

BG/Q Physical Torus Dimensions														
Racks	Rows	Columns	Torus size, in nodes					Torus size, in midplanes				Nodes	Cores	Threads
			A	B	C	D	E	A	B	C	D			
1/2	1	1	4	4	4	4	2	1	1	1	1	512	8,192	32,768
1	1	1	4	4	4	8	2	1	1	1	2	1,024	16,384	65,536
2	1	2	4	4	8	8	2	1	1	2	2	2,048	32,768	131,072
3	1	3	4	4	12	8	2	1	1	3	2	3,072	49,152	196,608
4	1	4	8	4	8	8	2	2	1	2	2	4,096	65,536	262,144
4	2	2	4	8	8	8	2	1	2	2	2	4,096	65,536	262,144
6	1	6	12	4	8	8	2	3	1	2	2	6,144	98,304	393,216
6	2	3	4	8	12	8	2	1	2	3	2	6,144	98,304	393,216
6	3	2	4	12	8	8	2	1	3	2	2	6,144	98,304	393,216
8	1	8	8	8	8	8	2	2	2	2	2	8,192	131,072	524,288
8	2	4	8	8	8	8	2	2	2	2	2	8,192	131,072	524,288
8	4	2	8	8	8	8	2	2	2	2	2	8,192	131,072	524,288
10	5	2	4	20	8	8	2	1	5	2	2	10,24	163,84	655,36
12	3	4	8	12	8	8	2	2	3	2	2	12,288	196,608	786,432
12	2	6	12	8	8	8	2	3	2	2	2	12,288	196,608	786,432
16	2	8	16	8	8	8	2	4	2	2	2	16,384	262,144	1,048,576
16	4	4	8	16	8	8	2	2	4	2	2	16,384	262,144	1,048,576
20	5	4	8	20	8	8	2	2	5	2	2	20,48	327,68	1,310,720
24	6	4	8	12	16	8	2	2	3	4	2	24,576	393,216	1,572,864
24	2	12	8	8	12	16	2	2	2	3	4	24,576	393,216	1,572,864
28	7	4	8	28	8	8	2	2	7	2	2	28,672	458,752	1,835,008
32	8	4	8	16	16	8	2	2	4	4	2	32,768	524,288	2,097,152
32	4	8	8	16	16	8	2	2	4	4	2	32,768	524,288	2,097,152
40	5	8	8	20	16	8	2	2	5	4	2	40,96	655,36	2,621,440
48	6	8	16	12	16	8	2	4	3	4	2	49,152	786,432	3,145,728
48	4	12	8	16	12	16	2	2	4	3	4	49,152	786,432	3,145,728
48	3	16	8	12	16	16	2	2	3	4	4	49,152	786,432	3,145,728
56	7	8	8	28	16	8	2	2	7	4	2	57,344	917,504	3,670,016
64	8	8	8	16	16	16	2	2	4	4	4	65,536	1,048,576	4,194,304
64	4	16	8	16	16	16	2	2	4	4	4	65,536	1,048,576	4,194,304
72	9	8	12	12	16	16	2	3	3	4	4	73,728	1,179,648	4,718,592
80	10	8	8	20	16	16	2	2	5	4	4	81,92	1,310,720	5,242,880
96	12	8	16	12	16	16	2	4	3	4	4	98,304	1,572,864	6,291,456
96	8	12	16	16	12	16	2	4	4	3	4	98,304	1,572,864	6,291,456
96	6	16	16	12	16	16	2	4	3	4	4	98,304	1,572,864	6,291,456