1

简单测试一下

$$f(Z)=\frac{1}{2}(3+Z_1+Z_2+Z_1Z_2)$$
$$C_1=\frac{1}{2}(1+Z_1)$$
$$C_2=\frac{1}{2}(1+Z_2)$$
$$C_3=\frac{1}{2}(1+Z_1Z_2)$$
$$H_c=\frac{1}{2}(3I+Z_1+Z_2+Z_1Z_2)$$

2

2个内部二次项

$$f(Z)=\frac{1}{2}(6\pm Z_1\pm Z_2\pm Z_3\pm Z_4\pm Z_1Z_2\pm Z_3Z_4\pm Z_1Z_3)$$
$$C_1=\frac{1}{2}(1\pm Z_1)$$
$$C_2=\frac{1}{2}(1\pm Z_2)$$
$$C_3=\frac{1}{2}(1\pm Z_3)$$
$$C_4=\frac{1}{2}(1\pm Z_4)$$
$$C_5=\frac{1}{2}(1\pm Z_1Z_2)$$
$$C_6=\frac{1}{2}(1\pm Z_3Z_4)$$
$$H_c=\frac{1}{2}(6I\pm Z_1\pm Z_2\pm Z_3\pm Z_4\pm Z_1Z_2\pm Z_3Z_4)$$

3

2个内部二次项，1个外部二次型

$$f(Z)=\frac{1}{2}(7\pm Z_1\pm Z_2\pm Z_3\pm Z_4\pm Z_1Z_2\pm Z_3Z_4\pm Z_1Z_3)$$
$$C_1=\frac{1}{2}(1\pm Z_1)$$
$$C_2=\frac{1}{2}(1\pm Z_2)$$

$$C_3 = \frac{1}{2}(1 \pm Z_3)$$
$$C_4 = \frac{1}{2}(1 \pm Z_4)$$
$$C_5 = \frac{1}{2}(1 \pm Z_1Z_2)$$
$$C_6 = \frac{1}{2}(1 \pm Z_3Z_4)$$
$$C_7 = \frac{1}{2}(1 \pm Z_1Z_3)$$
$$H_c = \frac{1}{2}(7I \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_3)$$

4

2个内部二次项，2个外部二次型

$$f(Z) = \frac{1}{2}(8 \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_3 \pm Z_2Z_4)$$
$$C_1 = \frac{1}{2}(1 \pm Z_1)$$
$$C_2 = \frac{1}{2}(1 \pm Z_2)$$
$$C_3 = \frac{1}{2}(1 \pm Z_3)$$
$$C_4 = \frac{1}{2}(1 \pm Z_4)$$
$$C_5 = \frac{1}{2}(1 \pm Z_1Z_2)$$
$$C_6 = \frac{1}{2}(1 \pm Z_3Z_4)$$
$$C_7 = \frac{1}{2}(1 \pm Z_1Z_3)$$
$$C_8 = \frac{1}{2}(1 \pm Z_2Z_4)$$
$$H_c = \frac{1}{2}(8I \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_3 \pm Z_2Z_4)$$

5

2个内部二次项，1个外部二次型 + 1个三次型

$$f(Z) = \frac{1}{2}(8 \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_3 \pm Z_1Z_2Z_3)$$
$$C_1 = \frac{1}{2}(1 \pm Z_1)$$
$$C_2 = \frac{1}{2}(1 \pm Z_2)$$
$$C_3 = \frac{1}{2}(1 \pm Z_3)$$

$$C_4 = \frac{1}{2}(1 \pm Z_4)$$
$$C_5 = \frac{1}{2}(1 \pm Z_1Z_2)$$
$$C_6 = \frac{1}{2}(1 \pm Z_3Z_4)$$
$$C_7 = \frac{1}{2}(1 \pm Z_1Z_3)$$
$$C_8 = \frac{1}{2}(1 \pm Z_1Z_2Z_3)$$
$$H_c = \frac{1}{2}(8I \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_3 \pm Z_1Z_2Z_3)$$

6

$$2\text{个内部二次项}, 2\text{个三次型}$$
$$f(Z) = \frac{1}{2}(8 \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_3Z_4 \pm Z_1Z_2Z_3)$$
$$C_1 = \frac{1}{2}(1 \pm Z_1)$$
$$C_2 = \frac{1}{2}(1 \pm Z_2)$$
$$C_3 = \frac{1}{2}(1 \pm Z_3)$$
$$C_4 = \frac{1}{2}(1 \pm Z_4)$$
$$C_5 = \frac{1}{2}(1 \pm Z_1Z_2)$$
$$C_6 = \frac{1}{2}(1 \pm Z_3Z_4)$$
$$C_7 = \frac{1}{2}(1 \pm Z_1Z_3Z_4)$$
$$C_8 = \frac{1}{2}(1 \pm Z_1Z_2Z_3)$$
$$H_c = \frac{1}{2}(8I \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_3Z_4 \pm Z_1Z_2Z_3)$$

7

$$2\text{个内部二次项}, 1\text{个外部二次型} + 1\text{个四次型}$$
$$f(Z) = \frac{1}{2}(8 \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_3 \pm Z_1Z_2Z_3Z_4)$$
$$C_1 = \frac{1}{2}(1 \pm Z_1)$$
$$C_2 = \frac{1}{2}(1 \pm Z_2)$$
$$C_3 = \frac{1}{2}(1 \pm Z_3)$$

$$C_4 = \frac{1}{2}(1 \pm Z_4)$$
$$C_5 = \frac{1}{2}(1 \pm Z_1Z_2)$$
$$C_6 = \frac{1}{2}(1 \pm Z_3Z_4)$$
$$C_7 = \frac{1}{2}(1 \pm Z_1Z_3)$$
$$C_8 = \frac{1}{2}(1 \pm Z_1Z_2Z_3Z_4)$$
$$H_c = \frac{1}{2}(8I \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_3 \pm Z_1Z_2Z_3Z_4)$$

8

$$2\text{个内部二次项}, 1\text{个三次型} + 1\text{个四次型}$$
$$f(Z) = \frac{1}{2}(8 \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_2Z_3 \pm Z_1Z_2Z_3Z_4)$$
$$C_1 = \frac{1}{2}(1 \pm Z_1)$$
$$C_2 = \frac{1}{2}(1 \pm Z_2)$$
$$C_3 = \frac{1}{2}(1 \pm Z_3)$$
$$C_4 = \frac{1}{2}(1 \pm Z_4)$$
$$C_5 = \frac{1}{2}(1 \pm Z_1Z_2)$$
$$C_6 = \frac{1}{2}(1 \pm Z_3Z_4)$$
$$C_7 = \frac{1}{2}(1 \pm Z_1Z_2Z_3)$$
$$C_8 = \frac{1}{2}(1 \pm Z_1Z_2Z_3Z_4)$$
$$H_c = \frac{1}{2}(8I \pm Z_1 \pm Z_2 \pm Z_3 \pm Z_4 \pm Z_1Z_2 \pm Z_3Z_4 \pm Z_1Z_2Z_3 \pm Z_1Z_2Z_3Z_4)$$