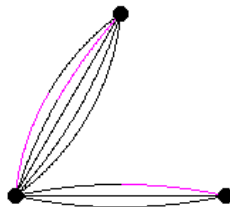
$$\begin{aligned}
Z_{57} = & \mu_{70}^{(1)} \mu_{02}^{(2)} \mu_{04}^{(2)} - 2\mu_{61}^{(1)} \mu_{11}^{(2)} \mu_{04}^{(2)} - 3\mu_{61}^{(1)} \mu_{02}^{(2)} \mu_{13}^{(2)} + \mu_{52}^{(1)} \mu_{20}^{(2)} \mu_{04}^{(2)} \\
& + 6\mu_{52}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} + 3\mu_{52}^{(1)} \mu_{02}^{(2)} \mu_{22}^{(2)} - 3\mu_{43}^{(1)} \mu_{20}^{(2)} \mu_{13}^{(2)} - \mu_{40}^{(1)} \mu_{20}^{(2)} \mu_{16}^{(2)} \\
& - 6\mu_{43}^{(1)} \mu_{11}^{(2)} \mu_{22}^{(2)} + 2\mu_{40}^{(1)} \mu_{11}^{(2)} \mu_{25}^{(2)} - \mu_{43}^{(1)} \mu_{02}^{(2)} \mu_{31}^{(2)} - \mu_{40}^{(1)} \mu_{02}^{(2)} \mu_{34}^{(2)} \\
& + \mu_{31}^{(1)} \mu_{34}^{(2)} \mu_{02}^{(2)} + 3\mu_{34}^{(1)} \mu_{20}^{(2)} \mu_{22}^{(2)} + 3\mu_{31}^{(1)} \mu_{20}^{(2)} \mu_{25}^{(2)} - 2\mu_{31}^{(1)} \mu_{25}^{(2)} \mu_{11}^{(2)} \\
& + 2\mu_{34}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} - 6\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{34}^{(2)} + \mu_{31}^{(1)} \mu_{16}^{(2)} \mu_{20}^{(2)} + 3\mu_{31}^{(1)} \mu_{02}^{(2)} \mu_{43}^{(2)} \\
& + \mu_{20}^{(2)} \mu_{40}^{(2)} \mu_{25}^{(2)} - \mu_{20}^{(1)} \mu_{40}^{(2)} \mu_{16}^{(2)} - 3\mu_{22}^{(1)} \mu_{43}^{(2)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{43}^{(2)} \mu_{04}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{40}^{(2)} \mu_{07}^{(2)} - 3\mu_{20}^{(2)} \mu_{31}^{(2)} \mu_{34}^{(2)} + 3\mu_{20}^{(1)} \mu_{31}^{(2)} \mu_{25}^{(2)} + 6\mu_{22}^{(1)} \mu_{34}^{(2)} \mu_{11}^{(2)} \\
& + 3\mu_{20}^{(1)} \mu_{34}^{(2)} \mu_{13}^{(2)} - 3\mu_{20}^{(1)} \mu_{31}^{(2)} \mu_{16}^{(2)} - \mu_{20}^{(1)} \mu_{31}^{(2)} \mu_{07}^{(2)} + 3\mu_{20}^{(2)} \mu_{22}^{(2)} \mu_{43}^{(2)} \\
& - \mu_{25}^{(1)} \mu_{20}^{(2)} \mu_{31}^{(2)} - 3\mu_{22}^{(1)} \mu_{20}^{(2)} \mu_{34}^{(2)} - 3\mu_{20}^{(1)} \mu_{22}^{(2)} \mu_{34}^{(2)} - 3\mu_{22}^{(1)} \mu_{25}^{(2)} \mu_{20}^{(2)} \\
& - 3\mu_{20}^{(1)} \mu_{25}^{(2)} \mu_{22}^{(2)} + 3\mu_{20}^{(1)} \mu_{22}^{(2)} \mu_{25}^{(2)} + 3\mu_{20}^{(1)} \mu_{22}^{(2)} \mu_{16}^{(2)} - \mu_{20}^{(2)} \mu_{13}^{(2)} \mu_{52}^{(2)} \\
& + 6\mu_{22}^{(1)} \mu_{11}^{(2)} \mu_{43}^{(2)} + \mu_{20}^{(1)} \mu_{13}^{(2)} \mu_{43}^{(2)} + \mu_{20}^{(1)} \mu_{16}^{(2)} \mu_{31}^{(2)} - \mu_{20}^{(1)} \mu_{13}^{(2)} \mu_{34}^{(2)} \\
& - 3\mu_{20}^{(1)} \mu_{13}^{(2)} \mu_{25}^{(2)} - 3\mu_{22}^{(1)} \mu_{02}^{(2)} \mu_{52}^{(2)} + \mu_{20}^{(1)} \mu_{04}^{(2)} \mu_{34}^{(2)} + 3\mu_{13}^{(1)} \mu_{52}^{(2)} \mu_{02}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{52}^{(2)} \mu_{04}^{(2)} - 2\mu_{11}^{(2)} \mu_{40}^{(2)} \mu_{34}^{(2)} + 2\mu_{11}^{(1)} \mu_{40}^{(2)} \mu_{25}^{(2)} - 6\mu_{13}^{(1)} \mu_{43}^{(2)} \mu_{11}^{(2)} \\
& - 6\mu_{11}^{(1)} \mu_{43}^{(2)} \mu_{13}^{(2)} - 2\mu_{11}^{(1)} \mu_{40}^{(2)} \mu_{16}^{(2)} + 6\mu_{11}^{(2)} \mu_{31}^{(2)} \mu_{43}^{(2)} - 6\mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{34}^{(2)} \\
& + 3\mu_{13}^{(1)} \mu_{34}^{(2)} \mu_{20}^{(2)} + 6\mu_{11}^{(1)} \mu_{34}^{(2)} \mu_{22}^{(2)} + 6\mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{25}^{(2)} + 2\mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{16}^{(2)} \\
& - 6\mu_{11}^{(2)} \mu_{22}^{(2)} \mu_{52}^{(2)} + \mu_{13}^{(1)} \mu_{20}^{(2)} \mu_{43}^{(2)} + 6\mu_{11}^{(1)} \mu_{22}^{(2)} \mu_{43}^{(2)} - 2\mu_{11}^{(1)} \mu_{25}^{(2)} \mu_{31}^{(2)} \\
& - 6\mu_{11}^{(1)} \mu_{22}^{(2)} \mu_{34}^{(2)} - 6\mu_{11}^{(1)} \mu_{22}^{(2)} \mu_{25}^{(2)} + 2\mu_{11}^{(2)} \mu_{13}^{(2)} \mu_{61}^{(2)} - 2\mu_{13}^{(1)} \mu_{11}^{(2)} \mu_{52}^{(2)} \\
& - 2\mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{52}^{(2)} + 2\mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{43}^{(2)} + 6\mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{34}^{(2)} + \mu_{13}^{(1)} \mu_{02}^{(2)} \mu_{61}^{(2)} \\
& - 2\mu_{11}^{(1)} \mu_{04}^{(2)} \mu_{43}^{(2)} - \mu_{04}^{(1)} \mu_{61}^{(2)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{61}^{(2)} \mu_{04}^{(2)} + 2\mu_{04}^{(1)} \mu_{52}^{(2)} \mu_{11}^{(2)} \\
& + 3\mu_{02}^{(1)} \mu_{52}^{(2)} \mu_{13}^{(2)} + \mu_{02}^{(1)} \mu_{40}^{(2)} \mu_{43}^{(2)} - \mu_{02}^{(1)} \mu_{40}^{(2)} \mu_{34}^{(2)} - \mu_{04}^{(1)} \mu_{43}^{(2)} \mu_{20}^{(2)} \\
& - 3\mu_{02}^{(1)} \mu_{43}^{(2)} \mu_{22}^{(2)} + \mu_{02}^{(1)} \mu_{40}^{(2)} \mu_{25}^{(2)} - 3\mu_{02}^{(2)} \mu_{31}^{(2)} \mu_{52}^{(2)} + 3\mu_{02}^{(1)} \mu_{31}^{(2)} \mu_{43}^{(2)} \\
& + \mu_{02}^{(1)} \mu_{34}^{(2)} \mu_{31}^{(2)} - 3\mu_{02}^{(1)} \mu_{31}^{(2)} \mu_{34}^{(2)} - \mu_{02}^{(1)} \mu_{31}^{(2)} \mu_{25}^{(2)} + 3\mu_{02}^{(2)} \mu_{22}^{(2)} \mu_{61}^{(2)} \\
& - 3\mu_{02}^{(1)} \mu_{22}^{(2)} \mu_{52}^{(2)} + 3\mu_{02}^{(1)} \mu_{22}^{(2)} \mu_{43}^{(2)} + 3\mu_{02}^{(1)} \mu_{22}^{(2)} \mu_{34}^{(2)} - \mu_{02}^{(2)} \mu_{13}^{(2)} \mu_{70}^{(2)} \\
& + \mu_{02}^{(1)} \mu_{13}^{(2)} \mu_{61}^{(2)} - \mu_{02}^{(1)} \mu_{13}^{(2)} \mu_{52}^{(2)} - 3\mu_{02}^{(1)} \mu_{13}^{(2)} \mu_{43}^{(2)} + \mu_{02}^{(1)} \mu_{04}^{(2)} \mu_{52}^{(2)}
\end{aligned}$$

weight=8

structure: 1,0,1,0,0,1

Generating graph:

$$\begin{array}{cccccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & V2 & 2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



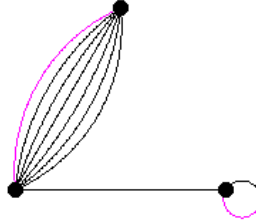
$$\begin{aligned}
Z_{58} = & -\mu_{70}^{(1)} \mu_{11}^{(2)} \mu_{06}^{(2)} + \mu_{61}^{(1)} \mu_{20}^{(2)} \mu_{06}^{(2)} - \mu_{60}^{(1)} \mu_{20}^{(2)} \mu_{07}^{(2)} + 6\mu_{61}^{(1)} \mu_{11}^{(2)} \mu_{15}^{(2)} \\
& + \mu_{60}^{(1)} \mu_{11}^{(2)} \mu_{16}^{(2)} - 6\mu_{52}^{(1)} \mu_{20}^{(2)} \mu_{15}^{(2)} + 6\mu_{51}^{(1)} \mu_{20}^{(2)} \mu_{16}^{(2)} - 15\mu_{52}^{(1)} \mu_{11}^{(2)} \mu_{24}^{(2)} \\
& - 6\mu_{51}^{(1)} \mu_{11}^{(2)} \mu_{25}^{(2)} + 15\mu_{43}^{(1)} \mu_{20}^{(2)} \mu_{24}^{(2)} - 15\mu_{42}^{(1)} \mu_{20}^{(2)} \mu_{25}^{(2)} + 20\mu_{43}^{(1)} \mu_{11}^{(2)} \mu_{33}^{(2)} \\
& + 15\mu_{42}^{(1)} \mu_{11}^{(2)} \mu_{34}^{(2)} - 20\mu_{34}^{(1)} \mu_{20}^{(2)} \mu_{33}^{(2)} + 20\mu_{33}^{(1)} \mu_{20}^{(2)} \mu_{34}^{(2)} - 15\mu_{34}^{(1)} \mu_{11}^{(2)} \mu_{42}^{(2)} \\
& - 20\mu_{33}^{(1)} \mu_{11}^{(2)} \mu_{43}^{(2)} + 15\mu_{25}^{(1)} \mu_{20}^{(2)} \mu_{42}^{(2)} - 15\mu_{24}^{(1)} \mu_{20}^{(2)} \mu_{43}^{(2)} + 6\mu_{25}^{(1)} \mu_{11}^{(2)} \mu_{51}^{(2)} \\
& + 15\mu_{24}^{(1)} \mu_{11}^{(2)} \mu_{52}^{(2)} - \mu_{11}^{(1)} \mu_{61}^{(1)} \mu_{06}^{(2)} + \mu_{11}^{(1)} \mu_{60}^{(1)} \mu_{07}^{(2)} + 6\mu_{11}^{(1)} \mu_{52}^{(1)} \mu_{15}^{(2)} \\
& - 6\mu_{11}^{(1)} \mu_{51}^{(1)} \mu_{16}^{(2)} - 15\mu_{11}^{(1)} \mu_{43}^{(1)} \mu_{24}^{(2)} + 15\mu_{11}^{(1)} \mu_{42}^{(1)} \mu_{25}^{(2)} + 20\mu_{11}^{(1)} \mu_{34}^{(1)} \mu_{33}^{(2)} \\
& - 20\mu_{11}^{(1)} \mu_{33}^{(1)} \mu_{34}^{(2)} - 6\mu_{16}^{(1)} \mu_{20}^{(2)} \mu_{51}^{(2)} + 6\mu_{15}^{(1)} \mu_{20}^{(2)} \mu_{52}^{(2)} - 15\mu_{11}^{(1)} \mu_{25}^{(1)} \mu_{42}^{(2)} \\
& + 15\mu_{11}^{(1)} \mu_{24}^{(1)} \mu_{43}^{(2)} - \mu_{16}^{(1)} \mu_{11}^{(2)} \mu_{60}^{(2)} - 6\mu_{15}^{(1)} \mu_{11}^{(2)} \mu_{61}^{(2)} + 6\mu_{11}^{(1)} \mu_{16}^{(1)} \mu_{51}^{(2)} \\
& - 6\mu_{11}^{(1)} \mu_{15}^{(1)} \mu_{52}^{(2)} - \mu_{11}^{(1)} \mu_{07}^{(1)} \mu_{60}^{(2)} + \mu_{11}^{(1)} \mu_{06}^{(1)} \mu_{61}^{(2)} + \mu_{02}^{(1)} \mu_{70}^{(1)} \mu_{06}^{(2)} \\
& - 6\mu_{02}^{(1)} \mu_{61}^{(1)} \mu_{15}^{(2)} - \mu_{02}^{(1)} \mu_{60}^{(1)} \mu_{16}^{(2)} + 15\mu_{02}^{(1)} \mu_{52}^{(1)} \mu_{24}^{(2)} + 6\mu_{02}^{(1)} \mu_{51}^{(1)} \mu_{25}^{(2)} \\
& - 20\mu_{02}^{(1)} \mu_{43}^{(1)} \mu_{33}^{(2)} - 15\mu_{02}^{(1)} \mu_{42}^{(1)} \mu_{34}^{(2)} + 15\mu_{02}^{(1)} \mu_{34}^{(1)} \mu_{42}^{(2)} + 20\mu_{02}^{(1)} \mu_{33}^{(1)} \mu_{43}^{(2)} \\
& + \mu_{07}^{(1)} \mu_{20}^{(2)} \mu_{60}^{(2)} - \mu_{06}^{(1)} \mu_{20}^{(2)} \mu_{61}^{(2)} - 6\mu_{02}^{(1)} \mu_{25}^{(1)} \mu_{51}^{(2)} - 15\mu_{02}^{(1)} \mu_{24}^{(1)} \mu_{52}^{(2)} \\
& + \mu_{06}^{(1)} \mu_{11}^{(2)} \mu_{70}^{(2)} + \mu_{02}^{(1)} \mu_{16}^{(1)} \mu_{60}^{(2)} + 6\mu_{02}^{(1)} \mu_{15}^{(1)} \mu_{61}^{(2)} - \mu_{02}^{(1)} \mu_{06}^{(1)} \mu_{70}^{(2)}
\end{aligned}$$

weight=9

structure: 1,0,0,0,1,1

Generating graph:

|    |   |   |   |   |   |   |   |    |
|----|---|---|---|---|---|---|---|----|
| V1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | V3 |
| V2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3  |



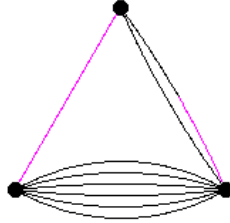
$$\begin{aligned}
Z_{59} = & \mu_{60}^{(1)} \mu_{20}^{(2)} \mu_{07}^{(2)} - \mu_{60}^{(1)} \mu_{11}^{(2)} \mu_{16}^{(2)} + \mu_{60}^{(1)} \mu_{16}^{(1)} \mu_{02}^{(2)} - \mu_{60}^{(1)} \mu_{07}^{(1)} \mu_{11}^{(2)} \\
& - 6\mu_{51}^{(1)} \mu_{20}^{(2)} \mu_{16}^{(2)} - 6\mu_{51}^{(1)} \mu_{25}^{(1)} \mu_{02}^{(2)} + 6\mu_{51}^{(1)} \mu_{11}^{(2)} \mu_{25}^{(2)} + 6\mu_{51}^{(1)} \mu_{16}^{(1)} \mu_{11}^{(2)} \\
& + 15\mu_{42}^{(1)} \mu_{34}^{(1)} \mu_{02}^{(2)} + 15\mu_{42}^{(1)} \mu_{20}^{(2)} \mu_{25}^{(2)} - 15\mu_{42}^{(1)} \mu_{25}^{(1)} \mu_{11}^{(2)} - 15\mu_{42}^{(1)} \mu_{11}^{(2)} \mu_{34}^{(2)} \\
& - 20\mu_{33}^{(1)} \mu_{43}^{(1)} \mu_{02}^{(2)} + 20\mu_{33}^{(1)} \mu_{34}^{(1)} \mu_{11}^{(2)} - 20\mu_{33}^{(1)} \mu_{20}^{(2)} \mu_{34}^{(2)} + 20\mu_{33}^{(1)} \mu_{11}^{(2)} \mu_{43}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{60}^{(2)} \mu_{07}^{(2)} + 6\mu_{20}^{(1)} \mu_{51}^{(2)} \mu_{16}^{(2)} + 15\mu_{24}^{(1)} \mu_{52}^{(1)} \mu_{02}^{(2)} - 15\mu_{20}^{(1)} \mu_{42}^{(2)} \mu_{25}^{(2)} \\
& - 15\mu_{24}^{(1)} \mu_{43}^{(1)} \mu_{11}^{(2)} + 20\mu_{20}^{(1)} \mu_{33}^{(2)} \mu_{34}^{(2)} + 15\mu_{24}^{(1)} \mu_{20}^{(2)} \mu_{43}^{(2)} - 15\mu_{20}^{(1)} \mu_{24}^{(2)} \mu_{43}^{(2)} \\
& - 15\mu_{24}^{(1)} \mu_{11}^{(2)} \mu_{52}^{(2)} + 6\mu_{20}^{(1)} \mu_{15}^{(2)} \mu_{52}^{(2)} - \mu_{20}^{(1)} \mu_{06}^{(2)} \mu_{61}^{(2)} + \mu_{11}^{(1)} \mu_{60}^{(2)} \mu_{16}^{(2)} \\
& - 6\mu_{15}^{(1)} \mu_{61}^{(1)} \mu_{02}^{(2)} + \mu_{11}^{(1)} \mu_{61}^{(1)} \mu_{06}^{(2)} - 6\mu_{11}^{(1)} \mu_{51}^{(2)} \mu_{25}^{(2)} + 6\mu_{15}^{(1)} \mu_{52}^{(1)} \mu_{11}^{(2)} \\
& - 6\mu_{11}^{(1)} \mu_{52}^{(1)} \mu_{15}^{(2)} + 15\mu_{11}^{(1)} \mu_{42}^{(2)} \mu_{34}^{(2)} + 15\mu_{11}^{(1)} \mu_{43}^{(1)} \mu_{24}^{(2)} - 20\mu_{11}^{(1)} \mu_{33}^{(1)} \mu_{43}^{(2)} \\
& - 20\mu_{11}^{(1)} \mu_{34}^{(1)} \mu_{33}^{(2)} - 6\mu_{15}^{(1)} \mu_{20}^{(2)} \mu_{52}^{(2)} + 15\mu_{11}^{(1)} \mu_{24}^{(2)} \mu_{52}^{(2)} + 15\mu_{11}^{(1)} \mu_{25}^{(1)} \mu_{42}^{(2)} \\
& + 6\mu_{15}^{(1)} \mu_{11}^{(2)} \mu_{61}^{(2)} - 6\mu_{11}^{(1)} \mu_{15}^{(2)} \mu_{61}^{(2)} - 6\mu_{11}^{(1)} \mu_{16}^{(1)} \mu_{51}^{(2)} + \mu_{11}^{(1)} \mu_{06}^{(1)} \mu_{70}^{(2)} \\
& + \mu_{11}^{(1)} \mu_{07}^{(2)} \mu_{60}^{(2)} + \mu_{06}^{(1)} \mu_{70}^{(1)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{70}^{(1)} \mu_{06}^{(2)} - \mu_{06}^{(1)} \mu_{61}^{(1)} \mu_{11}^{(2)} \\
& + 6\mu_{02}^{(1)} \mu_{61}^{(1)} \mu_{15}^{(2)} - 15\mu_{02}^{(1)} \mu_{52}^{(1)} \mu_{24}^{(2)} + 20\mu_{02}^{(1)} \mu_{43}^{(1)} \mu_{33}^{(2)} - 15\mu_{02}^{(1)} \mu_{34}^{(1)} \mu_{42}^{(2)} \\
& + \mu_{06}^{(1)} \mu_{20}^{(2)} \mu_{61}^{(2)} + 6\mu_{02}^{(1)} \mu_{25}^{(1)} \mu_{51}^{(2)} - \mu_{06}^{(1)} \mu_{11}^{(2)} \mu_{70}^{(2)} - \mu_{02}^{(1)} \mu_{16}^{(1)} \mu_{60}^{(2)}
\end{aligned}$$

weight=9

structure: 1,0,0,0,1,1

Generating graph:

|    |   |   |   |   |   |   |    |   |
|----|---|---|---|---|---|---|----|---|
| V1 | 1 | 1 | 1 | 1 | 1 | 1 | 2  | 2 |
| V2 | 3 | 3 | 3 | 3 | 3 | 3 | V3 | 3 |





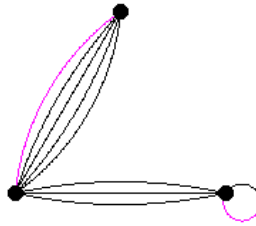
$$\begin{aligned}
Z_{60} = & -\mu_{70}^{(1)} \mu_{13}^{(2)} \mu_{04}^{(2)} + 3\mu_{61}^{(1)} \mu_{22}^{(2)} \mu_{04}^{(2)} + 4\mu_{61}^{(1)} (\mu_{13}^{(2)})^2 - 3\mu_{52}^{(1)} \mu_{31}^{(2)} \mu_{04}^{(2)} \\
& -18\mu_{52}^{(1)} \mu_{22}^{(2)} \mu_{13}^{(2)} + \mu_{43}^{(1)} \mu_{40}^{(2)} \mu_{04}^{(2)} - \mu_{40}^{(1)} \mu_{40}^{(2)} \mu_{07}^{(2)} + 16\mu_{43}^{(1)} \mu_{31}^{(2)} \mu_{13}^{(2)} \\
& + 3\mu_{40}^{(1)} \mu_{31}^{(2)} \mu_{16}^{(2)} + \mu_{40}^{(1)} \mu_{31}^{(1)} \mu_{07}^{(2)} + 18\mu_{43}^{(1)} (\mu_{22}^{(2)})^2 - 3\mu_{40}^{(1)} \mu_{22}^{(2)} \mu_{25}^{(2)} \\
& - 3\mu_{40}^{(1)} \mu_{22}^{(2)} \mu_{16}^{(2)} + \mu_{40}^{(1)} \mu_{13}^{(2)} \mu_{34}^{(2)} + 3\mu_{40}^{(1)} \mu_{13}^{(1)} \mu_{25}^{(2)} - \mu_{40}^{(1)} \mu_{04}^{(1)} \mu_{34}^{(2)} \\
& - 5\mu_{34}^{(1)} \mu_{40}^{(2)} \mu_{13}^{(2)} + 4\mu_{31}^{(1)} \mu_{40}^{(2)} \mu_{16}^{(2)} - \mu_{31}^{(1)} \mu_{43}^{(1)} \mu_{04}^{(2)} - 30\mu_{34}^{(1)} \mu_{31}^{(2)} \mu_{22}^{(2)} \\
& - 12\mu_{31}^{(1)} \mu_{31}^{(2)} \mu_{25}^{(2)} + 4\mu_{31}^{(1)} \mu_{34}^{(1)} \mu_{13}^{(2)} - 4(\mu_{31}^{(1)})^2 \mu_{16}^{(2)} + 12\mu_{31}^{(1)} \mu_{22}^{(2)} \mu_{34}^{(2)} \\
& - 6\mu_{31}^{(1)} \mu_{25}^{(2)} \mu_{22}^{(2)} + 18\mu_{31}^{(1)} \mu_{22}^{(2)} \mu_{25}^{(2)} - 4\mu_{31}^{(1)} \mu_{13}^{(2)} \mu_{43}^{(2)} + 4\mu_{31}^{(1)} \mu_{16}^{(1)} \mu_{31}^{(2)} \\
& - 16\mu_{31}^{(1)} \mu_{13}^{(1)} \mu_{34}^{(2)} - \mu_{31}^{(1)} \mu_{07}^{(1)} \mu_{40}^{(2)} + 5\mu_{31}^{(1)} \mu_{04}^{(1)} \mu_{43}^{(2)} + 3\mu_{22}^{(1)} \mu_{52}^{(1)} \mu_{04}^{(2)} \\
& + 9\mu_{25}^{(1)} \mu_{40}^{(2)} \mu_{22}^{(2)} - 6\mu_{22}^{(1)} \mu_{40}^{(2)} \mu_{25}^{(2)} - 12\mu_{22}^{(1)} \mu_{43}^{(1)} \mu_{13}^{(2)} + 12\mu_{25}^{(1)} (\mu_{31}^{(2)})^2 \\
& + 18\mu_{22}^{(1)} \mu_{31}^{(2)} \mu_{34}^{(2)} + 18\mu_{22}^{(1)} \mu_{34}^{(1)} \mu_{22}^{(2)} - 18\mu_{22}^{(1)} \mu_{22}^{(2)} \mu_{43}^{(2)} - 12\mu_{22}^{(1)} \mu_{25}^{(1)} \mu_{31}^{(2)} \\
& - 18(\mu_{22}^{(1)})^2 \mu_{34}^{(2)} + 6\mu_{22}^{(1)} \mu_{13}^{(2)} \mu_{52}^{(2)} + 3\mu_{22}^{(1)} \mu_{16}^{(1)} \mu_{40}^{(2)} + 30\mu_{22}^{(1)} \mu_{13}^{(1)} \mu_{43}^{(2)} \\
& - 9\mu_{22}^{(1)} \mu_{04}^{(1)} \mu_{52}^{(2)} - 3\mu_{13}^{(1)} \mu_{61}^{(1)} \mu_{04}^{(2)} + 12\mu_{13}^{(1)} \mu_{52}^{(1)} \mu_{13}^{(2)} - 7\mu_{16}^{(1)} \mu_{40}^{(2)} \mu_{31}^{(2)} \\
& + 4\mu_{13}^{(1)} \mu_{40}^{(2)} \mu_{34}^{(2)} - 18\mu_{13}^{(1)} \mu_{43}^{(1)} \mu_{22}^{(2)} - 12\mu_{13}^{(1)} \mu_{31}^{(2)} \mu_{43}^{(2)} + 12\mu_{13}^{(1)} \mu_{34}^{(1)} \mu_{31}^{(2)} \\
& + 12\mu_{13}^{(1)} \mu_{22}^{(2)} \mu_{52}^{(2)} - 3\mu_{13}^{(1)} \mu_{25}^{(1)} \mu_{40}^{(2)} - 4\mu_{13}^{(1)} \mu_{13}^{(2)} \mu_{61}^{(2)} - 12(\mu_{13}^{(1)})^2 \mu_{52}^{(2)} \\
& + 7\mu_{13}^{(1)} \mu_{04}^{(1)} \mu_{61}^{(2)} + \mu_{04}^{(1)} \mu_{70}^{(1)} \mu_{04}^{(2)} - 4\mu_{04}^{(1)} \mu_{61}^{(1)} \mu_{13}^{(2)} + 6\mu_{04}^{(1)} \mu_{52}^{(1)} \mu_{22}^{(2)} \\
& + \mu_{07}^{(1)} (\mu_{40}^{(2)})^2 - \mu_{04}^{(1)} \mu_{40}^{(2)} \mu_{43}^{(2)} - 4\mu_{04}^{(1)} \mu_{43}^{(1)} \mu_{31}^{(2)} + 3\mu_{04}^{(1)} \mu_{31}^{(2)} \mu_{52}^{(2)} \\
& + \mu_{04}^{(1)} \mu_{34}^{(1)} \mu_{40}^{(2)} - 3\mu_{04}^{(1)} \mu_{22}^{(2)} \mu_{61}^{(2)} + \mu_{04}^{(1)} \mu_{13}^{(2)} \mu_{70}^{(2)} - (\mu_{04}^{(1)})^2 \mu_{70}^{(2)}
\end{aligned}$$

weight=9

structure: 0,0,2,0,0,1

Generating graph:

|    |   |   |   |   |   |   |   |    |
|----|---|---|---|---|---|---|---|----|
| V1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | V3 |
| V2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 |    |



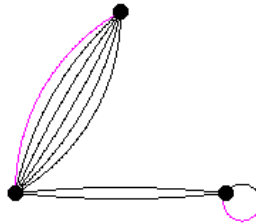
$$\begin{aligned}
Z_{61} = & -\mu_{70}^{(1)} \mu_{12}^{(2)} \mu_{05}^{(2)} + 2\mu_{61}^{(1)} \mu_{21}^{(2)} \mu_{05}^{(2)} + 5\mu_{61}^{(1)} \mu_{12}^{(2)} \mu_{14}^{(2)} - \mu_{52}^{(1)} \mu_{30}^{(2)} \mu_{05}^{(2)} \\
& -\mu_{50}^{(1)} \mu_{30}^{(2)} \mu_{07}^{(2)} - 10\mu_{52}^{(1)} \mu_{21}^{(2)} \mu_{14}^{(2)} + 2\mu_{50}^{(1)} \mu_{21}^{(2)} \mu_{16}^{(2)} - 10\mu_{52}^{(1)} \mu_{12}^{(2)} \mu_{23}^{(2)} \\
& -\mu_{50}^{(1)} \mu_{12}^{(2)} \mu_{25}^{(2)} + 5\mu_{43}^{(1)} \mu_{30}^{(2)} \mu_{14}^{(2)} + 5\mu_{41}^{(1)} \mu_{30}^{(2)} \mu_{16}^{(2)} + 20\mu_{43}^{(1)} \mu_{21}^{(2)} \mu_{23}^{(2)} \\
& -10\mu_{41}^{(1)} \mu_{21}^{(2)} \mu_{25}^{(2)} + 10\mu_{43}^{(1)} \mu_{12}^{(2)} \mu_{32}^{(2)} + 5\mu_{41}^{(1)} \mu_{12}^{(2)} \mu_{34}^{(2)} - 10\mu_{34}^{(1)} \mu_{30}^{(2)} \mu_{23}^{(2)} \\
& -10\mu_{32}^{(1)} \mu_{30}^{(2)} \mu_{25}^{(2)} - 20\mu_{34}^{(1)} \mu_{21}^{(2)} \mu_{32}^{(2)} + 20\mu_{32}^{(1)} \mu_{21}^{(2)} \mu_{34}^{(2)} - 5\mu_{34}^{(1)} \mu_{12}^{(2)} \mu_{41}^{(2)} \\
& -10\mu_{32}^{(1)} \mu_{12}^{(2)} \mu_{43}^{(2)} + \mu_{21}^{(1)} \mu_{52}^{(1)} \mu_{05}^{(2)} + \mu_{21}^{(1)} \mu_{50}^{(1)} \mu_{07}^{(2)} - 5\mu_{21}^{(1)} \mu_{43}^{(1)} \mu_{14}^{(2)} \\
& -5\mu_{21}^{(1)} \mu_{41}^{(1)} \mu_{16}^{(2)} + 10\mu_{25}^{(1)} \mu_{30}^{(2)} \mu_{32}^{(2)} + 10\mu_{23}^{(1)} \mu_{30}^{(2)} \mu_{34}^{(2)} + 10\mu_{21}^{(1)} \mu_{34}^{(1)} \mu_{23}^{(2)} \\
& +10\mu_{21}^{(1)} \mu_{32}^{(1)} \mu_{25}^{(2)} + 10\mu_{25}^{(1)} \mu_{21}^{(2)} \mu_{41}^{(2)} - 20\mu_{23}^{(1)} \mu_{21}^{(2)} \mu_{43}^{(2)} - 10\mu_{21}^{(1)} \mu_{25}^{(1)} \mu_{32}^{(2)} \\
& -10\mu_{21}^{(1)} \mu_{23}^{(1)} \mu_{34}^{(2)} + \mu_{25}^{(1)} \mu_{12}^{(2)} \mu_{50}^{(2)} + 10\mu_{23}^{(1)} \mu_{12}^{(2)} \mu_{52}^{(2)} + 5\mu_{21}^{(1)} \mu_{16}^{(1)} \mu_{41}^{(2)} \\
& +5\mu_{21}^{(1)} \mu_{14}^{(1)} \mu_{43}^{(2)} - \mu_{21}^{(1)} \mu_{07}^{(1)} \mu_{50}^{(2)} - \mu_{21}^{(1)} \mu_{05}^{(1)} \mu_{52}^{(2)} - 2\mu_{12}^{(1)} \mu_{61}^{(1)} \mu_{05}^{(2)} \\
& +10\mu_{12}^{(1)} \mu_{52}^{(1)} \mu_{14}^{(2)} - 2\mu_{12}^{(1)} \mu_{50}^{(1)} \mu_{16}^{(2)} - 20\mu_{12}^{(1)} \mu_{43}^{(1)} \mu_{23}^{(2)} + 10\mu_{12}^{(1)} \mu_{41}^{(1)} \mu_{25}^{(2)} \\
& -5\mu_{16}^{(1)} \mu_{30}^{(2)} \mu_{41}^{(2)} - 5\mu_{14}^{(1)} \mu_{30}^{(2)} \mu_{43}^{(2)} + 20\mu_{12}^{(1)} \mu_{34}^{(1)} \mu_{32}^{(2)} - 20\mu_{12}^{(1)} \mu_{32}^{(1)} \mu_{34}^{(2)} \\
& -2\mu_{16}^{(1)} \mu_{21}^{(2)} \mu_{50}^{(2)} + 10\mu_{14}^{(1)} \mu_{21}^{(2)} \mu_{52}^{(2)} - 10\mu_{12}^{(1)} \mu_{25}^{(1)} \mu_{41}^{(2)} + 20\mu_{12}^{(1)} \mu_{23}^{(1)} \mu_{43}^{(2)} \\
& -5\mu_{14}^{(1)} \mu_{12}^{(2)} \mu_{61}^{(2)} + 2\mu_{12}^{(1)} \mu_{16}^{(1)} \mu_{50}^{(2)} - 10\mu_{12}^{(1)} \mu_{14}^{(1)} \mu_{52}^{(2)} + 2\mu_{12}^{(1)} \mu_{05}^{(1)} \mu_{61}^{(2)} \\
& +\mu_{03}^{(1)} \mu_{70}^{(2)} \mu_{05}^{(2)} - 5\mu_{03}^{(1)} \mu_{61}^{(1)} \mu_{14}^{(2)} + 10\mu_{03}^{(1)} \mu_{52}^{(1)} \mu_{23}^{(2)} + \mu_{03}^{(1)} \mu_{50}^{(1)} \mu_{25}^{(2)} \\
& -10\mu_{03}^{(1)} \mu_{43}^{(1)} \mu_{32}^{(2)} - 5\mu_{03}^{(1)} \mu_{41}^{(1)} \mu_{34}^{(2)} + \mu_{07}^{(1)} \mu_{30}^{(2)} \mu_{50}^{(2)} + \mu_{05}^{(1)} \mu_{30}^{(2)} \mu_{52}^{(2)} \\
& +5\mu_{03}^{(1)} \mu_{34}^{(1)} \mu_{41}^{(2)} + 10\mu_{03}^{(1)} \mu_{32}^{(1)} \mu_{43}^{(2)} - 2\mu_{05}^{(1)} \mu_{21}^{(2)} \mu_{61}^{(2)} - \mu_{03}^{(1)} \mu_{25}^{(1)} \mu_{50}^{(2)} \\
& -10\mu_{03}^{(1)} \mu_{23}^{(1)} \mu_{52}^{(2)} + \mu_{05}^{(1)} \mu_{12}^{(2)} \mu_{70}^{(2)} + 5\mu_{03}^{(1)} \mu_{14}^{(1)} \mu_{61}^{(2)} - \mu_{03}^{(1)} \mu_{05}^{(1)} \mu_{70}^{(2)}
\end{aligned}$$

weight=9

structure: 0,1,0,1,0,1

Generating graph:

|    |   |   |   |   |   |   |   |    |
|----|---|---|---|---|---|---|---|----|
| V1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | V3 |
| V2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3  |



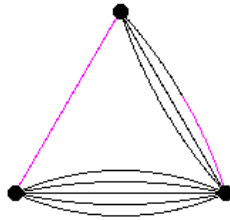
$$\begin{aligned}
Z_{62} = & \mu_{50}^{(1)} \mu_{30}^{(2)} \mu_{07}^{(2)} - 2\mu_{50}^{(1)} \mu_{21}^{(2)} \mu_{16}^{(2)} - \mu_{50}^{(1)} \mu_{25}^{(1)} \mu_{03}^{(2)} + \mu_{50}^{(1)} \mu_{12}^{(2)} \mu_{25}^{(2)} \\
& + 2\mu_{50}^{(1)} \mu_{16}^{(1)} \mu_{12}^{(2)} - \mu_{50}^{(1)} \mu_{07}^{(1)} \mu_{21}^{(2)} - 5\mu_{41}^{(1)} \mu_{30}^{(2)} \mu_{16}^{(2)} + 5\mu_{41}^{(1)} \mu_{34}^{(1)} \mu_{03}^{(2)} \\
& + 10\mu_{41}^{(1)} \mu_{21}^{(2)} \mu_{25}^{(2)} - 10\mu_{41}^{(1)} \mu_{25}^{(1)} \mu_{12}^{(2)} - 5\mu_{41}^{(1)} \mu_{12}^{(2)} \mu_{34}^{(2)} + 5\mu_{41}^{(1)} \mu_{16}^{(1)} \mu_{21}^{(2)} \\
& - \mu_{30}^{(1)} \mu_{50}^{(2)} \mu_{07}^{(2)} + 5\mu_{30}^{(1)} \mu_{41}^{(2)} \mu_{16}^{(2)} - 10\mu_{32}^{(1)} \mu_{43}^{(1)} \mu_{03}^{(2)} + 10\mu_{32}^{(1)} \mu_{30}^{(2)} \mu_{25}^{(2)} \\
& - 10\mu_{30}^{(1)} \mu_{32}^{(2)} \mu_{25}^{(2)} + 20\mu_{32}^{(1)} \mu_{34}^{(1)} \mu_{12}^{(2)} - 20\mu_{32}^{(1)} \mu_{21}^{(2)} \mu_{34}^{(2)} + 10\mu_{30}^{(1)} \mu_{23}^{(2)} \mu_{34}^{(2)} \\
& - 10\mu_{32}^{(1)} \mu_{25}^{(1)} \mu_{21}^{(2)} + 10\mu_{32}^{(1)} \mu_{12}^{(2)} \mu_{43}^{(2)} - 5\mu_{30}^{(1)} \mu_{14}^{(2)} \mu_{43}^{(2)} + \mu_{30}^{(1)} \mu_{05}^{(2)} \mu_{52}^{(2)} \\
& + 2\mu_{21}^{(1)} \mu_{50}^{(2)} \mu_{16}^{(2)} + 10\mu_{23}^{(1)} \mu_{52}^{(2)} \mu_{03}^{(2)} - \mu_{21}^{(1)} \mu_{52}^{(1)} \mu_{05}^{(2)} - 10\mu_{21}^{(1)} \mu_{41}^{(2)} \mu_{25}^{(2)} \\
& - 20\mu_{23}^{(1)} \mu_{43}^{(1)} \mu_{12}^{(2)} + 5\mu_{21}^{(1)} \mu_{43}^{(1)} \mu_{14}^{(2)} - 10\mu_{23}^{(1)} \mu_{30}^{(2)} \mu_{34}^{(2)} + 20\mu_{21}^{(1)} \mu_{32}^{(2)} \mu_{34}^{(2)} \\
& + 10\mu_{23}^{(1)} \mu_{34}^{(1)} \mu_{21}^{(2)} - 10\mu_{21}^{(1)} \mu_{34}^{(1)} \mu_{23}^{(2)} + 20\mu_{23}^{(1)} \mu_{21}^{(2)} \mu_{43}^{(2)} - 20\mu_{21}^{(1)} \mu_{23}^{(2)} \mu_{43}^{(2)} \\
& + 10\mu_{21}^{(1)} \mu_{25}^{(1)} \mu_{32}^{(2)} - 10\mu_{23}^{(1)} \mu_{12}^{(2)} \mu_{52}^{(2)} + 10\mu_{21}^{(1)} \mu_{14}^{(2)} \mu_{52}^{(2)} - 5\mu_{21}^{(1)} \mu_{16}^{(1)} \mu_{41}^{(2)} \\
& - 2\mu_{21}^{(1)} \mu_{05}^{(2)} \mu_{61}^{(2)} + \mu_{21}^{(1)} \mu_{07}^{(1)} \mu_{50}^{(2)} - 5\mu_{14}^{(1)} \mu_{61}^{(1)} \mu_{03}^{(2)} + 2\mu_{12}^{(1)} \mu_{61}^{(1)} \mu_{05}^{(2)} \\
& - \mu_{12}^{(1)} \mu_{50}^{(2)} \mu_{25}^{(2)} + 10\mu_{14}^{(1)} \mu_{52}^{(1)} \mu_{12}^{(2)} - 10\mu_{12}^{(1)} \mu_{52}^{(1)} \mu_{14}^{(2)} + 5\mu_{12}^{(1)} \mu_{41}^{(2)} \mu_{34}^{(2)} \\
& - 5\mu_{14}^{(1)} \mu_{43}^{(1)} \mu_{21}^{(2)} + 20\mu_{12}^{(1)} \mu_{43}^{(1)} \mu_{23}^{(2)} + 5\mu_{14}^{(1)} \mu_{30}^{(2)} \mu_{43}^{(2)} - 10\mu_{12}^{(1)} \mu_{32}^{(2)} \mu_{43}^{(2)} \\
& - 20\mu_{12}^{(1)} \mu_{34}^{(1)} \mu_{32}^{(2)} - 10\mu_{14}^{(1)} \mu_{21}^{(2)} \mu_{52}^{(2)} + 10\mu_{12}^{(1)} \mu_{23}^{(2)} \mu_{52}^{(2)} + 10\mu_{12}^{(1)} \mu_{25}^{(1)} \mu_{41}^{(2)} \\
& + 5\mu_{14}^{(1)} \mu_{12}^{(2)} \mu_{61}^{(2)} - 5\mu_{12}^{(1)} \mu_{14}^{(2)} \mu_{61}^{(2)} - 2\mu_{12}^{(1)} \mu_{16}^{(1)} \mu_{50}^{(2)} + \mu_{12}^{(1)} \mu_{05}^{(2)} \mu_{70}^{(2)} \\
& + \mu_{05}^{(1)} \mu_{70}^{(1)} \mu_{03}^{(2)} - \mu_{03}^{(1)} \mu_{70}^{(1)} \mu_{05}^{(2)} - 2\mu_{05}^{(1)} \mu_{61}^{(1)} \mu_{12}^{(2)} + 5\mu_{03}^{(1)} \mu_{61}^{(1)} \mu_{14}^{(2)} \\
& + \mu_{05}^{(1)} \mu_{52}^{(1)} \mu_{21}^{(2)} - 10\mu_{03}^{(1)} \mu_{52}^{(1)} \mu_{23}^{(2)} + 10\mu_{03}^{(1)} \mu_{43}^{(1)} \mu_{32}^{(2)} - \mu_{05}^{(1)} \mu_{30}^{(2)} \mu_{52}^{(2)} \\
& - 5\mu_{03}^{(1)} \mu_{34}^{(1)} \mu_{41}^{(2)} + 2\mu_{05}^{(1)} \mu_{21}^{(2)} \mu_{61}^{(2)} + \mu_{03}^{(1)} \mu_{25}^{(1)} \mu_{50}^{(2)} - \mu_{05}^{(1)} \mu_{12}^{(2)} \mu_{70}^{(2)}
\end{aligned}$$

weight=9

structure: 0,1,0,1,0,1

Generating graph:

$$\begin{array}{cccccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 & 2 \\
V2 & 3 & 3 & 3 & 3 & 3 & V3 & 3 & 3
\end{array}$$



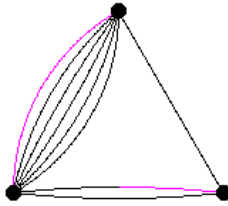
$$\begin{aligned}
Z_{63} = & -\mu_{70}^{(1)} \mu_{11}^{(2)} \mu_{06}^{(2)} + \mu_{70}^{(1)} \mu_{02}^{(2)} \mu_{15}^{(2)} + \mu_{61}^{(1)} \mu_{20}^{(2)} \mu_{06}^{(2)} + 4\mu_{61}^{(1)} \mu_{11}^{(2)} \mu_{15}^{(2)} \\
& -\mu_{60}^{(1)} \mu_{11}^{(2)} \mu_{16}^{(2)} - 5\mu_{61}^{(1)} \mu_{02}^{(2)} \mu_{24}^{(2)} + \mu_{60}^{(1)} \mu_{02}^{(2)} \mu_{25}^{(2)} - 5\mu_{52}^{(1)} \mu_{20}^{(2)} \mu_{15}^{(2)} \\
& + \mu_{51}^{(1)} \mu_{20}^{(2)} \mu_{16}^{(2)} - 5\mu_{52}^{(1)} \mu_{11}^{(2)} \mu_{24}^{(2)} + 4\mu_{51}^{(1)} \mu_{11}^{(2)} \mu_{25}^{(2)} + 10\mu_{52}^{(1)} \mu_{02}^{(2)} \mu_{33}^{(2)} \\
& - 5\mu_{51}^{(1)} \mu_{02}^{(2)} \mu_{34}^{(2)} + 10\mu_{43}^{(1)} \mu_{20}^{(2)} \mu_{24}^{(2)} - 5\mu_{42}^{(1)} \mu_{20}^{(2)} \mu_{25}^{(2)} - 5\mu_{42}^{(1)} \mu_{11}^{(2)} \mu_{34}^{(2)} \\
& - 10\mu_{43}^{(1)} \mu_{02}^{(2)} \mu_{42}^{(2)} + 10\mu_{42}^{(1)} \mu_{02}^{(2)} \mu_{43}^{(2)} - 10\mu_{34}^{(1)} \mu_{20}^{(2)} \mu_{33}^{(2)} + 10\mu_{33}^{(1)} \mu_{20}^{(2)} \mu_{34}^{(2)} \\
& + 5\mu_{34}^{(1)} \mu_{11}^{(2)} \mu_{42}^{(2)} + 5\mu_{34}^{(1)} \mu_{02}^{(2)} \mu_{51}^{(2)} - 10\mu_{33}^{(1)} \mu_{02}^{(2)} \mu_{52}^{(2)} - \mu_{20}^{(1)} \mu_{52}^{(1)} \mu_{06}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{51}^{(1)} \mu_{07}^{(2)} + 5\mu_{20}^{(1)} \mu_{43}^{(1)} \mu_{15}^{(2)} + 5\mu_{20}^{(1)} \mu_{42}^{(1)} \mu_{16}^{(2)} - 10\mu_{20}^{(1)} \mu_{34}^{(1)} \mu_{24}^{(2)} \\
& - 10\mu_{20}^{(1)} \mu_{33}^{(1)} \mu_{25}^{(2)} + 5\mu_{25}^{(1)} \mu_{20}^{(2)} \mu_{42}^{(2)} - 10\mu_{24}^{(1)} \mu_{20}^{(2)} \mu_{43}^{(2)} + 10\mu_{20}^{(1)} \mu_{25}^{(1)} \mu_{33}^{(2)} \\
& + 10\mu_{20}^{(1)} \mu_{24}^{(1)} \mu_{34}^{(2)} - 4\mu_{25}^{(1)} \mu_{11}^{(2)} \mu_{51}^{(2)} + 5\mu_{24}^{(1)} \mu_{11}^{(2)} \mu_{52}^{(2)} - 5\mu_{20}^{(1)} \mu_{16}^{(1)} \mu_{42}^{(2)} \\
& - 5\mu_{20}^{(1)} \mu_{15}^{(1)} \mu_{43}^{(2)} - \mu_{25}^{(1)} \mu_{02}^{(2)} \mu_{60}^{(2)} + 5\mu_{24}^{(1)} \mu_{02}^{(2)} \mu_{61}^{(2)} + \mu_{20}^{(1)} \mu_{07}^{(1)} \mu_{51}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{06}^{(1)} \mu_{52}^{(2)} + \mu_{11}^{(1)} \mu_{61}^{(1)} \mu_{06}^{(2)} + \mu_{11}^{(1)} \mu_{60}^{(1)} \mu_{07}^{(2)} - 4\mu_{11}^{(1)} \mu_{52}^{(1)} \mu_{15}^{(2)} \\
& - 4\mu_{11}^{(1)} \mu_{51}^{(1)} \mu_{16}^{(2)} + 5\mu_{11}^{(1)} \mu_{43}^{(1)} \mu_{24}^{(2)} + 5\mu_{11}^{(1)} \mu_{42}^{(1)} \mu_{25}^{(2)} - \mu_{16}^{(1)} \mu_{20}^{(2)} \mu_{51}^{(2)} \\
& + 5\mu_{15}^{(1)} \mu_{20}^{(2)} \mu_{52}^{(2)} - 5\mu_{11}^{(1)} \mu_{25}^{(1)} \mu_{42}^{(2)} - 5\mu_{11}^{(1)} \mu_{24}^{(1)} \mu_{43}^{(2)} + \mu_{16}^{(1)} \mu_{11}^{(2)} \mu_{60}^{(2)} \\
& - 4\mu_{15}^{(1)} \mu_{11}^{(2)} \mu_{61}^{(2)} + 4\mu_{11}^{(1)} \mu_{16}^{(1)} \mu_{51}^{(2)} + 4\mu_{11}^{(1)} \mu_{15}^{(1)} \mu_{52}^{(2)} - \mu_{15}^{(1)} \mu_{02}^{(2)} \mu_{70}^{(2)} \\
& - \mu_{11}^{(1)} \mu_{07}^{(1)} \mu_{60}^{(2)} - \mu_{11}^{(1)} \mu_{06}^{(1)} \mu_{61}^{(2)} - \mu_{02}^{(1)} \mu_{61}^{(1)} \mu_{15}^{(2)} - \mu_{02}^{(1)} \mu_{60}^{(1)} \mu_{16}^{(2)} \\
& + 5\mu_{02}^{(1)} \mu_{52}^{(1)} \mu_{24}^{(2)} + 5\mu_{02}^{(1)} \mu_{51}^{(1)} \mu_{25}^{(2)} - 10\mu_{02}^{(1)} \mu_{43}^{(1)} \mu_{33}^{(2)} - 10\mu_{02}^{(1)} \mu_{42}^{(1)} \mu_{34}^{(2)} \\
& + 10\mu_{02}^{(1)} \mu_{34}^{(1)} \mu_{42}^{(2)} + 10\mu_{02}^{(1)} \mu_{33}^{(1)} \mu_{43}^{(2)} - \mu_{06}^{(1)} \mu_{20}^{(2)} \mu_{61}^{(2)} - 5\mu_{02}^{(1)} \mu_{25}^{(1)} \mu_{51}^{(2)} \\
& - 5\mu_{02}^{(1)} \mu_{24}^{(1)} \mu_{52}^{(2)} + \mu_{06}^{(1)} \mu_{11}^{(2)} \mu_{70}^{(2)} + \mu_{02}^{(1)} \mu_{16}^{(1)} \mu_{60}^{(2)} + \mu_{02}^{(1)} \mu_{15}^{(1)} \mu_{61}^{(2)}
\end{aligned}$$

weight=9

structure: 1,0,0,0,1,1

Generating graph:

$$\begin{array}{cccccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
V2 & 2 & 2 & 2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



## Invariants of the order 8

$$\begin{aligned}
Z_{64} = & \mu_{71}^{(1)} \mu_{06}^{(2)} - \mu_{60}^{(2)} \mu_{26}^{(2)} - 6\mu_{62}^{(1)} \mu_{15}^{(2)} + \mu_{60}^{(1)} \mu_{17}^{(2)} - \mu_{60}^{(1)} \mu_{08}^{(1)} + 6\mu_{51}^{(2)} \mu_{35}^{(2)} \\
& + 15\mu_{53}^{(1)} \mu_{24}^{(2)} - 6\mu_{51}^{(1)} \mu_{26}^{(2)} + 6\mu_{51}^{(1)} \mu_{17}^{(1)} - 15\mu_{42}^{(2)} \mu_{44}^{(2)} - 20\mu_{44}^{(1)} \mu_{33}^{(2)} + 15\mu_{42}^{(1)} \mu_{35}^{(2)} \\
& - 15\mu_{42}^{(1)} \mu_{26}^{(1)} + 20\mu_{33}^{(2)} \mu_{53}^{(2)} + 15\mu_{35}^{(1)} \mu_{42}^{(2)} - 20\mu_{33}^{(1)} \mu_{44}^{(2)} + 20\mu_{33}^{(1)} \mu_{35}^{(1)} - 15\mu_{24}^{(2)} \mu_{62}^{(2)} \\
& - 6\mu_{26}^{(1)} \mu_{51}^{(2)} + 15\mu_{24}^{(1)} \mu_{53}^{(2)} - 15\mu_{24}^{(1)} \mu_{44}^{(1)} + 6\mu_{15}^{(2)} \mu_{71}^{(2)} + \mu_{17}^{(1)} \mu_{60}^{(2)} - 6\mu_{15}^{(1)} \mu_{62}^{(2)} \\
& + 6\mu_{15}^{(1)} \mu_{53}^{(1)} - \mu_{06}^{(2)} \mu_{80}^{(2)} + \mu_{06}^{(1)} \mu_{71}^{(2)} - \mu_{06}^{(1)} \mu_{62}^{(1)}
\end{aligned}$$

weight=8

structure: 0,0,0,0,1,0,1

Generating graph:

$$\begin{array}{cccccccc} V1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ & 1 & V2 & 2 & 2 & 2 & 2 & 2 \end{array}$$



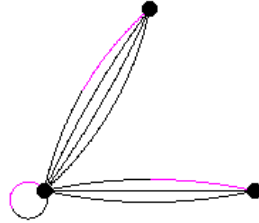
$$\begin{aligned} Z_{65} = & \mu_{71}^{(1)} \mu_{02}^{(2)} \mu_{03}^{(2)} - 2\mu_{62}^{(1)} \mu_{11}^{(2)} \mu_{03}^{(2)} - 3\mu_{62}^{(1)} \mu_{02}^{(2)} \mu_{12}^{(2)} + \mu_{53}^{(1)} \mu_{20}^{(2)} \mu_{03}^{(2)} \\ & + 6\mu_{53}^{(1)} \mu_{11}^{(2)} \mu_{12}^{(2)} + 3\mu_{53}^{(1)} \mu_{02}^{(2)} \mu_{21}^{(2)} - 3\mu_{44}^{(1)} \mu_{20}^{(2)} \mu_{12}^{(2)} - 6\mu_{44}^{(1)} \mu_{11}^{(2)} \mu_{21}^{(2)} \\ & - \mu_{44}^{(1)} \mu_{02}^{(2)} \mu_{30}^{(2)} + \mu_{30}^{(1)} \mu_{35}^{(1)} \mu_{02}^{(2)} + 3\mu_{35}^{(1)} \mu_{20}^{(2)} \mu_{21}^{(2)} - \mu_{30}^{(1)} \mu_{20}^{(2)} \mu_{26}^{(2)} \\ & - 2\mu_{30}^{(1)} \mu_{26}^{(1)} \mu_{11}^{(2)} + 2\mu_{35}^{(1)} \mu_{11}^{(2)} \mu_{30}^{(2)} + 2\mu_{30}^{(1)} \mu_{11}^{(2)} \mu_{35}^{(2)} + \mu_{30}^{(1)} \mu_{17}^{(1)} \mu_{20}^{(2)} \\ & - \mu_{30}^{(1)} \mu_{02}^{(2)} \mu_{44}^{(2)} - 3\mu_{21}^{(1)} \mu_{44}^{(1)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{44}^{(1)} \mu_{03}^{(2)} + \mu_{20}^{(2)} \mu_{30}^{(2)} \mu_{35}^{(2)} \\ & - \mu_{20}^{(1)} \mu_{30}^{(2)} \mu_{26}^{(2)} + 6\mu_{21}^{(1)} \mu_{35}^{(1)} \mu_{11}^{(2)} + 3\mu_{20}^{(1)} \mu_{35}^{(1)} \mu_{12}^{(2)} + \mu_{20}^{(1)} \mu_{30}^{(1)} \mu_{17}^{(2)} \\ & - \mu_{20}^{(1)} \mu_{30}^{(1)} \mu_{08}^{(2)} - 3\mu_{20}^{(2)} \mu_{21}^{(2)} \mu_{44}^{(2)} - \mu_{26}^{(1)} \mu_{20}^{(2)} \mu_{30}^{(2)} + 3\mu_{21}^{(1)} \mu_{20}^{(2)} \mu_{35}^{(2)} \\ & + 3\mu_{20}^{(1)} \mu_{21}^{(2)} \mu_{35}^{(2)} - 3\mu_{21}^{(1)} \mu_{26}^{(1)} \mu_{20}^{(2)} - 3\mu_{20}^{(1)} \mu_{26}^{(1)} \mu_{21}^{(2)} - 3\mu_{20}^{(1)} \mu_{03}^{(1)} \mu_{35}^{(2)} \\ & + 3\mu_{20}^{(1)} \mu_{21}^{(1)} \mu_{17}^{(2)} + 3\mu_{20}^{(2)} \mu_{12}^{(2)} \mu_{53}^{(2)} - 6\mu_{21}^{(1)} \mu_{11}^{(2)} \mu_{44}^{(2)} - 3\mu_{20}^{(1)} \mu_{12}^{(2)} \mu_{44}^{(2)} \\ & + \mu_{20}^{(1)} \mu_{17}^{(1)} \mu_{30}^{(2)} + 3\mu_{20}^{(1)} \mu_{12}^{(1)} \mu_{35}^{(2)} - 3\mu_{20}^{(1)} \mu_{12}^{(1)} \mu_{26}^{(2)} - \mu_{20}^{(2)} \mu_{03}^{(2)} \mu_{62}^{(2)} \\ & + 3\mu_{21}^{(1)} \mu_{02}^{(2)} \mu_{53}^{(2)} + \mu_{20}^{(1)} \mu_{03}^{(2)} \mu_{53}^{(2)} - \mu_{20}^{(1)} \mu_{03}^{(1)} \mu_{44}^{(2)} + \mu_{20}^{(1)} \mu_{03}^{(1)} \mu_{35}^{(1)} \\ & + 3\mu_{12}^{(1)} \mu_{53}^{(1)} \mu_{02}^{(2)} + 2\mu_{11}^{(1)} \mu_{53}^{(1)} \mu_{03}^{(2)} - 6\mu_{12}^{(1)} \mu_{44}^{(1)} \mu_{11}^{(2)} - 6\mu_{11}^{(1)} \mu_{44}^{(1)} \mu_{12}^{(2)} \\ & - 2\mu_{11}^{(2)} \mu_{30}^{(2)} \mu_{44}^{(2)} + 2\mu_{11}^{(1)} \mu_{30}^{(2)} \mu_{35}^{(2)} + 3\mu_{12}^{(1)} \mu_{35}^{(1)} \mu_{20}^{(2)} + 6\mu_{11}^{(1)} \mu_{35}^{(1)} \mu_{21}^{(2)} \\ & - 2\mu_{11}^{(1)} \mu_{30}^{(1)} \mu_{26}^{(2)} + 2\mu_{11}^{(1)} \mu_{30}^{(1)} \mu_{17}^{(2)} + 6\mu_{11}^{(2)} \mu_{21}^{(2)} \mu_{53}^{(2)} - 3\mu_{12}^{(1)} \mu_{20}^{(2)} \mu_{44}^{(2)} \\ & - 6\mu_{11}^{(1)} \mu_{21}^{(2)} \mu_{44}^{(2)} - 2\mu_{11}^{(1)} \mu_{26}^{(1)} \mu_{30}^{(2)} + 6\mu_{11}^{(1)} \mu_{21}^{(1)} \mu_{35}^{(2)} - 6\mu_{11}^{(1)} \mu_{21}^{(1)} \mu_{26}^{(2)} \\ & - 6\mu_{11}^{(2)} \mu_{12}^{(2)} \mu_{62}^{(2)} + 6\mu_{12}^{(1)} \mu_{11}^{(2)} \mu_{53}^{(2)} + 6\mu_{11}^{(1)} \mu_{12}^{(1)} \mu_{53}^{(2)} - 6\mu_{11}^{(1)} \mu_{12}^{(1)} \mu_{44}^{(2)} \\ & + 6\mu_{11}^{(1)} \mu_{12}^{(1)} \mu_{35}^{(2)} + 2\mu_{11}^{(2)} \mu_{03}^{(2)} \mu_{71}^{(2)} - 3\mu_{12}^{(1)} \mu_{02}^{(2)} \mu_{62}^{(2)} - 2\mu_{11}^{(1)} \mu_{03}^{(2)} \mu_{62}^{(2)} \\ & + 2\mu_{11}^{(1)} \mu_{03}^{(1)} \mu_{53}^{(2)} - 2\mu_{11}^{(1)} \mu_{03}^{(1)} \mu_{44}^{(2)} - \mu_{03}^{(1)} \mu_{62}^{(1)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{62}^{(1)} \mu_{03}^{(2)} \\ & + 2\mu_{03}^{(1)} \mu_{53}^{(1)} \mu_{11}^{(2)} + 3\mu_{02}^{(1)} \mu_{53}^{(1)} \mu_{12}^{(2)} - \mu_{03}^{(1)} \mu_{44}^{(1)} \mu_{20}^{(2)} - 3\mu_{02}^{(1)} \mu_{44}^{(1)} \mu_{21}^{(2)} \\ & + \mu_{02}^{(2)} \mu_{30}^{(2)} \mu_{53}^{(2)} - \mu_{02}^{(1)} \mu_{30}^{(2)} \mu_{44}^{(2)} + \mu_{02}^{(1)} \mu_{35}^{(1)} \mu_{30}^{(2)} + \mu_{02}^{(1)} \mu_{30}^{(1)} \mu_{35}^{(2)} \\ & - \mu_{02}^{(1)} \mu_{30}^{(1)} \mu_{26}^{(2)} - 3\mu_{02}^{(2)} \mu_{21}^{(2)} \mu_{62}^{(2)} + \mu_{03}^{(1)} \mu_{20}^{(2)} \mu_{53}^{(2)} + 3\mu_{02}^{(1)} \mu_{21}^{(1)} \mu_{53}^{(2)} \\ & - 3\mu_{02}^{(1)} \mu_{21}^{(1)} \mu_{44}^{(2)} + 3\mu_{02}^{(1)} \mu_{21}^{(1)} \mu_{35}^{(2)} + 3\mu_{02}^{(2)} \mu_{12}^{(2)} \mu_{71}^{(2)} - 2\mu_{03}^{(1)} \mu_{11}^{(2)} \mu_{62}^{(2)} \\ & - 3\mu_{02}^{(1)} \mu_{12}^{(2)} \mu_{62}^{(2)} + 3\mu_{02}^{(1)} \mu_{12}^{(1)} \mu_{53}^{(2)} - 3\mu_{02}^{(1)} \mu_{12}^{(1)} \mu_{44}^{(2)} - \mu_{02}^{(2)} \mu_{03}^{(2)} \mu_{80}^{(2)} \\ & + \mu_{03}^{(1)} \mu_{02}^{(2)} \mu_{71}^{(2)} + \mu_{02}^{(1)} \mu_{03}^{(2)} \mu_{71}^{(2)} - \mu_{02}^{(1)} \mu_{03}^{(1)} \mu_{62}^{(2)} + \mu_{02}^{(1)} \mu_{03}^{(1)} \mu_{53}^{(2)} \end{aligned}$$

weight=8

structure: 1,1,0,0,0,1

Generating graph:

|    |   |    |   |   |   |    |   |   |
|----|---|----|---|---|---|----|---|---|
| V1 | 1 | 1  | 1 | 1 | 1 | 1  | 1 | 1 |
|    | 1 | V2 | 2 | 2 | 2 | V3 | 3 | 3 |



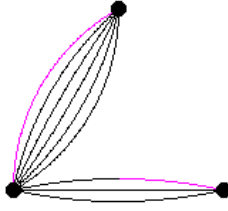
$$\begin{aligned}
 Z_{66} = & \mu_{80}^{(1)} \mu_{02}^{(2)} \mu_{05}^{(2)} - 2\mu_{71}^{(1)} \mu_{11}^{(2)} \mu_{05}^{(2)} - 5\mu_{71}^{(1)} \mu_{02}^{(2)} \mu_{14}^{(2)} + \mu_{62}^{(1)} \mu_{20}^{(2)} \mu_{05}^{(2)} \\
 & + 10\mu_{62}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} + 10\mu_{62}^{(1)} \mu_{02}^{(2)} \mu_{23}^{(2)} - 5\mu_{53}^{(1)} \mu_{20}^{(2)} \mu_{14}^{(2)} + \mu_{50}^{(1)} \mu_{20}^{(2)} \mu_{17}^{(2)} \\
 & - 20\mu_{53}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} - 2\mu_{50}^{(1)} \mu_{11}^{(2)} \mu_{26}^{(2)} - 10\mu_{53}^{(1)} \mu_{02}^{(2)} \mu_{32}^{(2)} + \mu_{50}^{(1)} \mu_{02}^{(2)} \mu_{35}^{(2)} \\
 & + 10\mu_{44}^{(1)} \mu_{20}^{(2)} \mu_{23}^{(2)} - 5\mu_{41}^{(1)} \mu_{20}^{(2)} \mu_{26}^{(2)} + 20\mu_{44}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} + 10\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{35}^{(2)} \\
 & + 5\mu_{44}^{(1)} \mu_{02}^{(2)} \mu_{41}^{(2)} - 5\mu_{41}^{(1)} \mu_{02}^{(2)} \mu_{44}^{(2)} - 10\mu_{35}^{(1)} \mu_{20}^{(2)} \mu_{32}^{(2)} + 10\mu_{32}^{(1)} \mu_{20}^{(2)} \mu_{35}^{(2)} \\
 & - 10\mu_{35}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} - 20\mu_{32}^{(1)} \mu_{11}^{(2)} \mu_{44}^{(2)} - \mu_{35}^{(1)} \mu_{02}^{(2)} \mu_{50}^{(2)} + 10\mu_{32}^{(1)} \mu_{02}^{(2)} \mu_{53}^{(2)} \\
 & - \mu_{20}^{(1)} \mu_{53}^{(1)} \mu_{05}^{(2)} - \mu_{20}^{(1)} \mu_{50}^{(1)} \mu_{08}^{(2)} + 5\mu_{20}^{(1)} \mu_{44}^{(1)} \mu_{14}^{(2)} + 5\mu_{20}^{(1)} \mu_{41}^{(1)} \mu_{17}^{(2)} \\
 & - 10\mu_{20}^{(1)} \mu_{35}^{(1)} \mu_{23}^{(2)} - 10\mu_{20}^{(1)} \mu_{32}^{(1)} \mu_{26}^{(2)} + 5\mu_{26}^{(1)} \mu_{20}^{(1)} \mu_{41}^{(2)} - 10\mu_{23}^{(1)} \mu_{20}^{(1)} \mu_{44}^{(2)} \\
 & + 10\mu_{20}^{(1)} \mu_{26}^{(1)} \mu_{32}^{(2)} + 10\mu_{20}^{(1)} \mu_{23}^{(1)} \mu_{35}^{(2)} + 2\mu_{26}^{(1)} \mu_{11}^{(1)} \mu_{50}^{(2)} + 20\mu_{23}^{(1)} \mu_{11}^{(1)} \mu_{53}^{(2)} \\
 & - 5\mu_{20}^{(1)} \mu_{17}^{(1)} \mu_{41}^{(2)} - 5\mu_{20}^{(1)} \mu_{14}^{(1)} \mu_{44}^{(2)} - 10\mu_{23}^{(1)} \mu_{02}^{(1)} \mu_{62}^{(2)} + \mu_{20}^{(1)} \mu_{08}^{(1)} \mu_{50}^{(2)} \\
 & + \mu_{20}^{(1)} \mu_{05}^{(1)} \mu_{53}^{(2)} + 2\mu_{11}^{(1)} \mu_{62}^{(1)} \mu_{05}^{(2)} - 10\mu_{11}^{(1)} \mu_{53}^{(1)} \mu_{14}^{(2)} + 2\mu_{11}^{(1)} \mu_{50}^{(1)} \mu_{17}^{(2)} \\
 & + 20\mu_{11}^{(1)} \mu_{44}^{(1)} \mu_{23}^{(2)} - 10\mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{26}^{(2)} - 20\mu_{11}^{(1)} \mu_{35}^{(1)} \mu_{32}^{(2)} + 20\mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{35}^{(2)} \\
 & - \mu_{17}^{(1)} \mu_{20}^{(1)} \mu_{50}^{(2)} + 5\mu_{14}^{(1)} \mu_{20}^{(1)} \mu_{53}^{(2)} + 10\mu_{11}^{(1)} \mu_{26}^{(1)} \mu_{41}^{(2)} - 20\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{44}^{(2)} \\
 & - 10\mu_{14}^{(1)} \mu_{11}^{(1)} \mu_{62}^{(2)} - 2\mu_{11}^{(1)} \mu_{17}^{(1)} \mu_{50}^{(2)} + 10\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{53}^{(2)} + 5\mu_{14}^{(1)} \mu_{02}^{(1)} \mu_{71}^{(2)} \\
 & - 2\mu_{11}^{(1)} \mu_{05}^{(1)} \mu_{62}^{(2)} - \mu_{02}^{(1)} \mu_{71}^{(1)} \mu_{05}^{(2)} + 5\mu_{02}^{(1)} \mu_{62}^{(1)} \mu_{14}^{(2)} - 10\mu_{02}^{(1)} \mu_{53}^{(1)} \mu_{23}^{(2)} \\
 & - \mu_{02}^{(1)} \mu_{50}^{(1)} \mu_{26}^{(2)} + 10\mu_{02}^{(1)} \mu_{44}^{(1)} \mu_{32}^{(2)} + 5\mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{35}^{(2)} - 5\mu_{02}^{(1)} \mu_{35}^{(1)} \mu_{41}^{(2)} \\
 & - 10\mu_{02}^{(1)} \mu_{32}^{(1)} \mu_{44}^{(2)} - \mu_{05}^{(1)} \mu_{20}^{(1)} \mu_{62}^{(2)} + \mu_{02}^{(1)} \mu_{26}^{(1)} \mu_{50}^{(2)} + 10\mu_{02}^{(1)} \mu_{23}^{(1)} \mu_{53}^{(2)} \\
 & + 2\mu_{05}^{(1)} \mu_{11}^{(1)} \mu_{71}^{(2)} - 5\mu_{02}^{(1)} \mu_{14}^{(1)} \mu_{62}^{(2)} - \mu_{05}^{(1)} \mu_{02}^{(1)} \mu_{80}^{(2)} + \mu_{02}^{(1)} \mu_{05}^{(1)} \mu_{71}^{(2)}
 \end{aligned}$$

weight=9

structure: 1,0,0,1,0,0,1

Generating graph:

|    |    |   |   |   |   |   |    |   |
|----|----|---|---|---|---|---|----|---|
| V1 | 1  | 1 | 1 | 1 | 1 | 1 | 1  | 1 |
|    | V2 | 2 | 2 | 2 | 2 | 2 | V3 | 3 |



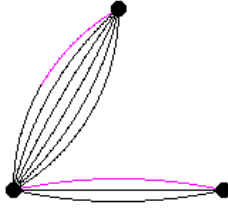
$$\begin{aligned}
Z_{67} = & \mu_{80}^{(1)} \mu_{02}^{(2)} \mu_{05}^{(2)} - 2\mu_{71}^{(1)} \mu_{11}^{(2)} \mu_{05}^{(2)} - 5\mu_{71}^{(1)} \mu_{02}^{(2)} \mu_{14}^{(2)} + \mu_{62}^{(1)} \mu_{20}^{(2)} \mu_{05}^{(2)} \\
& + 10\mu_{62}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} + 10\mu_{62}^{(1)} \mu_{02}^{(2)} \mu_{23}^{(2)} - 5\mu_{53}^{(1)} \mu_{20}^{(2)} \mu_{14}^{(2)} + \mu_{50}^{(1)} \mu_{26}^{(1)} \mu_{02}^{(2)} \\
& - 20\mu_{53}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} - 2\mu_{50}^{(1)} \mu_{17}^{(1)} \mu_{11}^{(2)} - 10\mu_{53}^{(1)} \mu_{02}^{(2)} \mu_{32}^{(2)} + \mu_{50}^{(1)} \mu_{08}^{(1)} \mu_{20}^{(2)} \\
& - 5\mu_{41}^{(1)} \mu_{35}^{(1)} \mu_{02}^{(2)} + 10\mu_{44}^{(1)} \mu_{20}^{(2)} \mu_{23}^{(2)} + 10\mu_{41}^{(1)} \mu_{26}^{(1)} \mu_{11}^{(2)} + 20\mu_{44}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} \\
& - 5\mu_{41}^{(1)} \mu_{17}^{(1)} \mu_{20}^{(2)} + 5\mu_{44}^{(1)} \mu_{02}^{(2)} \mu_{41}^{(2)} + 10\mu_{32}^{(1)} \mu_{44}^{(1)} \mu_{02}^{(2)} - 20\mu_{32}^{(1)} \mu_{35}^{(1)} \mu_{11}^{(2)} \\
& - 10\mu_{35}^{(1)} \mu_{20}^{(2)} \mu_{32}^{(2)} + 10\mu_{32}^{(1)} \mu_{26}^{(1)} \mu_{20}^{(2)} - 10\mu_{35}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} - \mu_{35}^{(1)} \mu_{02}^{(2)} \mu_{50}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{50}^{(2)} \mu_{17}^{(2)} - 10\mu_{23}^{(1)} \mu_{53}^{(1)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{50}^{(1)} \mu_{08}^{(2)} - 5\mu_{20}^{(1)} \mu_{41}^{(2)} \mu_{26}^{(2)} \\
& + 20\mu_{23}^{(1)} \mu_{44}^{(1)} \mu_{11}^{(2)} + 5\mu_{20}^{(1)} \mu_{41}^{(1)} \mu_{17}^{(2)} + 10\mu_{20}^{(1)} \mu_{32}^{(1)} \mu_{35}^{(2)} - 10\mu_{23}^{(1)} \mu_{35}^{(1)} \mu_{20}^{(2)} \\
& - 10\mu_{20}^{(1)} \mu_{32}^{(1)} \mu_{26}^{(2)} + 5\mu_{26}^{(1)} \mu_{20}^{(2)} \mu_{41}^{(2)} - 10\mu_{20}^{(1)} \mu_{23}^{(2)} \mu_{44}^{(2)} + 10\mu_{20}^{(1)} \mu_{23}^{(1)} \mu_{35}^{(2)} \\
& + 2\mu_{26}^{(1)} \mu_{11}^{(2)} \mu_{50}^{(2)} + 5\mu_{20}^{(1)} \mu_{14}^{(2)} \mu_{53}^{(2)} - 5\mu_{20}^{(1)} \mu_{14}^{(1)} \mu_{44}^{(2)} - \mu_{20}^{(1)} \mu_{05}^{(2)} \mu_{62}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{05}^{(1)} \mu_{53}^{(2)} + 5\mu_{14}^{(1)} \mu_{62}^{(1)} \mu_{02}^{(2)} - 2\mu_{11}^{(1)} \mu_{50}^{(2)} \mu_{26}^{(2)} - 10\mu_{14}^{(1)} \mu_{53}^{(1)} \mu_{11}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{50}^{(1)} \mu_{17}^{(2)} + 10\mu_{11}^{(1)} \mu_{41}^{(2)} \mu_{35}^{(2)} + 5\mu_{14}^{(1)} \mu_{44}^{(1)} \mu_{20}^{(2)} - 10\mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{26}^{(2)} \\
& - 20\mu_{11}^{(1)} \mu_{32}^{(2)} \mu_{44}^{(2)} + 20\mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{35}^{(2)} - \mu_{17}^{(1)} \mu_{20}^{(2)} \mu_{50}^{(2)} + 20\mu_{11}^{(1)} \mu_{23}^{(2)} \mu_{53}^{(2)} \\
& - 20\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{44}^{(2)} - 10\mu_{11}^{(1)} \mu_{14}^{(2)} \mu_{62}^{(2)} + 10\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{53}^{(2)} + 2\mu_{11}^{(1)} \mu_{05}^{(2)} \mu_{71}^{(2)} \\
& - 2\mu_{11}^{(1)} \mu_{05}^{(1)} \mu_{62}^{(2)} - \mu_{05}^{(1)} \mu_{71}^{(1)} \mu_{02}^{(2)} + 2\mu_{05}^{(1)} \mu_{62}^{(1)} \mu_{11}^{(2)} + \mu_{02}^{(1)} \mu_{50}^{(2)} \mu_{35}^{(2)} \\
& - \mu_{05}^{(1)} \mu_{53}^{(1)} \mu_{20}^{(2)} - \mu_{02}^{(1)} \mu_{50}^{(1)} \mu_{26}^{(2)} - 5\mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{44}^{(2)} + 5\mu_{02}^{(1)} \mu_{41}^{(2)} \mu_{35}^{(2)} \\
& + 10\mu_{02}^{(1)} \mu_{32}^{(2)} \mu_{53}^{(2)} - 10\mu_{02}^{(1)} \mu_{32}^{(1)} \mu_{44}^{(2)} - 10\mu_{02}^{(1)} \mu_{23}^{(2)} \mu_{62}^{(2)} + 10\mu_{02}^{(1)} \mu_{23}^{(1)} \mu_{53}^{(2)} \\
& + 5\mu_{02}^{(1)} \mu_{14}^{(2)} \mu_{71}^{(2)} - 5\mu_{02}^{(1)} \mu_{14}^{(1)} \mu_{62}^{(2)} - \mu_{02}^{(1)} \mu_{05}^{(2)} \mu_{80}^{(2)} + \mu_{02}^{(1)} \mu_{05}^{(1)} \mu_{71}^{(2)}
\end{aligned}$$

weight=9

structure: 1,0,0,1,0,0,1

Generating graph:

$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & V1 & 1 & 1 \\
V2 & 2 & 2 & 2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



$$\begin{aligned}
Z_{68} = & \mu_{80}^{(1)(2)(2)} \mu_{03}^{(2)} \mu_{04}^{(2)} - 3\mu_{71}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{04}^{(2)} - 4\mu_{71}^{(1)(2)(2)} \mu_{03}^{(2)} \mu_{13}^{(2)} + 3\mu_{62}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{04}^{(2)} \\
& + 12\mu_{62}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{13}^{(2)} + 6\mu_{62}^{(1)(2)(2)} \mu_{03}^{(2)} \mu_{22}^{(2)} - \mu_{53}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{04}^{(2)} - 12\mu_{53}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{13}^{(2)} \\
& - 18\mu_{53}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{22}^{(2)} - 4\mu_{53}^{(1)(2)(2)} \mu_{03}^{(2)} \mu_{31}^{(2)} + 4\mu_{44}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{13}^{(2)} + \mu_{40}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{17}^{(2)} \\
& + 18\mu_{44}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{22}^{(2)} - 3\mu_{40}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{26}^{(2)} + 12\mu_{44}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{31}^{(2)} + 3\mu_{40}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{35}^{(2)} \\
& + \mu_{44}^{(1)(2)(2)} \mu_{03}^{(2)} \mu_{40}^{(2)} - \mu_{40}^{(1)(2)(2)} \mu_{03}^{(2)} \mu_{44}^{(2)} + \mu_{30}^{(1)(2)(2)} \mu_{44}^{(2)} \mu_{04}^{(2)} - \mu_{30}^{(1)(2)(2)} \mu_{40}^{(2)} \mu_{08}^{(2)} \\
& - 6\mu_{35}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{22}^{(2)} - 4\mu_{31}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{26}^{(2)} - 4\mu_{30}^{(1)(2)(2)} \mu_{35}^{(2)} \mu_{13}^{(2)} + 4\mu_{30}^{(1)(2)(2)} \mu_{31}^{(2)} \mu_{17}^{(2)} \\
& - 12\mu_{35}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{31}^{(2)} + 12\mu_{31}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{35}^{(2)} + 6\mu_{30}^{(1)(2)(2)} \mu_{26}^{(2)} \mu_{22}^{(2)} - 6\mu_{30}^{(1)(2)(2)} \mu_{22}^{(2)} \mu_{26}^{(2)} \\
& - 3\mu_{35}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{40}^{(2)} - 12\mu_{31}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{44}^{(2)} - 4\mu_{30}^{(1)(2)(2)} \mu_{17}^{(2)} \mu_{31}^{(2)} + 4\mu_{30}^{(1)(2)(2)} \mu_{13}^{(2)} \mu_{35}^{(2)} \\
& + 4\mu_{31}^{(1)(2)(2)} \mu_{03}^{(2)} \mu_{53}^{(2)} + \mu_{30}^{(1)(2)(2)} \mu_{08}^{(2)} \mu_{40}^{(2)} - \mu_{30}^{(1)(2)(2)} \mu_{04}^{(2)} \mu_{44}^{(2)} - 3\mu_{21}^{(1)(2)(2)} \mu_{53}^{(2)} \mu_{04}^{(2)} \\
& + 12\mu_{21}^{(1)(2)(2)} \mu_{44}^{(2)} \mu_{13}^{(2)} + 3\mu_{21}^{(1)(2)(2)} \mu_{40}^{(2)} \mu_{17}^{(2)} + 4\mu_{26}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{31}^{(2)} + 6\mu_{22}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{35}^{(2)} \\
& - 18\mu_{21}^{(1)(2)(2)} \mu_{35}^{(2)} \mu_{22}^{(2)} - 12\mu_{21}^{(1)(2)(2)} \mu_{31}^{(2)} \mu_{26}^{(2)} + 3\mu_{26}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{40}^{(2)} - 18\mu_{22}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{44}^{(2)} \\
& + 12\mu_{21}^{(1)(2)(2)} \mu_{26}^{(2)} \mu_{31}^{(2)} + 18\mu_{21}^{(1)(2)(2)} \mu_{22}^{(2)} \mu_{35}^{(2)} + 18\mu_{22}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{53}^{(2)} - 3\mu_{21}^{(1)(2)(2)} \mu_{17}^{(2)} \mu_{40}^{(2)} \\
& - 12\mu_{21}^{(1)(2)(2)} \mu_{13}^{(2)} \mu_{44}^{(2)} - 6\mu_{22}^{(1)(2)(2)} \mu_{03}^{(2)} \mu_{62}^{(2)} + 3\mu_{21}^{(1)(2)(2)} \mu_{04}^{(2)} \mu_{53}^{(2)} + 3\mu_{12}^{(1)(2)(2)} \mu_{62}^{(2)} \mu_{04}^{(2)} \\
& - 12\mu_{12}^{(1)(2)(2)} \mu_{53}^{(2)} \mu_{13}^{(2)} + 18\mu_{12}^{(1)(2)(2)} \mu_{44}^{(2)} \mu_{22}^{(2)} - 3\mu_{12}^{(1)(2)(2)} \mu_{40}^{(2)} \mu_{26}^{(2)} - \mu_{17}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{40}^{(2)} \\
& - 4\mu_{13}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{44}^{(2)} - 12\mu_{12}^{(1)(2)(2)} \mu_{35}^{(2)} \mu_{31}^{(2)} + 12\mu_{12}^{(1)(2)(2)} \mu_{31}^{(2)} \mu_{35}^{(2)} + 12\mu_{13}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{53}^{(2)} \\
& + 3\mu_{12}^{(1)(2)(2)} \mu_{26}^{(2)} \mu_{40}^{(2)} - 18\mu_{12}^{(1)(2)(2)} \mu_{22}^{(2)} \mu_{44}^{(2)} - 12\mu_{13}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{62}^{(2)} + 12\mu_{12}^{(1)(2)(2)} \mu_{13}^{(2)} \mu_{53}^{(2)} \\
& + 4\mu_{13}^{(1)(2)(2)} \mu_{03}^{(2)} \mu_{71}^{(2)} - 3\mu_{12}^{(1)(2)(2)} \mu_{04}^{(2)} \mu_{62}^{(2)} - \mu_{03}^{(1)(2)(2)} \mu_{71}^{(2)} \mu_{04}^{(2)} + 4\mu_{03}^{(1)(2)(2)} \mu_{62}^{(2)} \mu_{13}^{(2)} \\
& - 6\mu_{03}^{(1)(2)(2)} \mu_{53}^{(2)} \mu_{22}^{(2)} + 4\mu_{03}^{(1)(2)(2)} \mu_{44}^{(2)} \mu_{31}^{(2)} + \mu_{03}^{(1)(2)(2)} \mu_{40}^{(2)} \mu_{35}^{(2)} + \mu_{04}^{(1)(2)(2)} \mu_{30}^{(2)} \mu_{53}^{(2)} \\
& - \mu_{03}^{(1)(2)(2)} \mu_{35}^{(2)} \mu_{40}^{(2)} - 4\mu_{03}^{(1)(2)(2)} \mu_{31}^{(2)} \mu_{44}^{(2)} - 3\mu_{04}^{(1)(2)(2)} \mu_{21}^{(2)} \mu_{62}^{(2)} + 6\mu_{03}^{(1)(2)(2)} \mu_{22}^{(2)} \mu_{53}^{(2)} \\
& + 3\mu_{04}^{(1)(2)(2)} \mu_{12}^{(2)} \mu_{71}^{(2)} - 4\mu_{03}^{(1)(2)(2)} \mu_{13}^{(2)} \mu_{62}^{(2)} - \mu_{04}^{(1)(2)(2)} \mu_{03}^{(2)} \mu_{80}^{(2)} + \mu_{03}^{(1)(2)(2)} \mu_{04}^{(2)} \mu_{71}^{(2)}
\end{aligned}$$

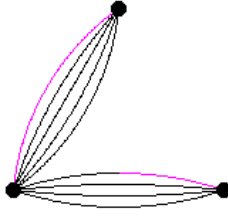
weight=9

structure: 0,1,1,0,0,1

Generating graph:

$$\begin{array}{cccccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
V2 & 2 & 2 & 2 & 2 & V3 & 3 & 3 & 3
\end{array}$$





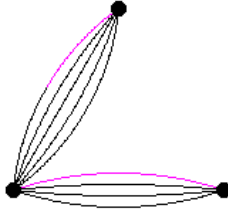
$$\begin{aligned}
Z_{69} = & \mu_{80}^{(1)} \mu_{03}^{(2)} \mu_{04}^{(2)} - 3\mu_{71}^{(1)} \mu_{12}^{(2)} \mu_{04}^{(2)} - 4\mu_{71}^{(1)} \mu_{03}^{(2)} \mu_{13}^{(2)} + 3\mu_{62}^{(1)} \mu_{21}^{(2)} \mu_{04}^{(2)} \\
& + 12\mu_{62}^{(1)} \mu_{12}^{(2)} \mu_{13}^{(2)} + 6\mu_{62}^{(1)} \mu_{03}^{(2)} \mu_{22}^{(2)} - \mu_{53}^{(1)} \mu_{30}^{(2)} \mu_{04}^{(2)} - 12\mu_{53}^{(1)} \mu_{21}^{(2)} \mu_{13}^{(2)} \\
& - 18\mu_{53}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} - 4\mu_{53}^{(1)} \mu_{03}^{(2)} \mu_{31}^{(2)} + 4\mu_{44}^{(1)} \mu_{30}^{(2)} \mu_{13}^{(2)} - \mu_{40}^{(1)} \mu_{35}^{(2)} \mu_{03}^{(2)} \\
& + 18\mu_{44}^{(1)} \mu_{21}^{(2)} \mu_{22}^{(2)} + 3\mu_{40}^{(1)} \mu_{26}^{(2)} \mu_{12}^{(2)} + 12\mu_{44}^{(1)} \mu_{12}^{(2)} \mu_{31}^{(2)} - 3\mu_{40}^{(1)} \mu_{17}^{(2)} \mu_{21}^{(2)} \\
& + \mu_{44}^{(1)} \mu_{03}^{(2)} \mu_{40}^{(2)} + \mu_{40}^{(1)} \mu_{08}^{(2)} \mu_{30}^{(2)} + \mu_{30}^{(1)} \mu_{40}^{(2)} \mu_{17}^{(2)} + 4\mu_{31}^{(1)} \mu_{44}^{(2)} \mu_{03}^{(2)} \\
& - \mu_{30}^{(1)} \mu_{40}^{(2)} \mu_{08}^{(2)} - 6\mu_{35}^{(1)} \mu_{30}^{(2)} \mu_{22}^{(2)} - 4\mu_{30}^{(1)} \mu_{31}^{(2)} \mu_{26}^{(2)} - 12\mu_{31}^{(1)} \mu_{35}^{(2)} \mu_{12}^{(2)} \\
& + 4\mu_{30}^{(1)} \mu_{31}^{(2)} \mu_{17}^{(2)} - 12\mu_{35}^{(1)} \mu_{21}^{(2)} \mu_{31}^{(2)} + 6\mu_{30}^{(1)} \mu_{22}^{(2)} \mu_{35}^{(2)} + 12\mu_{31}^{(1)} \mu_{26}^{(2)} \mu_{21}^{(2)} \\
& - 6\mu_{30}^{(1)} \mu_{22}^{(2)} \mu_{26}^{(2)} - 3\mu_{35}^{(1)} \mu_{12}^{(2)} \mu_{40}^{(2)} - 4\mu_{30}^{(1)} \mu_{13}^{(2)} \mu_{44}^{(2)} - 4\mu_{31}^{(1)} \mu_{17}^{(2)} \mu_{30}^{(2)} \\
& + 4\mu_{30}^{(1)} \mu_{13}^{(2)} \mu_{35}^{(2)} + \mu_{30}^{(1)} \mu_{04}^{(2)} \mu_{53}^{(2)} - \mu_{30}^{(1)} \mu_{04}^{(2)} \mu_{44}^{(2)} - 6\mu_{22}^{(1)} \mu_{53}^{(2)} \mu_{03}^{(2)} \\
& - 3\mu_{21}^{(1)} \mu_{40}^{(2)} \mu_{26}^{(2)} + 18\mu_{22}^{(1)} \mu_{44}^{(2)} \mu_{12}^{(2)} + 3\mu_{21}^{(1)} \mu_{40}^{(2)} \mu_{17}^{(2)} + 4\mu_{26}^{(1)} \mu_{30}^{(2)} \mu_{31}^{(2)} \\
& + 12\mu_{21}^{(1)} \mu_{31}^{(2)} \mu_{35}^{(2)} - 18\mu_{22}^{(1)} \mu_{35}^{(2)} \mu_{21}^{(2)} - 12\mu_{21}^{(1)} \mu_{31}^{(2)} \mu_{26}^{(2)} + 3\mu_{26}^{(1)} \mu_{21}^{(2)} \mu_{40}^{(2)} \\
& - 18\mu_{21}^{(1)} \mu_{22}^{(2)} \mu_{44}^{(2)} + 6\mu_{22}^{(1)} \mu_{26}^{(2)} \mu_{30}^{(2)} + 18\mu_{21}^{(1)} \mu_{22}^{(2)} \mu_{35}^{(2)} + 12\mu_{21}^{(1)} \mu_{13}^{(2)} \mu_{53}^{(2)} \\
& - 12\mu_{21}^{(1)} \mu_{13}^{(2)} \mu_{44}^{(2)} - 3\mu_{21}^{(1)} \mu_{04}^{(2)} \mu_{62}^{(2)} + 3\mu_{21}^{(1)} \mu_{04}^{(2)} \mu_{53}^{(2)} + 4\mu_{13}^{(1)} \mu_{62}^{(2)} \mu_{03}^{(2)} \\
& - 12\mu_{13}^{(1)} \mu_{53}^{(2)} \mu_{12}^{(2)} + 3\mu_{12}^{(1)} \mu_{40}^{(2)} \mu_{35}^{(2)} + 12\mu_{13}^{(1)} \mu_{44}^{(2)} \mu_{21}^{(2)} - 3\mu_{12}^{(1)} \mu_{40}^{(2)} \mu_{26}^{(2)} \\
& - \mu_{17}^{(1)} \mu_{30}^{(2)} \mu_{40}^{(2)} - 12\mu_{12}^{(1)} \mu_{31}^{(2)} \mu_{44}^{(2)} - 4\mu_{13}^{(1)} \mu_{35}^{(2)} \mu_{30}^{(2)} + 12\mu_{12}^{(1)} \mu_{31}^{(2)} \mu_{35}^{(2)} \\
& + 18\mu_{12}^{(1)} \mu_{22}^{(2)} \mu_{53}^{(2)} - 18\mu_{12}^{(1)} \mu_{22}^{(2)} \mu_{44}^{(2)} - 12\mu_{12}^{(1)} \mu_{13}^{(2)} \mu_{62}^{(2)} + 12\mu_{12}^{(1)} \mu_{13}^{(2)} \mu_{53}^{(2)} \\
& + 3\mu_{12}^{(1)} \mu_{04}^{(2)} \mu_{71}^{(2)} - 3\mu_{12}^{(1)} \mu_{04}^{(2)} \mu_{62}^{(2)} - \mu_{04}^{(1)} \mu_{71}^{(2)} \mu_{03}^{(2)} + 3\mu_{04}^{(1)} \mu_{62}^{(2)} \mu_{12}^{(2)} \\
& - 3\mu_{04}^{(1)} \mu_{53}^{(2)} \mu_{21}^{(2)} - \mu_{03}^{(1)} \mu_{40}^{(2)} \mu_{44}^{(2)} + \mu_{04}^{(1)} \mu_{44}^{(2)} \mu_{30}^{(2)} + \mu_{03}^{(1)} \mu_{40}^{(2)} \mu_{35}^{(2)} \\
& + 4\mu_{03}^{(1)} \mu_{31}^{(2)} \mu_{53}^{(2)} - 4\mu_{03}^{(1)} \mu_{31}^{(2)} \mu_{44}^{(2)} - 6\mu_{03}^{(1)} \mu_{22}^{(2)} \mu_{62}^{(2)} + 6\mu_{03}^{(1)} \mu_{22}^{(2)} \mu_{53}^{(2)} \\
& + 4\mu_{03}^{(1)} \mu_{13}^{(2)} \mu_{71}^{(2)} - 4\mu_{03}^{(1)} \mu_{13}^{(2)} \mu_{62}^{(2)} - \mu_{03}^{(1)} \mu_{04}^{(2)} \mu_{80}^{(2)} + \mu_{03}^{(1)} \mu_{04}^{(2)} \mu_{71}^{(2)}
\end{aligned}$$

weight=9

structure: 0,1,1,0,0,1

Generating graph:

$$\begin{array}{ccccccccc}
1 & 1 & 1 & 1 & 1 & V1 & 1 & 1 & 1 \\
V2 & 2 & 2 & 2 & 2 & V3 & 3 & 3 & 3
\end{array}$$



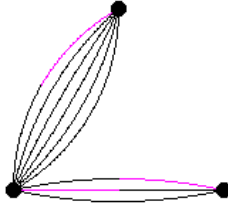
$$\begin{aligned}
Z_{70} = & \mu_{80}^{(1)} \mu_{02}^{(2)} \mu_{05}^{(2)} - \mu_{71}^{(1)} \mu_{11}^{(2)} \mu_{05}^{(2)} - 5\mu_{71}^{(1)} \mu_{02}^{(2)} \mu_{14}^{(2)} + 5\mu_{62}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} \\
& + 10\mu_{62}^{(1)} \mu_{02}^{(2)} \mu_{23}^{(2)} + \mu_{50}^{(1)} \mu_{20}^{(2)} \mu_{17}^{(2)} + \mu_{50}^{(1)} \mu_{26}^{(1)} \mu_{02}^{(2)} - 10\mu_{53}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} \\
& - \mu_{50}^{(1)} \mu_{11}^{(2)} \mu_{26}^{(2)} - \mu_{50}^{(1)} \mu_{17}^{(1)} \mu_{11}^{(2)} - 10\mu_{53}^{(1)} \mu_{02}^{(2)} \mu_{32}^{(2)} - 5\mu_{41}^{(1)} \mu_{35}^{(1)} \mu_{02}^{(2)} \\
& - 5\mu_{41}^{(1)} \mu_{20}^{(2)} \mu_{26}^{(2)} + 5\mu_{41}^{(1)} \mu_{26}^{(1)} \mu_{11}^{(2)} + 10\mu_{44}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} + 5\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{35}^{(2)} \\
& + 5\mu_{44}^{(1)} \mu_{02}^{(2)} \mu_{41}^{(2)} + 10\mu_{32}^{(1)} \mu_{44}^{(1)} \mu_{02}^{(2)} - 10\mu_{32}^{(1)} \mu_{35}^{(1)} \mu_{11}^{(2)} + 10\mu_{32}^{(1)} \mu_{20}^{(2)} \mu_{35}^{(2)} \\
& - 5\mu_{35}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} - 10\mu_{32}^{(1)} \mu_{11}^{(2)} \mu_{44}^{(2)} - \mu_{35}^{(1)} \mu_{02}^{(2)} \mu_{50}^{(2)} - \mu_{20}^{(2)} \mu_{50}^{(2)} \mu_{26}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{50}^{(2)} \mu_{17}^{(2)} - 10\mu_{23}^{(1)} \mu_{53}^{(1)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{50}^{(1)} \mu_{08}^{(2)} + 5\mu_{20}^{(2)} \mu_{41}^{(2)} \mu_{35}^{(2)} \\
& - 5\mu_{20}^{(1)} \mu_{41}^{(2)} \mu_{26}^{(2)} + 10\mu_{23}^{(1)} \mu_{44}^{(1)} \mu_{11}^{(2)} + 5\mu_{20}^{(1)} \mu_{41}^{(1)} \mu_{17}^{(2)} - 10\mu_{20}^{(2)} \mu_{32}^{(2)} \mu_{44}^{(2)} \\
& + 10\mu_{20}^{(1)} \mu_{32}^{(2)} \mu_{35}^{(2)} - 10\mu_{20}^{(1)} \mu_{32}^{(1)} \mu_{26}^{(2)} + 10\mu_{20}^{(2)} \mu_{23}^{(2)} \mu_{53}^{(2)} - 10\mu_{23}^{(1)} \mu_{20}^{(2)} \mu_{44}^{(2)} \\
& - 10\mu_{20}^{(1)} \mu_{23}^{(2)} \mu_{44}^{(2)} + 10\mu_{20}^{(1)} \mu_{23}^{(1)} \mu_{35}^{(2)} - 5\mu_{20}^{(2)} \mu_{14}^{(2)} \mu_{62}^{(2)} + \mu_{26}^{(1)} \mu_{11}^{(2)} \mu_{50}^{(2)} \\
& + 10\mu_{23}^{(1)} \mu_{11}^{(2)} \mu_{53}^{(2)} + 5\mu_{20}^{(1)} \mu_{14}^{(2)} \mu_{53}^{(2)} - 5\mu_{20}^{(1)} \mu_{14}^{(1)} \mu_{44}^{(2)} + \mu_{20}^{(2)} \mu_{05}^{(2)} \mu_{71}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{05}^{(2)} \mu_{62}^{(2)} + \mu_{20}^{(1)} \mu_{05}^{(1)} \mu_{53}^{(2)} + 5\mu_{14}^{(1)} \mu_{62}^{(1)} \mu_{02}^{(2)} + \mu_{11}^{(1)} \mu_{62}^{(1)} \mu_{05}^{(2)} \\
& + \mu_{11}^{(2)} \mu_{50}^{(2)} \mu_{35}^{(2)} - \mu_{11}^{(1)} \mu_{50}^{(2)} \mu_{26}^{(2)} - 5\mu_{14}^{(1)} \mu_{53}^{(1)} \mu_{11}^{(2)} - 5\mu_{11}^{(1)} \mu_{53}^{(1)} \mu_{14}^{(2)} \\
& + \mu_{11}^{(1)} \mu_{50}^{(1)} \mu_{17}^{(2)} + \mu_{11}^{(1)} \mu_{50}^{(1)} \mu_{08}^{(2)} - 5\mu_{11}^{(2)} \mu_{41}^{(2)} \mu_{44}^{(2)} + 5\mu_{11}^{(1)} \mu_{41}^{(2)} \mu_{35}^{(2)} \\
& + 10\mu_{11}^{(1)} \mu_{44}^{(2)} \mu_{23}^{(2)} - 5\mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{26}^{(2)} - 5\mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{17}^{(2)} + 10\mu_{11}^{(2)} \mu_{32}^{(2)} \mu_{53}^{(2)} \\
& - 10\mu_{11}^{(1)} \mu_{32}^{(2)} \mu_{44}^{(2)} - 10\mu_{11}^{(1)} \mu_{35}^{(1)} \mu_{32}^{(2)} + 10\mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{35}^{(2)} + 10\mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{26}^{(2)} \\
& - 10\mu_{11}^{(2)} \mu_{23}^{(2)} \mu_{62}^{(2)} + 5\mu_{14}^{(1)} \mu_{20}^{(2)} \mu_{53}^{(2)} + 10\mu_{11}^{(1)} \mu_{23}^{(2)} \mu_{53}^{(2)} + 5\mu_{11}^{(1)} \mu_{26}^{(1)} \mu_{41}^{(2)} \\
& - 10\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{44}^{(2)} - 10\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{35}^{(1)} + 5\mu_{11}^{(2)} \mu_{14}^{(2)} \mu_{71}^{(2)} - 5\mu_{14}^{(1)} \mu_{11}^{(2)} \mu_{62}^{(2)} \\
& - 5\mu_{11}^{(1)} \mu_{14}^{(2)} \mu_{62}^{(2)} - \mu_{11}^{(1)} \mu_{17}^{(1)} \mu_{50}^{(2)} + 5\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{53}^{(2)} + 5\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{44}^{(2)} \\
& - \mu_{11}^{(2)} \mu_{05}^{(2)} \mu_{80}^{(2)} + \mu_{11}^{(1)} \mu_{05}^{(2)} \mu_{71}^{(2)} - \mu_{11}^{(1)} \mu_{05}^{(1)} \mu_{62}^{(2)} - \mu_{11}^{(1)} \mu_{05}^{(1)} \mu_{53}^{(2)} \\
& - \mu_{05}^{(1)} \mu_{71}^{(1)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{71}^{(1)} \mu_{05}^{(2)} + \mu_{05}^{(1)} \mu_{62}^{(1)} \mu_{11}^{(2)} + 5\mu_{02}^{(1)} \mu_{62}^{(1)} \mu_{14}^{(2)} \\
& - 10\mu_{02}^{(1)} \mu_{53}^{(1)} \mu_{23}^{(2)} - \mu_{02}^{(1)} \mu_{50}^{(1)} \mu_{17}^{(2)} + 10\mu_{02}^{(1)} \mu_{44}^{(1)} \mu_{32}^{(2)} + 5\mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{26}^{(2)} \\
& - 5\mu_{02}^{(1)} \mu_{35}^{(1)} \mu_{41}^{(2)} - 10\mu_{02}^{(1)} \mu_{32}^{(1)} \mu_{35}^{(1)} - \mu_{05}^{(1)} \mu_{20}^{(2)} \mu_{62}^{(2)} + \mu_{02}^{(1)} \mu_{26}^{(1)} \mu_{50}^{(2)} \\
& + 10\mu_{02}^{(1)} \mu_{23}^{(1)} \mu_{44}^{(2)} + \mu_{05}^{(1)} \mu_{11}^{(2)} \mu_{71}^{(2)} - 5\mu_{02}^{(1)} \mu_{14}^{(1)} \mu_{53}^{(2)} + \mu_{02}^{(1)} \mu_{05}^{(1)} \mu_{62}^{(2)}
\end{aligned}$$

weight=9

structure: 1,0,0,1,0,0,1

Generating graph:

$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & V1 & 1 \\
V2 & 2 & 2 & 2 & 2 & 2 & V3 & 3 & 3
\end{array}$$

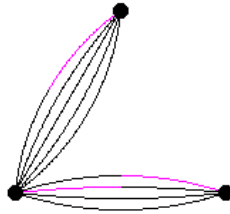


$$\begin{aligned}
Z_{71} = & \mu_{80}^{(1)(2)} \mu_{03}^{(2)} \mu_{04}^{(2)} - 2\mu_{71}^{(1)(2)} \mu_{12}^{(2)} \mu_{04}^{(2)} - 4\mu_{71}^{(1)(2)} \mu_{03}^{(2)} \mu_{13}^{(2)} + \mu_{62}^{(1)(2)} \mu_{21}^{(2)} \mu_{04}^{(2)} \\
& + 8\mu_{62}^{(1)(2)} \mu_{12}^{(2)} \mu_{13}^{(2)} + 6\mu_{62}^{(1)(2)} \mu_{03}^{(2)} \mu_{22}^{(2)} - 4\mu_{53}^{(1)(2)} \mu_{21}^{(2)} \mu_{13}^{(2)} - 12\mu_{53}^{(1)(2)} \mu_{12}^{(2)} \mu_{22}^{(2)} \\
& - 4\mu_{53}^{(1)(2)} \mu_{03}^{(2)} \mu_{31}^{(2)} + \mu_{40}^{(1)(2)} \mu_{30}^{(2)} \mu_{17}^{(2)} - \mu_{40}^{(1)(1)} \mu_{35}^{(2)} \mu_{03}^{(2)} + 6\mu_{44}^{(1)(2)} \mu_{21}^{(2)} \mu_{22}^{(2)} \\
& - 2\mu_{40}^{(1)(2)} \mu_{21}^{(2)} \mu_{26}^{(2)} + 2\mu_{40}^{(1)(1)} \mu_{26}^{(2)} \mu_{12}^{(2)} + 8\mu_{44}^{(1)(2)} \mu_{12}^{(2)} \mu_{31}^{(2)} + \mu_{40}^{(1)(2)} \mu_{12}^{(2)} \mu_{35}^{(2)} \\
& - \mu_{40}^{(1)(1)} \mu_{17}^{(2)} \mu_{21}^{(2)} + \mu_{44}^{(1)(2)} \mu_{03}^{(2)} \mu_{40}^{(2)} - \mu_{30}^{(2)} \mu_{40}^{(2)} \mu_{26}^{(2)} + \mu_{30}^{(1)(2)} \mu_{40}^{(2)} \mu_{17}^{(2)} \\
& + 4\mu_{31}^{(1)(1)} \mu_{44}^{(2)} \mu_{03}^{(2)} - \mu_{30}^{(1)(1)} \mu_{40}^{(2)} \mu_{08}^{(2)} + 4\mu_{30}^{(2)} \mu_{31}^{(2)} \mu_{35}^{(2)} - 4\mu_{31}^{(1)(2)} \mu_{30}^{(2)} \mu_{26}^{(2)} \\
& - 4\mu_{30}^{(1)(2)} \mu_{31}^{(2)} \mu_{26}^{(2)} - 8\mu_{31}^{(1)(1)} \mu_{35}^{(2)} \mu_{12}^{(2)} + 4\mu_{30}^{(1)(1)} \mu_{31}^{(2)} \mu_{17}^{(2)} - 6\mu_{30}^{(2)} \mu_{22}^{(2)} \mu_{44}^{(2)} \\
& - 4\mu_{35}^{(1)(2)} \mu_{21}^{(2)} \mu_{31}^{(2)} + 8\mu_{31}^{(1)(2)} \mu_{21}^{(2)} \mu_{35}^{(2)} + 6\mu_{30}^{(1)(2)} \mu_{22}^{(2)} \mu_{35}^{(2)} + 4\mu_{31}^{(1)(2)} \mu_{26}^{(2)} \mu_{21}^{(2)} \\
& - 6\mu_{30}^{(1)(1)} \mu_{22}^{(2)} \mu_{26}^{(2)} + 4\mu_{30}^{(2)} \mu_{13}^{(2)} \mu_{53}^{(2)} - 2\mu_{35}^{(1)(2)} \mu_{12}^{(2)} \mu_{40}^{(2)} - 4\mu_{31}^{(1)(2)} \mu_{12}^{(2)} \mu_{44}^{(2)} \\
& - 4\mu_{30}^{(1)(2)} \mu_{13}^{(2)} \mu_{44}^{(2)} + 4\mu_{30}^{(1)(1)} \mu_{13}^{(2)} \mu_{35}^{(2)} - \mu_{30}^{(2)} \mu_{04}^{(2)} \mu_{62}^{(2)} + \mu_{30}^{(1)(2)} \mu_{04}^{(2)} \mu_{53}^{(2)} \\
& - \mu_{30}^{(1)(1)} \mu_{04}^{(2)} \mu_{44}^{(2)} - 6\mu_{22}^{(1)(1)} \mu_{53}^{(2)} \mu_{03}^{(2)} - \mu_{21}^{(1)(1)} \mu_{53}^{(2)} \mu_{04}^{(2)} + 2\mu_{21}^{(1)(2)} \mu_{40}^{(2)} \mu_{35}^{(2)} \\
& - 2\mu_{21}^{(1)(2)} \mu_{40}^{(2)} \mu_{26}^{(2)} + 12\mu_{22}^{(1)(1)} \mu_{44}^{(2)} \mu_{12}^{(2)} + 4\mu_{21}^{(1)(1)} \mu_{44}^{(2)} \mu_{13}^{(2)} + 2\mu_{21}^{(1)(1)} \mu_{40}^{(2)} \mu_{17}^{(2)} \\
& + \mu_{21}^{(1)(1)} \mu_{40}^{(2)} \mu_{08}^{(2)} - 8\mu_{21}^{(2)} \mu_{31}^{(2)} \mu_{44}^{(2)} + 6\mu_{22}^{(1)(2)} \mu_{30}^{(2)} \mu_{35}^{(2)} + 8\mu_{21}^{(1)(2)} \mu_{31}^{(2)} \mu_{35}^{(2)} \\
& - 6\mu_{22}^{(1)(1)} \mu_{35}^{(2)} \mu_{21}^{(2)} - 6\mu_{21}^{(1)(1)} \mu_{35}^{(2)} \mu_{22}^{(2)} - 8\mu_{21}^{(1)(1)} \mu_{31}^{(2)} \mu_{26}^{(2)} - 4\mu_{21}^{(1)(1)} \mu_{31}^{(2)} \mu_{17}^{(2)} \\
& + 12\mu_{21}^{(2)} \mu_{22}^{(2)} \mu_{53}^{(2)} + \mu_{26}^{(1)(2)} \mu_{21}^{(2)} \mu_{40}^{(2)} - 12\mu_{22}^{(1)(2)} \mu_{21}^{(2)} \mu_{44}^{(2)} - 12\mu_{21}^{(1)(2)} \mu_{22}^{(2)} \mu_{44}^{(2)} \\
& + 4\mu_{21}^{(1)(2)} \mu_{26}^{(2)} \mu_{31}^{(2)} + 12\mu_{21}^{(1)(1)} \mu_{22}^{(2)} \mu_{35}^{(2)} + 6\mu_{21}^{(1)(1)} \mu_{22}^{(2)} \mu_{26}^{(2)} - 8\mu_{21}^{(1)(2)} \mu_{13}^{(2)} \mu_{62}^{(2)} \\
& + 6\mu_{22}^{(1)(2)} \mu_{12}^{(2)} \mu_{53}^{(2)} + 8\mu_{21}^{(1)(2)} \mu_{13}^{(2)} \mu_{53}^{(2)} - \mu_{21}^{(1)(1)} \mu_{17}^{(2)} \mu_{40}^{(2)} - 8\mu_{21}^{(1)(1)} \mu_{13}^{(2)} \mu_{44}^{(2)} \\
& - 4\mu_{21}^{(1)(1)} \mu_{13}^{(2)} \mu_{35}^{(2)} + 2\mu_{21}^{(2)} \mu_{04}^{(2)} \mu_{71}^{(2)} - 2\mu_{21}^{(1)(2)} \mu_{04}^{(2)} \mu_{62}^{(2)} + 2\mu_{21}^{(1)(1)} \mu_{04}^{(2)} \mu_{53}^{(2)} \\
& + \mu_{21}^{(1)(1)} \mu_{04}^{(2)} \mu_{44}^{(2)} + 4\mu_{13}^{(1)(1)} \mu_{62}^{(2)} \mu_{03}^{(2)} + 2\mu_{12}^{(1)(1)} \mu_{62}^{(2)} \mu_{04}^{(2)} - 8\mu_{13}^{(1)(1)} \mu_{53}^{(2)} \mu_{12}^{(2)} \\
& - 8\mu_{12}^{(1)(1)} \mu_{53}^{(2)} \mu_{13}^{(2)} - \mu_{12}^{(2)} \mu_{40}^{(2)} \mu_{44}^{(2)} + \mu_{12}^{(1)(2)} \mu_{40}^{(2)} \mu_{35}^{(2)} + 4\mu_{13}^{(1)(1)} \mu_{44}^{(2)} \mu_{21}^{(2)} \\
& + 12\mu_{12}^{(1)(1)} \mu_{44}^{(2)} \mu_{22}^{(2)} - \mu_{12}^{(1)(1)} \mu_{40}^{(2)} \mu_{26}^{(2)} - 2\mu_{12}^{(1)(1)} \mu_{40}^{(2)} \mu_{17}^{(2)} + 4\mu_{12}^{(1)(1)} \mu_{31}^{(2)} \mu_{53}^{(2)} \\
& - 4\mu_{13}^{(1)(2)} \mu_{30}^{(2)} \mu_{44}^{(2)} - 4\mu_{12}^{(1)(2)} \mu_{31}^{(2)} \mu_{44}^{(2)} - 8\mu_{12}^{(1)(1)} \mu_{35}^{(2)} \mu_{31}^{(2)} + 4\mu_{12}^{(1)(1)} \mu_{31}^{(2)} \mu_{35}^{(2)} \\
& + 8\mu_{12}^{(1)(1)} \mu_{31}^{(2)} \mu_{26}^{(2)} - 6\mu_{12}^{(2)} \mu_{22}^{(2)} \mu_{62}^{(2)} + 8\mu_{13}^{(1)(2)} \mu_{21}^{(2)} \mu_{53}^{(2)} + 6\mu_{12}^{(1)(2)} \mu_{22}^{(2)} \mu_{53}^{(2)} \\
& + 2\mu_{12}^{(1)(2)} \mu_{26}^{(2)} \mu_{40}^{(2)} - 6\mu_{12}^{(1)(1)} \mu_{22}^{(2)} \mu_{44}^{(2)} - 12\mu_{12}^{(1)(1)} \mu_{22}^{(2)} \mu_{35}^{(2)} + 4\mu_{12}^{(1)(1)} \mu_{13}^{(2)} \mu_{71}^{(2)} \\
& - 4\mu_{13}^{(1)(2)} \mu_{12}^{(2)} \mu_{62}^{(2)} - 4\mu_{12}^{(1)(2)} \mu_{13}^{(2)} \mu_{62}^{(2)} + 4\mu_{12}^{(1)(1)} \mu_{13}^{(2)} \mu_{53}^{(2)} + 8\mu_{12}^{(1)(1)} \mu_{13}^{(2)} \mu_{44}^{(2)} \\
& - \mu_{12}^{(2)} \mu_{04}^{(2)} \mu_{80}^{(2)} + \mu_{12}^{(1)(2)} \mu_{04}^{(2)} \mu_{71}^{(2)} - \mu_{12}^{(1)(1)} \mu_{04}^{(2)} \mu_{62}^{(2)} - 2\mu_{12}^{(1)(1)} \mu_{04}^{(2)} \mu_{53}^{(2)} \\
& - \mu_{04}^{(1)(1)} \mu_{71}^{(2)} \mu_{03}^{(2)} - \mu_{03}^{(1)(1)} \mu_{71}^{(2)} \mu_{04}^{(2)} + 2\mu_{04}^{(1)(1)} \mu_{62}^{(2)} \mu_{12}^{(2)} + 4\mu_{03}^{(1)(1)} \mu_{62}^{(2)} \mu_{13}^{(2)} \\
& - \mu_{04}^{(1)(1)} \mu_{53}^{(2)} \mu_{21}^{(2)} - 6\mu_{03}^{(1)(1)} \mu_{53}^{(2)} \mu_{22}^{(2)} + 4\mu_{03}^{(1)(1)} \mu_{44}^{(2)} \mu_{31}^{(2)} + \mu_{03}^{(1)(1)} \mu_{40}^{(2)} \mu_{26}^{(2)} \\
& + \mu_{04}^{(1)(2)} \mu_{30}^{(2)} \mu_{53}^{(2)} - \mu_{03}^{(1)(1)} \mu_{35}^{(2)} \mu_{40}^{(2)} - 4\mu_{03}^{(1)(1)} \mu_{31}^{(2)} \mu_{35}^{(2)} - 2\mu_{04}^{(1)(2)} \mu_{21}^{(2)} \mu_{62}^{(2)} \\
& + 6\mu_{03}^{(1)(1)} \mu_{22}^{(2)} \mu_{44}^{(2)} + \mu_{04}^{(1)(1)} \mu_{12}^{(2)} \mu_{71}^{(2)} - 4\mu_{03}^{(1)(1)} \mu_{13}^{(2)} \mu_{53}^{(2)} + \mu_{03}^{(1)(1)} \mu_{04}^{(2)} \mu_{62}^{(2)}
\end{aligned}$$

weight=9

structure: 0,1,1,0,0,0,1  
Generating graph:

|    |   |   |   |   |    |    |   |   |
|----|---|---|---|---|----|----|---|---|
| 1  | 1 | 1 | 1 | 1 | 1  | V1 | 1 | 1 |
| V2 | 2 | 2 | 2 | 2 | V3 | 3  | 3 | 3 |



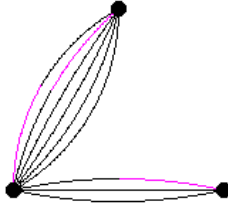
$$\begin{aligned}
Z_{72} = & \mu_{80}^{(1)} \mu_{02}^{(2)} \mu_{05}^{(2)} - 2\mu_{71}^{(1)} \mu_{11}^{(2)} \mu_{05}^{(2)} - 4\mu_{71}^{(1)} \mu_{02}^{(2)} \mu_{14}^{(2)} + \mu_{62}^{(1)} \mu_{20}^{(2)} \mu_{05}^{(2)} \\
& + 8\mu_{62}^{(1)} \mu_{11}^{(2)} \mu_{14}^{(2)} + 6\mu_{62}^{(1)} \mu_{02}^{(2)} \mu_{23}^{(2)} - 4\mu_{53}^{(1)} \mu_{20}^{(2)} \mu_{14}^{(2)} + \mu_{50}^{(1)} \mu_{20}^{(2)} \mu_{17}^{(2)} \\
& - 12\mu_{53}^{(1)} \mu_{11}^{(2)} \mu_{23}^{(2)} - 2\mu_{50}^{(1)} \mu_{11}^{(2)} \mu_{26}^{(2)} - 4\mu_{53}^{(1)} \mu_{02}^{(2)} \mu_{32}^{(2)} + \mu_{50}^{(1)} \mu_{02}^{(2)} \mu_{35}^{(2)} \\
& - \mu_{41}^{(1)} \mu_{35}^{(2)} \mu_{02}^{(2)} + 6\mu_{44}^{(1)} \mu_{20}^{(2)} \mu_{23}^{(2)} - 4\mu_{41}^{(1)} \mu_{20}^{(2)} \mu_{26}^{(2)} + 2\mu_{41}^{(1)} \mu_{26}^{(2)} \mu_{11}^{(2)} \\
& + 8\mu_{44}^{(1)} \mu_{11}^{(2)} \mu_{32}^{(2)} + 8\mu_{41}^{(1)} \mu_{11}^{(2)} \mu_{35}^{(2)} - \mu_{41}^{(1)} \mu_{17}^{(2)} \mu_{20}^{(2)} + \mu_{44}^{(1)} \mu_{02}^{(2)} \mu_{41}^{(2)} \\
& - 4\mu_{41}^{(1)} \mu_{02}^{(2)} \mu_{44}^{(2)} + 4\mu_{32}^{(1)} \mu_{44}^{(1)} \mu_{02}^{(2)} - 8\mu_{32}^{(1)} \mu_{35}^{(1)} \mu_{11}^{(2)} - 4\mu_{35}^{(1)} \mu_{20}^{(2)} \mu_{32}^{(2)} \\
& + 6\mu_{32}^{(1)} \mu_{20}^{(2)} \mu_{35}^{(2)} + 4\mu_{32}^{(1)} \mu_{26}^{(2)} \mu_{20}^{(2)} - 2\mu_{35}^{(1)} \mu_{11}^{(2)} \mu_{41}^{(2)} - 12\mu_{32}^{(1)} \mu_{11}^{(2)} \mu_{44}^{(2)} \\
& + 6\mu_{32}^{(1)} \mu_{02}^{(2)} \mu_{53}^{(2)} - \mu_{20}^{(2)} \mu_{50}^{(2)} \mu_{26}^{(2)} + \mu_{20}^{(1)} \mu_{50}^{(2)} \mu_{17}^{(2)} - 6\mu_{23}^{(1)} \mu_{53}^{(1)} \mu_{02}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{53}^{(1)} \mu_{05}^{(2)} - \mu_{20}^{(1)} \mu_{50}^{(1)} \mu_{08}^{(2)} + 4\mu_{20}^{(2)} \mu_{41}^{(2)} \mu_{35}^{(2)} - 4\mu_{20}^{(1)} \mu_{41}^{(2)} \mu_{26}^{(2)} \\
& + 12\mu_{23}^{(1)} \mu_{44}^{(1)} \mu_{11}^{(2)} + 4\mu_{20}^{(1)} \mu_{44}^{(1)} \mu_{14}^{(2)} + 4\mu_{20}^{(1)} \mu_{41}^{(1)} \mu_{17}^{(2)} + \mu_{20}^{(1)} \mu_{41}^{(1)} \mu_{08}^{(2)} \\
& - 6\mu_{20}^{(2)} \mu_{32}^{(2)} \mu_{44}^{(2)} + 6\mu_{20}^{(1)} \mu_{32}^{(2)} \mu_{35}^{(2)} - 6\mu_{23}^{(1)} \mu_{35}^{(1)} \mu_{20}^{(2)} - 6\mu_{20}^{(1)} \mu_{35}^{(1)} \mu_{23}^{(2)} \\
& - 6\mu_{20}^{(1)} \mu_{32}^{(1)} \mu_{26}^{(2)} - 4\mu_{20}^{(1)} \mu_{32}^{(1)} \mu_{17}^{(2)} + 4\mu_{20}^{(1)} \mu_{23}^{(2)} \mu_{53}^{(2)} + \mu_{26}^{(1)} \mu_{20}^{(2)} \mu_{41}^{(2)} \\
& - 4\mu_{23}^{(1)} \mu_{20}^{(2)} \mu_{44}^{(2)} - 4\mu_{20}^{(1)} \mu_{23}^{(2)} \mu_{44}^{(2)} + 4\mu_{20}^{(1)} \mu_{26}^{(1)} \mu_{32}^{(2)} + 4\mu_{20}^{(1)} \mu_{23}^{(1)} \mu_{35}^{(2)} \\
& + 6\mu_{20}^{(1)} \mu_{23}^{(1)} \mu_{26}^{(2)} - \mu_{20}^{(2)} \mu_{14}^{(2)} \mu_{62}^{(2)} + 8\mu_{23}^{(1)} \mu_{11}^{(2)} \mu_{53}^{(2)} + \mu_{20}^{(1)} \mu_{14}^{(2)} \mu_{53}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{17}^{(2)} \mu_{41}^{(2)} - \mu_{20}^{(1)} \mu_{14}^{(2)} \mu_{44}^{(2)} - 4\mu_{20}^{(1)} \mu_{14}^{(2)} \mu_{35}^{(2)} - 4\mu_{23}^{(1)} \mu_{02}^{(2)} \mu_{62}^{(2)} \\
& + \mu_{20}^{(1)} \mu_{05}^{(1)} \mu_{44}^{(2)} + 4\mu_{14}^{(1)} \mu_{62}^{(1)} \mu_{02}^{(2)} + 2\mu_{11}^{(1)} \mu_{62}^{(1)} \mu_{05}^{(2)} + 2\mu_{11}^{(2)} \mu_{50}^{(2)} \mu_{35}^{(2)} \\
& - 2\mu_{11}^{(1)} \mu_{50}^{(2)} \mu_{26}^{(2)} - 8\mu_{14}^{(1)} \mu_{53}^{(1)} \mu_{11}^{(2)} - 8\mu_{11}^{(1)} \mu_{53}^{(1)} \mu_{14}^{(2)} + 2\mu_{11}^{(1)} \mu_{50}^{(1)} \mu_{17}^{(2)} \\
& - 8\mu_{11}^{(2)} \mu_{41}^{(2)} \mu_{44}^{(2)} + 8\mu_{11}^{(1)} \mu_{41}^{(2)} \mu_{35}^{(2)} + 4\mu_{14}^{(1)} \mu_{44}^{(1)} \mu_{20}^{(2)} + 12\mu_{11}^{(1)} \mu_{44}^{(1)} \mu_{23}^{(2)} \\
& - 8\mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{26}^{(2)} - 2\mu_{11}^{(1)} \mu_{41}^{(1)} \mu_{17}^{(2)} + 12\mu_{11}^{(2)} \mu_{32}^{(2)} \mu_{53}^{(2)} - 12\mu_{11}^{(1)} \mu_{32}^{(2)} \mu_{44}^{(2)} \\
& - 8\mu_{11}^{(1)} \mu_{35}^{(2)} \mu_{32}^{(2)} + 12\mu_{11}^{(1)} \mu_{32}^{(2)} \mu_{35}^{(2)} + 8\mu_{11}^{(1)} \mu_{32}^{(1)} \mu_{26}^{(2)} - 8\mu_{11}^{(2)} \mu_{23}^{(2)} \mu_{62}^{(2)} \\
& + \mu_{14}^{(1)} \mu_{20}^{(2)} \mu_{53}^{(2)} + 8\mu_{11}^{(1)} \mu_{23}^{(2)} \mu_{53}^{(2)} + 2\mu_{11}^{(1)} \mu_{26}^{(1)} \mu_{41}^{(2)} - 8\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{44}^{(2)} \\
& - 12\mu_{11}^{(1)} \mu_{23}^{(1)} \mu_{35}^{(2)} + 2\mu_{11}^{(2)} \mu_{14}^{(2)} \mu_{71}^{(2)} - 2\mu_{14}^{(1)} \mu_{11}^{(2)} \mu_{62}^{(2)} - 2\mu_{11}^{(1)} \mu_{14}^{(2)} \mu_{62}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{53}^{(2)} + 8\mu_{11}^{(1)} \mu_{14}^{(1)} \mu_{44}^{(2)} + \mu_{14}^{(1)} \mu_{02}^{(2)} \mu_{71}^{(2)} - 2\mu_{11}^{(1)} \mu_{05}^{(1)} \mu_{53}^{(2)} \\
& - \mu_{05}^{(1)} \mu_{71}^{(1)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{71}^{(1)} \mu_{05}^{(2)} + 2\mu_{05}^{(1)} \mu_{62}^{(1)} \mu_{11}^{(2)} + 4\mu_{02}^{(1)} \mu_{62}^{(1)} \mu_{14}^{(2)} \\
& - \mu_{02}^{(2)} \mu_{50}^{(2)} \mu_{44}^{(2)} + \mu_{02}^{(1)} \mu_{50}^{(2)} \mu_{35}^{(2)} - \mu_{05}^{(1)} \mu_{53}^{(1)} \mu_{20}^{(2)} - 6\mu_{02}^{(1)} \mu_{53}^{(1)} \mu_{23}^{(2)} \\
& - \mu_{02}^{(1)} \mu_{50}^{(1)} \mu_{26}^{(2)} + 4\mu_{02}^{(2)} \mu_{41}^{(2)} \mu_{53}^{(2)} - 4\mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{44}^{(2)} + 4\mu_{02}^{(1)} \mu_{44}^{(1)} \mu_{32}^{(2)} \\
& + 4\mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{35}^{(2)} + \mu_{02}^{(1)} \mu_{41}^{(1)} \mu_{26}^{(2)} - 6\mu_{02}^{(2)} \mu_{32}^{(2)} \mu_{62}^{(2)} + 6\mu_{02}^{(1)} \mu_{32}^{(2)} \mu_{53}^{(2)} \\
& - \mu_{02}^{(1)} \mu_{35}^{(1)} \mu_{41}^{(2)} - 6\mu_{02}^{(1)} \mu_{32}^{(1)} \mu_{44}^{(2)} - 4\mu_{02}^{(1)} \mu_{32}^{(1)} \mu_{35}^{(2)} + 4\mu_{02}^{(2)} \mu_{23}^{(2)} \mu_{71}^{(2)} \\
& - 4\mu_{02}^{(1)} \mu_{23}^{(2)} \mu_{62}^{(2)} + 4\mu_{02}^{(1)} \mu_{23}^{(1)} \mu_{53}^{(2)} + 6\mu_{02}^{(1)} \mu_{23}^{(1)} \mu_{44}^{(2)} - \mu_{02}^{(2)} \mu_{14}^{(2)} \mu_{80}^{(2)} \\
& + \mu_{02}^{(1)} \mu_{14}^{(2)} \mu_{71}^{(2)} - \mu_{02}^{(1)} \mu_{14}^{(1)} \mu_{62}^{(2)} - 4\mu_{02}^{(1)} \mu_{14}^{(1)} \mu_{53}^{(2)} + \mu_{02}^{(1)} \mu_{05}^{(1)} \mu_{62}^{(2)}
\end{aligned}$$

weight=9

structure: 1,0,0,1,0,0,1

Generating graph:

$$\begin{array}{cccccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
& 2 & V2 & 2 & 2 & 2 & 2 & V3 & 3 & 3
\end{array}$$



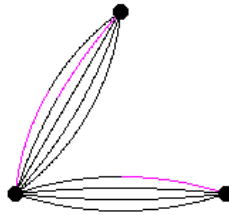
$$\begin{aligned}
Z_{73} = & \mu_{80}^{(1)(2)} \mu_{03}^{(2)} \mu_{04}^{(2)} - 3\mu_{71}^{(1)(2)} \mu_{12}^{(2)} \mu_{04}^{(2)} - 3\mu_{71}^{(1)} \mu_{03}^{(2)} \mu_{13}^{(2)} + 3\mu_{62}^{(1)(2)} \mu_{21}^{(2)} \mu_{04}^{(2)} \\
& + 9\mu_{62}^{(1)(2)} \mu_{12}^{(2)} \mu_{13}^{(2)} + 3\mu_{62}^{(1)} \mu_{03}^{(2)} \mu_{22}^{(2)} - \mu_{53}^{(1)(2)} \mu_{30}^{(2)} \mu_{04}^{(2)} - 9\mu_{53}^{(1)(2)} \mu_{21}^{(2)} \mu_{13}^{(2)} \\
& - 9\mu_{53}^{(1)} \mu_{12}^{(2)} \mu_{22}^{(2)} - \mu_{53}^{(1)} \mu_{03}^{(2)} \mu_{31}^{(2)} + 3\mu_{44}^{(1)(2)} \mu_{30}^{(2)} \mu_{13}^{(2)} + \mu_{40}^{(1)} \mu_{30}^{(2)} \mu_{17}^{(2)} \\
& + 9\mu_{44}^{(1)} \mu_{21}^{(2)} \mu_{22}^{(2)} - 3\mu_{40}^{(1)(2)} \mu_{21}^{(2)} \mu_{26}^{(2)} + 3\mu_{44}^{(1)} \mu_{12}^{(2)} \mu_{31}^{(2)} + 3\mu_{40}^{(1)} \mu_{12}^{(2)} \mu_{35}^{(2)} \\
& - \mu_{40}^{(1)} \mu_{03}^{(2)} \mu_{44}^{(2)} - \mu_{30}^{(2)} \mu_{40}^{(2)} \mu_{26}^{(2)} + \mu_{30}^{(1)} \mu_{40}^{(2)} \mu_{17}^{(2)} + \mu_{31}^{(1)} \mu_{44}^{(1)} \mu_{03}^{(2)} \\
& + \mu_{30}^{(1)} \mu_{44}^{(1)} \mu_{04}^{(2)} - \mu_{30}^{(1)} \mu_{40}^{(1)} \mu_{08}^{(2)} + 3\mu_{30}^{(2)} \mu_{31}^{(2)} \mu_{35}^{(2)} - 3\mu_{35}^{(1)} \mu_{30}^{(1)} \mu_{22}^{(2)} \\
& - 3\mu_{31}^{(1)} \mu_{30}^{(2)} \mu_{26}^{(2)} - 3\mu_{30}^{(1)} \mu_{31}^{(2)} \mu_{26}^{(2)} - 3\mu_{31}^{(1)} \mu_{35}^{(1)} \mu_{12}^{(2)} - 3\mu_{30}^{(1)} \mu_{35}^{(1)} \mu_{13}^{(2)} \\
& + 3\mu_{30}^{(1)} \mu_{31}^{(1)} \mu_{17}^{(2)} + \mu_{30}^{(1)} \mu_{31}^{(1)} \mu_{08}^{(1)} - 3\mu_{30}^{(2)} \mu_{22}^{(2)} \mu_{44}^{(2)} - 3\mu_{35}^{(1)} \mu_{21}^{(2)} \mu_{31}^{(2)} \\
& + 9\mu_{31}^{(1)} \mu_{21}^{(2)} \mu_{35}^{(2)} + 3\mu_{30}^{(1)} \mu_{22}^{(2)} \mu_{35}^{(2)} + 3\mu_{31}^{(1)} \mu_{26}^{(1)} \mu_{21}^{(2)} + 3\mu_{30}^{(1)} \mu_{26}^{(1)} \mu_{22}^{(2)} \\
& - 3\mu_{30}^{(1)} \mu_{22}^{(1)} \mu_{26}^{(2)} - 3\mu_{30}^{(1)} \mu_{22}^{(1)} \mu_{17}^{(1)} + \mu_{30}^{(2)} \mu_{13}^{(2)} \mu_{53}^{(2)} - 9\mu_{31}^{(1)} \mu_{12}^{(2)} \mu_{44}^{(2)} \\
& - \mu_{30}^{(1)} \mu_{13}^{(2)} \mu_{44}^{(2)} - \mu_{31}^{(1)} \mu_{17}^{(1)} \mu_{30}^{(2)} - \mu_{30}^{(1)} \mu_{17}^{(1)} \mu_{31}^{(2)} + \mu_{30}^{(1)} \mu_{13}^{(1)} \mu_{35}^{(2)} \\
& + 3\mu_{30}^{(1)} \mu_{13}^{(1)} \mu_{26}^{(1)} + 3\mu_{31}^{(1)} \mu_{03}^{(2)} \mu_{53}^{(2)} - \mu_{30}^{(1)} \mu_{04}^{(1)} \mu_{35}^{(2)} - 3\mu_{22}^{(1)} \mu_{53}^{(1)} \mu_{03}^{(2)} \\
& - 3\mu_{21}^{(1)} \mu_{53}^{(1)} \mu_{04}^{(2)} + 3\mu_{21}^{(2)} \mu_{40}^{(2)} \mu_{35}^{(2)} - 3\mu_{21}^{(1)} \mu_{40}^{(2)} \mu_{26}^{(2)} + 9\mu_{22}^{(1)} \mu_{44}^{(1)} \mu_{12}^{(2)} \\
& + 9\mu_{21}^{(1)} \mu_{44}^{(1)} \mu_{13}^{(2)} + 3\mu_{21}^{(1)} \mu_{40}^{(1)} \mu_{17}^{(2)} - 9\mu_{21}^{(2)} \mu_{31}^{(2)} \mu_{44}^{(2)} + \mu_{26}^{(1)} \mu_{30}^{(2)} \mu_{31}^{(2)} \\
& + 3\mu_{22}^{(1)} \mu_{30}^{(2)} \mu_{35}^{(2)} + 9\mu_{21}^{(1)} \mu_{31}^{(2)} \mu_{35}^{(2)} - 9\mu_{22}^{(1)} \mu_{35}^{(1)} \mu_{21}^{(2)} - 9\mu_{21}^{(1)} \mu_{35}^{(1)} \mu_{22}^{(2)} \\
& - 9\mu_{21}^{(1)} \mu_{31}^{(1)} \mu_{26}^{(2)} - 3\mu_{21}^{(1)} \mu_{31}^{(1)} \mu_{17}^{(1)} + 9\mu_{21}^{(2)} \mu_{22}^{(2)} \mu_{53}^{(2)} - 9\mu_{22}^{(1)} \mu_{21}^{(2)} \mu_{44}^{(2)} \\
& - 9\mu_{21}^{(1)} \mu_{22}^{(2)} \mu_{44}^{(2)} + 3\mu_{22}^{(1)} \mu_{26}^{(1)} \mu_{30}^{(2)} + 3\mu_{21}^{(1)} \mu_{26}^{(1)} \mu_{31}^{(2)} + 9\mu_{21}^{(1)} \mu_{22}^{(1)} \mu_{35}^{(2)} \\
& + 9\mu_{21}^{(1)} \mu_{22}^{(1)} \mu_{26}^{(2)} - 3\mu_{21}^{(2)} \mu_{13}^{(2)} \mu_{62}^{(2)} + 9\mu_{22}^{(1)} \mu_{12}^{(2)} \mu_{53}^{(2)} + 3\mu_{21}^{(1)} \mu_{13}^{(2)} \mu_{53}^{(2)} \\
& - 3\mu_{21}^{(1)} \mu_{13}^{(1)} \mu_{44}^{(2)} - 9\mu_{21}^{(1)} \mu_{13}^{(1)} \mu_{35}^{(2)} - 3\mu_{22}^{(1)} \mu_{03}^{(2)} \mu_{62}^{(2)} + 3\mu_{21}^{(1)} \mu_{04}^{(1)} \mu_{44}^{(2)} \\
& + 3\mu_{13}^{(1)} \mu_{62}^{(1)} \mu_{03}^{(2)} + 3\mu_{12}^{(1)} \mu_{62}^{(1)} \mu_{04}^{(2)} - 9\mu_{13}^{(1)} \mu_{53}^{(1)} \mu_{12}^{(2)} - 9\mu_{12}^{(1)} \mu_{53}^{(1)} \mu_{13}^{(2)} \\
& - 3\mu_{12}^{(2)} \mu_{40}^{(2)} \mu_{44}^{(2)} + 3\mu_{12}^{(1)} \mu_{40}^{(2)} \mu_{35}^{(2)} + 9\mu_{13}^{(1)} \mu_{44}^{(1)} \mu_{21}^{(2)} + 9\mu_{12}^{(1)} \mu_{44}^{(1)} \mu_{22}^{(2)} \\
& - 3\mu_{12}^{(1)} \mu_{40}^{(1)} \mu_{26}^{(2)} + 9\mu_{12}^{(1)} \mu_{31}^{(2)} \mu_{53}^{(2)} - \mu_{13}^{(1)} \mu_{30}^{(2)} \mu_{44}^{(2)} - 9\mu_{12}^{(1)} \mu_{31}^{(2)} \mu_{44}^{(2)} \\
& - 3\mu_{13}^{(1)} \mu_{35}^{(1)} \mu_{30}^{(2)} - 3\mu_{12}^{(1)} \mu_{35}^{(1)} \mu_{31}^{(2)} + 9\mu_{12}^{(1)} \mu_{31}^{(1)} \mu_{35}^{(2)} + 3\mu_{12}^{(1)} \mu_{31}^{(1)} \mu_{26}^{(2)} \\
& - 9\mu_{12}^{(2)} \mu_{22}^{(2)} \mu_{62}^{(2)} + 3\mu_{13}^{(1)} \mu_{21}^{(2)} \mu_{53}^{(2)} + 9\mu_{12}^{(1)} \mu_{22}^{(2)} \mu_{53}^{(2)} - 9\mu_{12}^{(1)} \mu_{22}^{(1)} \mu_{44}^{(2)} \\
& - 9\mu_{12}^{(1)} \mu_{22}^{(1)} \mu_{35}^{(2)} + 3\mu_{12}^{(2)} \mu_{13}^{(2)} \mu_{71}^{(2)} - 3\mu_{13}^{(1)} \mu_{12}^{(2)} \mu_{62}^{(2)} - 3\mu_{12}^{(1)} \mu_{13}^{(1)} \mu_{62}^{(2)} \\
& + 3\mu_{12}^{(1)} \mu_{13}^{(1)} \mu_{53}^{(2)} + 9\mu_{12}^{(1)} \mu_{13}^{(1)} \mu_{44}^{(1)} + \mu_{13}^{(1)} \mu_{03}^{(2)} \mu_{71}^{(2)} - 3\mu_{12}^{(1)} \mu_{04}^{(1)} \mu_{53}^{(2)} \\
& - \mu_{04}^{(1)} \mu_{71}^{(1)} \mu_{03}^{(2)} - \mu_{03}^{(1)} \mu_{71}^{(1)} \mu_{04}^{(2)} + 3\mu_{04}^{(1)} \mu_{62}^{(1)} \mu_{12}^{(2)} + 3\mu_{03}^{(1)} \mu_{62}^{(1)} \mu_{13}^{(2)} \\
& - 3\mu_{04}^{(1)} \mu_{53}^{(1)} \mu_{21}^{(2)} - 3\mu_{03}^{(1)} \mu_{53}^{(1)} \mu_{22}^{(2)} + \mu_{03}^{(1)} \mu_{40}^{(1)} \mu_{53}^{(2)} - \mu_{03}^{(1)} \mu_{40}^{(1)} \mu_{44}^{(2)} \\
& + \mu_{04}^{(1)} \mu_{44}^{(1)} \mu_{30}^{(2)} + \mu_{03}^{(1)} \mu_{44}^{(1)} \mu_{31}^{(2)} + \mu_{03}^{(1)} \mu_{40}^{(1)} \mu_{35}^{(2)} - 3\mu_{03}^{(2)} \mu_{21}^{(2)} \mu_{62}^{(2)} \\
& + 3\mu_{03}^{(1)} \mu_{31}^{(2)} \mu_{53}^{(2)} - 3\mu_{03}^{(1)} \mu_{31}^{(1)} \mu_{44}^{(2)} - \mu_{03}^{(1)} \mu_{31}^{(1)} \mu_{35}^{(2)} + 3\mu_{03}^{(1)} \mu_{22}^{(2)} \mu_{71}^{(2)} \\
& - 3\mu_{03}^{(1)} \mu_{22}^{(1)} \mu_{62}^{(2)} + 3\mu_{03}^{(1)} \mu_{22}^{(1)} \mu_{53}^{(2)} + 3\mu_{03}^{(1)} \mu_{22}^{(1)} \mu_{44}^{(2)} - \mu_{03}^{(1)} \mu_{13}^{(1)} \mu_{80}^{(2)} \\
& + \mu_{03}^{(1)} \mu_{13}^{(1)} \mu_{71}^{(2)} - \mu_{03}^{(1)} \mu_{13}^{(1)} \mu_{62}^{(2)} - 3\mu_{03}^{(1)} \mu_{13}^{(1)} \mu_{53}^{(2)} + \mu_{03}^{(1)} \mu_{04}^{(1)} \mu_{62}^{(2)}
\end{aligned}$$

weight=9

structure: 0,1,1,0,0,0,1

Generating graph:

|    |    |   |   |   |    |   |   |   |
|----|----|---|---|---|----|---|---|---|
| V1 | 1  | 1 | 1 | 1 | 1  | 1 | 1 | 1 |
| 2  | V2 | 2 | 2 | 2 | V3 | 3 | 3 | 3 |



$$\begin{aligned}
Z_{74} = & \mu_{80}^{(1)}(\mu_{02}^{(2)})^3 - 6\mu_{71}^{(1)}\mu_{11}^{(2)}(\mu_{02}^{(2)})^2 + 3\mu_{62}^{(1)}\mu_{20}^{(2)}(\mu_{02}^{(2)})^2 + 12\mu_{62}^{(1)}(\mu_{11}^{(2)})^2\mu_{02}^{(2)} \\
& - 12\mu_{53}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)}\mu_{02}^{(2)} - 8\mu_{53}^{(1)}(\mu_{11}^{(2)})^3 + 3\mu_{44}^{(1)}(\mu_{20}^{(2)})^2\mu_{02}^{(2)} + 12\mu_{44}^{(1)}\mu_{20}^{(2)}(\mu_{11}^{(2)})^2 \\
& - 6\mu_{35}^{(1)}(\mu_{20}^{(2)})^2\mu_{11}^{(2)} - 2\mu_{20}^{(1)}\mu_{53}^{(1)}(\mu_{02}^{(2)})^2 + 8\mu_{20}^{(1)}\mu_{44}^{(1)}\mu_{11}^{(2)}\mu_{02}^{(2)} \\
& - 4\mu_{20}^{(1)}\mu_{35}^{(1)}\mu_{20}^{(2)}\mu_{02}^{(2)} - 8\mu_{20}^{(1)}\mu_{35}^{(1)}(\mu_{11}^{(2)})^2 + \mu_{26}^{(1)}(\mu_{20}^{(2)})^3 - \mu_{20}^{(1)}(\mu_{20}^{(2)})^2\mu_{26}^{(2)} \\
& + 8\mu_{20}^{(1)}\mu_{26}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)} + 2(\mu_{20}^{(1)})^2\mu_{20}^{(2)}\mu_{17}^{(2)} + (\mu_{20}^{(1)})^2\mu_{26}^{(1)}\mu_{02}^{(2)} - (\mu_{20}^{(1)})^3\mu_{08}^{(2)} \\
& + 4\mu_{20}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)}\mu_{35}^{(2)} - 4(\mu_{20}^{(1)})^2\mu_{11}^{(2)}\mu_{26}^{(2)} - 2(\mu_{20}^{(1)})^2\mu_{17}^{(1)}\mu_{11}^{(2)} + 6(\mu_{20}^{(1)})^2\mu_{11}^{(1)}\mu_{17}^{(2)} \\
& - 2\mu_{20}^{(1)}\mu_{20}^{(2)}\mu_{02}^{(2)}\mu_{44}^{(2)} + 2(\mu_{20}^{(1)})^2\mu_{02}^{(2)}\mu_{35}^{(2)} + (\mu_{20}^{(1)})^2\mu_{08}^{(1)}\mu_{20}^{(2)} - 3(\mu_{20}^{(1)})^2\mu_{02}^{(1)}\mu_{26}^{(2)} \\
& - 4\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{35}^{(1)}\mu_{02}^{(2)} - 2\mu_{20}^{(1)}\mu_{17}^{(1)}(\mu_{20}^{(2)})^2 - 8\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{20}^{(2)}\mu_{26}^{(2)} \\
& + 8\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{26}^{(1)}\mu_{11}^{(2)} - 4\mu_{20}^{(1)}(\mu_{11}^{(2)})^2\mu_{44}^{(2)} + 16\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{11}^{(2)}\mu_{35}^{(2)} \\
& - 4\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{17}^{(2)}\mu_{20}^{(2)} - 12\mu_{20}^{(1)}(\mu_{11}^{(2)})^2\mu_{26}^{(2)} + 4\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{02}^{(2)}\mu_{53}^{(2)} \\
& - 8\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{02}^{(2)}\mu_{44}^{(2)} + 12\mu_{20}^{(1)}\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{35}^{(2)} + 2\mu_{20}^{(1)}\mu_{02}^{(1)}\mu_{44}^{(1)}\mu_{02}^{(2)} \\
& - 4\mu_{20}^{(1)}\mu_{02}^{(1)}\mu_{35}^{(1)}\mu_{11}^{(2)} + 4\mu_{20}^{(1)}\mu_{02}^{(1)}\mu_{20}^{(2)}\mu_{35}^{(2)} + 2\mu_{20}^{(1)}\mu_{02}^{(1)}\mu_{26}^{(1)}\mu_{20}^{(2)} \\
& - 8\mu_{20}^{(1)}\mu_{02}^{(1)}\mu_{11}^{(2)}\mu_{44}^{(2)} - \mu_{20}^{(1)}(\mu_{02}^{(2)})^2\mu_{62}^{(2)} + 4\mu_{20}^{(1)}\mu_{02}^{(1)}\mu_{02}^{(2)}\mu_{53}^{(2)} \\
& - 3\mu_{20}^{(1)}(\mu_{02}^{(1)})^2\mu_{44}^{(2)} + 4\mu_{11}^{(1)}\mu_{62}^{(1)}(\mu_{02}^{(2)})^2 - 16\mu_{11}^{(1)}\mu_{53}^{(1)}\mu_{11}^{(2)}\mu_{02}^{(2)} \\
& + 8\mu_{11}^{(1)}\mu_{44}^{(1)}\mu_{20}^{(2)}\mu_{02}^{(2)} + 16\mu_{11}^{(1)}\mu_{44}^{(1)}(\mu_{11}^{(2)})^2 - 16\mu_{11}^{(1)}\mu_{35}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)} \\
& + 2\mu_{11}^{(1)}(\mu_{20}^{(2)})^2\mu_{35}^{(2)} + 4\mu_{11}^{(1)}\mu_{26}^{(1)}(\mu_{20}^{(2)})^2 - 8\mu_{11}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)}\mu_{44}^{(2)} \\
& + 4\mu_{11}^{(1)}\mu_{20}^{(2)}\mu_{02}^{(2)}\mu_{53}^{(2)} + 4(\mu_{11}^{(1)})^2\mu_{44}^{(1)}\mu_{02}^{(2)} - 8(\mu_{11}^{(1)})^2\mu_{35}^{(1)}\mu_{11}^{(2)} + 8(\mu_{11}^{(1)})^2\mu_{20}^{(2)}\mu_{35}^{(2)} \\
& + 4(\mu_{11}^{(1)})^2\mu_{26}^{(1)}\mu_{20}^{(2)} + 8\mu_{11}^{(1)}(\mu_{11}^{(2)})^2\mu_{53}^{(2)} - 16(\mu_{11}^{(1)})^2\mu_{11}^{(2)}\mu_{44}^{(2)} + 8(\mu_{11}^{(1)})^3\mu_{35}^{(2)} \\
& - 8\mu_{11}^{(1)}\mu_{11}^{(2)}\mu_{02}^{(2)}\mu_{62}^{(2)} + 8(\mu_{11}^{(1)})^2\mu_{02}^{(2)}\mu_{53}^{(2)} - 12(\mu_{11}^{(1)})^2\mu_{02}^{(1)}\mu_{44}^{(2)} \\
& - 4\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{53}^{(1)}\mu_{02}^{(2)} + 8\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{44}^{(1)}\mu_{11}^{(2)} - 4\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{35}^{(1)}\mu_{20}^{(2)} \\
& - 8\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{20}^{(2)}\mu_{44}^{(2)} + 16\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{11}^{(2)}\mu_{53}^{(2)} + 2\mu_{11}^{(1)}(\mu_{02}^{(2)})^2\mu_{71}^{(2)} \\
& - 8\mu_{11}^{(1)}\mu_{02}^{(1)}\mu_{02}^{(2)}\mu_{62}^{(2)} + 6\mu_{11}^{(1)}(\mu_{02}^{(1)})^2\mu_{53}^{(2)} - 2\mu_{02}^{(1)}\mu_{71}^{(1)}(\mu_{02}^{(2)})^2 \\
& + 8\mu_{02}^{(1)}\mu_{62}^{(1)}\mu_{11}^{(2)}\mu_{02}^{(2)} - 4\mu_{02}^{(1)}\mu_{53}^{(1)}\mu_{20}^{(2)}\mu_{02}^{(2)} - 8\mu_{02}^{(1)}\mu_{53}^{(1)}(\mu_{11}^{(2)})^2 \\
& + 8\mu_{02}^{(1)}\mu_{44}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)} - 2\mu_{02}^{(1)}\mu_{35}^{(1)}(\mu_{20}^{(2)})^2 - \mu_{02}^{(1)}(\mu_{20}^{(2)})^2\mu_{44}^{(2)} \\
& + 4\mu_{02}^{(1)}\mu_{20}^{(2)}\mu_{11}^{(2)}\mu_{53}^{(2)} - 2\mu_{02}^{(1)}\mu_{20}^{(2)}\mu_{02}^{(2)}\mu_{62}^{(2)} - 4\mu_{02}^{(1)}(\mu_{11}^{(2)})^2\mu_{62}^{(2)} \\
& + 4\mu_{02}^{(1)}\mu_{11}^{(2)}\mu_{02}^{(2)}\mu_{71}^{(2)} + (\mu_{02}^{(1)})^2\mu_{62}^{(1)}\mu_{02}^{(2)} - 2(\mu_{02}^{(1)})^2\mu_{53}^{(1)}\mu_{11}^{(2)} + (\mu_{02}^{(1)})^2\mu_{44}^{(1)}\mu_{20}^{(2)} \\
& + 2(\mu_{02}^{(1)})^2\mu_{20}^{(2)}\mu_{53}^{(2)} - 4(\mu_{02}^{(1)})^2\mu_{11}^{(2)}\mu_{62}^{(2)} - \mu_{02}^{(1)}(\mu_{02}^{(2)})^2\mu_{80}^{(2)} + 2(\mu_{02}^{(1)})^2\mu_{02}^{(2)}\mu_{71}^{(2)} \\
& - (\mu_{02}^{(1)})^3\mu_{62}^{(2)}
\end{aligned}$$

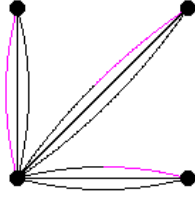
weight=9

structure: 3,0,0,0,0,1

Generating graph:

$$\begin{array}{cccccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
V2 & 2 & 2 & V3 & 3 & 3 & V4 & 4 & 4
\end{array}$$





### Invariants of the order 9

$$\begin{aligned}
 Z_{75} = & \mu_{81}^{(1)} \mu_{07}^{(2)} + \mu_{70}^{(2)} \mu_{27}^{(2)} - 7\mu_{72}^{(1)} \mu_{16}^{(2)} - \mu_{70}^{(1)} \mu_{18}^{(2)} + \mu_{70}^{(1)} \mu_{09}^{(1)} - 7\mu_{61}^{(2)} \mu_{36}^{(2)} \\
 & + 21\mu_{63}^{(1)} \mu_{25}^{(2)} + 7\mu_{61}^{(1)} \mu_{27}^{(2)} - 7\mu_{61}^{(1)} \mu_{18}^{(1)} + 21\mu_{52}^{(2)} \mu_{45}^{(2)} - 35\mu_{54}^{(1)} \mu_{34}^{(2)} - 21\mu_{52}^{(1)} \mu_{36}^{(2)} \\
 & + 21\mu_{52}^{(1)} \mu_{27}^{(1)} - 35\mu_{43}^{(2)} \mu_{54}^{(2)} + 35\mu_{45}^{(1)} \mu_{43}^{(2)} + 35\mu_{43}^{(1)} \mu_{45}^{(2)} - 35\mu_{43}^{(1)} \mu_{36}^{(1)} + 35\mu_{34}^{(2)} \mu_{63}^{(2)} \\
 & - 21\mu_{36}^{(1)} \mu_{52}^{(2)} - 35\mu_{34}^{(1)} \mu_{54}^{(2)} + 35\mu_{34}^{(1)} \mu_{45}^{(1)} - 21\mu_{25}^{(2)} \mu_{72}^{(2)} + 7\mu_{27}^{(1)} \mu_{61}^{(2)} + 21\mu_{25}^{(1)} \mu_{63}^{(2)} \\
 & - 21\mu_{25}^{(1)} \mu_{54}^{(1)} + 7\mu_{16}^{(2)} \mu_{81}^{(2)} - \mu_{18}^{(1)} \mu_{70}^{(2)} - 7\mu_{16}^{(1)} \mu_{72}^{(2)} + 7\mu_{16}^{(1)} \mu_{63}^{(1)} - \mu_{07}^{(2)} \mu_{90}^{(2)} \\
 & + \mu_{07}^{(1)} \mu_{81}^{(2)} - \mu_{07}^{(1)} \mu_{72}^{(1)}
 \end{aligned}$$

weight=9

structure: 0,0,0,0,0,1,0,1

Generating graph:

$$\begin{array}{cccccccc}
 V1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
 1 & V2 & 2 & 2 & 2 & 2 & 2 & 2
 \end{array}$$



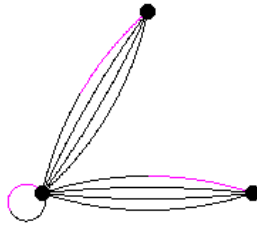
$$\begin{aligned}
Z_{76} = & \mu_{81}^{(1)}(\mu_{03}^{(2)})^2 - 6\mu_{72}^{(1)}\mu_{12}^{(2)}\mu_{03}^{(2)} + 6\mu_{63}^{(1)}\mu_{21}^{(2)}\mu_{03}^{(2)} + 9\mu_{63}^{(1)}(\mu_{12}^{(2)})^2 - 2\mu_{54}^{(1)}\mu_{30}^{(2)}\mu_{03}^{(2)} \\
& - 18\mu_{54}^{(1)}\mu_{21}^{(2)}\mu_{12}^{(2)} + 6\mu_{45}^{(1)}\mu_{30}^{(2)}\mu_{12}^{(2)} + 9\mu_{45}^{(1)}(\mu_{21}^{(2)})^2 + 2\mu_{30}^{(1)}\mu_{45}^{(1)}\mu_{03}^{(2)} - (\mu_{30}^{(2)})^2\mu_{36}^{(2)} \\
& - 6\mu_{36}^{(1)}\mu_{30}^{(2)}\mu_{21}^{(2)} + 2\mu_{30}^{(1)}\mu_{30}^{(2)}\mu_{27}^{(2)} - 6\mu_{30}^{(1)}\mu_{36}^{(1)}\mu_{12}^{(2)} - (\mu_{30}^{(1)})^2\mu_{18}^{(2)} + (\mu_{30}^{(1)})^2\mu_{09}^{(1)} \\
& + 6\mu_{30}^{(2)}\mu_{21}^{(2)}\mu_{45}^{(2)} - 6\mu_{30}^{(1)}\mu_{21}^{(2)}\mu_{36}^{(2)} + 6\mu_{30}^{(1)}\mu_{27}^{(2)}\mu_{21}^{(2)} + 6\mu_{30}^{(1)}\mu_{21}^{(1)}\mu_{27}^{(2)} \\
& - 6\mu_{30}^{(1)}\mu_{21}^{(1)}\mu_{18}^{(2)} - 6\mu_{30}^{(2)}\mu_{12}^{(2)}\mu_{54}^{(2)} + 6\mu_{30}^{(1)}\mu_{12}^{(2)}\mu_{45}^{(2)} - 2\mu_{30}^{(1)}\mu_{18}^{(1)}\mu_{30}^{(2)} \\
& - 6\mu_{30}^{(1)}\mu_{12}^{(1)}\mu_{36}^{(2)} + 6\mu_{30}^{(1)}\mu_{12}^{(1)}\mu_{27}^{(2)} + 2\mu_{30}^{(2)}\mu_{03}^{(2)}\mu_{63}^{(2)} - 2\mu_{30}^{(1)}\mu_{03}^{(2)}\mu_{54}^{(2)} \\
& + 2\mu_{30}^{(1)}\mu_{03}^{(2)}\mu_{45}^{(2)} - 2\mu_{30}^{(1)}\mu_{03}^{(1)}\mu_{36}^{(2)} - 6\mu_{21}^{(1)}\mu_{54}^{(1)}\mu_{03}^{(2)} + 18\mu_{21}^{(1)}\mu_{45}^{(1)}\mu_{12}^{(2)} \\
& + \mu_{27}^{(1)}(\mu_{30}^{(2)})^2 - 6\mu_{21}^{(1)}\mu_{30}^{(2)}\mu_{36}^{(2)} - 18\mu_{21}^{(1)}\mu_{36}^{(1)}\mu_{21}^{(2)} - 9(\mu_{21}^{(2)})^2\mu_{54}^{(2)} + 18\mu_{21}^{(1)}\mu_{21}^{(2)}\mu_{45}^{(2)} \\
& + 6\mu_{21}^{(1)}\mu_{27}^{(1)}\mu_{30}^{(2)} - 9(\mu_{21}^{(1)})^2\mu_{36}^{(2)} + 9(\mu_{21}^{(1)})^2\mu_{27}^{(1)} + 18\mu_{21}^{(2)}\mu_{12}^{(2)}\mu_{63}^{(2)} - 18\mu_{21}^{(1)}\mu_{12}^{(2)}\mu_{54}^{(2)} \\
& + 18\mu_{21}^{(1)}\mu_{12}^{(1)}\mu_{45}^{(2)} - 18\mu_{21}^{(1)}\mu_{12}^{(1)}\mu_{36}^{(1)} - 6\mu_{21}^{(2)}\mu_{03}^{(2)}\mu_{72}^{(2)} + 6\mu_{21}^{(1)}\mu_{03}^{(2)}\mu_{63}^{(2)} \\
& - 6\mu_{21}^{(1)}\mu_{03}^{(1)}\mu_{54}^{(2)} + 6\mu_{21}^{(1)}\mu_{03}^{(1)}\mu_{45}^{(1)} + 6\mu_{12}^{(1)}\mu_{63}^{(1)}\mu_{03}^{(2)} - 18\mu_{12}^{(1)}\mu_{54}^{(1)}\mu_{12}^{(2)} \\
& + 18\mu_{12}^{(1)}\mu_{45}^{(1)}\mu_{21}^{(2)} + 6\mu_{12}^{(1)}\mu_{30}^{(2)}\mu_{45}^{(2)} - 6\mu_{12}^{(1)}\mu_{36}^{(1)}\mu_{30}^{(2)} - 18\mu_{12}^{(1)}\mu_{21}^{(1)}\mu_{54}^{(2)} \\
& - 9(\mu_{12}^{(2)})^2\mu_{72}^{(2)} + 18\mu_{12}^{(1)}\mu_{12}^{(2)}\mu_{63}^{(2)} - 9(\mu_{12}^{(1)})^2\mu_{54}^{(2)} + 9(\mu_{12}^{(1)})^2\mu_{45}^{(1)} + 6\mu_{12}^{(2)}\mu_{03}^{(2)}\mu_{81}^{(2)} \\
& - 6\mu_{12}^{(1)}\mu_{03}^{(2)}\mu_{72}^{(2)} + 6\mu_{12}^{(1)}\mu_{03}^{(1)}\mu_{63}^{(2)} - 6\mu_{12}^{(1)}\mu_{03}^{(1)}\mu_{54}^{(1)} - 2\mu_{03}^{(1)}\mu_{72}^{(1)}\mu_{03}^{(2)} \\
& + 6\mu_{03}^{(1)}\mu_{63}^{(1)}\mu_{12}^{(2)} - 6\mu_{03}^{(1)}\mu_{54}^{(1)}\mu_{21}^{(2)} + 2\mu_{03}^{(1)}\mu_{45}^{(1)}\mu_{30}^{(2)} - 2\mu_{03}^{(1)}\mu_{30}^{(2)}\mu_{54}^{(2)} \\
& + 6\mu_{03}^{(1)}\mu_{21}^{(2)}\mu_{63}^{(2)} - 6\mu_{03}^{(1)}\mu_{12}^{(2)}\mu_{72}^{(2)} - (\mu_{03}^{(2)})^2\mu_{90}^{(2)} + 2\mu_{03}^{(1)}\mu_{03}^{(2)}\mu_{81}^{(2)} - (\mu_{03}^{(1)})^2\mu_{72}^{(2)} \\
& + (\mu_{03}^{(1)})^2\mu_{63}^{(1)}
\end{aligned}$$

weight=9

structure: 0,2,0,0,0,0,1

Generating graph:

|    |   |    |   |   |   |    |   |   |
|----|---|----|---|---|---|----|---|---|
| V1 | 1 | 1  | 1 | 1 | 1 | 1  | 1 | 1 |
|    | 1 | V2 | 2 | 2 | 2 | V3 | 3 | 3 |



$$\begin{aligned}
Z_{77} = & \mu_{81}^{(1)} \mu_{02}^{(2)} \mu_{04}^{(2)} - 2\mu_{72}^{(1)} \mu_{11}^{(2)} \mu_{04}^{(2)} - 4\mu_{72}^{(1)} \mu_{02}^{(2)} \mu_{13}^{(2)} + \mu_{63}^{(1)} \mu_{20}^{(2)} \mu_{04}^{(2)} \\
& + 8\mu_{63}^{(1)} \mu_{11}^{(2)} \mu_{13}^{(2)} + 6\mu_{63}^{(1)} \mu_{02}^{(2)} \mu_{22}^{(2)} - 4\mu_{54}^{(1)} \mu_{20}^{(2)} \mu_{13}^{(2)} - 12\mu_{54}^{(1)} \mu_{11}^{(2)} \mu_{22}^{(2)} \\
& - 4\mu_{54}^{(1)} \mu_{02}^{(2)} \mu_{31}^{(2)} - \mu_{40}^{(1)} \mu_{36}^{(1)} \mu_{02}^{(2)} + 6\mu_{45}^{(1)} \mu_{20}^{(2)} \mu_{22}^{(2)} + \mu_{40}^{(1)} \mu_{20}^{(2)} \mu_{27}^{(2)} \\
& + 2\mu_{40}^{(1)} \mu_{27}^{(1)} \mu_{11}^{(2)} + 8\mu_{45}^{(1)} \mu_{11}^{(2)} \mu_{31}^{(2)} - 2\mu_{40}^{(1)} \mu_{11}^{(2)} \mu_{36}^{(2)} - \mu_{40}^{(1)} \mu_{18}^{(1)} \mu_{20}^{(2)} \\
& + \mu_{45}^{(1)} \mu_{02}^{(2)} \mu_{40}^{(2)} + \mu_{40}^{(1)} \mu_{02}^{(2)} \mu_{45}^{(2)} + 4\mu_{31}^{(1)} \mu_{45}^{(1)} \mu_{02}^{(2)} - 8\mu_{31}^{(1)} \mu_{36}^{(1)} \mu_{11}^{(2)} \\
& - 4\mu_{36}^{(1)} \mu_{20}^{(2)} \mu_{31}^{(2)} - 4\mu_{31}^{(1)} \mu_{20}^{(2)} \mu_{36}^{(2)} + 4\mu_{31}^{(1)} \mu_{27}^{(1)} \mu_{20}^{(2)} - 2\mu_{36}^{(1)} \mu_{11}^{(2)} \mu_{40}^{(2)} \\
& + 8\mu_{31}^{(1)} \mu_{11}^{(2)} \mu_{45}^{(2)} - 4\mu_{31}^{(1)} \mu_{02}^{(2)} \mu_{54}^{(2)} - 6\mu_{22}^{(1)} \mu_{54}^{(1)} \mu_{02}^{(2)} - \mu_{20}^{(1)} \mu_{54}^{(1)} \mu_{04}^{(2)} \\
& - \mu_{20}^{(2)} \mu_{40}^{(2)} \mu_{36}^{(2)} + \mu_{20}^{(1)} \mu_{40}^{(2)} \mu_{27}^{(2)} + 12\mu_{22}^{(1)} \mu_{45}^{(1)} \mu_{11}^{(2)} + 4\mu_{20}^{(1)} \mu_{45}^{(1)} \mu_{13}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{40}^{(1)} \mu_{18}^{(2)} + \mu_{20}^{(1)} \mu_{40}^{(1)} \mu_{09}^{(2)} + 4\mu_{20}^{(2)} \mu_{31}^{(2)} \mu_{45}^{(2)} - 4\mu_{20}^{(1)} \mu_{31}^{(2)} \mu_{36}^{(2)} \\
& - 6\mu_{22}^{(1)} \mu_{36}^{(1)} \mu_{20}^{(2)} - 6\mu_{20}^{(1)} \mu_{36}^{(1)} \mu_{22}^{(2)} + 4\mu_{20}^{(1)} \mu_{31}^{(1)} \mu_{27}^{(2)} - 4\mu_{20}^{(1)} \mu_{31}^{(1)} \mu_{18}^{(2)} \\
& - 6\mu_{20}^{(2)} \mu_{22}^{(2)} \mu_{54}^{(2)} + \mu_{27}^{(1)} \mu_{20}^{(2)} \mu_{40}^{(2)} + 6\mu_{22}^{(1)} \mu_{20}^{(2)} \mu_{45}^{(2)} + 6\mu_{20}^{(1)} \mu_{22}^{(2)} \mu_{45}^{(2)} \\
& + 4\mu_{20}^{(1)} \mu_{27}^{(1)} \mu_{31}^{(2)} - 6\mu_{20}^{(1)} \mu_{22}^{(1)} \mu_{36}^{(2)} + 6\mu_{20}^{(1)} \mu_{22}^{(1)} \mu_{27}^{(2)} + 4\mu_{20}^{(1)} \mu_{13}^{(1)} \mu_{63}^{(2)} \\
& - 12\mu_{22}^{(1)} \mu_{11}^{(2)} \mu_{54}^{(2)} - 4\mu_{20}^{(1)} \mu_{13}^{(2)} \mu_{54}^{(2)} - \mu_{20}^{(1)} \mu_{18}^{(1)} \mu_{40}^{(2)} + 4\mu_{20}^{(1)} \mu_{13}^{(1)} \mu_{45}^{(2)} \\
& - 4\mu_{20}^{(1)} \mu_{13}^{(1)} \mu_{36}^{(2)} - \mu_{20}^{(2)} \mu_{04}^{(2)} \mu_{72}^{(2)} + 6\mu_{22}^{(1)} \mu_{02}^{(2)} \mu_{63}^{(2)} + \mu_{20}^{(1)} \mu_{04}^{(2)} \mu_{63}^{(2)} \\
& - \mu_{20}^{(1)} \mu_{04}^{(1)} \mu_{54}^{(2)} + \mu_{20}^{(1)} \mu_{04}^{(1)} \mu_{45}^{(2)} + 4\mu_{13}^{(1)} \mu_{63}^{(1)} \mu_{02}^{(2)} + 2\mu_{11}^{(1)} \mu_{63}^{(1)} \mu_{04}^{(2)} \\
& - 8\mu_{13}^{(1)} \mu_{54}^{(1)} \mu_{11}^{(2)} - 8\mu_{11}^{(1)} \mu_{54}^{(1)} \mu_{13}^{(2)} + 2\mu_{11}^{(2)} \mu_{40}^{(2)} \mu_{45}^{(2)} - 2\mu_{11}^{(1)} \mu_{40}^{(2)} \mu_{36}^{(2)} \\
& + 4\mu_{13}^{(1)} \mu_{45}^{(1)} \mu_{20}^{(2)} + 12\mu_{11}^{(1)} \mu_{45}^{(1)} \mu_{22}^{(2)} + 2\mu_{11}^{(1)} \mu_{40}^{(1)} \mu_{27}^{(2)} - 2\mu_{11}^{(1)} \mu_{40}^{(1)} \mu_{18}^{(2)} \\
& - 8\mu_{11}^{(2)} \mu_{31}^{(2)} \mu_{54}^{(2)} + 8\mu_{11}^{(1)} \mu_{31}^{(2)} \mu_{45}^{(2)} - 8\mu_{11}^{(1)} \mu_{36}^{(1)} \mu_{31}^{(2)} - 8\mu_{11}^{(1)} \mu_{31}^{(1)} \mu_{36}^{(2)} \\
& + 8\mu_{11}^{(1)} \mu_{31}^{(1)} \mu_{27}^{(2)} + 12\mu_{11}^{(2)} \mu_{22}^{(2)} \mu_{63}^{(2)} - 4\mu_{13}^{(1)} \mu_{20}^{(2)} \mu_{54}^{(2)} - 12\mu_{11}^{(1)} \mu_{22}^{(2)} \mu_{54}^{(2)} \\
& + 2\mu_{11}^{(1)} \mu_{27}^{(1)} \mu_{40}^{(2)} + 12\mu_{11}^{(1)} \mu_{22}^{(1)} \mu_{45}^{(2)} - 12\mu_{11}^{(1)} \mu_{22}^{(1)} \mu_{36}^{(2)} - 8\mu_{11}^{(1)} \mu_{13}^{(1)} \mu_{72}^{(2)} \\
& + 8\mu_{13}^{(1)} \mu_{11}^{(2)} \mu_{63}^{(2)} + 8\mu_{11}^{(1)} \mu_{13}^{(2)} \mu_{63}^{(2)} - 8\mu_{11}^{(1)} \mu_{13}^{(1)} \mu_{54}^{(2)} + 8\mu_{11}^{(1)} \mu_{13}^{(1)} \mu_{45}^{(2)} \\
& + 2\mu_{11}^{(2)} \mu_{04}^{(2)} \mu_{81}^{(2)} - 4\mu_{13}^{(1)} \mu_{02}^{(2)} \mu_{72}^{(2)} - 2\mu_{11}^{(1)} \mu_{04}^{(2)} \mu_{72}^{(2)} + 2\mu_{11}^{(1)} \mu_{04}^{(1)} \mu_{63}^{(2)} \\
& - 2\mu_{11}^{(1)} \mu_{04}^{(1)} \mu_{54}^{(2)} - \mu_{04}^{(1)} \mu_{72}^{(1)} \mu_{02}^{(2)} - \mu_{02}^{(1)} \mu_{72}^{(1)} \mu_{04}^{(2)} + 2\mu_{04}^{(1)} \mu_{63}^{(1)} \mu_{11}^{(2)} \\
& + 4\mu_{02}^{(1)} \mu_{63}^{(1)} \mu_{13}^{(2)} - \mu_{04}^{(1)} \mu_{54}^{(1)} \mu_{20}^{(2)} - 6\mu_{02}^{(1)} \mu_{54}^{(1)} \mu_{22}^{(2)} - \mu_{02}^{(2)} \mu_{40}^{(2)} \mu_{54}^{(2)} \\
& + \mu_{02}^{(1)} \mu_{40}^{(2)} \mu_{45}^{(2)} + 4\mu_{02}^{(1)} \mu_{45}^{(1)} \mu_{31}^{(2)} - \mu_{02}^{(1)} \mu_{40}^{(1)} \mu_{36}^{(2)} + \mu_{02}^{(1)} \mu_{40}^{(1)} \mu_{27}^{(2)} \\
& + 4\mu_{02}^{(2)} \mu_{31}^{(2)} \mu_{63}^{(2)} - 4\mu_{02}^{(1)} \mu_{31}^{(2)} \mu_{54}^{(2)} - \mu_{02}^{(1)} \mu_{36}^{(1)} \mu_{40}^{(2)} + 4\mu_{02}^{(1)} \mu_{31}^{(1)} \mu_{45}^{(2)} \\
& - 4\mu_{02}^{(1)} \mu_{31}^{(1)} \mu_{36}^{(2)} - 6\mu_{02}^{(2)} \mu_{22}^{(2)} \mu_{72}^{(2)} + \mu_{04}^{(1)} \mu_{20}^{(2)} \mu_{63}^{(2)} + 6\mu_{02}^{(1)} \mu_{22}^{(2)} \mu_{63}^{(2)} \\
& - 6\mu_{02}^{(1)} \mu_{22}^{(1)} \mu_{54}^{(2)} + 6\mu_{02}^{(1)} \mu_{22}^{(1)} \mu_{45}^{(2)} + 4\mu_{02}^{(2)} \mu_{13}^{(2)} \mu_{81}^{(2)} - 2\mu_{04}^{(1)} \mu_{11}^{(2)} \mu_{72}^{(2)} \\
& - 4\mu_{02}^{(1)} \mu_{13}^{(2)} \mu_{72}^{(2)} + 4\mu_{02}^{(1)} \mu_{13}^{(1)} \mu_{63}^{(2)} - 4\mu_{02}^{(1)} \mu_{13}^{(1)} \mu_{54}^{(2)} - \mu_{02}^{(2)} \mu_{04}^{(2)} \mu_{90}^{(2)} \\
& + \mu_{04}^{(1)} \mu_{02}^{(2)} \mu_{81}^{(2)} + \mu_{02}^{(1)} \mu_{04}^{(2)} \mu_{81}^{(2)} - \mu_{02}^{(1)} \mu_{04}^{(1)} \mu_{72}^{(2)} + \mu_{02}^{(1)} \mu_{04}^{(1)} \mu_{63}^{(2)}
\end{aligned}$$

weight=9

structure: 1,0,1,0,0,0,0,1

Generating graph:

$$\begin{array}{cccccccc}
V1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
& 1 & V2 & 2 & 2 & 2 & V3 & 3 & 3
\end{array}$$

