Amkor Package Capability — Laminate Products

Package Type & Body Size	Leadcount and Pitch	Factory
CABGA		
5.0 x 5.0	40, 48, 56, 64	J1, K4, P3, C1
5.0 x 10.0	20	K4, P3, C1
6.0 x 6.0	36, 36, 48, 49, 56, 64, 88 100	J1, K4, P3, C1
6.0 x 8.0	24, 48	J1, K4, P3, C1
7.0 x 7.0	49, 64, 84	J1, K4, P3, C1
7.0 x 9.5	24	K4 & P3
8.0 x 8.0	64, 72, 73, 81	J1, K4, P3, C1
9.0 x 9.0	64, 80, 81, 100	J1, K4, P3, C1
10.0 x 10.0	64, 81, 96, 97, 100, 104, 128	J1, K4, P3, C1
11.0 x 11.0	80, 100, 109, 128	J1, K4, P3, C1
12.0 x 12.0	121, 144, 160, 180, 196, 208	J1, K4, P3, C1
13.0 x 13.0	144, 160, 176, 200, 224	J1, K4, P3, C1
14.0 x 14.0	169, 192, 193	J1, K4, P3, C1
15.0 x 15.0	196, 208	J1, K4, P3, C1
16.0 x 16.0	324	J1, K4, P3, C1
17.0 x 17.0	208, 224, 208, 256, 256	J1, K4, P3, C1
18.0 x 18.0	168, 320	J1, K4, P3, C1
19.0 x 19.0	256, 288, 324	J1, K4, P3, C1
21.0 x 21.0	272	J1, K4, P3, C1
CTBGA/CVBGA		
5.0 x 5.0	40, 48, 56, 60, 64	J1, K4, P3, C1
6.0 x 6.0	49, 49, 56, 64, 84, 88, 100	J1, K4, P3, C1
6.0 x 8.0	48	T3, K4, P3, C1
6.0 x 9.0	48	T3, K4, P3, C1
6.0 x 12.0	44	J1, K4, P3, C1
7.0 x 7.0	49, 64, 80, 84, 108	J1, K4, P3, C1
8.0 x 8.0	64, 81, 96, 108, 132	J1, K4, P3, C1
9.0 x 9.0	81, 100	J1, K4, P3, C1
10.0 x 10.0	100, 144	J1, K4, P3, C1
11.0 x 11.0	100, 128	J1, K4, P3, C1
12.0 x 12.0	160, 196, 288	J1, K4, P3, C1
13.0 x 13.0	144, 176, 224	J1, K4, P3, C1
14.0 x 14.0	192	J1, K4, P3, C1
15.0 x 15.0	208	J1, K4, P3, C1
Note: For CABGA / CTBGA / CVBGA, other body sizes and footprints are supported.		
Please contact AMKOR for more details on specific availability.		
PSvfBGA		
10.0 x 10.0	233	K4
12.0 x 12.0	244, 305, 320, 343, 376, 389	K4
14.0 x 14.0	353, 373, 409, 440, 447, 544	K4
15.0 x 15.0	416, 492, 604	K4

Legend: 0.5 mm pitch 0.65 mm pitch 0.8 mm pitch 1.0 mm pitch 1.27 mm pitch 1.5 mm pitch Future packages

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Package Type & Body Size	Leadcount and Pitch	Factory
fc CSP		
5.0 x 5.0	48, 64	P3
6.0 x 6.0	49, 64, 84	P3
7.0 x 7.0	49, 64, 80, 108, 125, 128	P3
7.5 x 7.5	196, 191 (K4)	P3
8.0 x 8.0	49, 64, 81, 96, 132, 169, 201	P3
9.0 x 9.0	64, 100, 156, 233	P3
9.5 x 10.0	282	K4
10.0 x 10.0	81, 100, 116, 144, 180, 273, 293, 284 (K4)	P3
11.0 x 11.0	100, 169	P3
12.0 x 12.0	121, 196, 617, 424 (K4)	P3
13.0 x 13.0	144, 192, 320, 336	P3
14.0 x 14.0	169, 621	P3
15.0 x 15.0	196	P3
17.0 x 17.0	358, 1020	K4 & P3
HPBGA		
35.0 x 35.0	480, 580	K4 & P3
40.0 x 40.0	528, 680, 792	K4 & P3
42.5 x 42.5	540, 560	K4 & P3
45.0 x 45.0	600, 640, 696, 1036	P3
47.5 x 47.5	696	P3
PBGA and MCM-PBGA		
13.0 x 13.0	144	P3
14.0 x 22.0	119, 153	P3
15.0 x 15.0	120, 121, 156, 160, 176, 196	K4 & P3
17.0 x 17.0	144, 192, 208, 248, 252, 256	K4 & P3
19.0 x 19.0	240, 289, 305, 324	K4
23.0 x 23.0	169, 192, 208, 217, 240, 241, 249, 256, 264, 324, 376	K4
23.0 x 23.0	208, 233, 241, 244, 320, 323, 360, 456	K4
23.0 x 23.0	169, 177, 208, 217, 233, 249, 288, 324, 360, 388, 456, 484	P3
27.0 x 27.0	225, 256, 272, 264, 292, 300, 316, 320, 324, 328, 336, 352, 356	K4
	388, 400, 456, 484 416, 452, 456, 484, 672, 676	K4
27.0 x 27.0	225, 244, 256, 272, 284, 300, 316, 318, 324, 328, 336, 348, 356, 361,	P3
	388, 400, 416, 456, 484, 600, 676	P3
27.0 x 27.0	376	C3
31.0 x 31.0	304, 329, 353, 360, 385, 421, 516, 604, 608, 692, 896	K4
31.0 x 31.0	304, 329, 353, 385, 409, 433, 448, 516, 556, 640, 676, 900	P3
35.0 x 35.0	313, 420, 456	C3
35.0 x 35.0	313, 340, 352, 371, 372, 387, 388, 420, 456, 465, 468, 492, 516, 525	K4
	544, 552, 580, 580, 672, 680, 728, 729, 740, 788, 820, 1152, 1156	K4
35.0 x 35.0	313, 352, 388, 404, 436, 452, 456, 492, 496, 520, 548, 552, 580	P3
35.0 x 35.0	313, 452, 456	C3
37.5 x 37.5	500, 524, 529, 553, 625, 627, 844, 851, 863, 974	K4
40.0 x 40.0	432, 503, 557, 564, 569, 596, 658, 713, 776, 792, 809, 928, 1005	K4

Legend: 0.5 mm pitch 0.65 mm pitch 0.8 mm pitch 1.0 mm pitch 1.27 mm pitch 1.5 mm pitch Future packages

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Package Type & Body Size	Leadcount and Pitch	Factory
Super BGA®		
13.0 x 13.0	80	K4 & P3
17.0 x 17.0	88	K4
19.0 x 19.0	159	K4 & P3
21.0 x 21.0	156	K4
23.0 x 23.0	168, 208	K4 & P3
27.0 x 27.0	204, 256, 290, 352	K4 & P3
29.0 x 29.0	272	K4 & P3
31.0 x 31.0	304, 384, 416, 484, 500	K4 & P3
35.0 x 35.0	313, 352, 356, 388, 408, 420, 440, 456, 480, 480, 503, 516,	K4 & P3
	580, 1156	
37.5 x 37.5	480	K4 & P3
40.0 x 40.0	432, 520, 560, 596, 600, 672, 680, 728, 776, 792, 992	K4 & P3
42.5 x 42.5	540, 560, 860	K4 & P3
45.0 x 45.0	596, 600, 652, 656, 731, 900, 1036	K4 & P3
Super FC ®		
17.0 x 17.0	[252]	
19.0 x 19.0	320	
21.0 x 21.0	289, 389	P3, T3
23.0 x 23.0	[480], 484, 548	P3, T3
24.5 x 19.5	655	P3, K4, T3
25.0 x 25.0	360, [572]	P3, K4, T3
27.0 x 27.0	272, 388, 484, 544, 576, 625, [672], 675, 676, 720	P3, K4, T3
29.0 x 29.0	729, [780], 783	P3, K4, T3
31.0 x 31.0	672, 736, 788, 829, 841, [896], 899	P3, K4, T3
33.0 x 33.0	820, 880, 884, 960, [1020]	P3, K4, T3
35.0 x 35.0	388, 440, 472, 528, 552, 680, 900, 960, 1008, [1152]	P3, K4, T3
37.5 x 37.5	876, 1148, [1292]	P3, K4, T3
40.0 x 40.0	525, 680, 717, 792, 956, 957, 957, 1012, 1157, 1248, 1280,	P3, K4, T3
	1309, 1323, 1325, 1377, 1413, 1444, 1445, 1508, 1515, [1517]	P3, K4, T3
42.5 x 42.5	860, 1189, 1252, 1605, [1677], 1680, 1760	P3, K4, T3
45.0 x 45.0	625, 1557, 1724, 1728, 1788, 1837, [1932]	P3, K4, T3

*At least one of the listed factories has the tool listed
[ ] = Standard Leadcount

C1/C3 = Shanghai, China
K1 = Seoul, Korea
K3 = Bupyeong, Korea
K4 = Gwangju, Korea
P1 = Muntinlupa City, Philippines
P3/P4 = Laguna, Philippines
T1/T3 = Lung Tan, Taiwan

Legend: *0.5 mm pitch* *0.65 mm pitch* *0.8 mm pitch* *1.0 mm pitch* *1.27 mm pitch* ***1.5 mm pitch*** *Future packages*

This listing contains information relating to package type, body size, leadcount, pitch and factory location
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Package Type & Body Size	Leadcount and Pitch	Factory
Stacked CSP		
5 x 5	65, 72, 76,	K4
6 x 6	64, 64, 97, 121	K4
6 x 8	48, 54, 63	K4
6.2 x 7.2	96	K4
7 x 7	64, 64, 84, 98, 128, 169,160, 209	J1, K4, C3
7 x 9	56	K4
7 x 10	81	J1, C3
7 x 12	56	K4
7.7 x 9	44	K4,C3
8 x 8	52, 56, 81, 96, 100, 105,121, 132,133, 144, 160, 161, 176, 180, 196, 208	J1, K4, C3
8 x 9.2	44	K4
8 x 10	44, 56, 66, 67, 71, 84, 88,107	K4,C3
8 x 11	66, 72,107	K4,C3
8 x 11.6	73	K4
8 x 12	44, 66, 67, 74	K4
9 x 7	56	K4
9 x 9	81, 100, 121 , 124, 128, 216, 236, 296	K4
9 x 11	103, 105, 165	K4
9 x 12	73, 107, 130, 192	J1
10 x 10	100, 121, 128, 144, 173, 174, 180, 180, 216, 259, 268, 409	K4,C3
10 x 12	79, 88	K4
10 x 13	64	C3
10 x 13.5	149	J1
10 x 14	96	K4
10.5 x 10.5	316	K4
10.5 x 13	107, 137	J1, K4, C3
11 x 8	88	K4
11 x 11	144, 169, 200, 225, 256, 432, 468	K4
11 x 13	105, 135	K4,C3
11 x 14	225	J1
11.5 x 13	153	K4
12 x 12	117, 128, 144, 160, 161, 168, 179, 208, 228, 272, 277, 289, 318, 385	J1, K4, C3
12 x 16	169	K4
12 x 18	169, 199	K4
13 x 13	144, 225, 289, 294, 325, 341, 401, 417	K4
14 x 14	134, 151, 152, 300, 348, 409, 516	K4,C3
14 x 18	100 , 169	K4
15 x 15	160, 196, 255, 272, 289, 543	K4
17 x 17	208, 256	K4
19 x 19	324 , 484	K4

C1/C3 = Shanghai, China P1 = Muntinlupa City, Philippines
K1 = Seoul, Korea P3/P4 = Laguna, Philippines
K3 = Bupyeong, Korea T1/T3 = Lung Tan, Taiwan
K4 = Gwangju, Korea J1 = Iwate, Japan

Legend: 0.4 mm pitch 0.5 mm pitch 0.6 mm pitch 0.65 mm pitch 0.75 mm pitch 0.8 mm pitch 1.0 mm pitch Future packages

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Package Type & Body Size	Leadcount and Pitch	Factory
fcSCSP		
7.0x7.0	*116, 144*	K4
10.0x10.0	***384, 387***	K4
10.0x13.0	*389*	K4
11.0x11.0	***456***	K4
12.0x12.0	***560***	K4
14.0x14.0	***608***	K4
15.0x15.0	***543, 603***	K4
PSvfBGA		
10.0 x 10.0	*233, 292*	K4
12.0 x 12.0	*244, 305, 320, 324, 343, 352, 376*	K4
14.0 x 14.0	*353, 373, 409, 424, 440, 441, 469, 484, 544*	K4
15.0 x 15.0	*416, 492, 604, 626*	K4
PSvfBGA - PoP / TMV (Wirebond)		
10.0 x 10.0	*233, 292*	K4
12.0 x 12.0	*244, 305, 320, 324, 343, 352, 376,* ***401***	K4
14.0 x 14.0	*353, 373, 409, 424, 440, 441, 469, 484, 544*	K4
15.0 x 15.0	***416,*** *492, 604, 626*	K4
PSvfBGA - PoP / TMV (Flip Chip)		
12.0 x 12.0	***401, 515, 516***	K4
14.0 x 14.0	***617, 620, 904***	K4

C1/C3 = Shanghai, China P1 = Muntinlupa City, Philippines
K1 = Seoul, Korea P3/P4 = Laguna, Philippines
K3 = Bupyeong, Korea T1/T3 = Lung Tan, Taiwan
K4 = Gwangju, Korea J1 = Iwate, Japan

Legend: 0.4 mm pitch 0.5 mm pitch 0.6 mm pitch 0.65 mm pitch 0.75 mm pitch 0.8 mm pitch 1.0 mm pitch Future packages

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