PG No. 15 D_{4h} $4/mmm$ [tetragonal]

* Wyckoff site: 2a, site symmetry: 4mm

Table 1: Wyckoff bond: 2a@2a

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, 0, z]$	[1,2,3,4,13,14,15,16]
2	$[0, 0, -Z]$	$[0, 0, -z]$	[5,6,7,8,9,10,11,12]

Table 2: Wyckoff bond: 4b@2a

No.	vector	center	mapping
1	$[X, 0, 0]$	$[0, 0, z]$	[1,-2,13,-14]
2	$[0, X, 0]$	$[0, 0, z]$	[3,-4,-15,16]
3	$[-X, 0, 0]$	$[0, 0, -z]$	[5,-6,9,-10]
4	$[0, X, 0]$	$[0, 0, -z]$	[7,-8,-11,12]

Table 3: Wyckoff bond: 4c@2a

No.	vector	center	mapping
1	$[X, X, 0]$	$[0, 0, z]$	[1,-2,-15,16]
2	$[-X, X, 0]$	$[0, 0, z]$	[3,-4,-13,14]
3	$[-X, X, 0]$	$[0, 0, -z]$	[5,-6,-11,12]
4	$[X, X, 0]$	$[0, 0, -z]$	[7,-8,-9,10]

Table 4: Wyckoff bond: 8d@2a

No.	vector	center	mapping
1	$[X, 0, Z]$	$[0, 0, z]$	[1,13]
2	$[-X, 0, Z]$	$[0, 0, z]$	[2,14]
3	$[0, X, Z]$	$[0, 0, z]$	[3,16]
4	$[0, -X, Z]$	$[0, 0, z]$	[4,15]
5	$[-X, 0, -Z]$	$[0, 0, -z]$	[5,9]
6	$[X, 0, -Z]$	$[0, 0, -z]$	[6,10]
7	$[0, X, -Z]$	$[0, 0, -z]$	[7,12]
8	$[0, -X, -Z]$	$[0, 0, -z]$	[8,11]

Table 5: Wyckoff bond: `8e@2a`

No.	vector	center	mapping
1	$[X,\,X,\,Z]$	$[0,\,0,\,z]$	`[1,16]`
2	$[-X,\,-X,\,Z]$	$[0,\,0,\,z]$	`[2,15]`
3	$[-X,\,X,\,Z]$	$[0,\,0,\,z]$	`[3,14]`
4	$[X,\,-X,\,Z]$	$[0,\,0,\,z]$	`[4,13]`
5	$[-X,\,X,\,-Z]$	$[0,\,0,\,-z]$	`[5,12]`
6	$[X,\,-X,\,-Z]$	$[0,\,0,\,-z]$	`[6,11]`
7	$[X,\,X,\,-Z]$	$[0,\,0,\,-z]$	`[7,10]`
8	$[-X,\,-X,\,-Z]$	$[0,\,0,\,-z]$	`[8,9]`

Table 6: Wyckoff bond: `8f@2a`

No.	vector	center	mapping
1	$[X,\,Y,\,0]$	$[0,\,0,\,z]$	`[1,-2]`
2	$[-Y,\,X,\,0]$	$[0,\,0,\,z]$	`[3,-4]`
3	$[-X,\,Y,\,0]$	$[0,\,0,\,-z]$	`[5,-6]`
4	$[Y,\,X,\,0]$	$[0,\,0,\,-z]$	`[7,-8]`
5	$[-X,\,-Y,\,0]$	$[0,\,0,\,-z]$	`[9,-10]`
6	$[Y,\,-X,\,0]$	$[0,\,0,\,-z]$	`[11,-12]`
7	$[X,\,-Y,\,0]$	$[0,\,0,\,z]$	`[13,-14]`
8	$[-Y,\,-X,\,0]$	$[0,\,0,\,z]$	`[15,-16]`

Table 7: Wyckoff bond: `16g@2a`

No.	vector	center	mapping
1	$[X,\,Y,\,Z]$	$[0,\,0,\,z]$	`[1]`
2	$[-X,\,-Y,\,Z]$	$[0,\,0,\,z]$	`[2]`
3	$[-Y,\,X,\,Z]$	$[0,\,0,\,z]$	`[3]`
4	$[Y,\,-X,\,Z]$	$[0,\,0,\,z]$	`[4]`
5	$[-X,\,Y,\,-Z]$	$[0,\,0,\,-z]$	`[5]`
6	$[X,\,-Y,\,-Z]$	$[0,\,0,\,-z]$	`[6]`
7	$[Y,\,X,\,-Z]$	$[0,\,0,\,-z]$	`[7]`
8	$[-Y,\,-X,\,-Z]$	$[0,\,0,\,-z]$	`[8]`
9	$[-X,\,-Y,\,-Z]$	$[0,\,0,\,-z]$	`[9]`
10	$[X,\,Y,\,-Z]$	$[0,\,0,\,-z]$	`[10]`
11	$[Y,\,-X,\,-Z]$	$[0,\,0,\,-z]$	`[11]`
12	$[-Y,\,X,\,-Z]$	$[0,\,0,\,-z]$	`[12]`
13	$[X,\,-Y,\,Z]$	$[0,\,0,\,z]$	`[13]`
14	$[-X,\,Y,\,Z]$	$[0,\,0,\,z]$	`[14]`
15	$[-Y,\,-X,\,Z]$	$[0,\,0,\,z]$	`[15]`
16	$[Y,\,X,\,Z]$	$[0,\,0,\,z]$	`[16]`

* Wyckoff site: 4b, site symmetry: `m.m2`

Table 8: Wyckoff bond: `4a@4b`

No.	vector	center	mapping
1	$[X, X, 0]$	$[x, x, 0]$	`[1,7,10,16]`
2	$[-X, -X, 0]$	$[-x, -x, 0]$	`[2,8,9,15]`
3	$[-X, X, 0]$	$[-x, x, 0]$	`[3,5,12,14]`
4	$[X, -X, 0]$	$[x, -x, 0]$	`[4,6,11,13]`

Table 9: Wyckoff bond: `4b@4b`

No.	vector	center	mapping
1	$[X, -X, 0]$	$[x, x, 0]$	`[1,-7,10,-16]`
2	$[-X, X, 0]$	$[-x, -x, 0]$	`[2,-8,9,-15]`
3	$[X, X, 0]$	$[-x, x, 0]$	`[3,-5,12,-14]`
4	$[-X, -X, 0]$	$[x, -x, 0]$	`[4,-6,11,-13]`

Table 10: Wyckoff bond: `4c@4b`

No.	vector	center	mapping
1	$[0, 0, Z]$	$[x, x, 0]$	`[1,-7,-10,16]`
2	$[0, 0, Z]$	$[-x, -x, 0]$	`[2,-8,-9,15]`
3	$[0, 0, Z]$	$[-x, x, 0]$	`[3,-5,-12,14]`
4	$[0, 0, Z]$	$[x, -x, 0]$	`[4,-6,-11,13]`

Table 11: Wyckoff bond: `8d@4b`

No.	vector	center	mapping
1	$[X, X, Z]$	$[x, x, 0]$	`[1,16]`
2	$[-X, -X, Z]$	$[-x, -x, 0]$	`[2,15]`
3	$[-X, X, Z]$	$[-x, x, 0]$	`[3,14]`
4	$[X, -X, Z]$	$[x, -x, 0]$	`[4,13]`
5	$[-X, X, -Z]$	$[-x, x, 0]$	`[5,12]`
6	$[X, -X, -Z]$	$[x, -x, 0]$	`[6,11]`
7	$[X, X, -Z]$	$[x, x, 0]$	`[7,10]`
8	$[-X, -X, -Z]$	$[-x, -x, 0]$	`[8,9]`

Table 12: Wyckoff bond: `8e@4b`

No.	vector	center	mapping
1	$[X, -X, Z]$	$[x, x, 0]$	`[1,-7]`
2	$[-X, X, Z]$	$[-x, -x, 0]$	`[2,-8]`
3	$[X, X, Z]$	$[-x, x, 0]$	`[3,-5]`
4	$[-X, -X, Z]$	$[x, -x, 0]$	`[4,-6]`
5	$[-X, X, -Z]$	$[-x, -x, 0]$	`[9,-15]`
6	$[X, -X, -Z]$	$[x, x, 0]$	`[10,-16]`
7	$[-X, -X, -Z]$	$[x, -x, 0]$	`[11,-13]`
8	$[X, X, -Z]$	$[-x, x, 0]$	`[12,-14]`

Table 13: Wyckoff bond: `8f@4b`

No.	vector	center	mapping
1	$[X, Y, 0]$	$[x, x, 0]$	`[1,10]`
2	$[-X, -Y, 0]$	$[-x, -x, 0]$	`[2,9]`
3	$[-Y, X, 0]$	$[-x, x, 0]$	`[3,12]`
4	$[Y, -X, 0]$	$[x, -x, 0]$	`[4,11]`
5	$[-X, Y, 0]$	$[-x, x, 0]$	`[5,14]`
6	$[X, -Y, 0]$	$[x, -x, 0]$	`[6,13]`
7	$[Y, X, 0]$	$[x, x, 0]$	`[7,16]`
8	$[-Y, -X, 0]$	$[-x, -x, 0]$	`[8,15]`

Table 14: Wyckoff bond: `16g@4b`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, x, 0]$	`[1]`
2	$[-X, -Y, Z]$	$[-x, -x, 0]$	`[2]`
3	$[-Y, X, Z]$	$[-x, x, 0]$	`[3]`
4	$[Y, -X, Z]$	$[x, -x, 0]$	`[4]`
5	$[-X, Y, -Z]$	$[-x, x, 0]$	`[5]`
6	$[X, -Y, -Z]$	$[x, -x, 0]$	`[6]`
7	$[Y, X, -Z]$	$[x, x, 0]$	`[7]`
8	$[-Y, -X, -Z]$	$[-x, -x, 0]$	`[8]`
9	$[-X, -Y, -Z]$	$[-x, -x, 0]$	`[9]`
10	$[X, Y, -Z]$	$[x, x, 0]$	`[10]`
11	$[Y, -X, -Z]$	$[x, -x, 0]$	`[11]`
12	$[-Y, X, -Z]$	$[-x, x, 0]$	`[12]`
13	$[X, -Y, Z]$	$[x, -x, 0]$	`[13]`
14	$[-X, Y, Z]$	$[-x, x, 0]$	`[14]`
15	$[-Y, -X, Z]$	$[-x, -x, 0]$	`[15]`
16	$[Y, X, Z]$	$[x, x, 0]$	`[16]`

* Wyckoff site: 4c, site symmetry: m2m.

Table 15: Wyckoff bond: 4a@4c

No.	vector	center	mapping
1	$[X, 0, 0]$	$[x, 0, 0]$	[1,6,10,13]
2	$[-X, 0, 0]$	$[-x, 0, 0]$	[2,5,9,14]
3	$[0, X, 0]$	$[0, x, 0]$	[3,7,12,16]
4	$[0, -X, 0]$	$[0, -x, 0]$	[4,8,11,15]

Table 16: Wyckoff bond: 4b@4c

No.	vector	center	mapping
1	$[0, X, 0]$	$[x, 0, 0]$	[1,-6,10,-13]
2	$[0, -X, 0]$	$[-x, 0, 0]$	[2,-5,9,-14]
3	$[-X, 0, 0]$	$[0, x, 0]$	[3,-7,12,-16]
4	$[X, 0, 0]$	$[0, -x, 0]$	[4,-8,11,-15]

Table 17: Wyckoff bond: 4c@4c

No.	vector	center	mapping
1	$[0, 0, Z]$	$[x, 0, 0]$	[1,-6,-10,13]
2	$[0, 0, Z]$	$[-x, 0, 0]$	[2,-5,-9,14]
3	$[0, 0, Z]$	$[0, x, 0]$	[3,-7,-12,16]
4	$[0, 0, Z]$	$[0, -x, 0]$	[4,-8,-11,15]

Table 18: Wyckoff bond: 8d@4c

No.	vector	center	mapping
1	$[X, 0, Z]$	$[x, 0, 0]$	[1,13]
2	$[-X, 0, Z]$	$[-x, 0, 0]$	[2,14]
3	$[0, X, Z]$	$[0, x, 0]$	[3,16]
4	$[0, -X, Z]$	$[0, -x, 0]$	[4,15]
5	$[-X, 0, -Z]$	$[-x, 0, 0]$	[5,9]
6	$[X, 0, -Z]$	$[x, 0, 0]$	[6,10]
7	$[0, X, -Z]$	$[0, x, 0]$	[7,12]
8	$[0, -X, -Z]$	$[0, -x, 0]$	[8,11]

Table 19: Wyckoff bond: `8e@4c`

No.	vector	center	mapping
1	$[0, X, Z]$	$[x, 0, 0]$	[1,-6]
2	$[0, -X, Z]$	$[-x, 0, 0]$	[2,-5]
3	$[-X, 0, Z]$	$[0, x, 0]$	[3,-7]
4	$[X, 0, Z]$	$[0, -x, 0]$	[4,-8]
5	$[0, -X, -Z]$	$[-x, 0, 0]$	[9,-14]
6	$[0, X, -Z]$	$[x, 0, 0]$	[10,-13]
7	$[X, 0, -Z]$	$[0, -x, 0]$	[11,-15]
8	$[-X, 0, -Z]$	$[0, x, 0]$	[12,-16]

Table 20: Wyckoff bond: `8f@4c`

No.	vector	center	mapping
1	$[X, Y, 0]$	$[x, 0, 0]$	[1,10]
2	$[-X, -Y, 0]$	$[-x, 0, 0]$	[2,9]
3	$[-Y, X, 0]$	$[0, x, 0]$	[3,12]
4	$[Y, -X, 0]$	$[0, -x, 0]$	[4,11]
5	$[-X, Y, 0]$	$[-x, 0, 0]$	[5,14]
6	$[X, -Y, 0]$	$[x, 0, 0]$	[6,13]
7	$[Y, X, 0]$	$[0, x, 0]$	[7,16]
8	$[-Y, -X, 0]$	$[0, -x, 0]$	[8,15]

Table 21: Wyckoff bond: `16g@4c`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, 0, 0]$	[1]
2	$[-X, -Y, Z]$	$[-x, 0, 0]$	[2]
3	$[-Y, X, Z]$	$[0, x, 0]$	[3]
4	$[Y, -X, Z]$	$[0, -x, 0]$	[4]
5	$[-X, Y, -Z]$	$[-x, 0, 0]$	[5]
6	$[X, -Y, -Z]$	$[x, 0, 0]$	[6]
7	$[Y, X, -Z]$	$[0, x, 0]$	[7]
8	$[-Y, -X, -Z]$	$[0, -x, 0]$	[8]
9	$[-X, -Y, -Z]$	$[-x, 0, 0]$	[9]
10	$[X, Y, -Z]$	$[x, 0, 0]$	[10]
11	$[Y, -X, -Z]$	$[0, -x, 0]$	[11]
12	$[-Y, X, -Z]$	$[0, x, 0]$	[12]
13	$[X, -Y, Z]$	$[x, 0, 0]$	[13]
14	$[-X, Y, Z]$	$[-x, 0, 0]$	[14]
15	$[-Y, -X, Z]$	$[0, -x, 0]$	[15]
16	$[Y, X, Z]$	$[0, x, 0]$	[16]

* Wyckoff site: 8d, site symmetry: m..

Table 22: Wyckoff bond: 8a@8d

No.	vector	center	mapping
1	$[X, Y, 0]$	$[x, y, 0]$	[1,10]
2	$[-X, -Y, 0]$	$[-x, -y, 0]$	[2,9]
3	$[-Y, X, 0]$	$[-y, x, 0]$	[3,12]
4	$[Y, -X, 0]$	$[y, -x, 0]$	[4,11]
5	$[-X, Y, 0]$	$[-x, y, 0]$	[5,14]
6	$[X, -Y, 0]$	$[x, -y, 0]$	[6,13]
7	$[Y, X, 0]$	$[y, x, 0]$	[7,16]
8	$[-Y, -X, 0]$	$[-y, -x, 0]$	[8,15]

Table 23: Wyckoff bond: 8b@8d

No.	vector	center	mapping
1	$[0, 0, Z]$	$[x, y, 0]$	[1,-10]
2	$[0, 0, Z]$	$[-x, -y, 0]$	[2,-9]
3	$[0, 0, Z]$	$[-y, x, 0]$	[3,-12]
4	$[0, 0, Z]$	$[y, -x, 0]$	[4,-11]
5	$[0, 0, -Z]$	$[-x, y, 0]$	[5,-14]
6	$[0, 0, -Z]$	$[x, -y, 0]$	[6,-13]
7	$[0, 0, -Z]$	$[y, x, 0]$	[7,-16]
8	$[0, 0, -Z]$	$[-y, -x, 0]$	[8,-15]

Table 24: Wyckoff bond: 16c@8d

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, 0]$	[1]
2	$[-X, -Y, Z]$	$[-x, -y, 0]$	[2]
3	$[-Y, X, Z]$	$[-y, x, 0]$	[3]
4	$[Y, -X, Z]$	$[y, -x, 0]$	[4]
5	$[-X, Y, -Z]$	$[-x, y, 0]$	[5]
6	$[X, -Y, -Z]$	$[x, -y, 0]$	[6]
7	$[Y, X, -Z]$	$[y, x, 0]$	[7]
8	$[-Y, -X, -Z]$	$[-y, -x, 0]$	[8]
9	$[-X, -Y, -Z]$	$[-x, -y, 0]$	[9]
10	$[X, Y, -Z]$	$[x, y, 0]$	[10]
11	$[Y, -X, -Z]$	$[y, -x, 0]$	[11]
12	$[-Y, X, -Z]$	$[-y, x, 0]$	[12]
13	$[X, -Y, Z]$	$[x, -y, 0]$	[13]
14	$[-X, Y, Z]$	$[-x, y, 0]$	[14]
15	$[-Y, -X, Z]$	$[-y, -x, 0]$	[15]

Table 24

No.	vector	center	mapping
16	$[Y, X, Z]$	$[y, x, 0]$	[16]

* Wyckoff site: 8e, site symmetry: ..m

Table 25: Wyckoff bond: 8a@8e

No.	vector	center	mapping
1	$[X, X, Z]$	$[x, x, z]$	[1,16]
2	$[-X, -X, Z]$	$[-x, -x, z]$	[2,15]
3	$[-X, X, Z]$	$[-x, x, z]$	[3,14]
4	$[X, -X, Z]$	$[x, -x, z]$	[4,13]
5	$[-X, X, -Z]$	$[-x, x, -z]$	[5,12]
6	$[X, -X, -Z]$	$[x, -x, -z]$	[6,11]
7	$[X, X, -Z]$	$[x, x, -z]$	[7,10]
8	$[-X, -X, -Z]$	$[-x, -x, -z]$	[8,9]

Table 26: Wyckoff bond: 8b@8e

No.	vector	center	mapping
1	$[X, -X, 0]$	$[x, x, z]$	[1,-16]
2	$[-X, X, 0]$	$[-x, -x, z]$	[2,-15]
3	$[X, X, 0]$	$[-x, x, z]$	[3,-14]
4	$[-X, -X, 0]$	$[x, -x, z]$	[4,-13]
5	$[-X, -X, 0]$	$[-x, x, -z]$	[5,-12]
6	$[X, X, 0]$	$[x, -x, -z]$	[6,-11]
7	$[-X, X, 0]$	$[x, x, -z]$	[7,-10]
8	$[X, -X, 0]$	$[-x, -x, -z]$	[8,-9]

Table 27: Wyckoff bond: 16c@8e

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, x, z]$	[1]
2	$[-X, -Y, Z]$	$[-x, -x, z]$	[2]
3	$[-Y, X, Z]$	$[-x, x, z]$	[3]
4	$[Y, -X, Z]$	$[x, -x, z]$	[4]
5	$[-X, Y, -Z]$	$[-x, x, -z]$	[5]
6	$[X, -Y, -Z]$	$[x, -x, -z]$	[6]
7	$[Y, X, -Z]$	$[x, x, -z]$	[7]
8	$[-Y, -X, -Z]$	$[-x, -x, -z]$	[8]
9	$[-X, -Y, -Z]$	$[-x, -x, -z]$	[9]

Table 27

No.	vector	center	mapping
10	$[X, Y, -Z]$	$[x, x, -z]$	[10]
11	$[Y, -X, -Z]$	$[x, -x, -z]$	[11]
12	$[-Y, X, -Z]$	$[-x, x, -z]$	[12]
13	$[X, -Y, Z]$	$[x, -x, z]$	[13]
14	$[-X, Y, Z]$	$[-x, x, z]$	[14]
15	$[-Y, -X, Z]$	$[-x, -x, z]$	[15]
16	$[Y, X, Z]$	$[x, x, z]$	[16]

* Wyckoff site: `8f`, site symmetry: `.m.`

Table 28: Wyckoff bond: `8a@8f`

No.	vector	center	mapping
1	$[X, 0, Z]$	$[x, 0, z]$	[1,13]
2	$[-X, 0, Z]$	$[-x, 0, z]$	[2,14]
3	$[0, X, Z]$	$[0, x, z]$	[3,16]
4	$[0, -X, Z]$	$[0, -x, z]$	[4,15]
5	$[-X, 0, -Z]$	$[-x, 0, -z]$	[5,9]
6	$[X, 0, -Z]$	$[x, 0, -z]$	[6,10]
7	$[0, X, -Z]$	$[0, x, -z]$	[7,12]
8	$[0, -X, -Z]$	$[0, -x, -z]$	[8,11]

Table 29: Wyckoff bond: `8b@8f`

No.	vector	center	mapping
1	$[0, X, 0]$	$[x, 0, z]$	[1,-13]
2	$[0, -X, 0]$	$[-x, 0, z]$	[2,-14]
3	$[-X, 0, 0]$	$[0, x, z]$	[3,-16]
4	$[X, 0, 0]$	$[0, -x, z]$	[4,-15]
5	$[0, X, 0]$	$[-x, 0, -z]$	[5,-9]
6	$[0, -X, 0]$	$[x, 0, -z]$	[6,-10]
7	$[X, 0, 0]$	$[0, x, -z]$	[7,-12]
8	$[-X, 0, 0]$	$[0, -x, -z]$	[8,-11]

Table 30: Wyckoff bond: `16c@8f`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, 0, z]$	[1]
2	$[-X, -Y, Z]$	$[-x, 0, z]$	[2]
3	$[-Y, X, Z]$	$[0, x, z]$	[3]

continued ...

Table 30

No.	vector	center	mapping
4	$[Y, -X, Z]$	$[0, -x, z]$	[4]
5	$[-X, Y, -Z]$	$[-x, 0, -z]$	[5]
6	$[X, -Y, -Z]$	$[x, 0, -z]$	[6]
7	$[Y, X, -Z]$	$[0, x, -z]$	[7]
8	$[-Y, -X, -Z]$	$[0, -x, -z]$	[8]
9	$[-X, -Y, -Z]$	$[-x, 0, -z]$	[9]
10	$[X, Y, -Z]$	$[x, 0, -z]$	[10]
11	$[Y, -X, -Z]$	$[0, -x, -z]$	[11]
12	$[-Y, X, -Z]$	$[0, x, -z]$	[12]
13	$[X, -Y, Z]$	$[x, 0, z]$	[13]
14	$[-X, Y, Z]$	$[-x, 0, z]$	[14]
15	$[-Y, -X, Z]$	$[0, -x, z]$	[15]
16	$[Y, X, Z]$	$[0, x, z]$	[16]

* Wyckoff site: 16g, site symmetry: 1

Table 31: Wyckoff bond: 16a@16g

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, z]$	[1]
2	$[-X, -Y, Z]$	$[-x, -y, z]$	[2]
3	$[-Y, X, Z]$	$[-y, x, z]$	[3]
4	$[Y, -X, Z]$	$[y, -x, z]$	[4]
5	$[-X, Y, -Z]$	$[-x, y, -z]$	[5]
6	$[X, -Y, -Z]$	$[x, -y, -z]$	[6]
7	$[Y, X, -Z]$	$[y, x, -z]$	[7]
8	$[-Y, -X, -Z]$	$[-y, -x, -z]$	[8]
9	$[-X, -Y, -Z]$	$[-x, -y, -z]$	[9]
10	$[X, Y, -Z]$	$[x, y, -z]$	[10]
11	$[Y, -X, -Z]$	$[y, -x, -z]$	[11]
12	$[-Y, X, -Z]$	$[-y, x, -z]$	[12]
13	$[X, -Y, Z]$	$[x, -y, z]$	[13]
14	$[-X, Y, Z]$	$[-x, y, z]$	[14]
15	$[-Y, -X, Z]$	$[-y, -x, z]$	[15]
16	$[Y, X, Z]$	$[y, x, z]$	[16]