

GHz BGA Socket - Direct mount, solderless

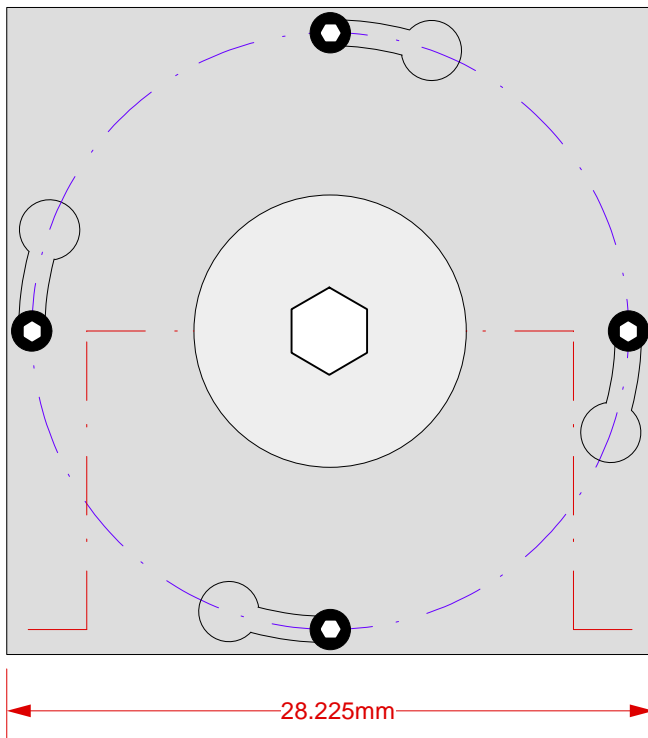
Features

- 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

28.225mm

A



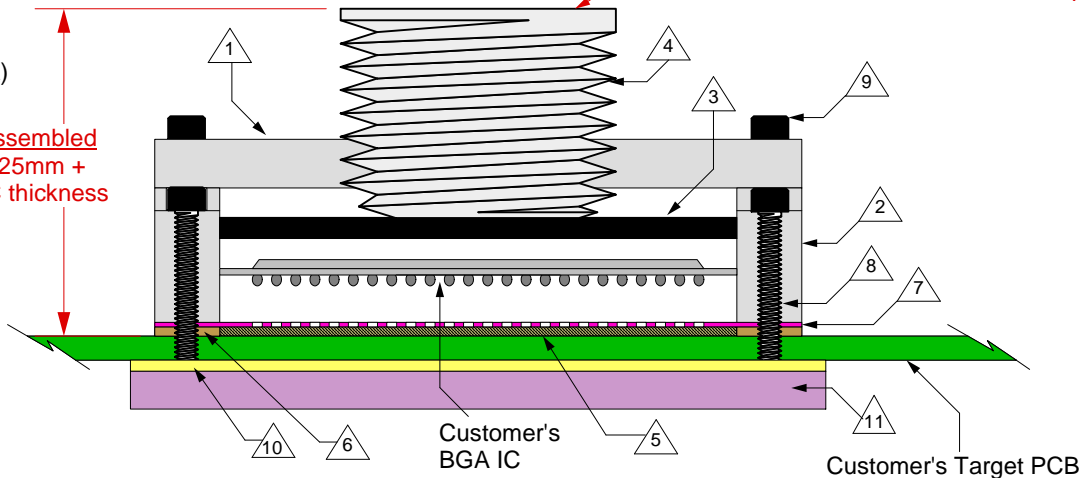
28.225mm

A

Side View
(Section AA)

Assembled
8.25mm +
IC thickness

Recommended torque = 6 in lbs.



- | | |
|----|---|
| 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: 40 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 = 0.5mm. |
| 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-8010 Drawing

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

Status: Released

Scale: -

Rev: B

Drawing: J. Glab

Date: 6/7/07

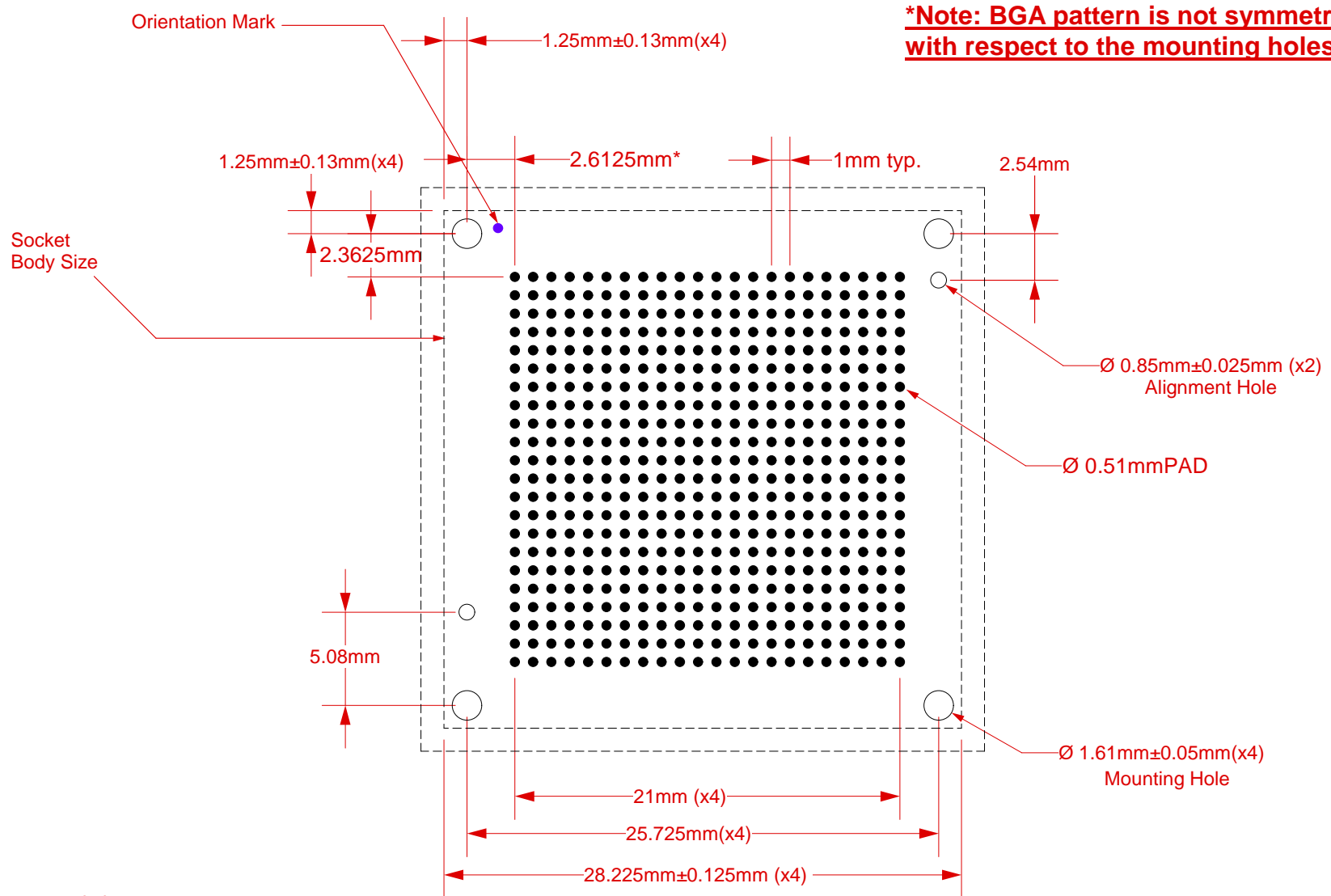
File: SG-BGA-6010 Dwg.mcd

Modified: 7/6/09, AE

All tolerances: $\pm 0.125\text{mm}$ (unless stated otherwise). Materials and specifications are subject to change without notice.

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Recommended PCB Layout
Top View



Target PCB Recommendations


Total thickness: 1.6mm min.

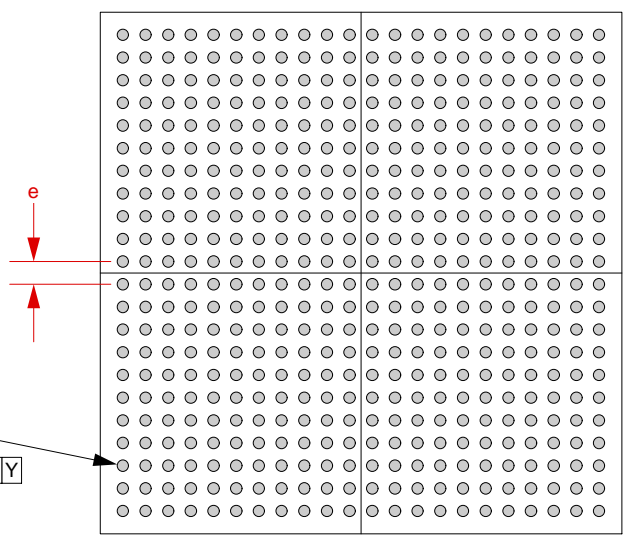
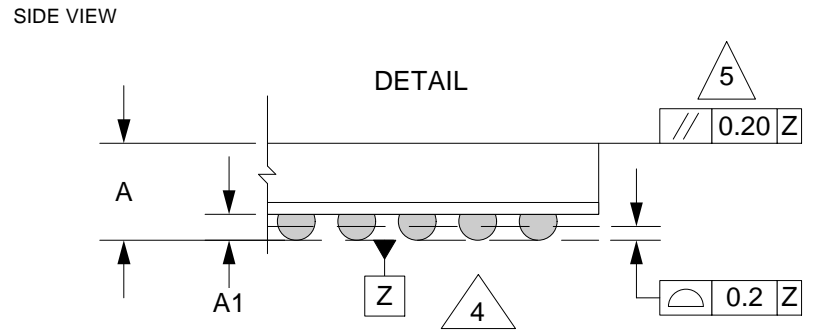
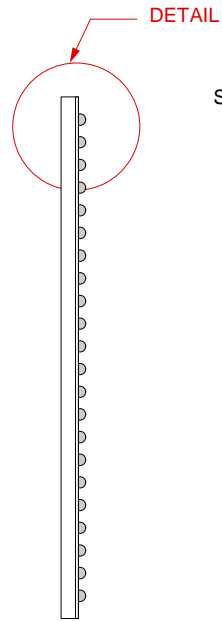
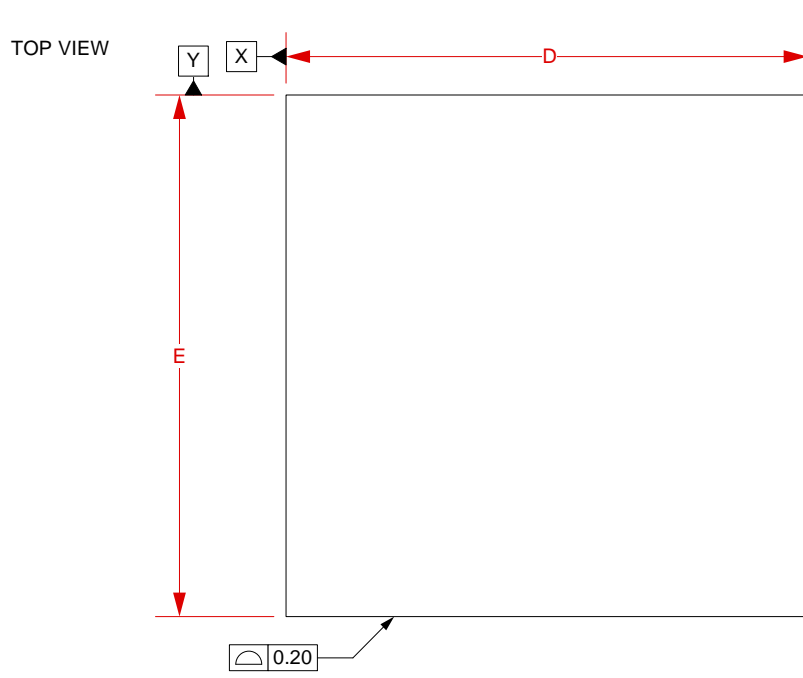
Plating: Gold or Solder finish

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-8010 Drawing		Status: Released	Scale: -	Rev: B
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			File: SG-BGA-6010 Dwg.mcd		Modified: 7/6/09, AE



BOTTOM VIEW

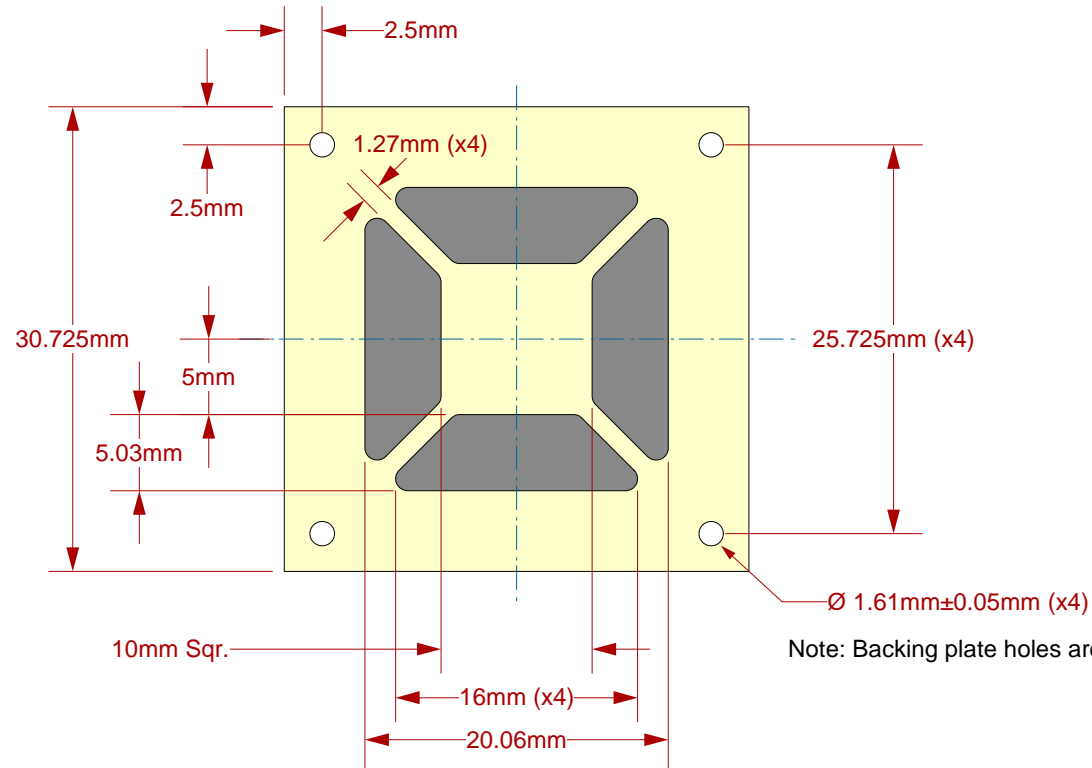
1. Dimensions are in millimeters.
 2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
- Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
 - Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
 - Parallelism measurement shall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

DIM	MIN	MAX
A		2.5
A1	0.4	0.6
b		0.70
D	23.00 BSC	
E	23.00 BSC	
e	1.0 BSC	

Array 22x22

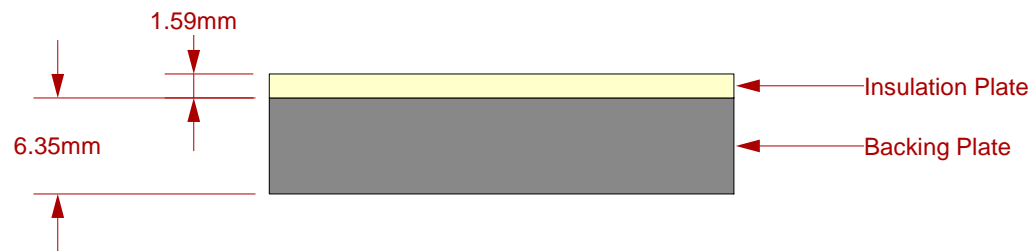
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Top View



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

Side View



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