

Side View

(Section AA)

Assembled

8.25mm + IC thickness

/12\

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



Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.



Socket base: Black anodized Aluminum. Thickness = 5mm.



Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.



Compression screw: Clear anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.



Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.75mm.



Elastomer Guide: Non-clad FR4. Thickness = 0.725mm.



Ball Guide: Kapton polyimide.



Socket base screw: Socket head cap, alloy steel with black oxide finish, 0-80 fine thread, 9.525mm long.



Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.



Socket base nut: 18-8 Stainless steel, 0-80 fine thread



Nylon washer: 1.73mm ID; 4.78mm OD 0.64mm thickness.



Customer's Target PCB

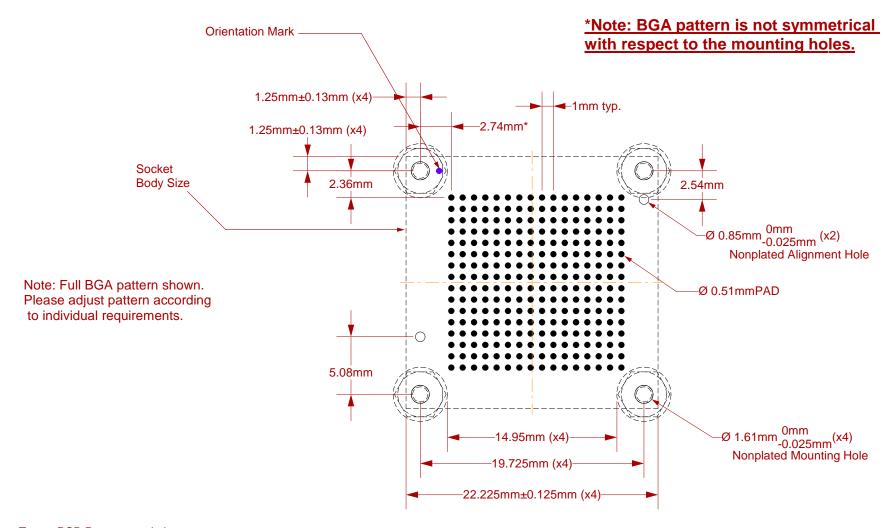
IC Frame: FR4

	SG-BGA-6143 Drawing	Status: Released	Scale	: -	Rev: B	
	© 2009 IRONWOOD ELECTRONICS, INC. Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen	Drawing: H. Hansen		Date: 4/26/05	
		File: SG-BGA-6143 Dwg	File: SG-BGA-6143 Dwg		Modified: 7/6/09, AE	

Customer's

BGAIC

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



Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish

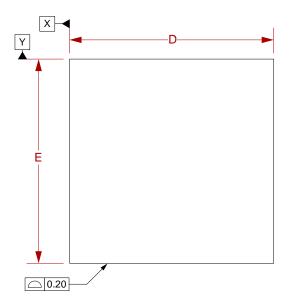
PCB Pad height: Same or higher than solder mask

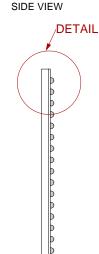
NOTE: Steel backing plate may be required based on end user's application

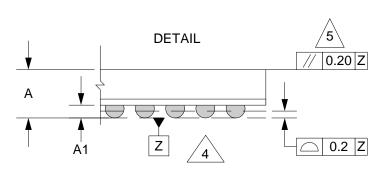
Recommended PCB Layout Tolerances: ±0.025mm [±0.001"] unless stated otherwise.

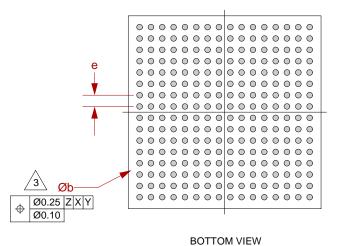
SG-BGA-6143 Drawing	Status: Released	Scale	: 3:1 Rev: B	
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	File: SG-BGA-6143 Dwg		Modified: 7/6/09, AE	

TOP VIEW









- 1. Dimensions are in millimeters.
- Interpret dimensions and tolerances per ASME Y14.5M-1994.
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Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.



Datum Z (seating plane) is defined by the spherical crowns of the solder balls.



Parallelism measurement shall exclude any effect of mark on top surface of package.

DIM	MIN	MAX	
Α		2.02	
A1	0.3	0.5	
b		0.6	
D	17.0	0 BSC	
E	17.0	0 BSC	
е	1.0 BSC		

Array 16x16

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