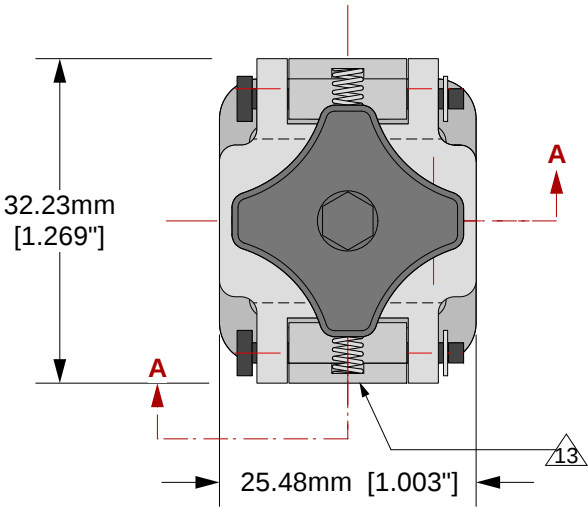
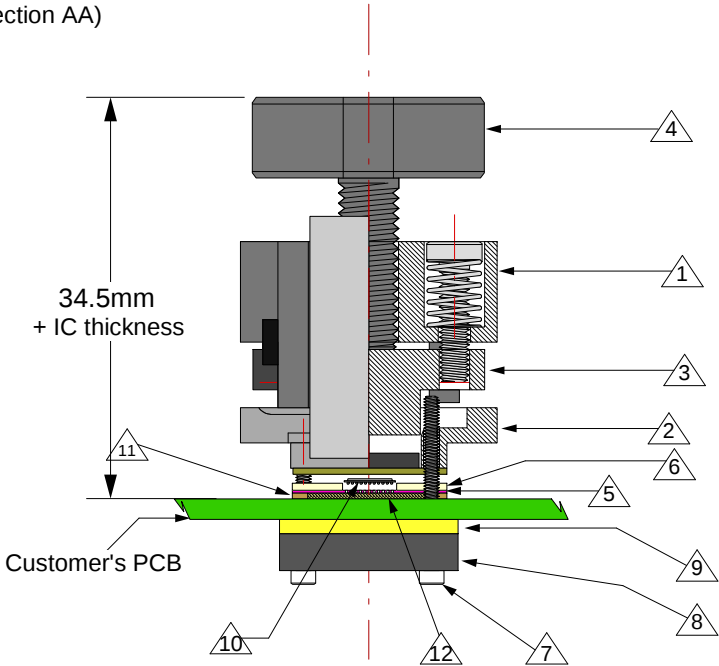




Side View  
(Section AA)



Features

- Directly mounts to target PCB (needs tooling holes) with hardware
- Minimum real estate required
- Compression plate distributes forces evenly
- Clamshell lid

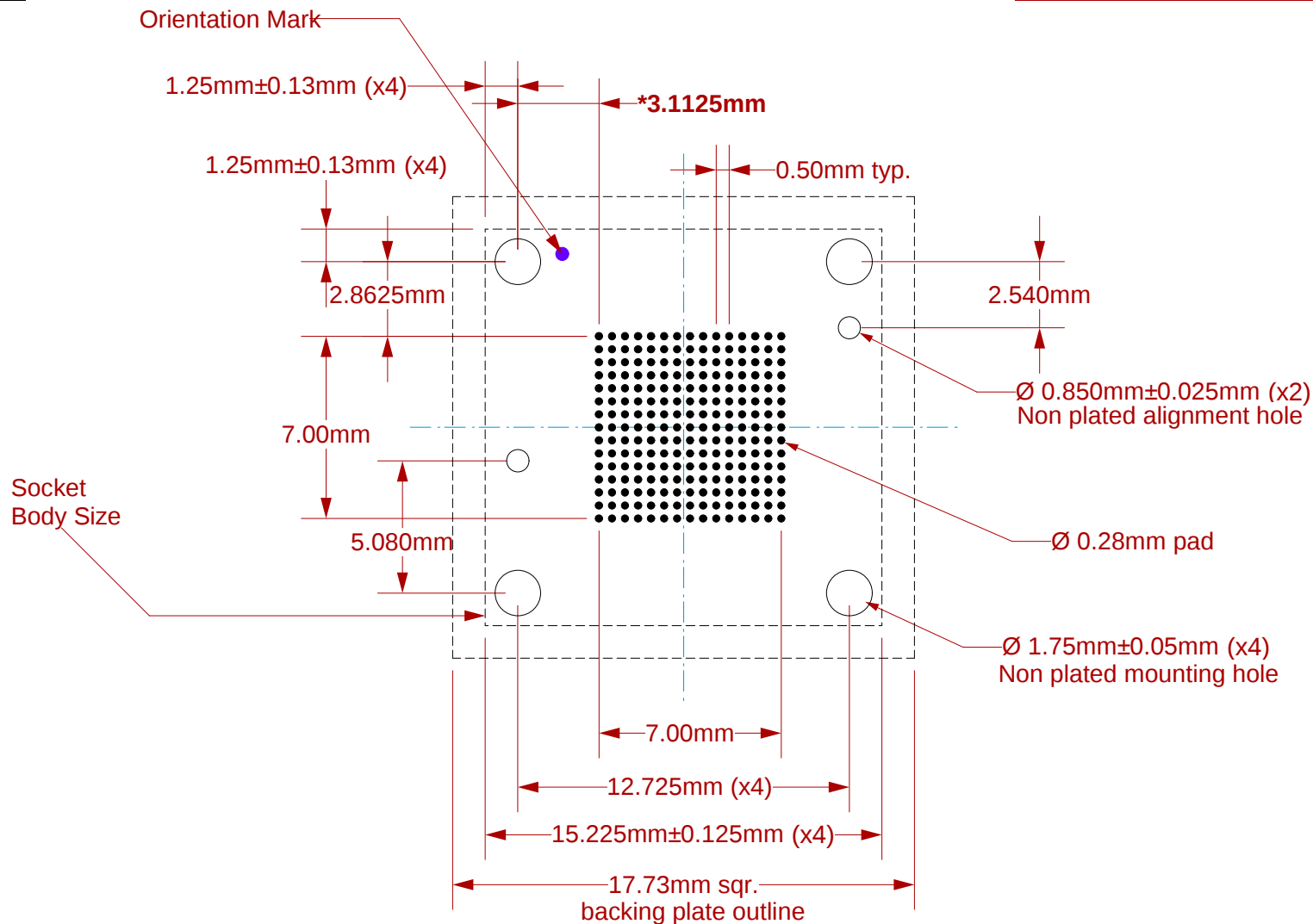
Materials:

- 1 Clam Shell Lid: Black anodized Aluminum. Height = 16.5 mm.
- 2 Socket Base: Black anodized Aluminum. Height = 6 mm.
- 3 Compression Plate: Black anodized Aluminum. Thickness = 8.5 mm.
- 4 Compression Screw: Clear anodized Aluminum. Height = 25 mm, Fluted Knob
- 5 Ball Guide: Kapton polyimide.
- 6 IC Guide: Torlon
- 7 Socket Base Screw: Socket Head Cap Screw, alloy steel with black oxide finish, 0-80 Thread, 5/8" long.
- 8 Backing Plate: Black anodized Aluminum. Thickness= 4mm
- 9 Insulation Plate: FR4/G10
- 10 Customer's BGA IC
- 11 Elastomer Guide: Non-clad FR4. Thickness = 0.475mm.
- 12 Elastomer: 20 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.5mm.
- 13 Latch: Black anodized Aluminum.

|                                                                                    |                                                                                                                                               |                  |                                          |        |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------|--------|
| <b>CG-BGA-5002 Drawing</b>                                                         |                                                                                                                                               | Status: Released | Scale: -                                 | Rev: B |
|  | © 2007 IRONWOOD ELECTRONICS, INC.<br>11351 Rupp Drive, Suite 400, Burnsville, MN 55337<br>Tele: (952) 229-8200<br>www.ironwoodelectronics.com |                  | Drawing: J. Glab                         |        |
|                                                                                    | File: CG-BGA-5002 Dwg.mcd                                                                                                                     |                  | Date: 9/13/07<br>Modified: 09/17/14 , DH |        |

All Tolerances: ±0.125mm (unless stated otherwise). Materials and specifications are subject to change without notice.

\*Note: BGA pattern is not symmetrical



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.

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

**CG-BGA-5002 Drawing**

Status: Released

Scale: 4:1

Rev: B



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Drawing: J. Glab

Date: 9/13/07

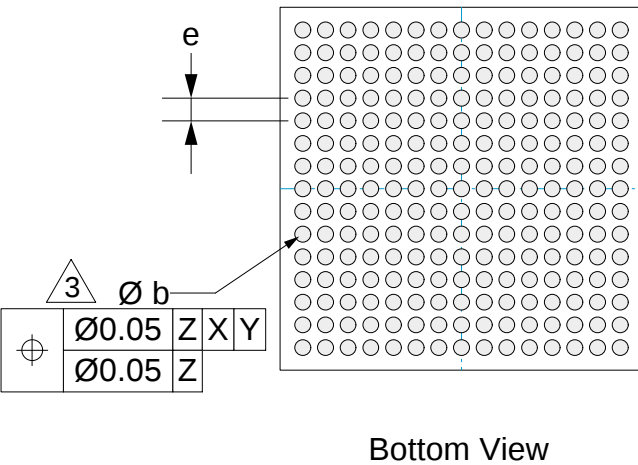
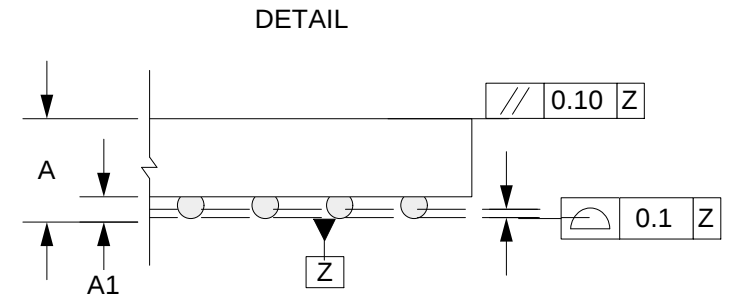
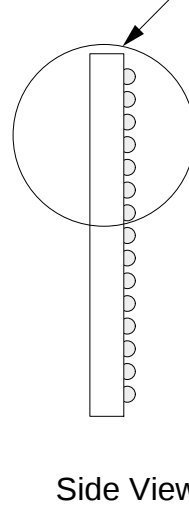
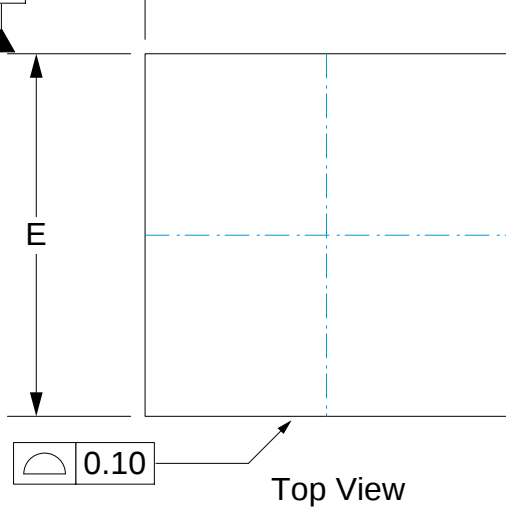
File: CG-BGA-5002 Dwg.mcd

Modified: 09/17/14, DH

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Detail



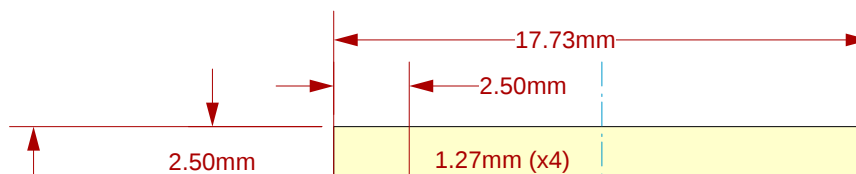
1. Dimensions are in millimeters.
  2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

| DIM | MIN     | MAX  |
|-----|---------|------|
| A   | 0.74    | 1.0  |
| A1  | 0.18    | 0.28 |
| b   | 0.29    | 0.35 |
| D   | 8.0 BSC |      |
| E   | 8.0 BSC |      |
| e   | 0.5 BSC |      |

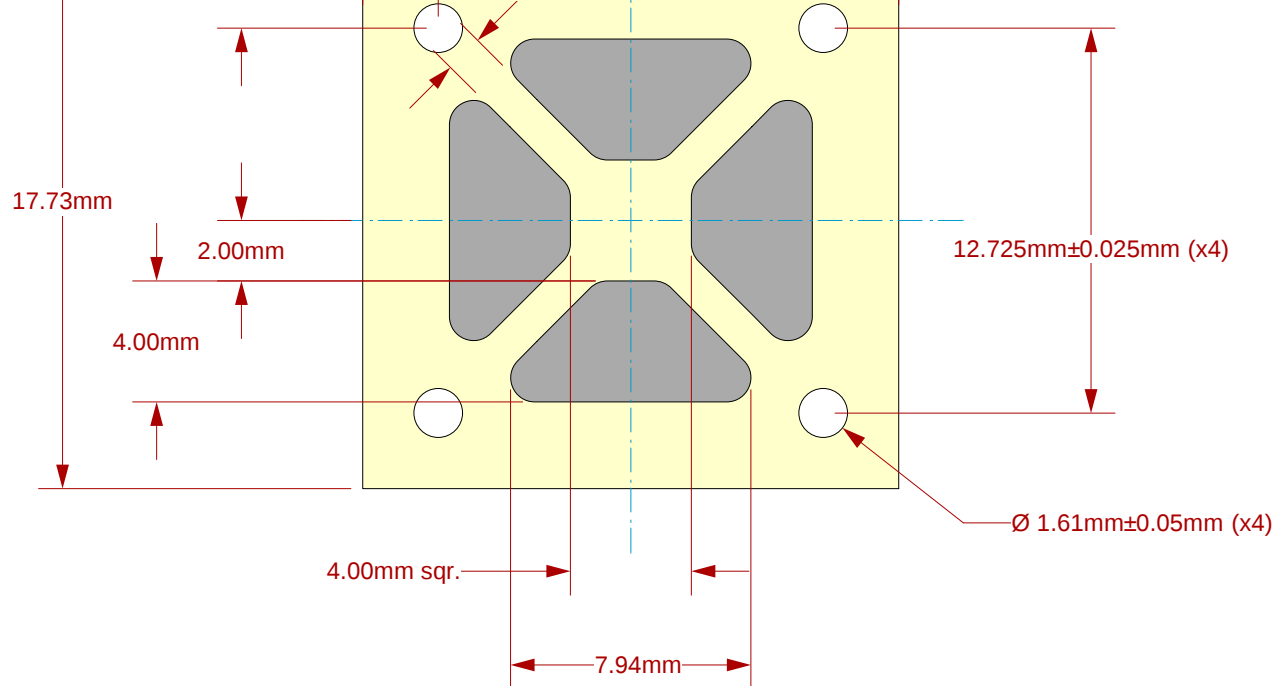
15 x 15 array

|                                                                                                                                                                                                                                            |                           |                  |                        |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------|------------------------|--------|
| <b>CG-BGA-5002 Drawing</b>                                                                                                                                                                                                                 |                           | Status: Released | Scale: -               | Rev: B |
|  <p>© 2007 IRONWOOD ELECTRONICS, INC.<br/>11351 Rupp Drive, Suite 400, Burnsville, MN 55337<br/>Tele: (952) 229-8200<br/>www.ironwoodelectronics.com</p> | Drawing: J. Glab          |                  | Date: 9/13/07          |        |
|                                                                                                                                                                                                                                            | File: CG-BGA-5002 Dwg.mcd |                  | Modified: 09/17/14, DH |        |

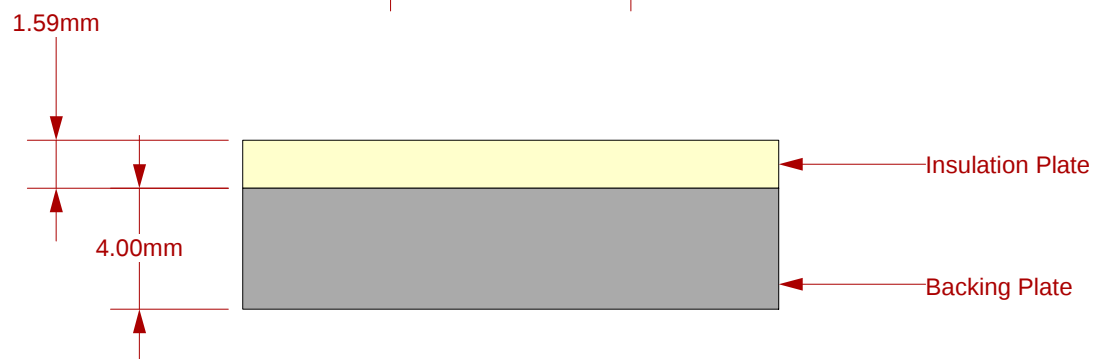
PAGE 3 of 4



Top View



Side View



USE DXF DATA

Description: Backing Plate with Insulation Plate

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

|                                                                                     |                                                                                                                                                                             |                           |                        |        |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------|--------|
|  | <b>CG-BGA-5002 Drawing</b><br>© 2007 IRONWOOD ELECTRONICS, INC.<br>11351 Rupp Drive, Suite 400, Burnsville, MN 55337<br>Tele: (952) 229-8200<br>www.ironwoodelectronics.com | Status: Released          | Scale: -               | Rev: B |
|                                                                                     |                                                                                                                                                                             | Drawing: J. Glab          | Date: 9/13/07          |        |
|                                                                                     |                                                                                                                                                                             | File: CG-BGA-5002 Dwg.mcd | Modified: 09/17/14, DH |        |