


AMKOR/ANAM CONFIDENTIAL

Amkor Technology, Inc.
 Chandler, Arizona, USA
 Amkor Technology (Japan), Inc.
 1-1-1, Shinjuku Ward, Tokyo, Japan
 Amkor Technology (Philippines), Inc.
 10th Floor, 1000 Market Street, Pasig City, Philippines



PACKAGE OUTLINE MATRIX, TOPP
 7 x 7 mm BODY, 1.00/0.10 mm THICK,
 1.50 mm THICK (OPTIONAL 0.75)

32770
 PRINTING IS SCALED TO FIT
 DO NOT SCALE DRAWING

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JEDEC VARIATION ALL DIMENSIONS IN MILLIMETERS

Y	X	MIN.	NOM.	MAX.	1	2	3	4
A	A1	0.05	0.10	0.15	13			
A	A4	0.95	1.00	1.05				
B	B1	9.00 BSC			4			
B	B2	7.00 BSC			7.8			
B	B3	9.00 BSC			4			
B	B4	7.00 BSC			7.8			
E	E1	0.45	0.50	0.75				
L	L1	0.45	0.50	0.75				
N	N1	0.45	0.50	0.75				
F	F1	0.30	0.37	0.45	9			
B	B1	0.30	0.35	0.40				
B	B2	0.30	0.35	0.40				
CC	CC1	0.10	0.10	0.10				
CC	CC2	0.10	0.10	0.10				
CC	CC3	0.10	0.10	0.10				
CC	CC4	0.20	0.20	0.20				

JEDEC VARIATION ALL DIMENSIONS IN MILLIMETERS

Y	X	MIN.	NOM.	MAX.	1	2	3	4
A	A1	0.05	0.10	0.15	13			
A	A4	0.95	1.00	1.05				
B	B1	9.00 BSC			4			
B	B2	7.00 BSC			7.8			
B	B3	9.00 BSC			4			
B	B4	7.00 BSC			7.8			
E	E1	0.45	0.50	0.75				
L	L1	0.45	0.50	0.75				
N	N1	0.45	0.50	0.75				
F	F1	0.17	0.22	0.27	9			
B	B1	0.17	0.20	0.23				
B	B2	0.17	0.20	0.23				
CC	CC1	0.08	0.08	0.08				
CC	CC2	0.08	0.08	0.08				
CC	CC3	0.08	0.08	0.08				
CC	CC4	0.08	0.08	0.08				

JEDEC VARIATION ALL DIMENSIONS IN MILLIMETERS

Y	X	MIN.	NOM.	MAX.	1	2	3	4
A	A1	0.05	0.10	0.15	13			
A	A4	0.95	1.00	1.05				
B	B1	9.00 BSC			4			
B	B2	7.00 BSC			7.8			
B	B3	9.00 BSC			4			
B	B4	7.00 BSC			7.8			
E	E1	0.45	0.50	0.75				
L	L1	0.45	0.50	0.75				
N	N1	0.45	0.50	0.75				
F	F1	0.13	0.18	0.23	9			
B	B1	0.13	0.16	0.19				
B	B2	0.13	0.16	0.19				
CC	CC1	0.08	0.08	0.08				
CC	CC2	0.08	0.08	0.08				
CC	CC3	0.08	0.08	0.08				
CC	CC4	0.07	0.07	0.07				

- NOTES:
- ALL DIMENSIONS AND TOLERANCES REFER TO ANSI Y14.5-1998.
 - LEAD PROTRUSION SHALL BE 0.08mm TOTAL IN EXCESS OF THE b DIMENSION AT MAXIMUM MATERIAL RADIUS OR THE FOOT.
 - LEADS WHERE LEADS EXIT PLASTIC BODY AT CENTERLINE BETWEEN DATUMS (E2) AND (E3) TO BE DETERMINED AT CENTERLINE BETWEEN LEADS WHERE LEADS EXIT PLASTIC BODY AT DATUM PLANE (E2).
 - LEADS WHERE LEADS EXIT PLASTIC BODY AT DATUM PLANE (E3) TO BE DETERMINED AT SEATING PLANE (E2).
 - DIMENSIONS D1 AND E1 DO NOT INCLUDE MOLD PROTRUSION DIMENSIONS.
 - DIMENSIONS D2 AND E2 REPRESENT THE SIZE OF THE EXPOSED PAD. THE ACTUAL DIMENSIONS ARE SPECIFIED ON THE BONDING DIAGRAM, AND IS DEPENDENT ON THE DIE SIZE.
 - EXPOSED PAD SHALL BE COPLANAR WITH BOTTOM OF PACKAGE WITHIN 0.05.
 - CORNER CHAMFER OF EXPOSED DIE PAD SHALL BE WITHIN 0.30 MM.
 - DIMENSION b DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.08mm TOTAL IN EXCESS OF THE b DIMENSION AT MAXIMUM MATERIAL RADIUS OR THE FOOT.
 - CONTROLLING DIMENSION MILLIMETER.
 - MAXIMUM ALLOWABLE DIE THICKNESS TO BE ASSEMBLED IN THIS PACKAGE FAMILY IS 0.38 MILLIMETERS.
 - THIS OUTLINE COMPLIES TO JEDEC PUBLICATION 95 (MCPAD) WITH THE EXCEPTION OF THE SEATING PLANE AT ITS DEFINED AS THE DISTANCE FROM THE SEATING PLANE TO THE LOWEST POINT OF THE PACKAGE BODY.
 - DIMENSION D2 AND E2 REPRESENT THE SIZE OF THE EXPOSED PAD, AND IS DEPENDENT ON THE DIE SIZE.
 - EXPOSED PAD SHALL BE COPLANAR WITH BOTTOM OF PACKAGE WITHIN 0.05.
 - CORNER CHAMFER OF EXPOSED DIE PAD SHALL BE WITHIN 0.30 MM.