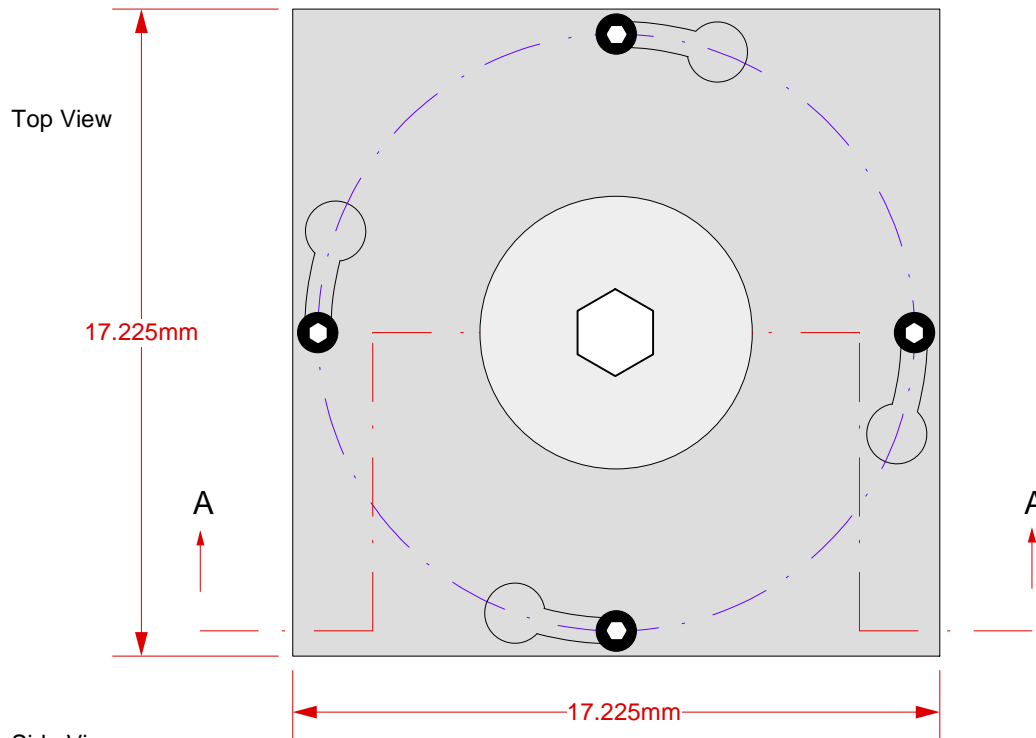
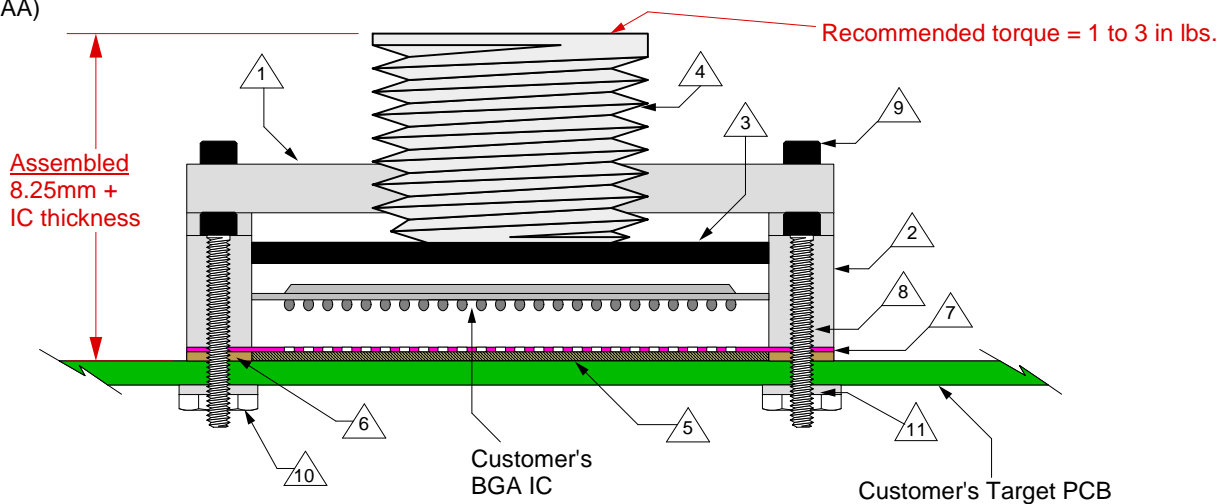


# GHz BGA Socket - Direct mount, solderless



Side View  
(Section AA)



## 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 Aluminum. Thickness = 2.5mm.
- 2 Socket base: Black anodized Aluminum. Thickness = 5mm.
- 3 Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
- 4 Compression screw: Black 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 = 0.75mm.
- 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: 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-6044 Drawing

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11351 Rupp Drive, Suite 400, Burnsville, MN 55337  
Tele: (952) 229-8200  
www.ironwoodelectronics.com

Status: Released

Scale: -

Rev: C

Drawing: H. Hansen

Date: 3/28/02

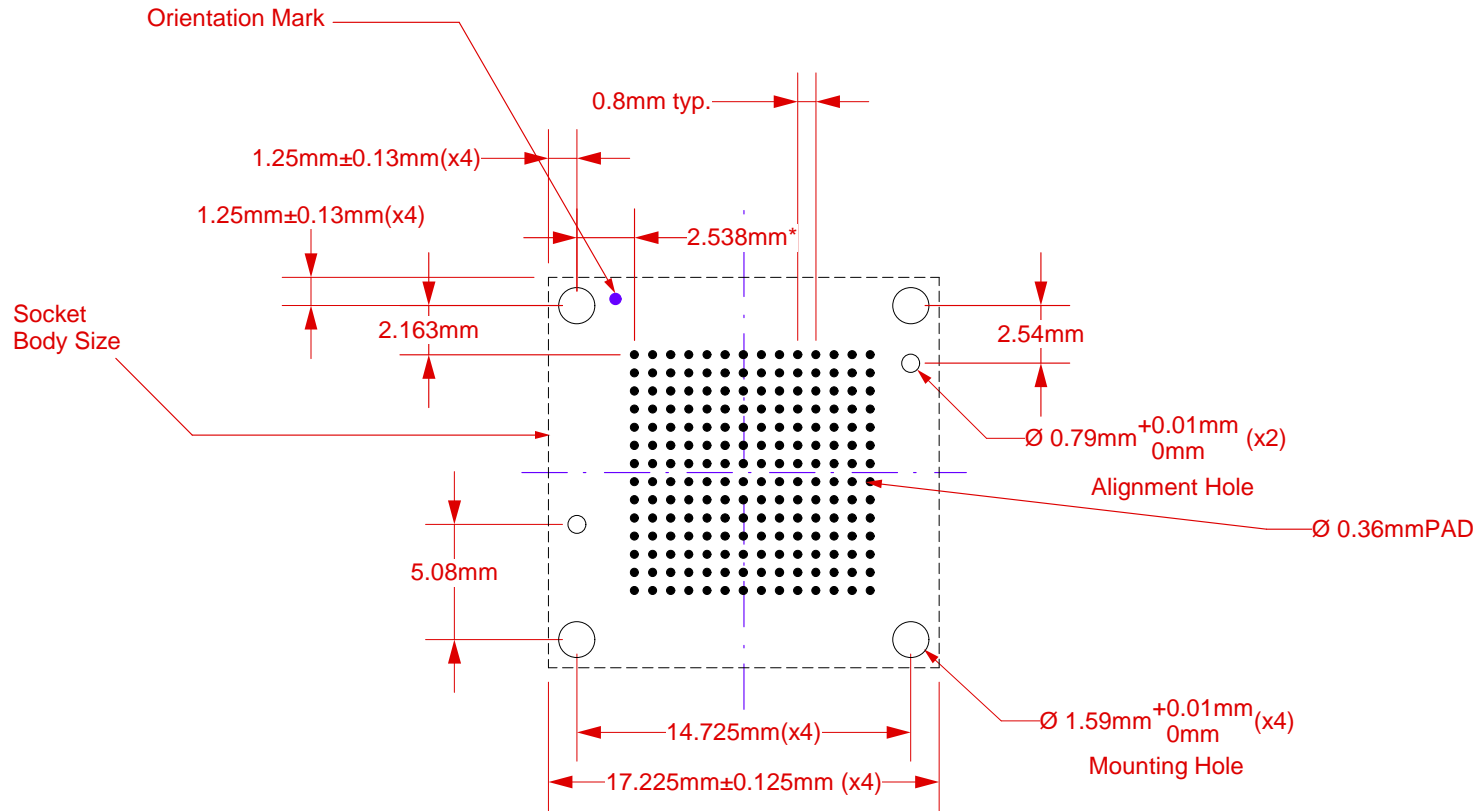
File: SG-BGA-6044 Dwg.mcd

Modified: 6/12/09, AE

All tolerances:  $\pm 0.125$ 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.**




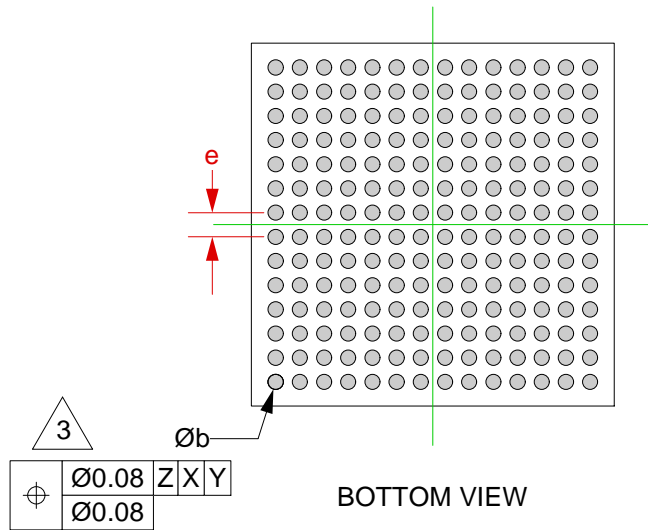
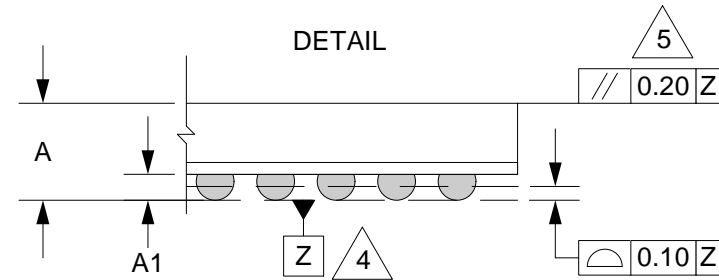
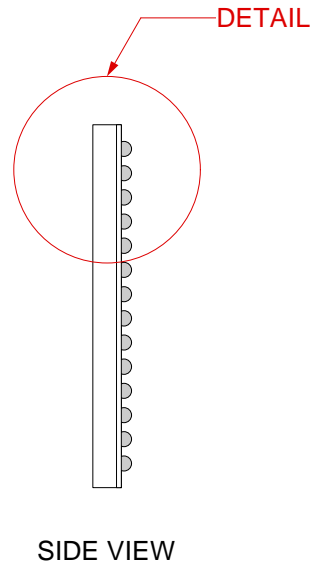
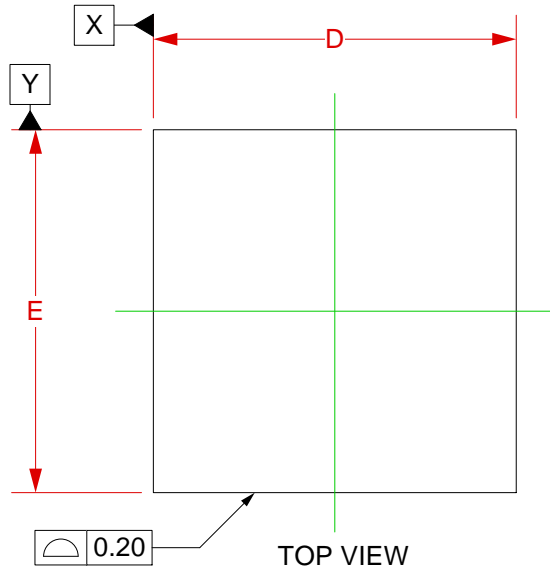
Target PCB Recommendations

Total thickness: 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:  $\pm 0.025\text{mm}$  [ $\pm 0.001''$ ] unless stated otherwise.


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	<p>Drawing: H. Hansen</p>	<p>Date: 3/28/02</p>		
	<p>File: SG-BGA-6044 Dwg.mcd</p>	<p>Modified: 6/12/09, AE</p>		



1. Dimensions are in millimeters.
  2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
- 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
A		1.4
A1	0.35	0.45
b		0.55
D	12.00 BSC	
E	12.00 BSC	
e	0.80 BSC	

Array 14x14

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	<p>Drawing: H. Hansen</p>		<p>Date: 3/28/02</p>	
	<p>File: SG-BGA-6044 Dwg.mcd</p>		<p>Modified: 6/12/09, AE</p>	