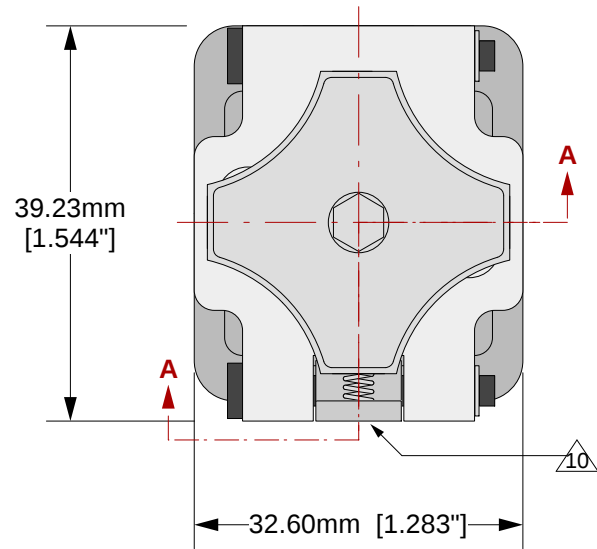
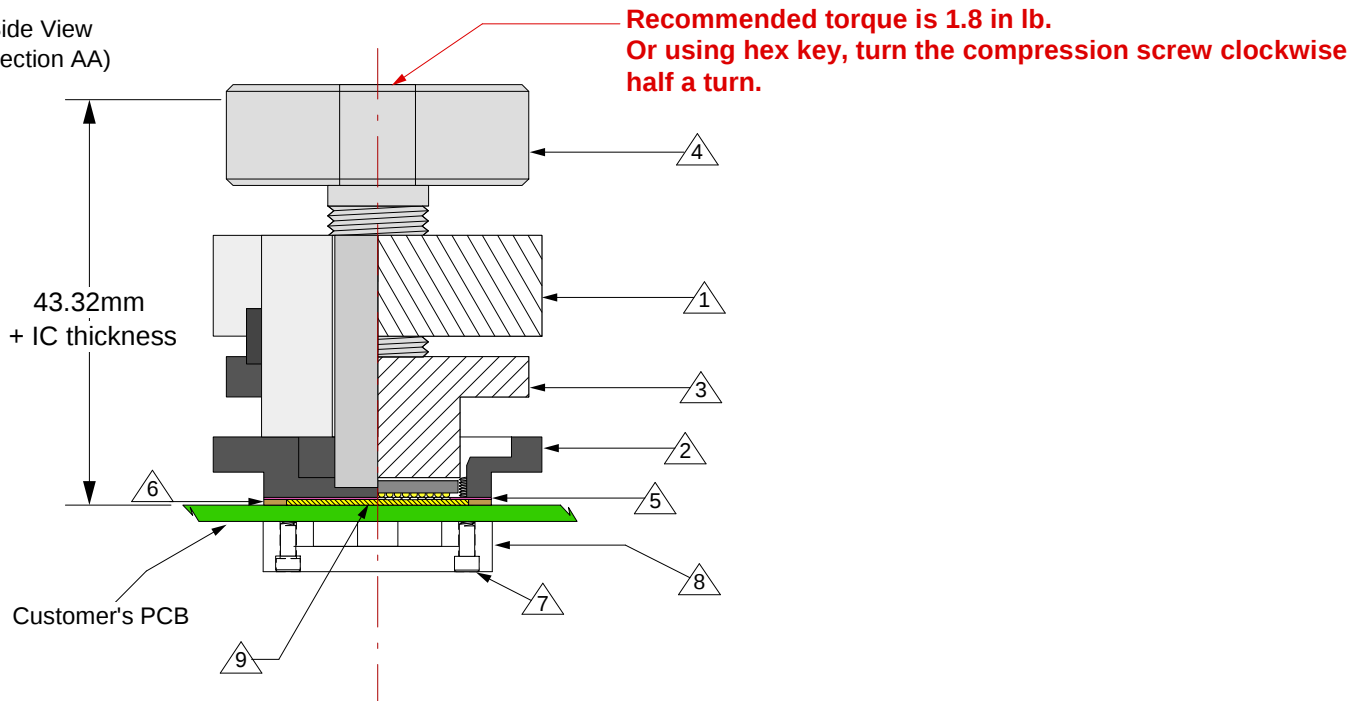


# Top View



# 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

Minimum real estate required

High speed, reliable Elastomer connection

## Materials:

- 1 Clam Shell Lid: Black anodized Aluminum. Height = 20 mm.
- 2 Socket Base: Black anodized Aluminum. Height = 6 mm.
- 3 Compression Plate: Black anodized Aluminum. Thickness = 12 mm.
- 4 Compression Screw: Clear anodized Aluminum. Height = 27 mm, Fluted Knob
- 5 Ball guide: Kapton
- 6 Elastomer Guide: Ultem 1000. Thickness: 0.425mm
- 7 Socket Base Screw: Socket Head Cap Screw, alloy steel with black oxide finish, 0-80 Thread, 3/8" long.
- 8 Backing Plate: Black anodized Aluminum
- 9 Elastomer: 20 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.5mm.
- 10 Latch: Black anodized Aluminum.

## CG-BGA-5008 Drawing

© 2012 IRONWOOD ELECTRONICS, INC.  
Tele: (952) 229-8200  
www.ironwoodelectronics.com

Status: Released

Scale: 1.25:1

Rev: A

Drawing: E Smolentseva

Date: 10/22/12

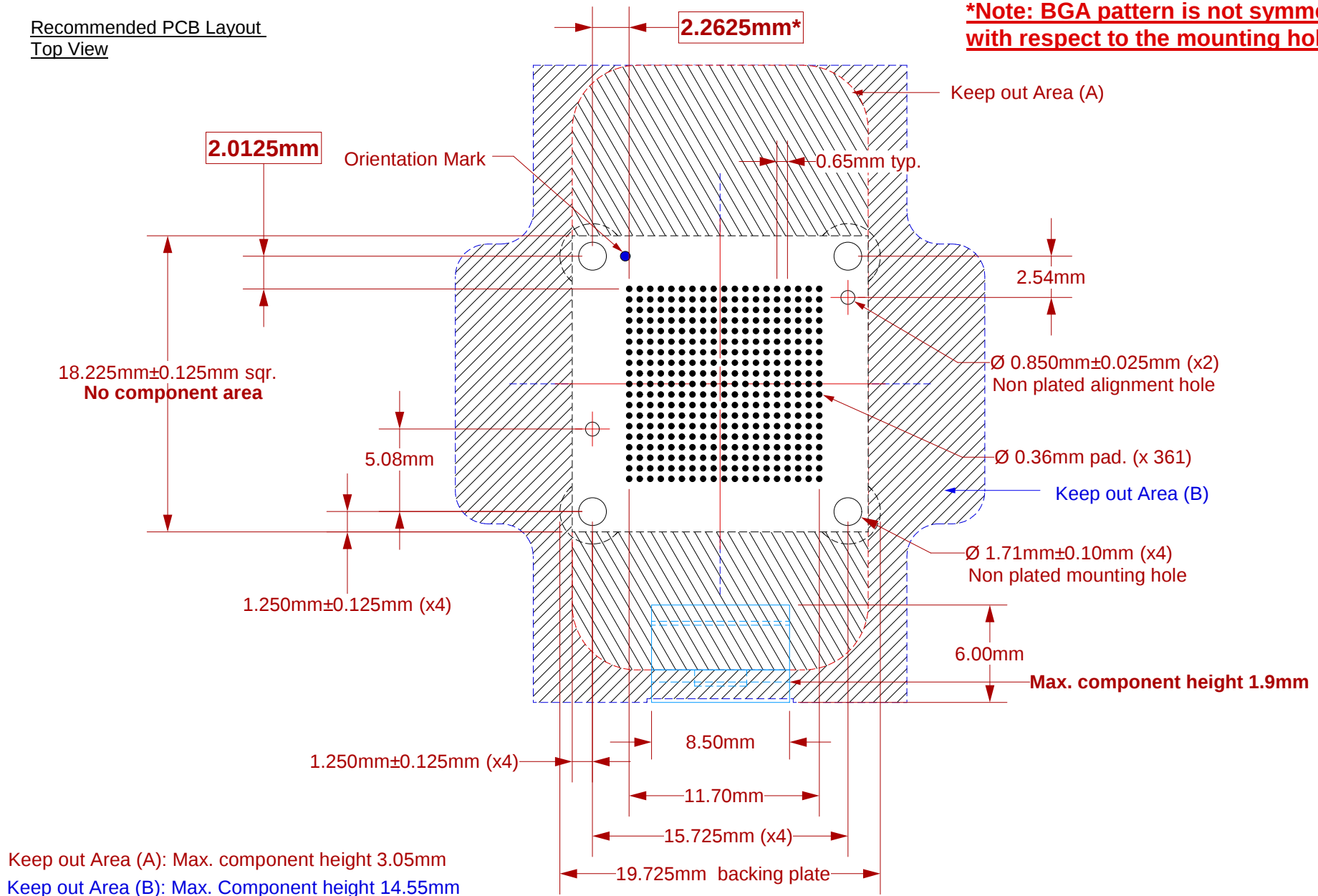
File: CG-BGA-5008 Dwg

Modified:

All Tolerances:  $\pm 0.125\text{mm}$  (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.**



Target PCB Recommendations

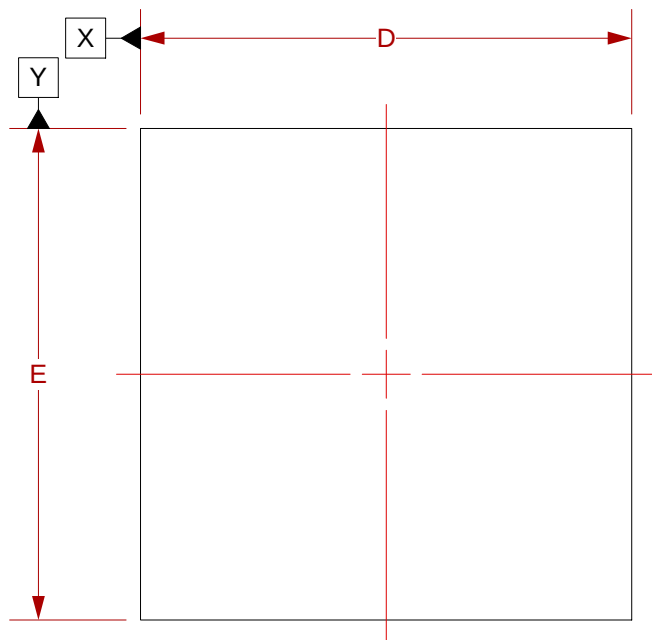
Total thickness: 1.5mm min.

Plating: Gold or Solder finish

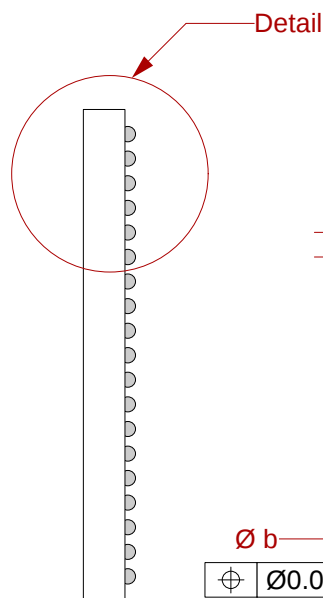
DXF DATA WILL BE PROVIDED

|                                                                                                                                                                                       |                        |                  |                |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------|----------------|--------|
| CG-BGA-5008 Drawing                                                                                                                                                                   |                        | Status: Released | Scale: 1.25:1  | Rev: A |
|  <p>© 2012 IRONWOOD ELECTRONICS, INC.<br/>Tele: (952) 229-8200<br/>www.ironwoodelectronics.com</p> | Drawing: E Smolentseva |                  | Date: 10/22/12 |        |
|                                                                                                                                                                                       | File: CG-BGA-5008 Dwg  |                  | Modified:      |        |

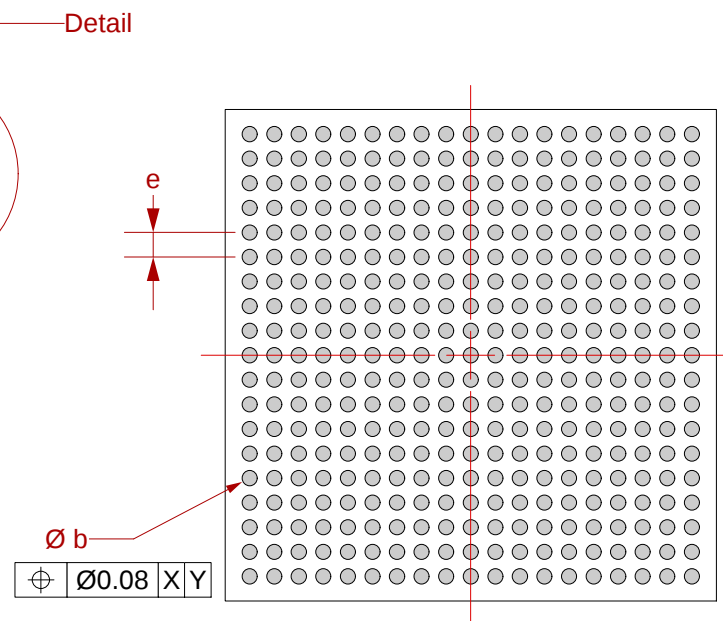
Recommended PCB Layout Tolerances:  
±0.025mm [±0.001"] unless stated otherwise.



Top View

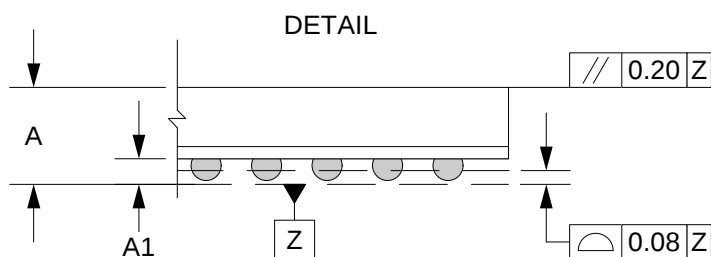


Side View



Bottom View

|   |       |   |   |   |
|---|-------|---|---|---|
| ⊕ | Ø0.15 | Z | X | Y |
|   | Ø0.08 |   |   |   |



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.

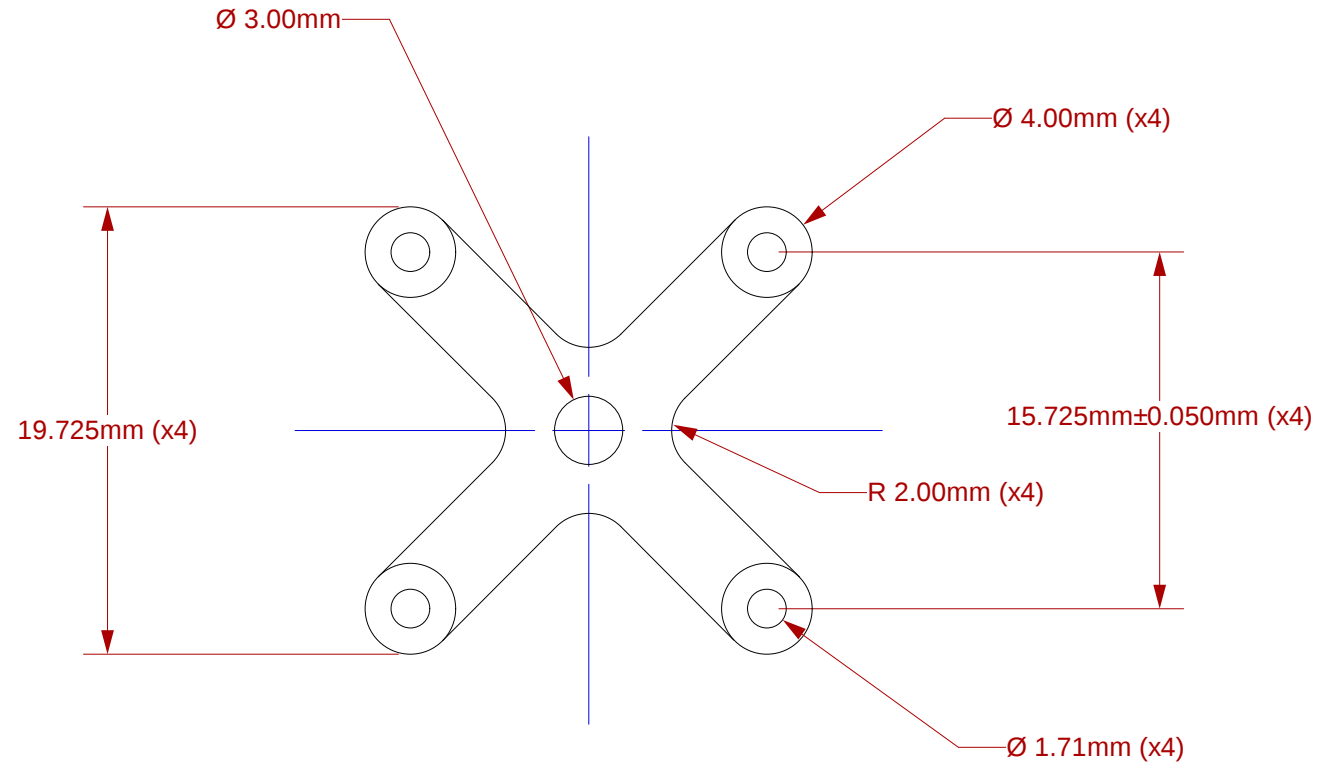


Parallelism measurement shall exclude any effect of mark on top surface of package.

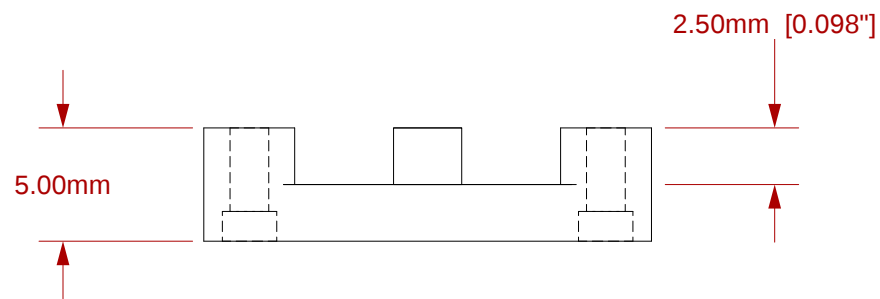
| DIM | MIN      | MAX  |
|-----|----------|------|
| A   |          | 1.4  |
| A1  | 0.25     | 0.3  |
| b   |          | 0.45 |
| D   | 13.0 BSC |      |
| E   | 13.0 BSC |      |
| e   | 0.65 BSC |      |

19 x 19 array

|                                                                                                                                                                                       |                        |                  |                |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------|----------------|--------|
| <b>CG-BGA-5008 Drawing</b>                                                                                                                                                            |                        | Status: Released | Scale: 1.25:1  | Rev: A |
|  <p>© 2012 IRONWOOD ELECTRONICS, INC.<br/>Tele: (952) 229-8200<br/>www.ironwoodelectronics.com</p> | Drawing: E Smolentseva |                  | Date: 10/22/12 |        |
|                                                                                                                                                                                       | File: CG-BGA-5008 Dwg  |                  | Modified:      |        |



Top View

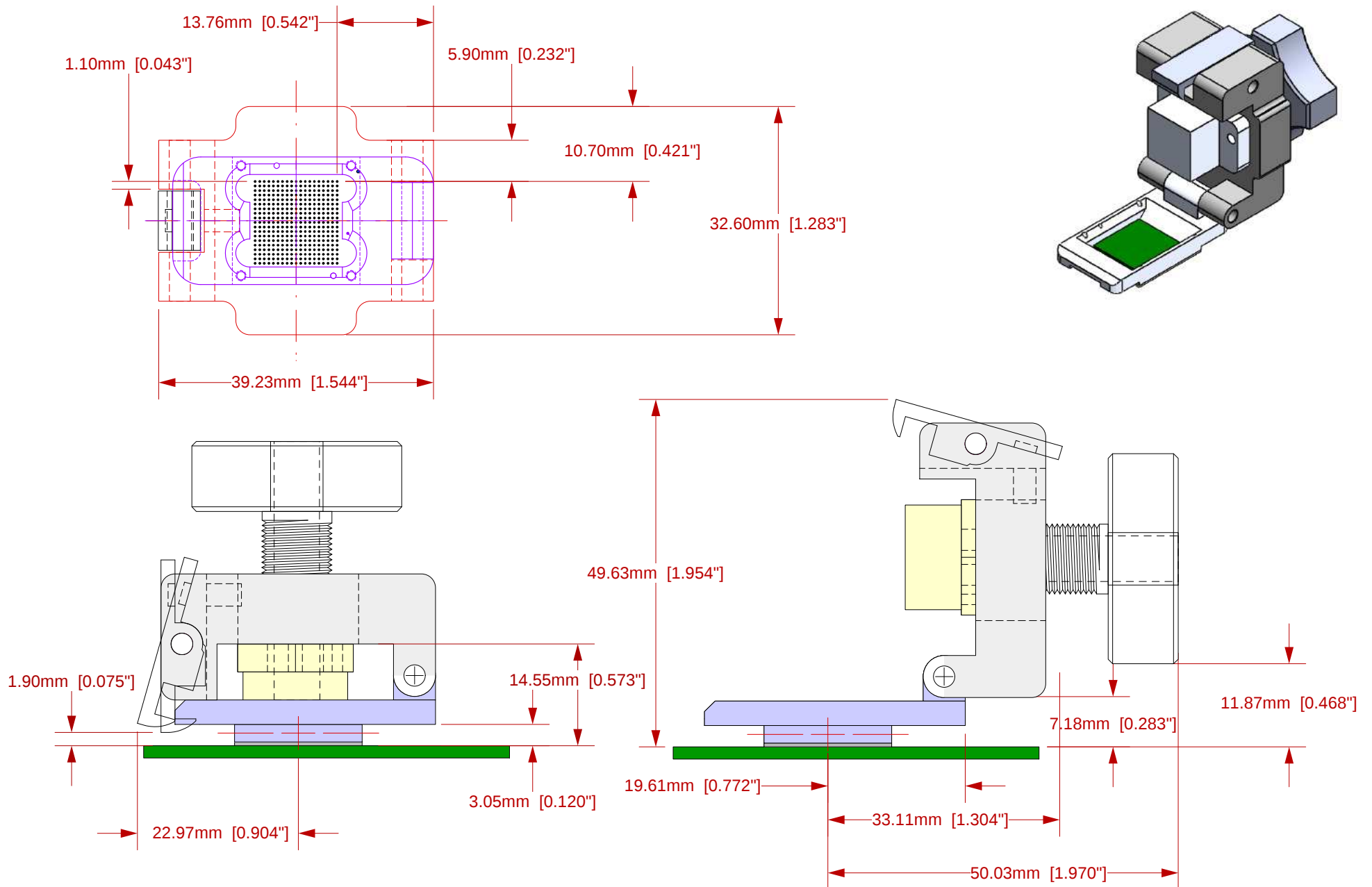


Side View

Description: Backing Plate

|                                                                                     |                                                                                          |                        |               |                |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------|---------------|----------------|
| CG-BGA-5008 Drawing                                                                 |                                                                                          | Status: Released       | Scale: 1.25:1 | Rev: A         |
|  | © 2012 IRONWOOD ELECTRONICS, INC.<br>Tele: (952) 229-8200<br>www.ironwoodelectronics.com | Drawing: E Smolentseva |               | Date: 10/22/12 |
|                                                                                     |                                                                                          | File: CG-BGA-5008 Dwg  |               | Modified:      |

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



Description: Keep out area information

|                                                                                                                                                                                       |                        |                  |                |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------|----------------|--------|
| <b>CG-BGA-5008 Drawing</b>                                                                                                                                                            |                        | Status: Released | Scale: 1.25:1  | Rev: A |
|  <p>© 2012 IRONWOOD ELECTRONICS, INC.<br/>Tele: (952) 229-8200<br/>www.ironwoodelectronics.com</p> | Drawing: E Smolentseva |                  | Date: 10/22/12 |        |
|                                                                                                                                                                                       | File: CG-BGA-5008 Dwg  |                  | Modified:      |        |

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