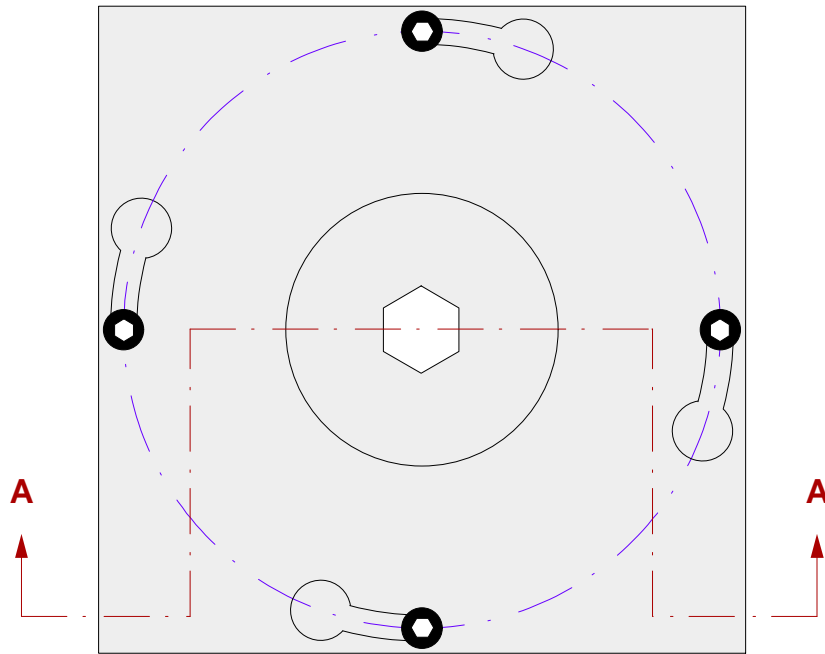


# GHz BGA Socket - Direct mount, solderless

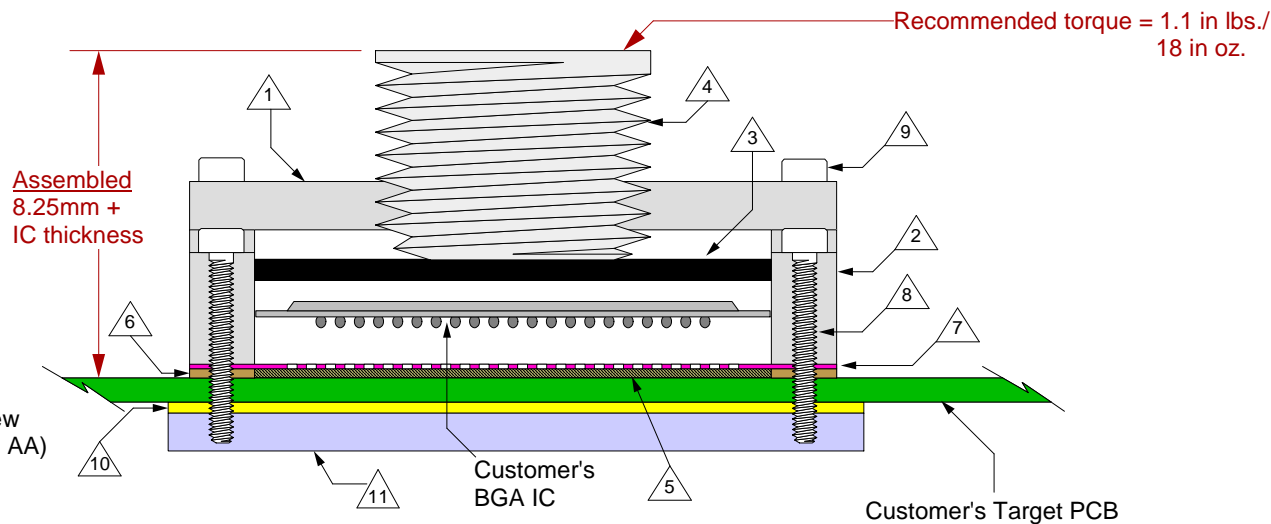
## Features

- 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.

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- △ 5 Elastomer: 20 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.5mm.

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- △ 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.

## SG-BGA-7032 Drawing

© 2009 IRONWOOD ELECTRONICS, INC.  
11351 Rupp Drive, Suite 400, Burnsville, MN 55337  
Tele: (952) 229-8200  
www.ironwoodelectronics.com

Status: Released

Scale: -

Rev: B

Drawing: H. Hansen

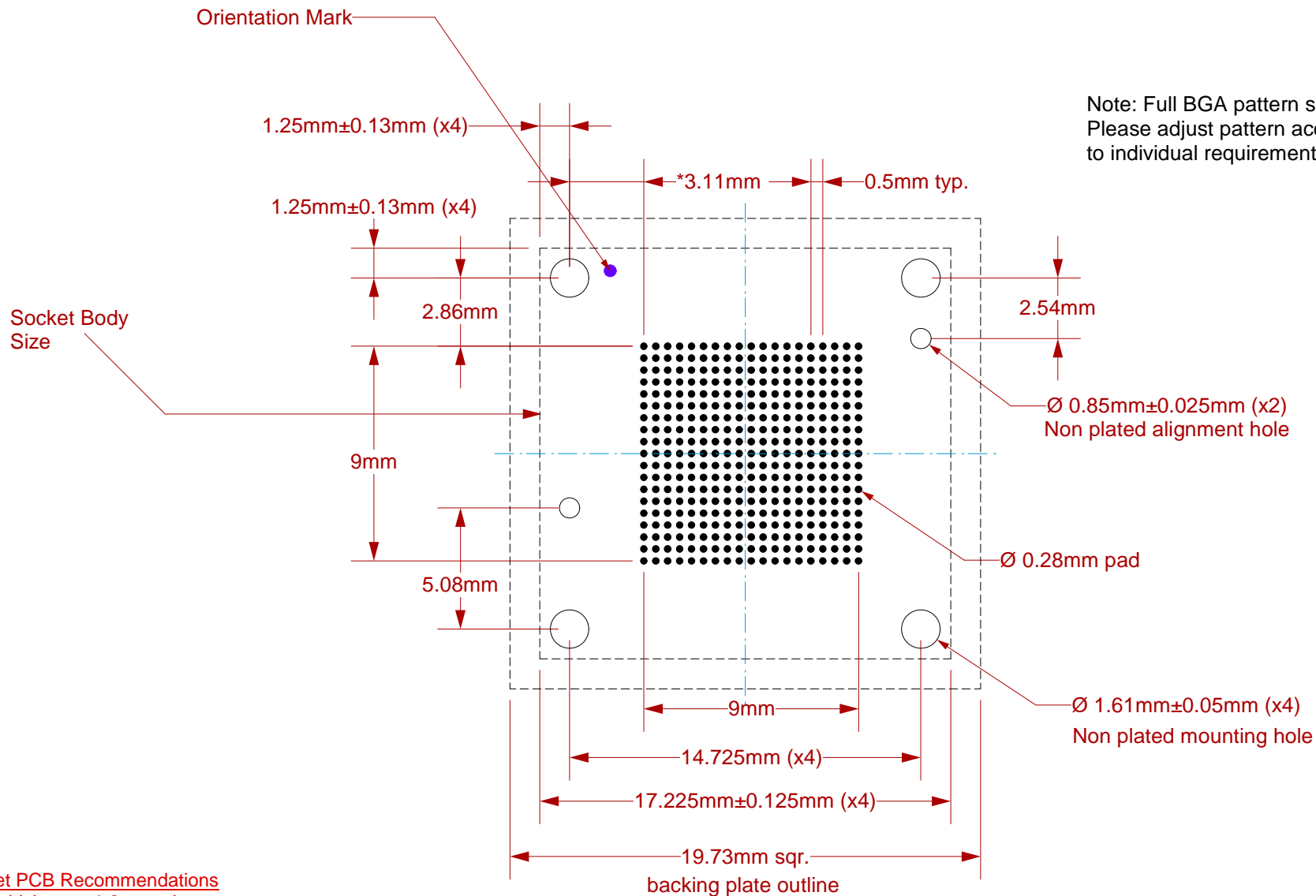
Date: 1/24/05

File: SG-BGA-7032 Dwg

Modified: 6/12/09, AE

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: Full BGA pattern shown. Please adjust pattern according to individual requirements.

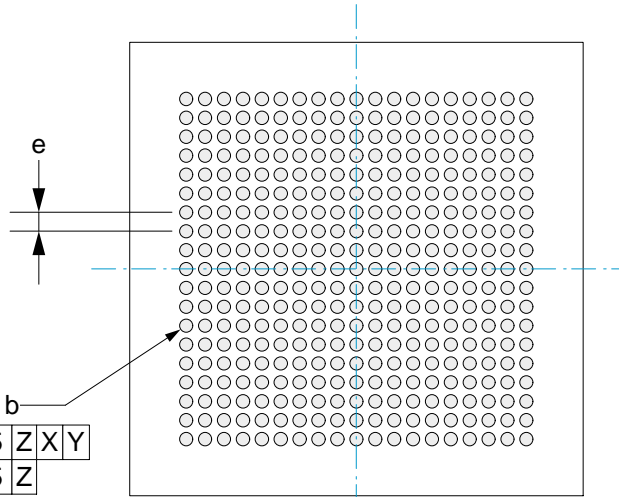
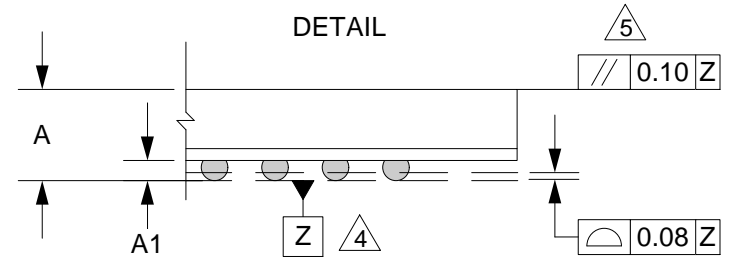
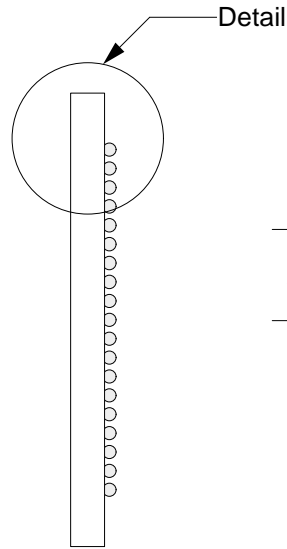
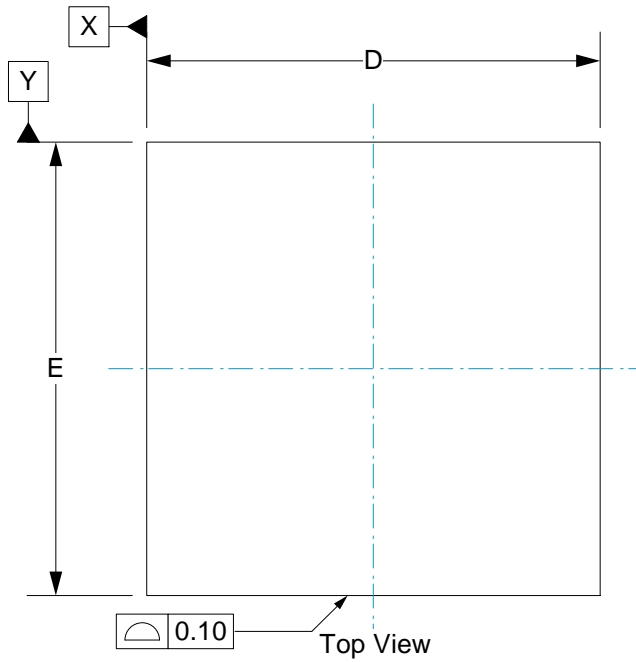
Target PCB Recommendations

Total thickness: 1.6mm min.  
Plating: Gold or Solder finish  
PCB Pad height: Same or higher than solder mask

All dimensions are in mm unless stated otherwise

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


<b>SG-BGA-7032 Drawing</b>		Status: Released	Scale: 4:1	Rev: B
 <p>© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com</p>	Drawing: H. Hansen		Date: 1/24/05	
	File: SG-BGA-7032 Dwg		Modified: 6/12/09, AE	



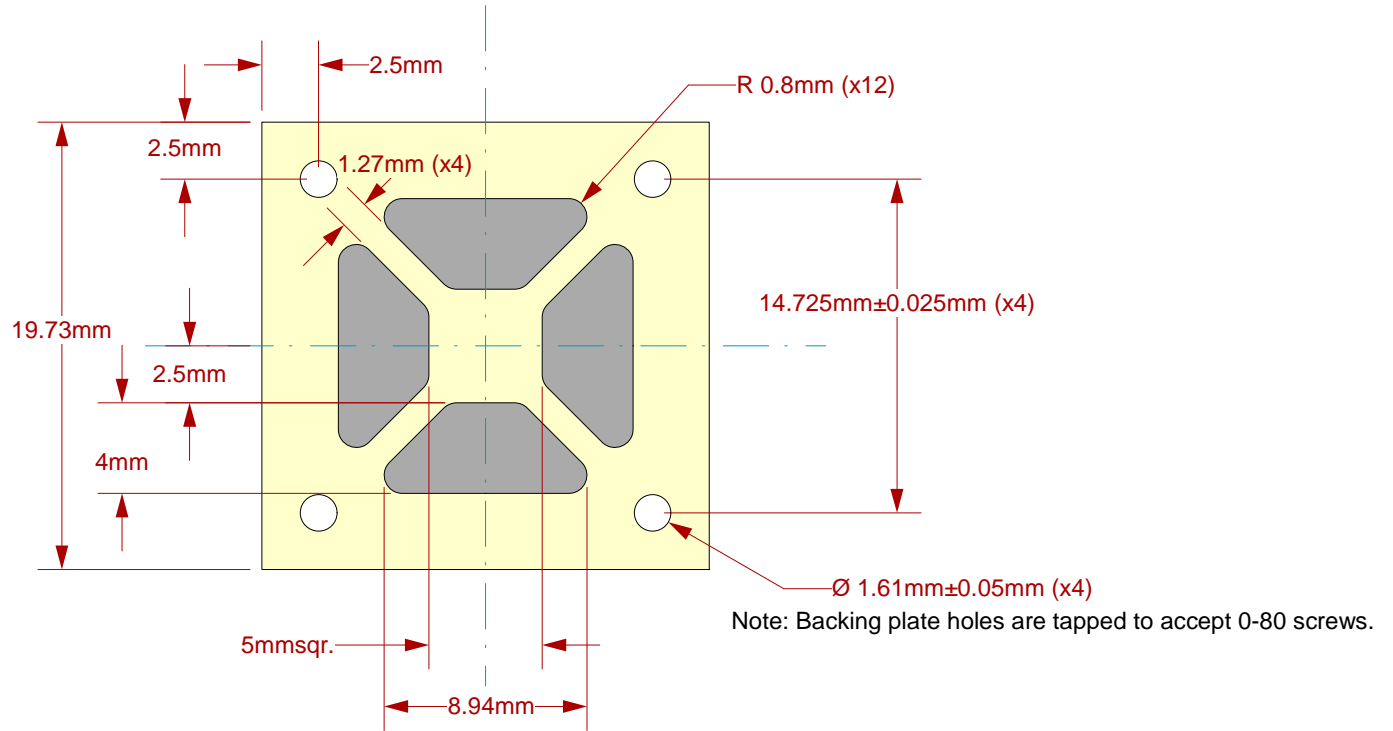
1. Dimensions are in millimeters.
  2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
- 3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
  - 4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
  - 5. Parallelism measurement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

DIM	MIN	MAX
A		1.2
A1	0.2	0.3
b		0.35
D	12.0 BSC	
E	12.0 BSC	
e	0.5 BSC	

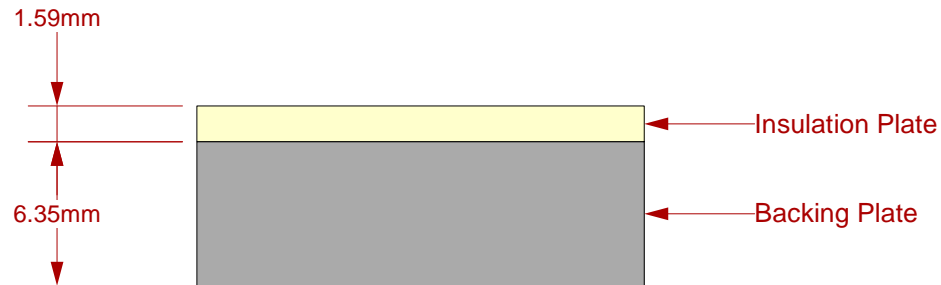
19 X 19 array

	<b>SG-BGA-7032 Drawing</b>	Status: Released	Scale: 1:0.2	Rev: B
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 1/24/05
		File: SG-BGA-7032 Dwg	Modified: 6/12/09, AE	

Top View




Side View



Description: Insulation Plate and Backing Plate

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

<b>SG-BGA-7032 Drawing</b>		Status: Released	Scale: 3:1	Rev: B
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com		Drawing: H. Hansen	
			Date: 1/24/05	
			Modified: 6/12/09, AE	