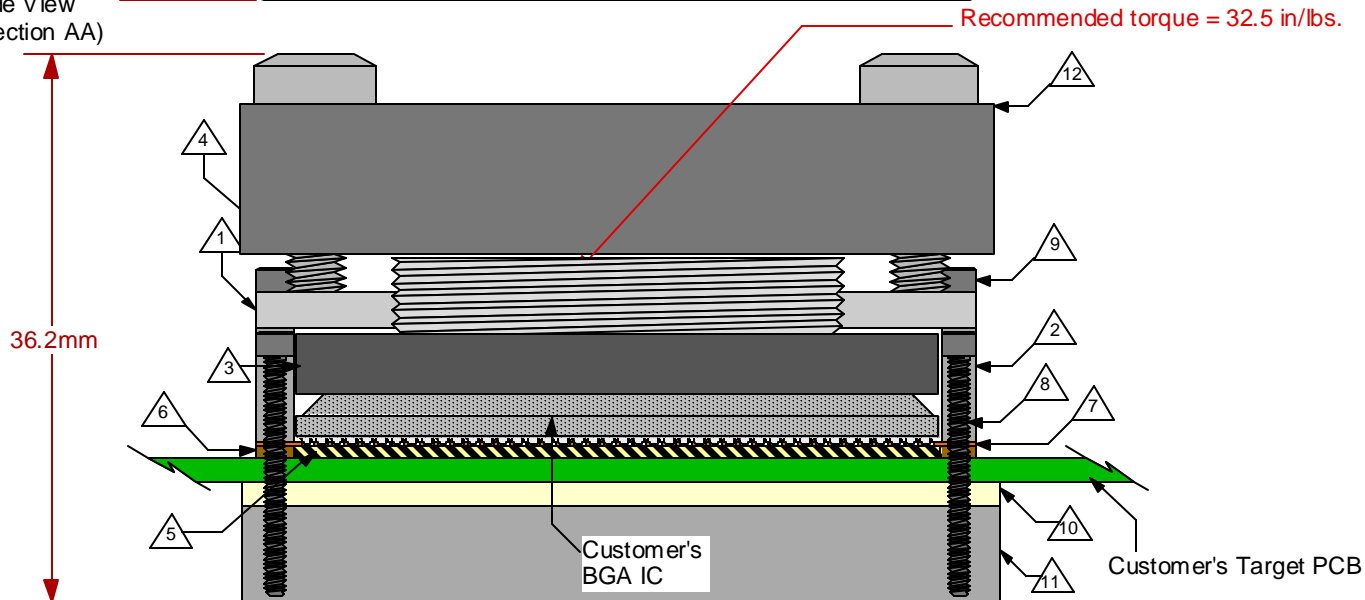


Side View
(Section AA)



GHz BGA Socket - Direct mount, solderless

Features

- Directly mounts to target PCB (needs tooling holes) with hardware.
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Ball guide prevents over compression of elastomer
- Easily removable swivel socket lid

- 1 Socket Lid: Black anodized 6061 Aluminum. Thickness = 2.5mm.
- 2 Socket base: Black anodized 6061 Aluminum. Thickness = 7.5mm.
- 3 Compression Plate: Black anodized 6061 Aluminum. Thickness = 4.0mm.
- 4 Compression screw: Clear anodized 6061 Aluminum. Thickness = 10mm, Hex socket = 5mm.
- 5 Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.75mm.
- 6 Elastomer Guide: Cirlex or equivalent. Thickness = 0.75mm.
- 7 Ball Guide: Kapton polyimide.
- 8 Socket base screw: Socket head cap, Alloy steel with black oxide finish, 0-80 fine thread, 9.525mm long.
- 9 Socket lid screw: Socket head cap, Alloy steel with black oxide finish, 0-80 fine thread, 4.76mm long.
- 10 Insulation Plate: FR4/G10, 1.59mm thick.
- 11 Backing Plate: Anodized 6061 Aluminum 6.35mm thick.
- 12 Fan: 50mm square, 10mm thick, 10 CFM air flow, 12V

SG-BGA-6119 Drawing

Status: Released

Scale: -

Rev: B

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PO BOX 21151 ST. PAUL, MN 55121
Tele: (651) 452-8100
www.ironwoodelectronics.com

Drawing: Heidi Hansen

Date: 11/11/04

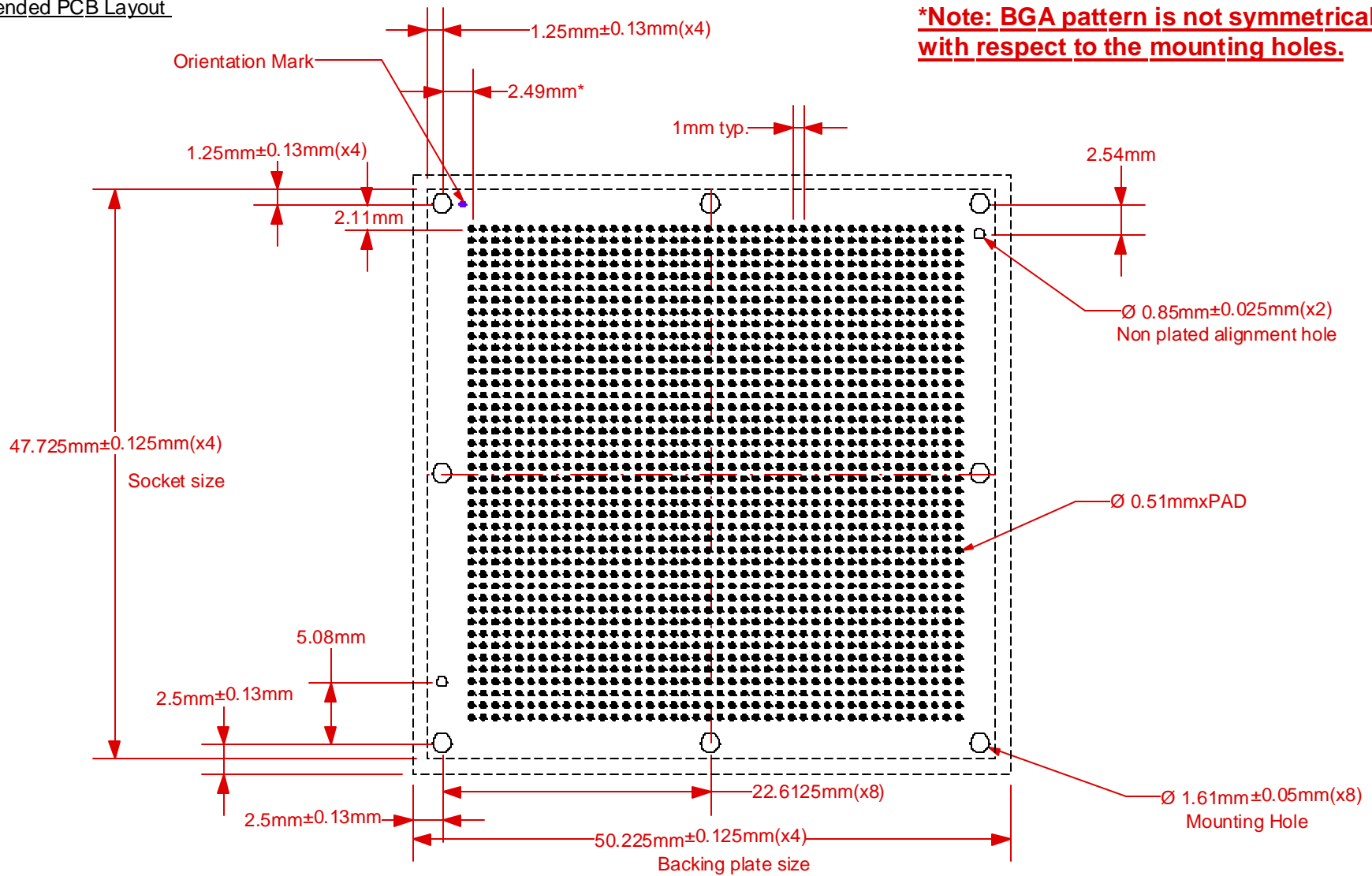
File: SG-BGA-6119 Dwg

Modified: 3/1/05

All tolerances: ± 0.125 mm (unless stated otherwise). Materials and specifications are subject to change without notice.

Recommended PCB Layout
Top View

***Note: BGA pattern is not symmetrical with respect to the mounting holes.**




Target PCB Recommendations

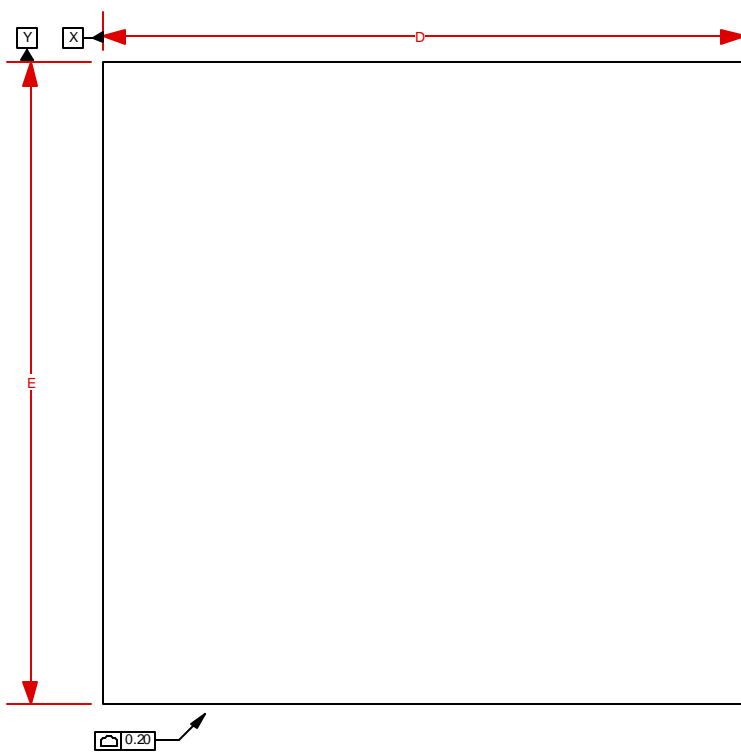
Total thickness: 2.4mm min.
 Plating: Gold or Solder finish
 PCB Pad height: Same or higher than solder mask

NOTE: Steel backing plate may be required based on end user's application

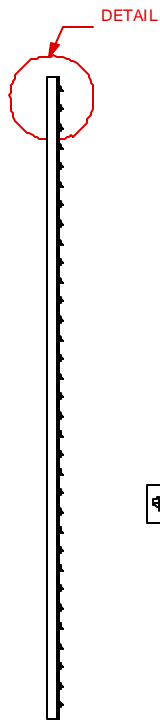
Recommended PCB Layout Tolerances: ±0.025mm [±0.001"] unless stated otherwise.

 <p>SG-BGA-6119 Drawing © 2004 IRONWOOD ELECTRONICS, INC. PO BOX 21151 ST. PAUL, MN 55121 Tele: (651) 452-8100 www.ironwoodelectronics.com</p>	Status: Released	Scale: 2:1	Rev: B
	Drawing: Heidi Hansen		Date: 11/11/04
	File: SG-BGA-6119 Dwg		Modified: 3/1/05

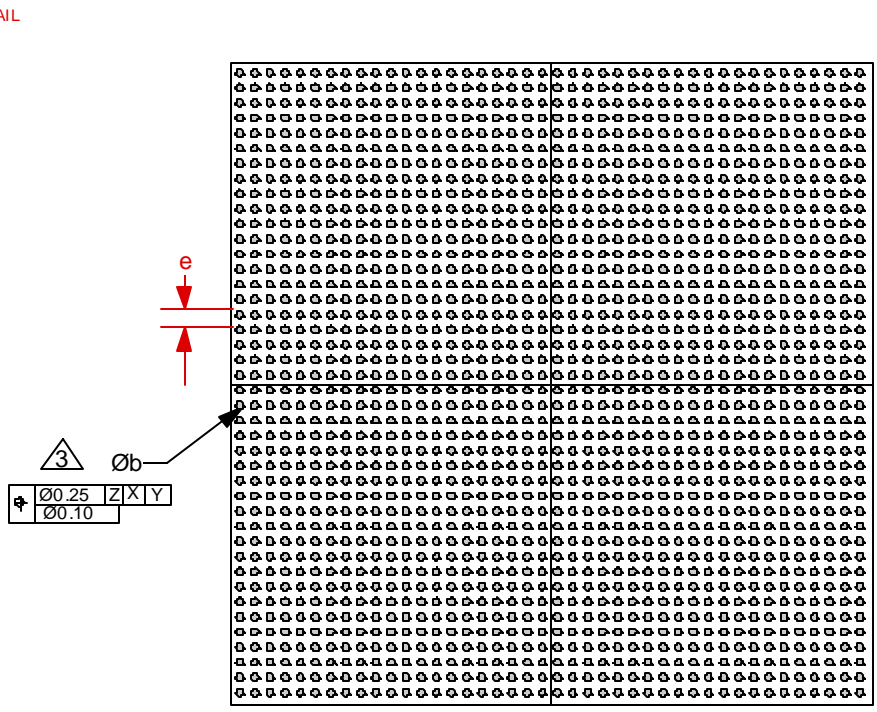
Compatible BGA Spec



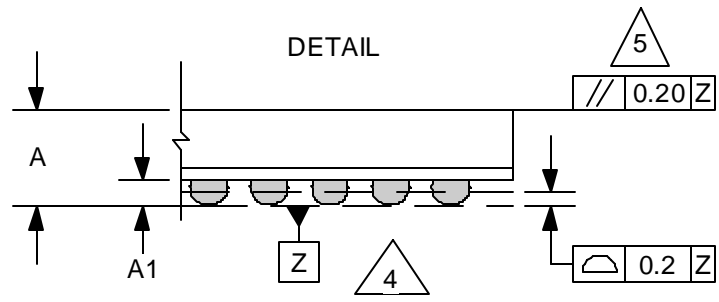
TOP VIEW



SIDE VIEW




BOTTOM VIEW



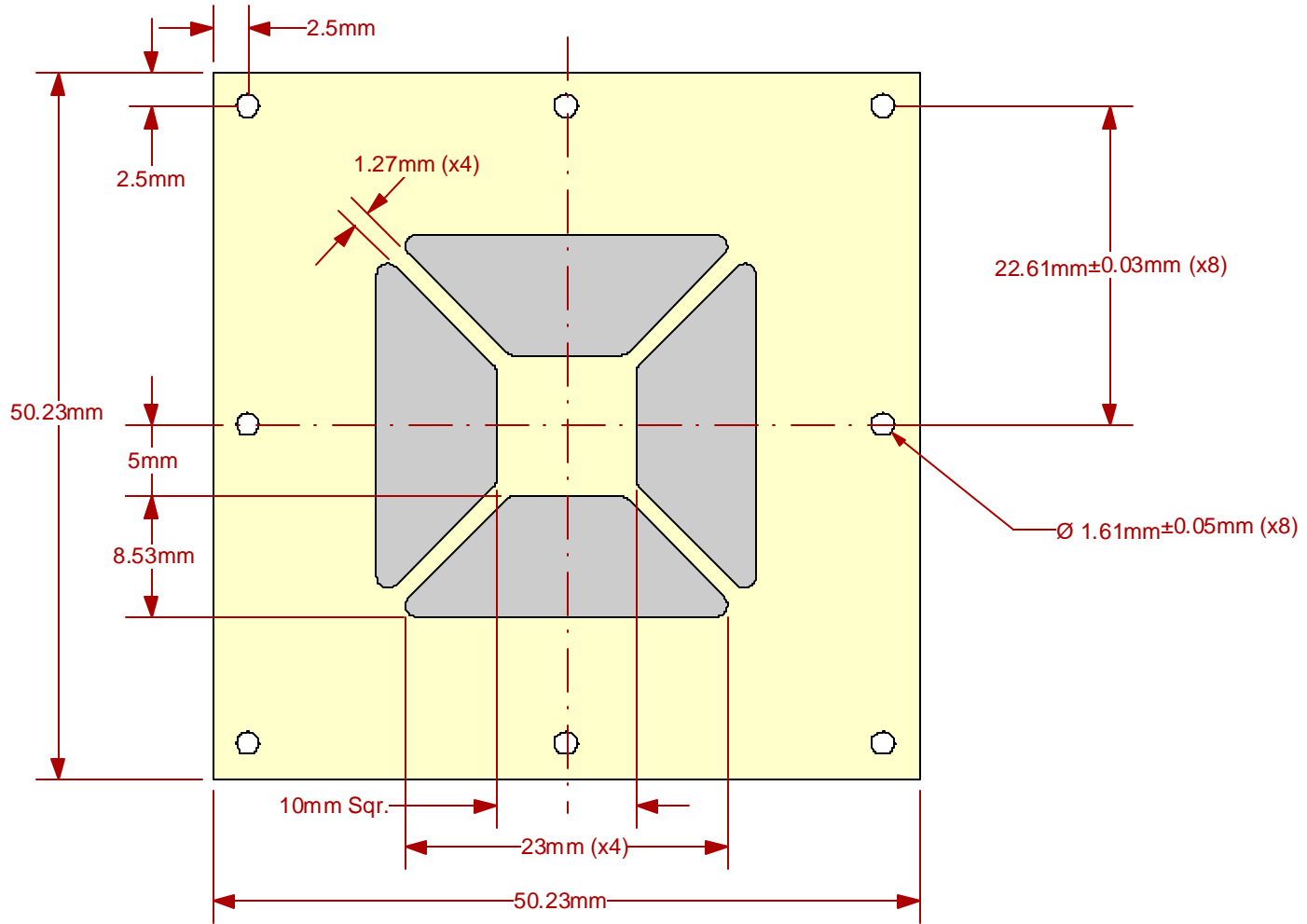
1. Dimensions are in millimeters.
 2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
- 3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
 - 4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
 - 5. Parallelism measurement shall exclude any effect of mark on top surface of package.

DIM	MIN	MAX
A		3.45
A1	0.40	0.60
b		0.70
D	42.50 BSC	
E	42.50 BSC	
e	1.0 BSC	

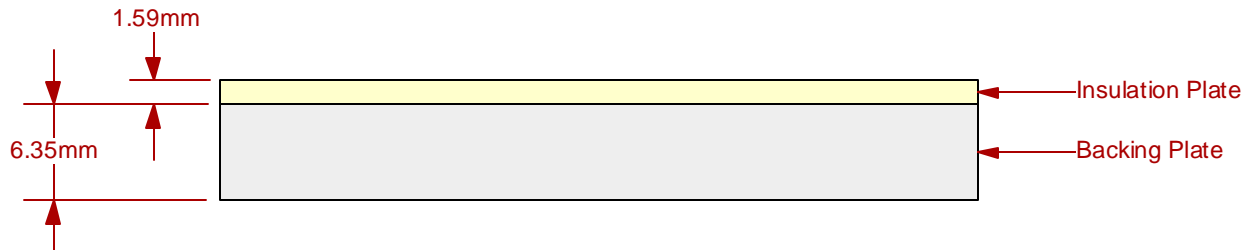
Array: 42x42

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	File: SG-BGA-6119 Dwg		Modified: 3/1/05


Top View



Side View



Description: Backing Plate with Insulation Plate

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		Drawing: Heidi Hansen	Date: 11/11/04	
		File: SG-BGA-6119 Dwg	Modified: 3/1/05	

All dimensions are in mm.
 All tolerances are +/- 0.125mm.
 (Unless stated otherwise)