

#MAGMA algorithm

$$\begin{pmatrix} 1 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 1 & 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 1 & 0 & 0 & 1 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 & 1 & 1 & 0 & 0 & 0 & 1 & 1 & 1 \\ 0 & 0 & 0 & 0 & 2 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 2 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 & 1 & 1 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 1 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 2 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 2 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 2 \end{pmatrix}$$

*Group Order: 980995276800

= <2, 21>, <3, 5>, <5, 2>, <7, 1>, <11, 1>

*Kissing Number: 264

*Theta Series

$1 + 264q^4 + 2048q^6 + 7944q^8 + 24576q^{10} + 64416q^{12} + 135168q^{14} + \dots$

*Iso : D12 Lattice

*The Shortest Vector

(1 -1 0 0 -1 -1 0 0 0 0 0 0),
(1 -1 0 0 -1 1 0 0 0 0 0 0),
(1 -1 0 0 1 -1 0 0 0 0 0 0),
(1 -1 0 0 1 1 0 0 0 0 0 0),
(1 0 -1 -1 -1 0 0 0 0 0 0 0),
(1 0 -1 -1 1 0 0 0 0 0 0 0),
(1 0 -1 1 -1 0 0 0 0 0 0 0),
(1 0 -1 1 1 0 0 0 0 0 0 0),
(1 0 0 0 -1 0 -1 0 0 0 -1 0),
(1 0 0 0 -1 0 -1 0 0 0 1 0),
(1 0 0 0 -1 0 0 -1 0 0 0 -1),
(1 0 0 0 -1 0 0 -1 0 0 0 1),
(1 0 0 0 -1 0 0 0 -1 -1 0 0),
(1 0 0 0 -1 0 0 0 -1 1 0 0),
(1 0 0 0 -1 0 0 0 1 -1 0 0),
(1 0 0 0 -1 0 0 0 1 1 0 0),
(1 0 0 0 -1 0 0 1 0 0 0 -1),
(1 0 0 0 -1 0 0 1 0 0 0 1),
(1 0 0 0 -1 0 1 0 0 0 -1 0),
(1 0 0 0 -1 0 1 0 0 0 1 0),
(1 0 0 0 1 0 -1 0 0 0 -1 0),
(1 0 0 0 1 0 -1 0 0 0 1 0),
(1 0 0 0 1 0 0 -1 0 0 0 -1),
(1 0 0 0 1 0 0 -1 0 0 0 1),
(1 0 0 0 1 0 0 0 -1 -1 0 0),
(1 0 0 0 1 0 0 0 -1 1 0 0),
(1 0 0 0 1 0 0 0 1 -1 0 0),
(1 0 0 0 1 0 0 0 1 1 0 0),
(1 0 0 0 1 0 0 1 0 0 0 -1),
(1 0 0 0 1 0 0 1 0 0 0 1),

(1 0 0 0 1 0 1 0 0 0 -1 0),
(100010100010),
(1 0 1 -1 -1 0 0 0 0 0 0 0),
(1 0 1 -1 1 0 0 0 0 0 0 0),
(1 0 1 1 -1 0 0 0 0 0 0 0),
(101110000000),
(1 1 0 0 -1 -1 0 0 0 0 0 0),
(1 1 0 0 -1 1 0 0 0 0 0 0),
(1 1 0 0 1 -1 0 0 0 0 0 0),
(110011000000),
(200000000000),
(0 1 -1 -1 0 -1 0 0 0 0 0 0),
(0 1 -1 -1 0 1 0 0 0 0 0 0),
(0 1 -1 1 0 -1 0 0 0 0 0 0),
(0 1 -1 1 0 1 0 0 0 0 0 0),
(0 1 0 0 0 -1 -1 0 0 0 -1 0),
(0 1 0 0 0 -1 -1 0 0 0 1 0),
(0 1 0 0 0 -1 0 -1 0 0 0 -1),
(0 1 0 0 0 -1 0 -1 0 0 0 1),
(0 1 0 0 0 -1 0 0 -1 -1 0 0),
(0 1 0 0 0 -1 0 0 -1 1 0 0),
(0 1 0 0 0 -1 0 0 1 -1 0 0),
(0 1 0 0 0 -1 0 0 1 1 0 0),
(0 1 0 0 0 -1 0 1 0 0 0 -1),
(0 1 0 0 0 -1 0 1 0 0 0 1),
(0 1 0 0 0 -1 1 0 0 0 -1 0),
(0 1 0 0 0 -1 1 0 0 0 1 0),
(0 1 0 0 0 1 -1 0 0 0 -1 0),
(0 1 0 0 0 1 -1 0 0 0 1 0),
(0 1 0 0 0 1 0 -1 0 0 0 -1),
(0 1 0 0 0 1 0 -1 0 0 0 1),
(0 1 0 0 0 1 0 0 -1 -1 0 0),
(0 1 0 0 0 1 0 0 -1 1 0 0),
(0 1 0 0 0 1 0 0 1 -1 0 0),
(010001001100),
(0 1 0 0 0 1 0 1 0 0 0 -1),
(010001010001),
(0 1 0 0 0 1 1 0 0 0 -1 0),
(010001100010),
(0 1 1 -1 0 -1 0 0 0 0 0 0),
(0 1 1 -1 0 1 0 0 0 0 0 0),
(0 1 1 1 0 -1 0 0 0 0 0 0),
(011101000000),
(020000000000),
(0 0 1 -1 0 0 -1 0 0 0 -1 0),
(0 0 1 -1 0 0 -1 0 0 0 1 0),
(0 0 1 -1 0 0 0 -1 0 0 0 -1),
(0 0 1 -1 0 0 0 -1 0 0 0 1),
(0 0 1 -1 0 0 0 0 -1 -1 0 0),
(0 0 1 -1 0 0 0 0 -1 1 0 0),
(0 0 1 -1 0 0 0 0 1 -1 0 0),
(0 0 1 -1 0 0 0 0 1 1 0 0),
(0 0 1 -1 0 0 0 1 0 0 0 -1),
(0 0 1 -1 0 0 0 1 0 0 0 1),
(0 0 1 -1 0 0 1 0 0 0 -1 0),
(0 0 1 -1 0 0 1 0 0 0 1 0),
(0 0 1 1 0 0 -1 0 0 0 -1 0),
(0 0 1 1 0 0 -1 0 0 0 1 0),
(0 0 1 1 0 0 0 -1 0 0 0 -1),
(0 0 1 1 0 0 0 -1 0 0 0 1),
(0 0 1 1 0 0 0 0 -1 -1 0 0),
(0 0 1 1 0 0 0 0 -1 1 0 0),
(0 0 1 1 0 0 0 0 1 -1 0 0),
(001100001100),

