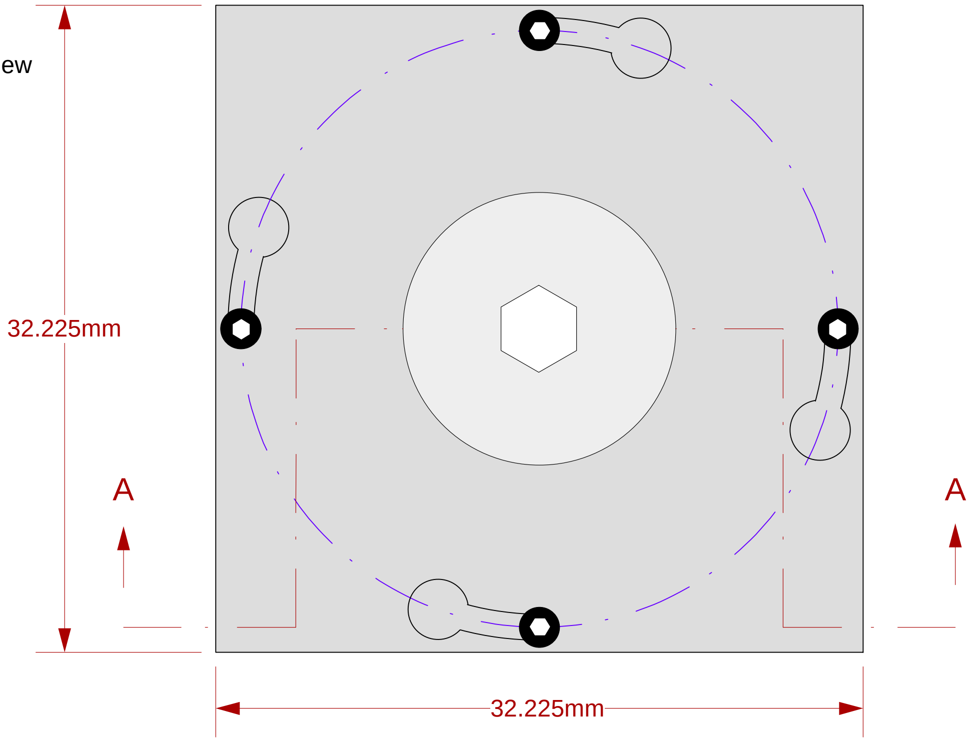
GHz BGA Socket - Direct mount, solderless

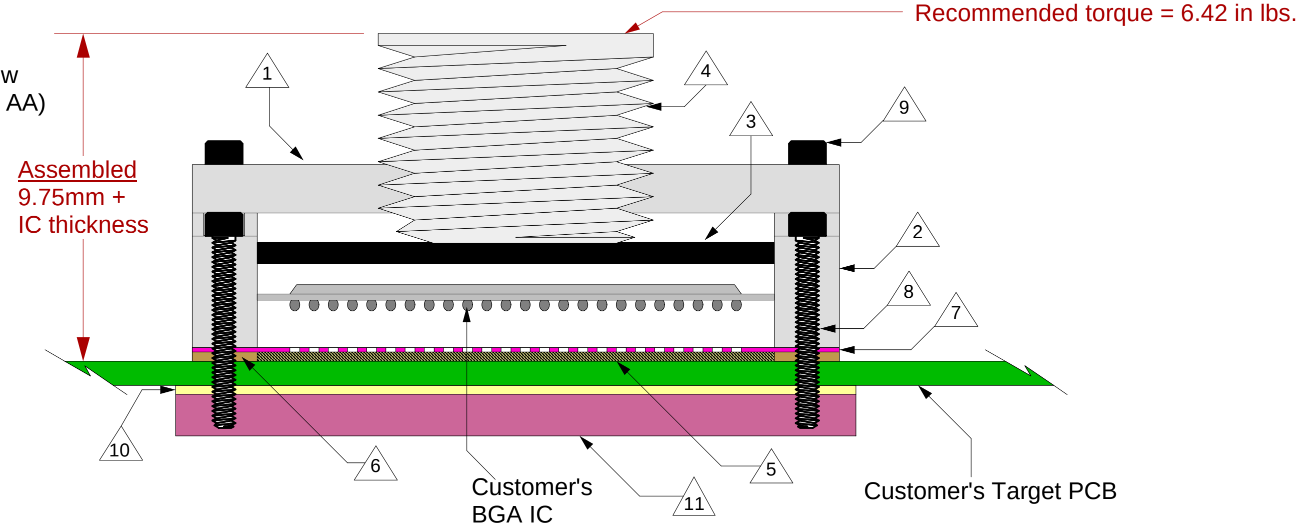
Features

- 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

Top View



Side View
(Section AA)

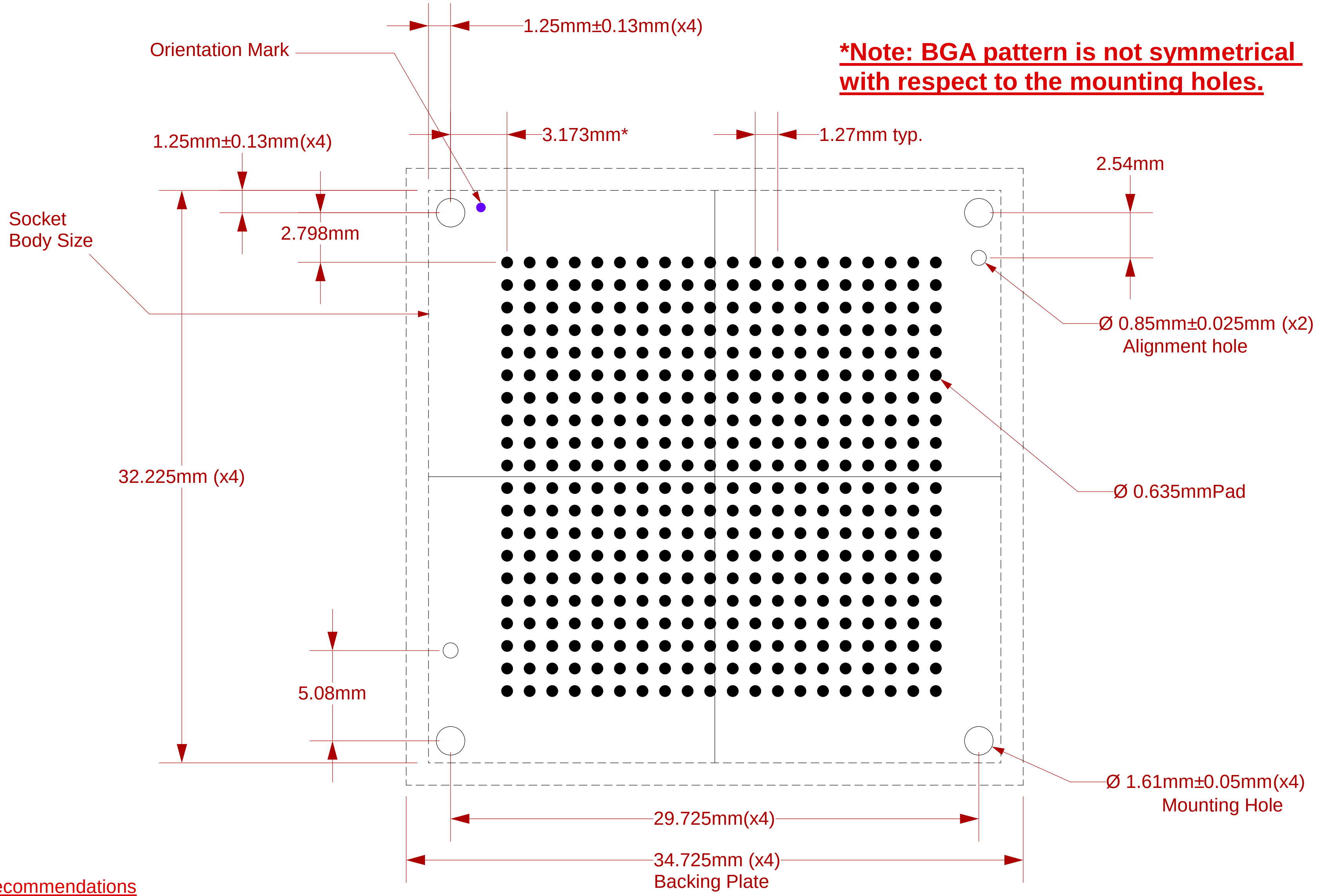


1	Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
2	Socket base: Black anodized Aluminum. Thickness = 6.5mm.
3	Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
4	Compression screw: Black anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.
5	Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.75mm.
6	Elastomer Guide: Non-clad FR4. Thickness = 0.725mm.
7	Ball Guide: Kapton polyimide.
8	Socket base screw: Fillister head, Alloy steel with black oxide finish, 0-80 fine thread , 15.875mm long.
9	Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.
10	Insulation Plate: FR4/G10, 1.59mm thick.
11	Backing Plate: Anodized Aluminum 6.35mm thick.

SG-BGA-6208 Drawing	Status: Released	Scale: -	Rev: B
© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: J. Glab	Date: 10/30/06	
	File: SG-BGA-6208 Dwg	Modified: 7/21/09, AE	

All tolerances: ±0.125mm (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

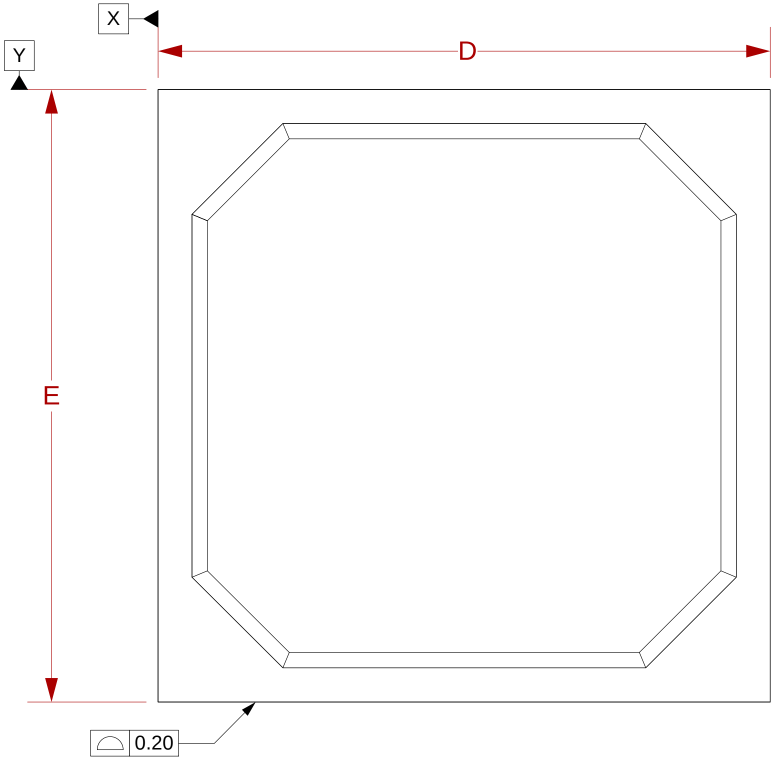
Recommended PCB Layout Tolerances: ±0.025mm [±0.001"] unless stated otherwise.

SG-BGA-6208 Drawing
Status: Released
Scale: 3:1
Rev: B

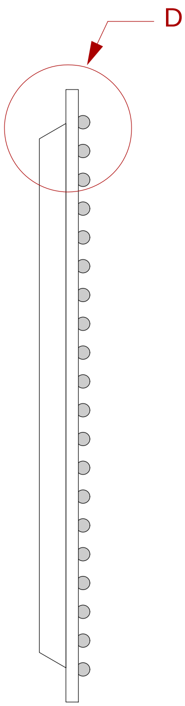
11351 Rupp Drive, Suite 400, Burnsville, MN 55337
Tele: (952) 229-8200
www.ironwoodelectronics.com

Drawing: J. Glab
Date: 10/30/06
File: SG-BGA-6208 Dwg
Modified: 7/21/09, AE

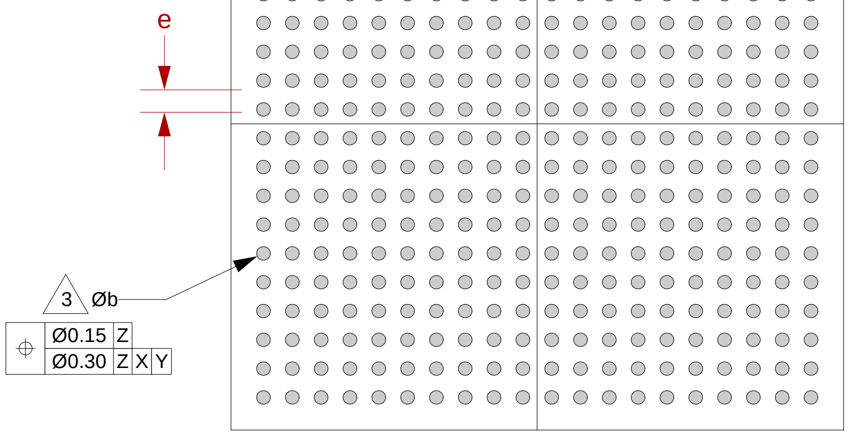
Compatible BGA Spec



TOP VIEW

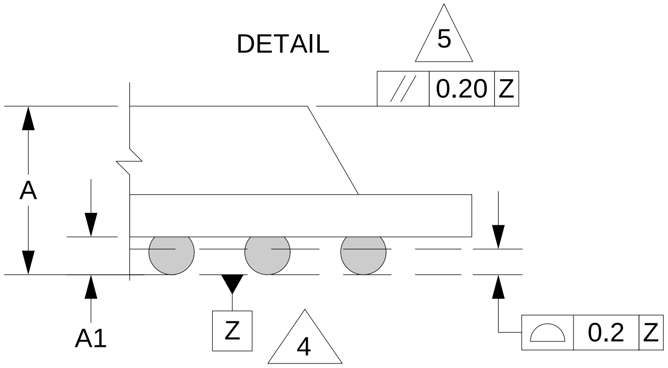


SIDE VIEW



BOTTOM VIEW

DETAIL



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.

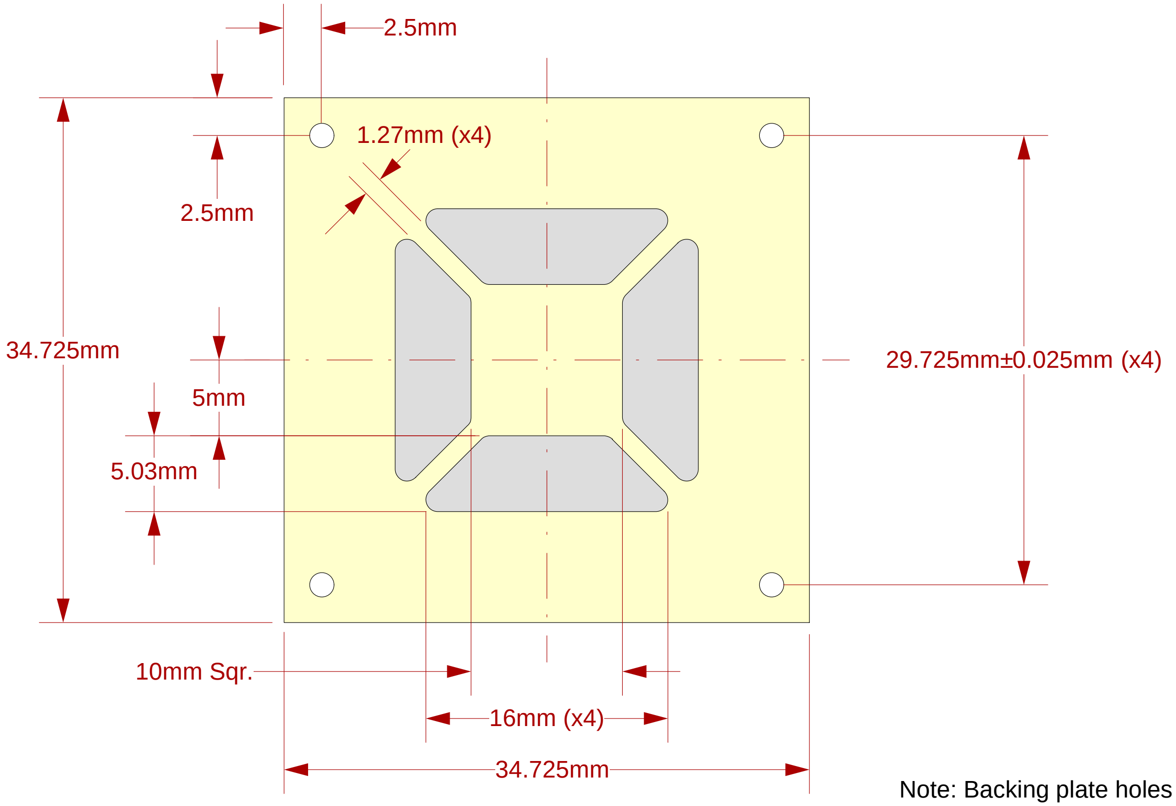
5 Parallelism measurement shall exclude any effect of mark on top surface of package.

DIM	MIN	MAX
A		2.6
A1	0.35	0.5
b		0.9
D	27.00 BSC	
E	27.00 BSC	
e	1.27 BSC	

Array 20x20

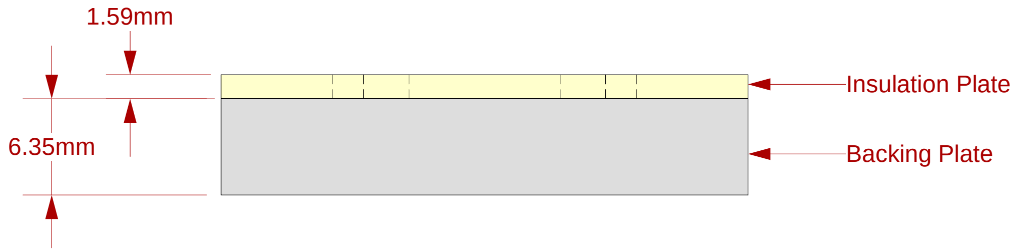
SG-BGA-6208 Drawing	Status: Released	Scale: -	Rev: B
© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: J. Glab	Date: 10/30/06	
	File: SG-BGA-6208 Dwg	Modified: 7/21/09, AE	

Top View



Note: Backing plate holes are tapped to accept 0-80 screws.

Side View



Description: Backing Plate with Insulation Plate

SG-BGA-6208 Drawing	Status: Released	Scale: -	Rev: B
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: J. Glab	Date: 10/30/06	
	File: SG-BGA-6208 Dwg	Modified: 7/21/09, AE	

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