

MECHANICAL CASE OUTLINE

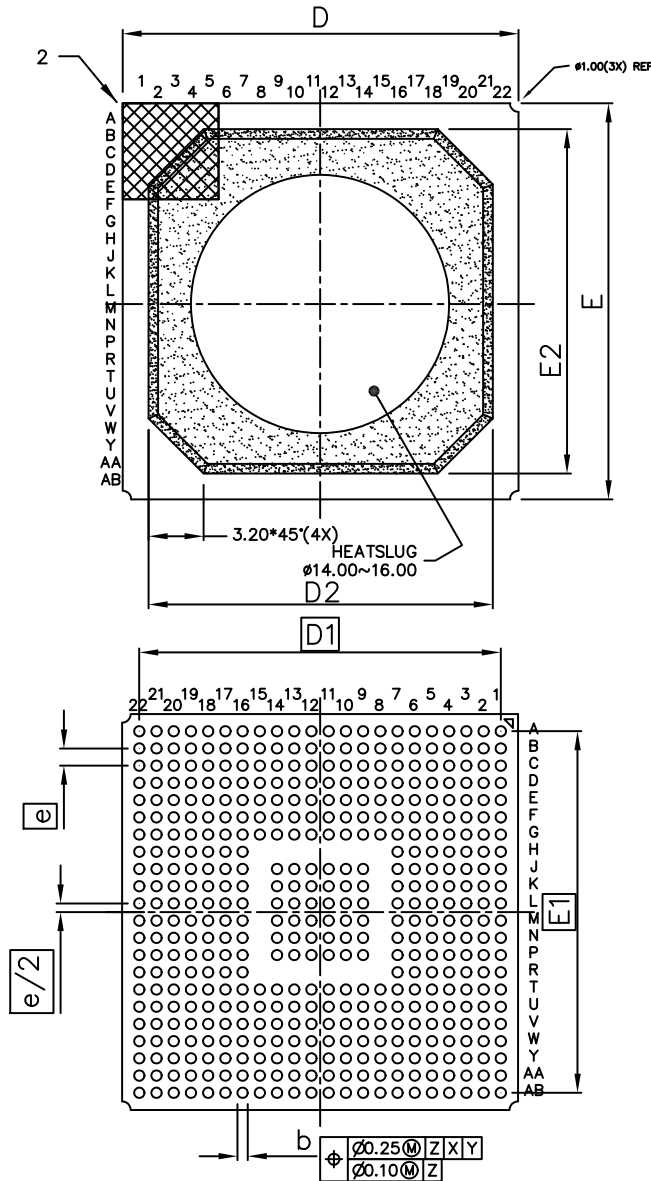
PACKAGE DIMENSIONS

ON Semiconductor®

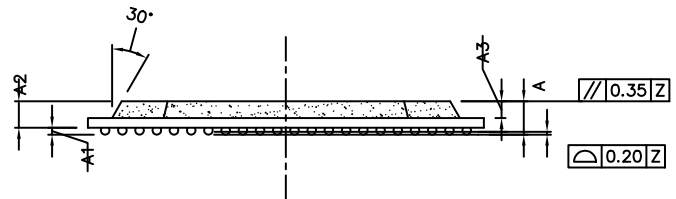


SBGA 456, 23x23
CASE 126AA-01
ISSUE O

DATE 09 JUL 2008



SYMBOL	DIMENSIONS
A	2.03 ±0.13
A1	0.50 ±0.10
A2	1.53 REF
A3	0.97 REF
b	0.60 ±0.10
D/E	23.00 ±0.20
D1/E1	21.00
D2/E2	20.00 REF
e	1.00
JEDEC REF #	MS-034 Var AAJ-1 (DEPOP)



NOTES:

1. ALL LINEAR DIMENSIONS ARE IN MILLIMETERS.
2. DETAILS OF A1 CORNER ARE OPTIONAL, AND MAY CONSIST OF INK DOT, LASER MARK OR METALIZED MARKING, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED.
3. DIMENSION "A" ALREADY CONSIDERS COLLAPSE BALLS.

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W/B NO.	BALL NO.	W/B NO.	BALL NO.	W/B NO.	BALL NO.	W/B NO.	BALL NO.	W/B NO.	BALL NO.
1	E4	65	R4	129	Y15	191	H22	253	B12
2	F4	66	AA1	130	V13	192	J21	254	C12
3	D3	67	W2	131	AA17	193	G22	255	D13
4	C2	68	U3	132	W13	194	K20	256	A12
5	E3	69	Y2	133	AB20	195	L18	257	E12
6	G4	70	V3	134	AA18	196	H21	258	A11
7	B1	71	T4	135	AB21	197	F22	259	B11
8	D2	72	W3	136	Y16	198	L19	260	D11
9	F3	73	U4	137	AA19	199	E22	261	C11
10	H4	74	AA3	138	AA20	200	G21	262	A10
11	C1	75	V4	139	Y17	201	J20	263	B10
12	E2	76	AB3	140	V14	202	D22	264	D12
13	G3	77	Y4	141	Y18	203	F21	265	A9
14	D1	78	AA4	142	W14	204	K18	266	E11
15	J5	79	AB4	143	AA22	205	C22	267	C10
16	J4	80	W6	144	Y19	206	K19	268	B9
17	F2	81	W7	145	Y21	207	H20	269	A8
18	H3	82	W5	146	W15	208	E21	270	D10
19	E1	83	Y5	147	W16	209	B22	271	B8
20	G2	84	Y6	148	Y22	210	D21	272	C9
21	F1	85	AA5	149	W17	211	G20	273	E10
22	J3	86	AB5	150	V19	212	C21	274	A7
23	K4	87	AA6	151	V20	213	F20	275	A6
24	H2	88	Y7	152	V21	214	J18	276	B7
25	K5	89	W8	153	V22	215	A21	277	C8
26	G1	90	AB6	154	W21	216	J19	278	A5
27	H1	91	AA7	155	W20	217	E20	279	D9
28	J2	92	Y8	156	U19	218	D20	280	B6
29	K3	93	AB7	157	U20	219	B20	281	E9
30	J1	94	V9	158	T19	220	H19	282	A4
31	K2	95	W9	159	U22	221	G19	283	C7
32	K1	96	AA8	160	R19	222	A20	284	D8
33	L4	97	AB8	161	U21	223	F19	285	B5
34	L3	98	Y9	162	T20	224	E19	286	A3
35	L5	99	AA9	163	W18	225	D15	287	A2
36	L2	100	AB9	164	W22	226	D18	288	C6
37	L1	101	AB10	165	T21	227	C19	289	B4
38	M1	102	V10	166	R20	228	D17	290	B3
39	M2	103	AA10	167	T22	229	C18	291	C5
40	M3	104	Y10	168	R21	230	D16	292	D7
41	N1	105	W10	169	P18	231	B19	293	C4
42	M4	106	AB11	170	P19	232	C17	294	D6
43	N2	107	AA11	171	R22	233	B18	295	D5
44	M5	108	AB12	172	P20	234	A19		
45	P1	109	Y11	173	P21	235	C16		
46	P2	110	AA12	174	P22	236	B17		
47	N3	111	AB13	175	N22	237	A18		
48	R1	112	V11	176	N21	238	D14		
49	T1	113	AB14	177	N18	239	C15		
50	R2	114	W11	178	N20	240	B16		
51	N4	115	AA13	179	N19	241	A17		
52	P3	116	Y12	180	M22	242	A16		
53	N5	117	AB15	181	M21	243	B15		
54	U1	118	AA14	182	L22	244	C14		
55	T2	119	AB16	183	M20	245	A15		
56	V1	120	Y13	184	L21	246	E14		
57	R3	121	V12	185	K22	247	B14		
58	U2	122	AA15	186	M18	248	E13		
59	W1	123	W12	187	J22	249	A14		
60	Y1	124	AB17	188	M19	250	C13		
61	P4	125	AB18	189	K21	251	B13		
62	T3	126	AB19	190	L20	252	A13		
63	P5	127	Y14						
64	V2	128	AA16						


COMMENTS:
 THE FOLLOWING BALL ADDRESS ARE GND:
 A1, A22, AA2, AA21, AB1, AB22, B2, B21, C3, C20, D4, D19, E5, E6, E7, E16, E17, E18, F5, F6, F7, F16, F17, F18, G5, G6, G7, G16, G17, G18, J9, J10, J11, J12, J13, J14, K9, K10, K11, K12, K13, K14, L9, L10, L11, L12, L13, L14, M9, M10, M11, M12, M13, M14, N9, N10, N11, N12, N13, N14, P9, P10, P11, P12, P13, P14, T5, T6, T7, T16, T17, T18, U5, U6, U7, U16, U17, U18, V5, V6, V7, V16, V17, V18, W4, W19, Y3, Y20

THE FOLLOWING BALL ADDRESS ARE PWR1:
 G8, G9, G10, G11, G12, G13, G14, G15, H7, H16, J7, J16, K7, K16, L7, L16, M7, M16, N7, N16, P7, P16, R7, R16, T8, T9, T10, T11, T12, T13, T14, T15

THE FOLLOWING BALL ADDRESS ARE PWR2:
 E8, E15, F8, F9, F10, F11, F12, F13, F14, F15, H5, H6, H17, H18, J6, J17, K6, K17, L6, L17, M6, M17, N6, N17, P6, P17, R5, R6, R17, R18, U8, U9, U10, U11, U12, U13, U14, U15, U18, V8, V15

THE FOLLOWING BALL ADDRESS ARE No Connect:
 AB2

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