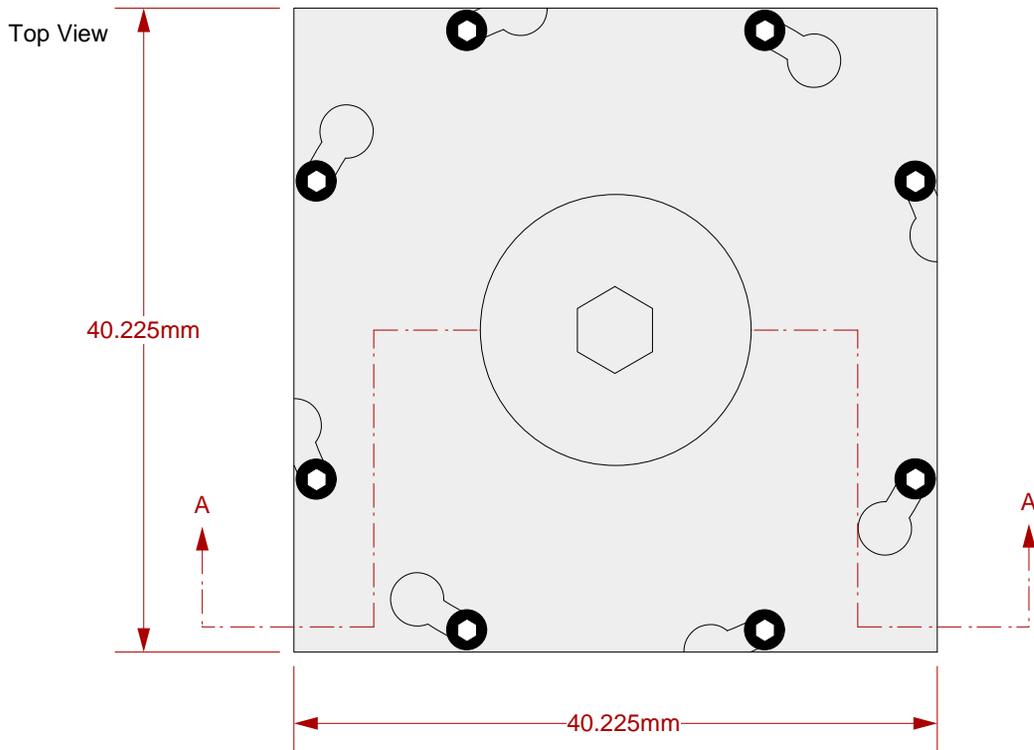


GHz BGA Socket - Direct mount, solderless

Features

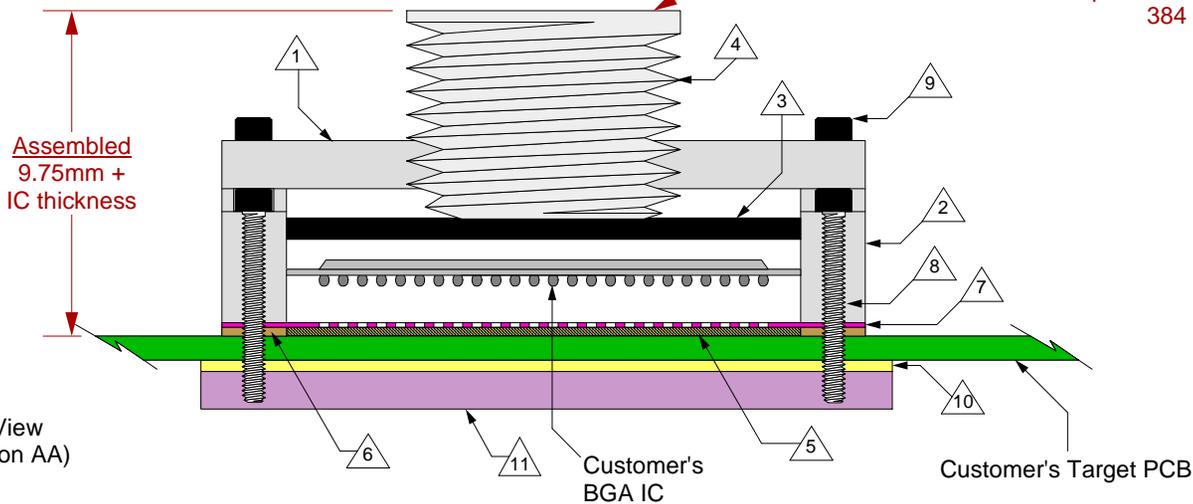
- Directly mounts to target PCB (needs tooling holes) with hardware.
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Ball guide prevents over compression of elastomer
- Easily removable swivel socket lid



40.225mm

40.225mm

Recommended torque = 24 in lbs./
384 in oz.



Assembled
9.75mm +
IC thickness

Side View
(Section AA)

Customer's
BGA IC

Customer's Target PCB

- 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: 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: Cirlex or equivalent.
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 , 15.875mm 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-6196 Drawing

© 2006 IRONWOOD ELECTRONICS, INC.
11351 Rupp Drive, Suite 400, Burnsville, MN 55337
Tele: (952) 229-8200
www.ironwoodelectronics.com

Status: Released

Scale: -

Rev: B

Drawing: J. Glab

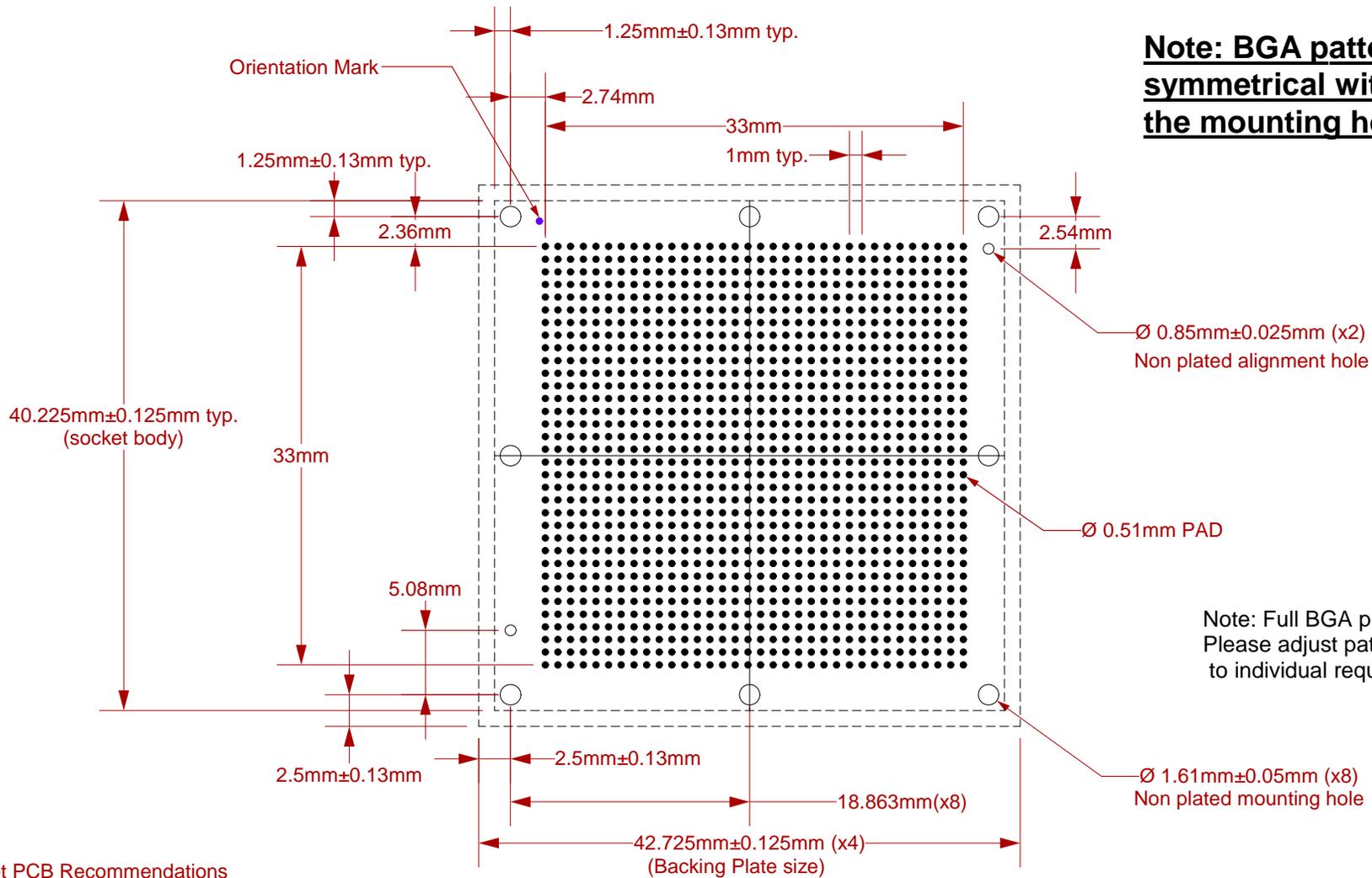
Date: 10/24/06

File: SG-BGA-6196 Dwg

Modified: 5/19/09

All tolerances: ± 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.

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

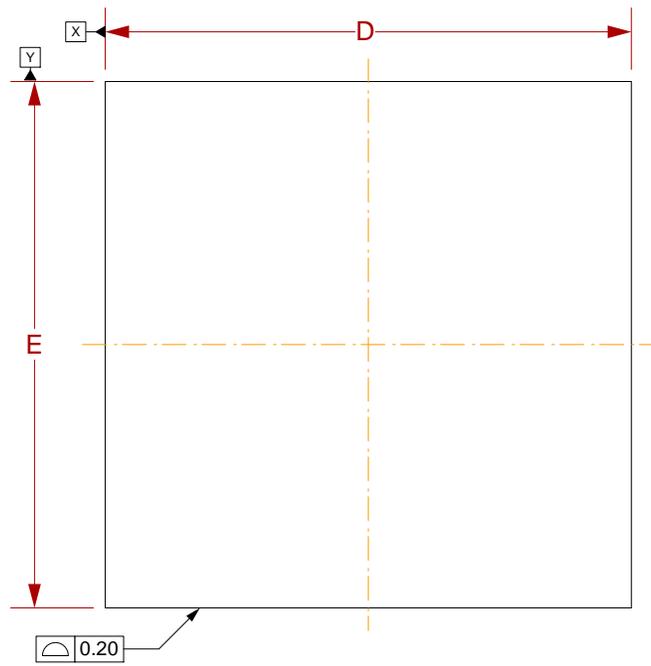
Target PCB Recommendations

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

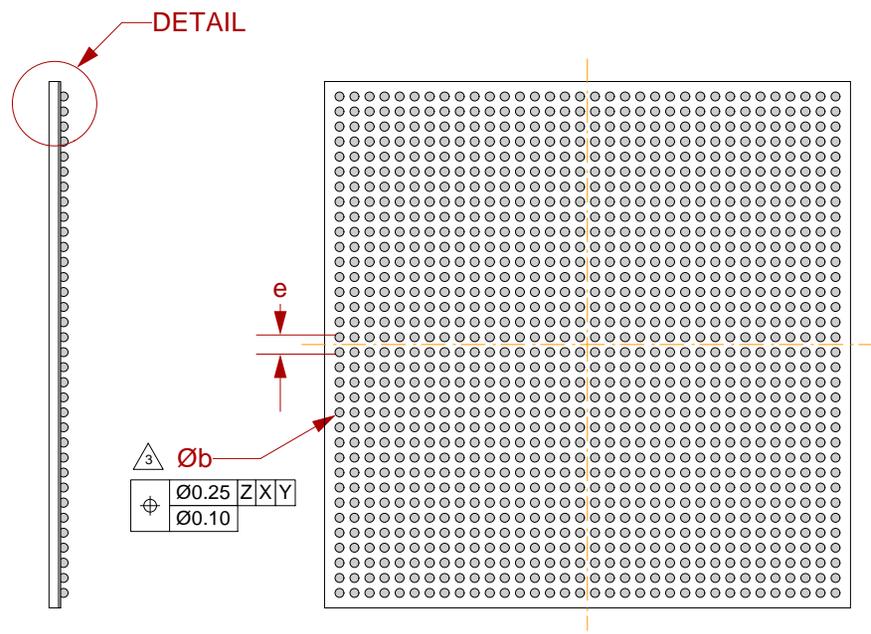
NOTE: Steel backing plate may be required based on end user's application

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

	SG-BGA-6196 Drawing	Status: Released	Scale: -	Rev: B
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		File: SG-BGA-6196 Dwg	Modified: 5/19/09	



TOP VIEW

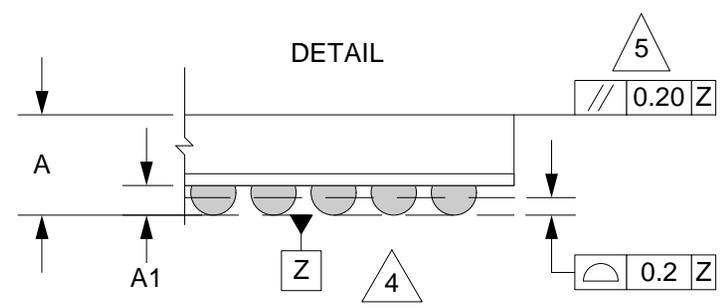


SIDE VIEW

BOTTOM VIEW

DIM	MIN	MAX
A		3.5
A1	0.3	0.5
b	0.5	0.7
D	35.0 BSC	
E	35.0 BSC	
e	1.00 BSC	

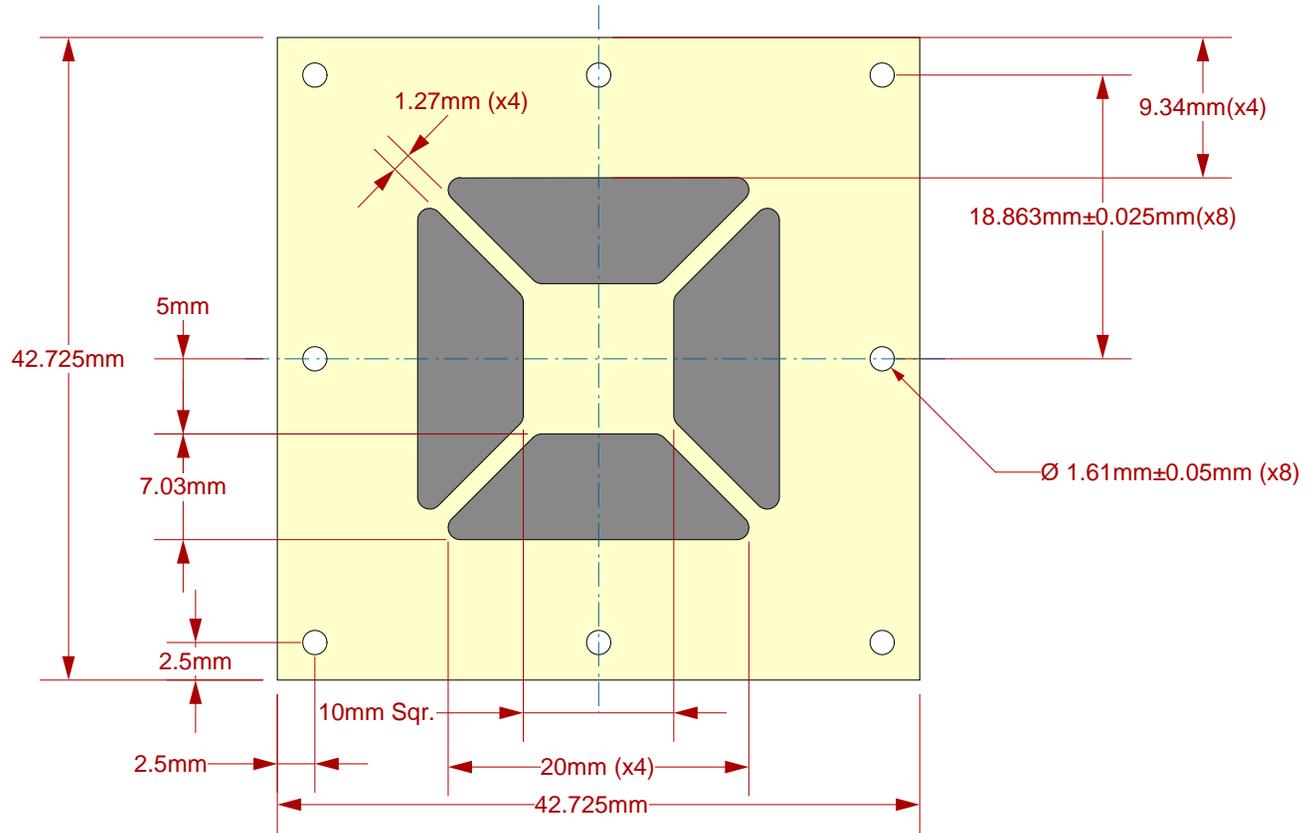
Array 34x34



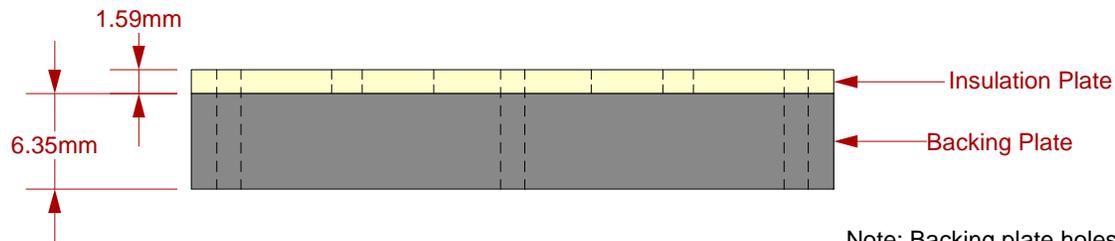
- $\text{\textcircled{1}}$ Dimensions are in millimeters.
- $\text{\textcircled{2}}$ Interpret dimensions and tolerances per ASME Y14.5M-1994.
- $\text{\textcircled{3}}$ Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
- $\text{\textcircled{4}}$ Datum Z (seating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

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	Drawing: J. Glab	Date: 10/24/06		
	File: SG-BGA-6196 Dwg	Modified: 5/19/09		

Top View



Side View



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

Description: Insulation Plate and Backing Plate

SG-BGA-6196 Drawing

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File: SG-BGA-6196 Dwg

Modified: 5/19/09

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