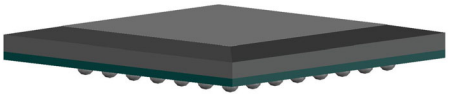
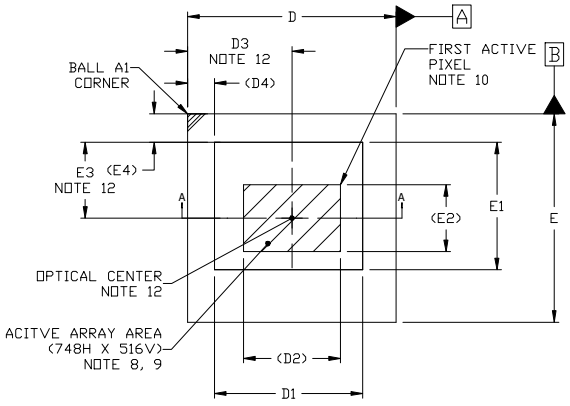
MECHANICAL CASE OUTLINE
PACKAGE DIMENSIONS

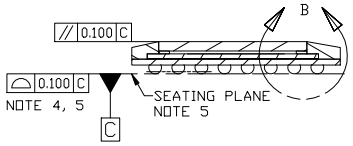


IBGA63 9x9x1.54, 1.00P
CASE 503AL
ISSUE B

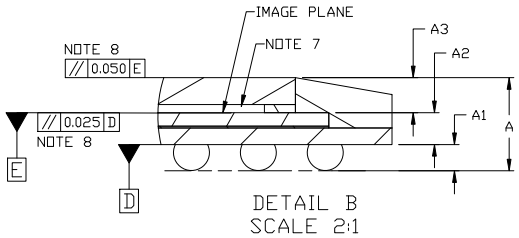
DATE 18 MAY 2023



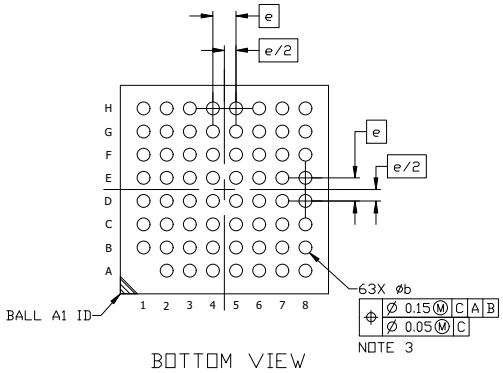
TOP VIEW



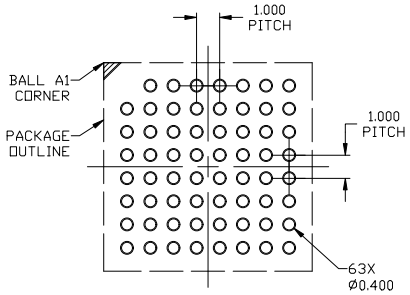
SECTION A-A



DETAIL B
SCALE 2:1



BOTTOM VIEW



RECOMMENDED MOUNTING FOOTPRINT*

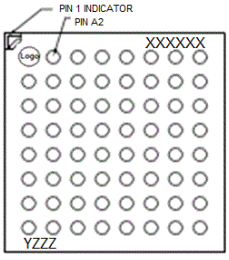
* FOR ADDITIONAL INFORMATION ON OUR Pb-FREE STRATEGY AND SOLDERING DETAILS, PLEASE DOWNLOAD THE ON SEMICONDUCTOR SOLDERING AND MOUNTING TECHNIQUES REFERENCE MANUAL, SOLDERRM/D.

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS (mm).
3. SOLDER BALL DIAMETER IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER PARALLEL TO DATUM C.
4. COPLANARITY APPLIES TO THE SPHERICAL CROWNS OF THE SOLDER BALLS.
5. DATUM C, THE SEATING PLANE IS DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
6. GLASS: 0.400 THICKNESS; REFRACTIVE INDEX = 1.52; AR COATING R<1% 420-850nm (EACH SIDE).
7. AIR GAP BETWEEN GLASS AND PIXEL ARRAY: 0.125 THICKNESS.
8. PARALLELISM APPLIES ONLY TO THE ACTIVE ARRAY.
9. MAXIMUM ROTATION OF ACTIVE ARRAY RELATIVE TO DATUMS A AND B IS ±0.5°.
10. REFER TO THE DEVICE DATA SHEET FOR TOTAL PIXEL ARRAY DEFINITIONS.
11. PACKAGE CENTER (X, Y) = (0.000, 0.000).
12. OPTICAL CENTER RELATIVE TO PACKAGE CENTER (X, Y) = (0.000, 0.000).

DIM	MILLIMETERS		
	MIN.	NOM.	MAX.
A	~	~	1.540
A1	0.340	0.390	0.440
A2	0.425	0.475	0.525
A3	0.475	0.525	0.575
b	0.450	0.500	0.550
D	8.925	9.000	9.075
D1	6.300	6.400	6.500
D2	4.189 REF.		
D3	4.425	4.500	4.575
D4	1.157 REF.		
E	8.925	9.000	9.075
E1	5.400	5.500	5.600
E2	2.890 REF.		
E3	4.425	4.500	4.575
E4	1.225 REF.		
e	1.000 BSC.		

GENERIC MARKING DIAGRAM*



XXXX = Specific Device Code
Y = Year
ZZZ = Lot Traceability

*This information is generic. Please refer to device data sheet for actual part marking. Pb−Free indicator, “G” or microdot “▪”, may or may not be present. Some products may not follow the Generic Marking.

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