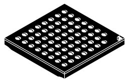
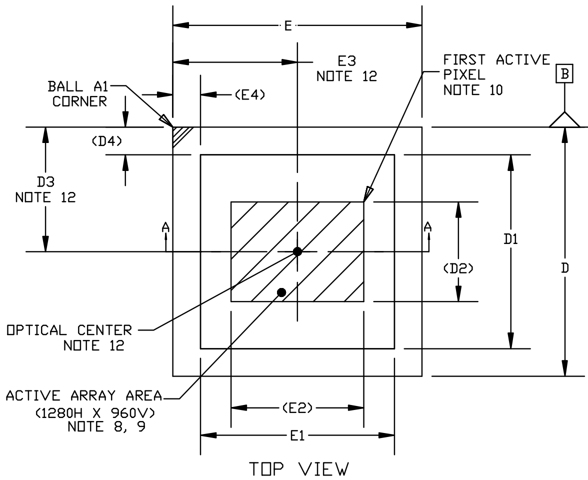
MECHANICAL CASE OUTLINE
PACKAGE DIMENSIONS



SCALE 1:1

IBGA63 9x9
CASE 503AY
ISSUE C

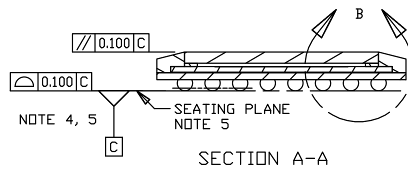
DATE 06 JAN 2023

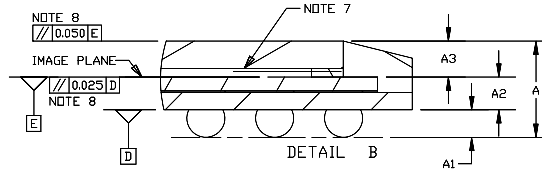


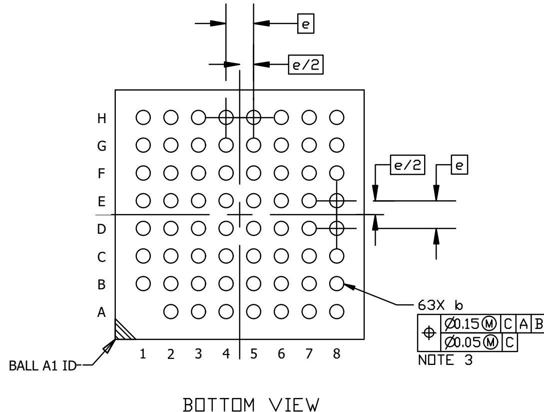
NOTES:

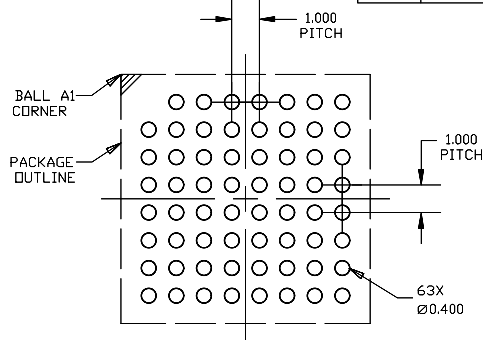
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS [mm].
3. SOLDER BALL DIAMETER IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER PARALLEL TO DATUM C.
4. COPLANARITY APPLIES TO THE SPHERICAL CROWNS OF THE SOLDER BALLS.
5. DATUM C, THE SEATING PLANE IS DEFINED 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	~	~	1.550
A1	0.350	0.400	0.450
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	6.900	7.000	7.100
D2	3.600 REF		
D3	4.425	4.500	4.575
D4	1.002 REF		
E	8.925	9.000	9.075
E1	6.900	7.000	7.100
E2	4.800 REF		
E3	4.425	4.500	4.575
E4	0.999 REF		
e	1.000 BSC		





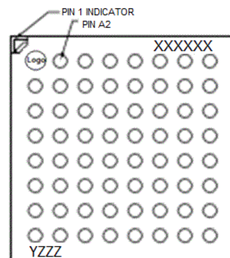




RECOMMENDED MOUNTING FOOTPRINT*

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

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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