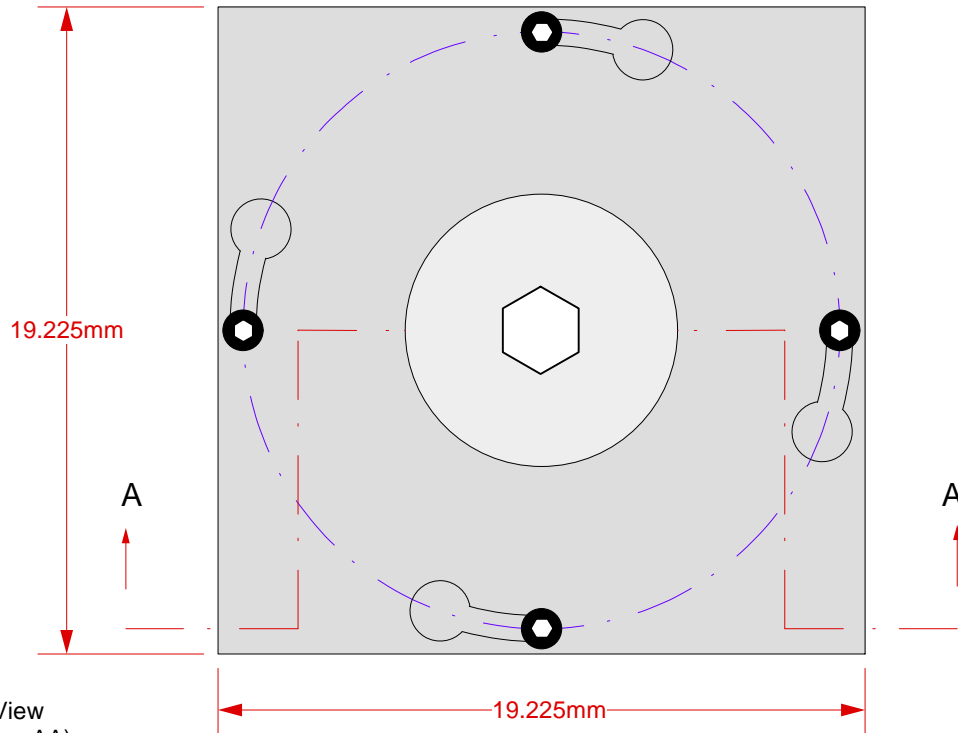


Top View

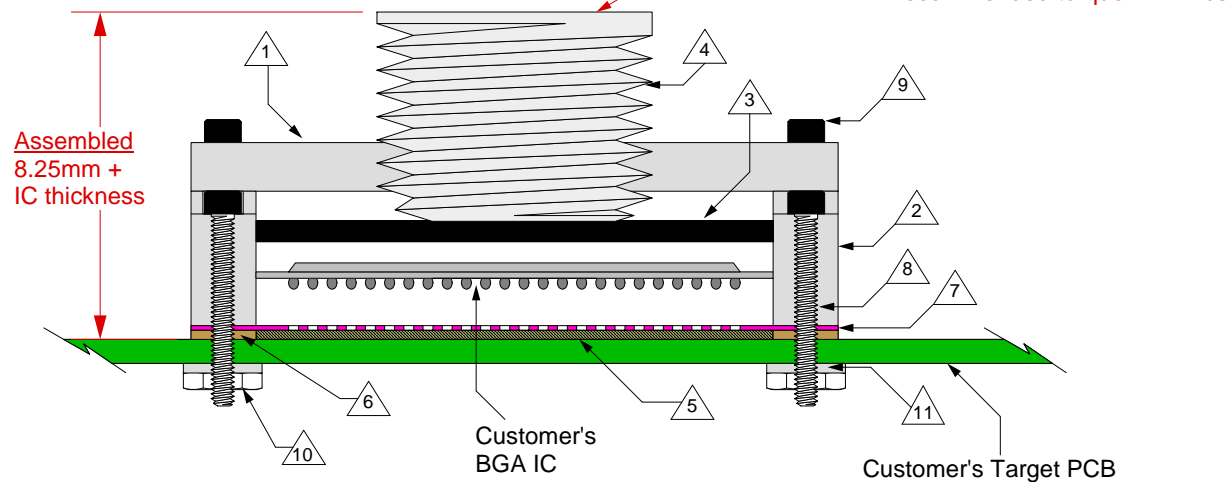


# GHz BGA Socket - Direct mount, solderless

## 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

Side View  
(Section AA)



- △ 1 Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
- △ 2 Socket base: Black anodized Aluminum. Thickness = 5mm.
- △ 3 Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
- △ 4 Compression screw: Clear anodized Aluminum. Thickness = 5mm, 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: Non-clad FR4. Thickness = 0.725mm.
- △ 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: Shoulder screw, 18-8 SS, 0-80 fine thread.
- △ 10 Socket base nut: 18-8 Stainless steel, 0-80 fine thread.
- △ 11 Nylon washer: 1.73mm ID; 4.78mm OD 0.64mm thickness.

## SG-BGA-6112 Drawing

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

Status: Released

Scale: -

Rev: B

Drawing: H. Hansen

Date: 4/26/04

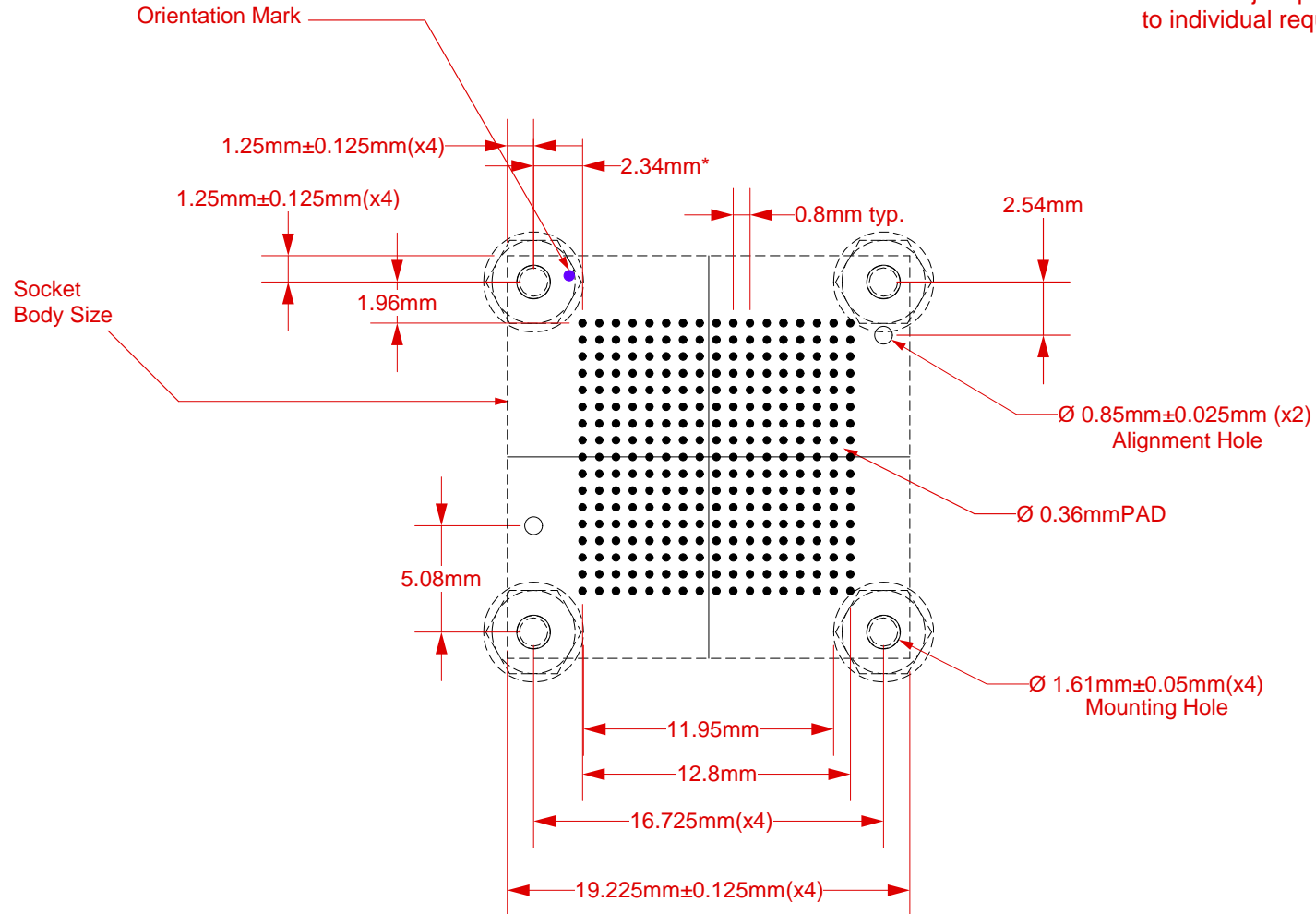
File: SG-BGA-6112 Dwg

Modified: 6/2/09

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

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

Note: Maximum BGA pattern shown. Please adjust pattern according to individual requirements.




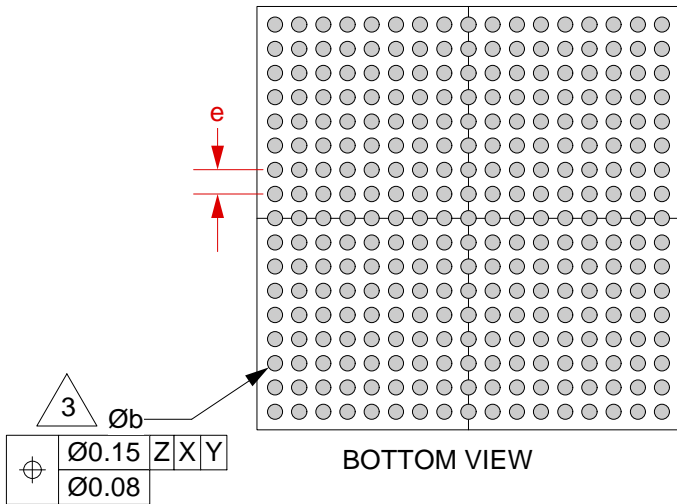
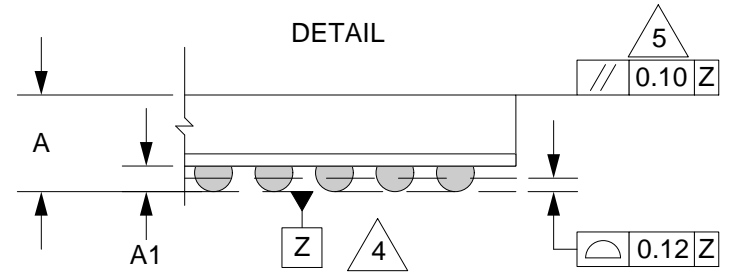
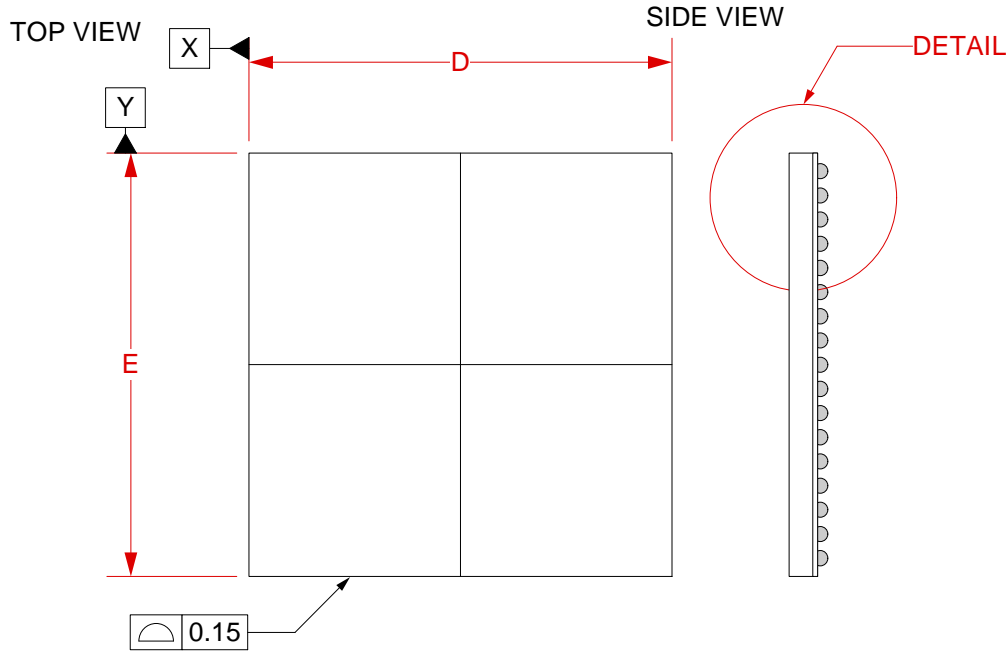
**Target PCB Recommendations**

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.

	<b>SG-BGA-6112 Drawing</b>	Status: Released	Scale: 3:1	Rev: B
	© 2004 IRONWOOD ELECTRONICS, INC. PO BOX 21151 ST. PAUL, MN 55121 Tele: (651) 452-8100 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 4/26/04
		File: SG-BGA-6112 Dwg	Modified: 6/2/09	



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		1.16
A1	0.3	0.4
b	0.4	0.5
D	14.00 BSC	
E	14.00 BSC	
e	0.80 BSC	

Array 17x17

**SG-BGA-6112 Drawing**

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Modified: 6/2/09

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