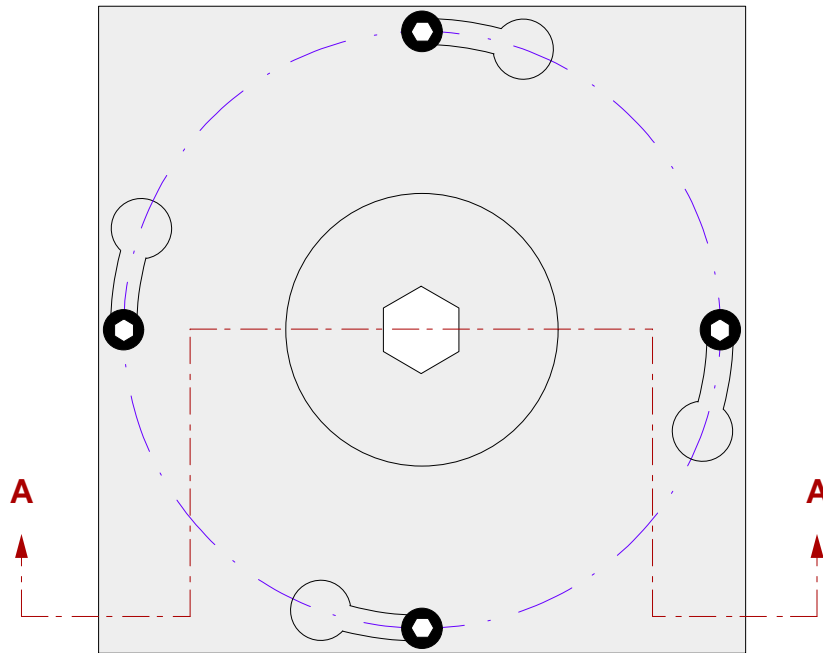


GHz BGA Socket - Direct mount, solderless

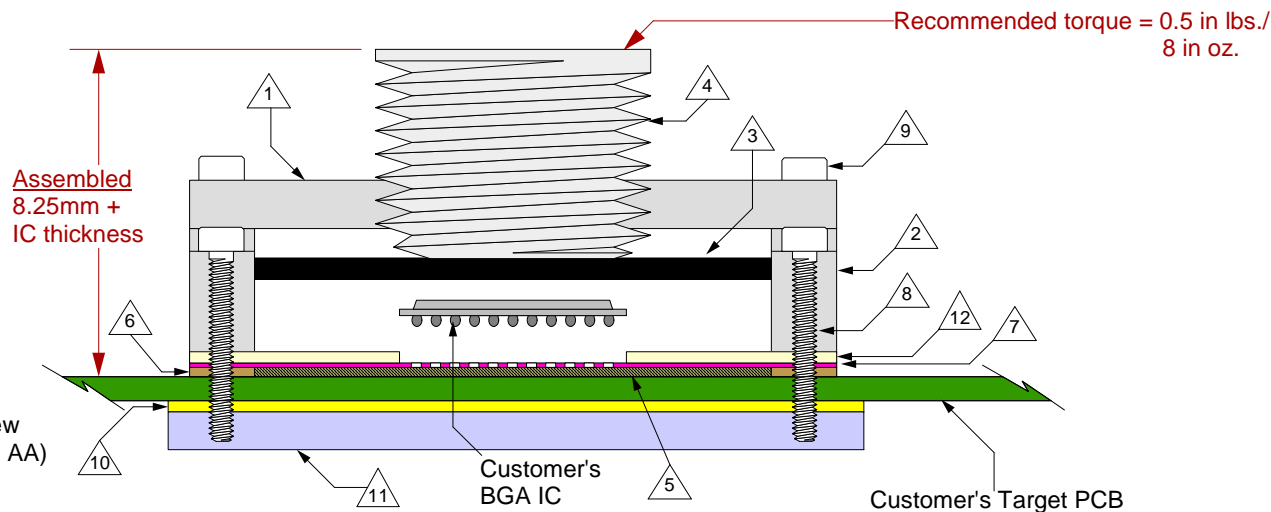
Features

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

Top View



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: 20 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.5mm.
- △ 6 Elastomer Guide: Non-clad FR4. Thickness = 0.475mm.
- △ 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 Insulation Plate: FR4/G10, Thickness = 1.59mm.
- △ 11 Backing Plate: Black anodized Aluminum. Thickness = 6.35mm.
- △ 12 IC Guide: FR4

SG-BGA-7114 Drawing

Status: Released

Scale: -

Rev: B



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Drawing: J. Glab

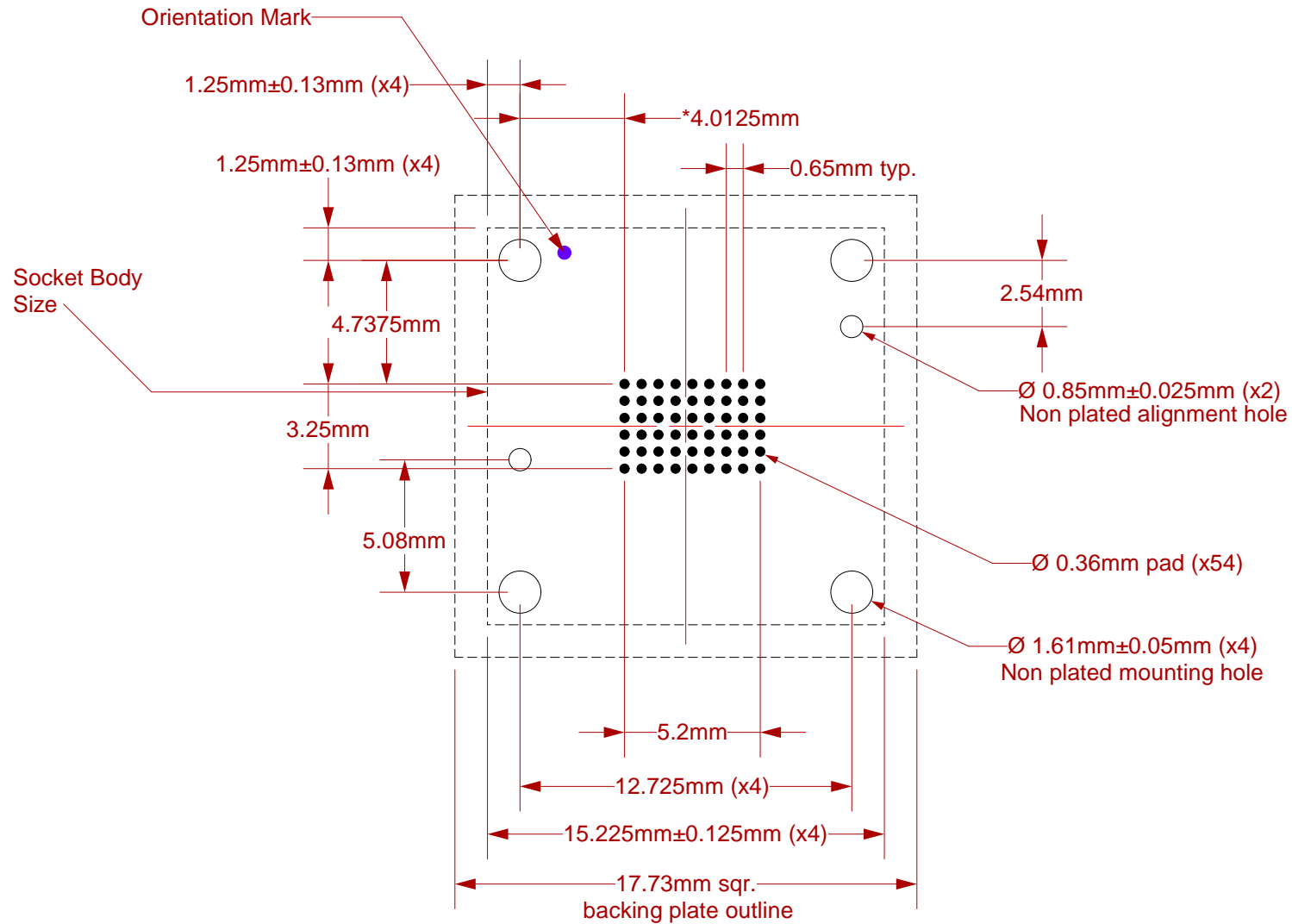
Date: 12/10/07

File: SG-BGA-7114 Dwg

Modified: 6/4/09, AE

All tolerances: ± 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; it is shifted by 0.25mm to the right..**



Target PCB Recommendations


Total thickness: 1.6mm min.

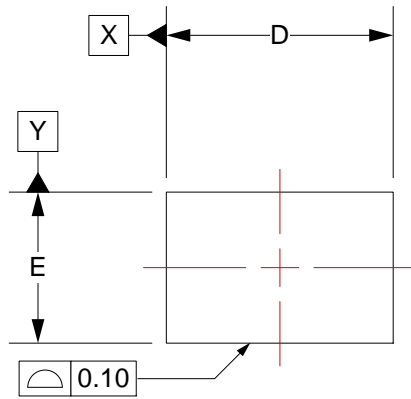
Plating: Gold or Solder finish

PCB Pad height: Same or higher than solder mask

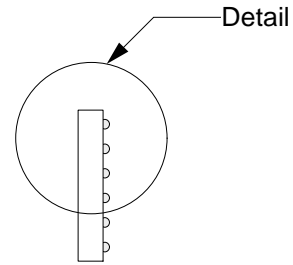
All dimensions are in mm unless stated otherwise

Recommended PCB Layout Tolerances: $\pm 0.025\text{mm}$ [$\pm 0.001''$] unless stated otherwise.

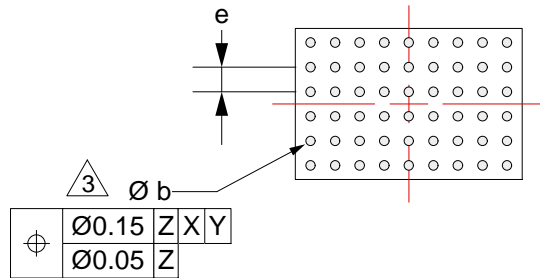
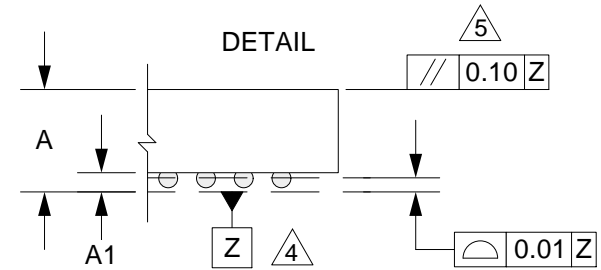
 <p>© 2007 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com</p>	<p>SG-BGA-7114 Drawing</p>		<p>Status: Released</p>	<p>Scale: -</p>	<p>Rev: B</p>
	<p>Drawing: J. Glab</p>		<p>Date: 12/10/07</p>		
	<p>File: SG-BGA-7114 Dwg</p>		<p>Modified: 6/4/09, AE</p>		



Top View



Side View




Bottom View

1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.

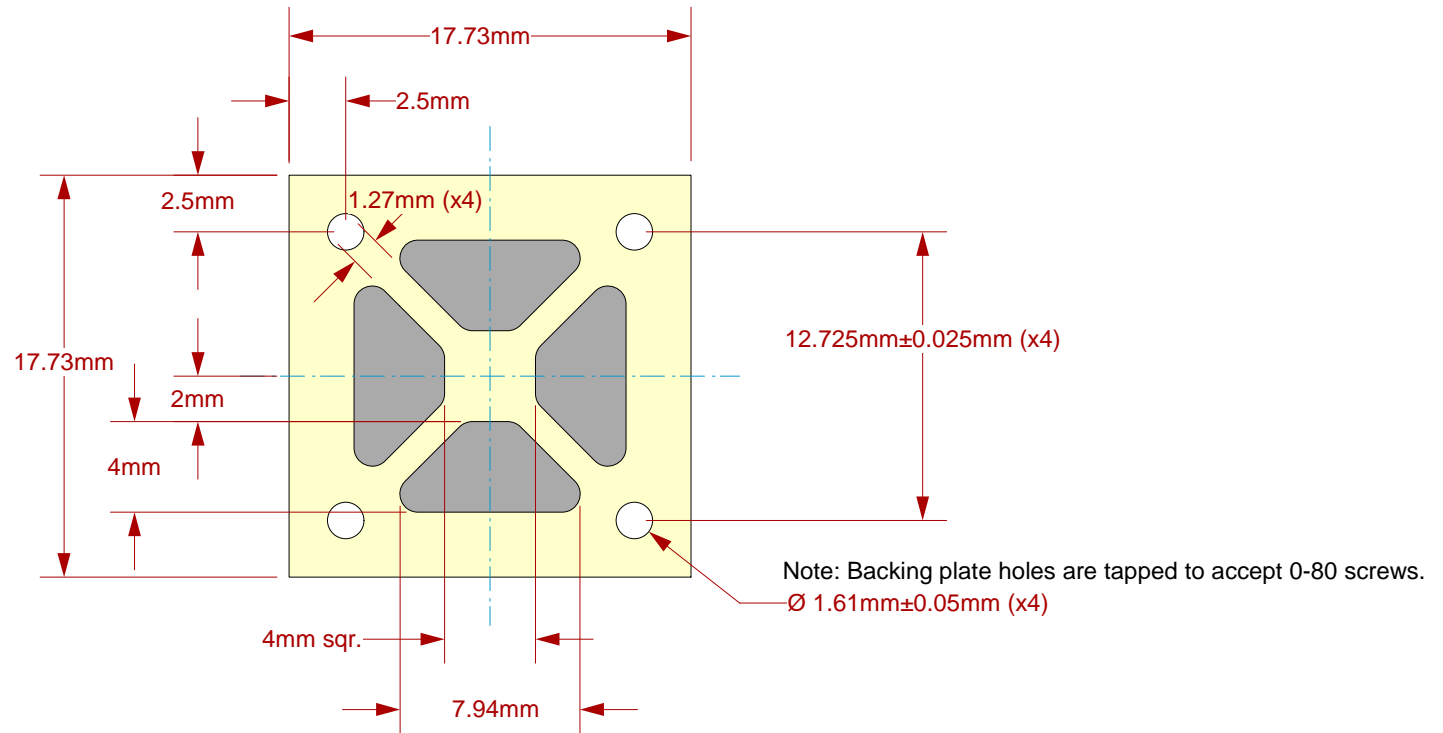
- 3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
- 4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
- 5. Parallelism measurement shall exclude any effect of mark on top surface of package.

DIM	MIN	MAX
A		1.08
A1	0.12	0.22
b	0.25 typ.	
D	6.0 BSC	
E	4.0 BSC	
e	0.65 BSC	

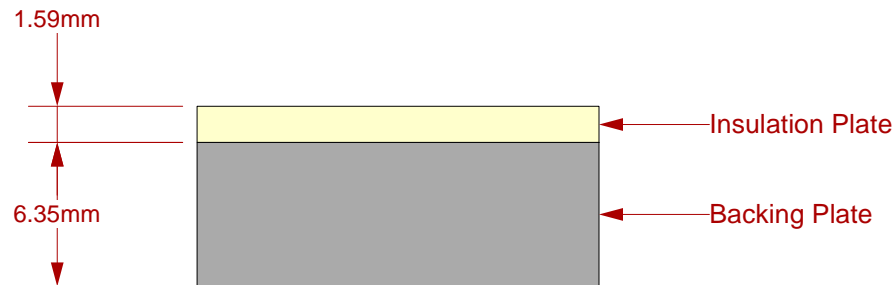
9 x 6 array

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	<p>Drawing: J. Glab</p>	<p>Date: 12/10/07</p>		
	<p>File: SG-BGA-7114 Dwg</p>	<p>Modified: 6/4/09, AE</p>		

Top View




Side View



Description: Insulation Plate and Backing Plate

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

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	<p>Drawing: J. Glab</p>	<p>Date: 12/10/07</p>		
	<p>File: SG-BGA-7114 Dwg</p>	<p>Modified: 6/4/09, AE</p>		