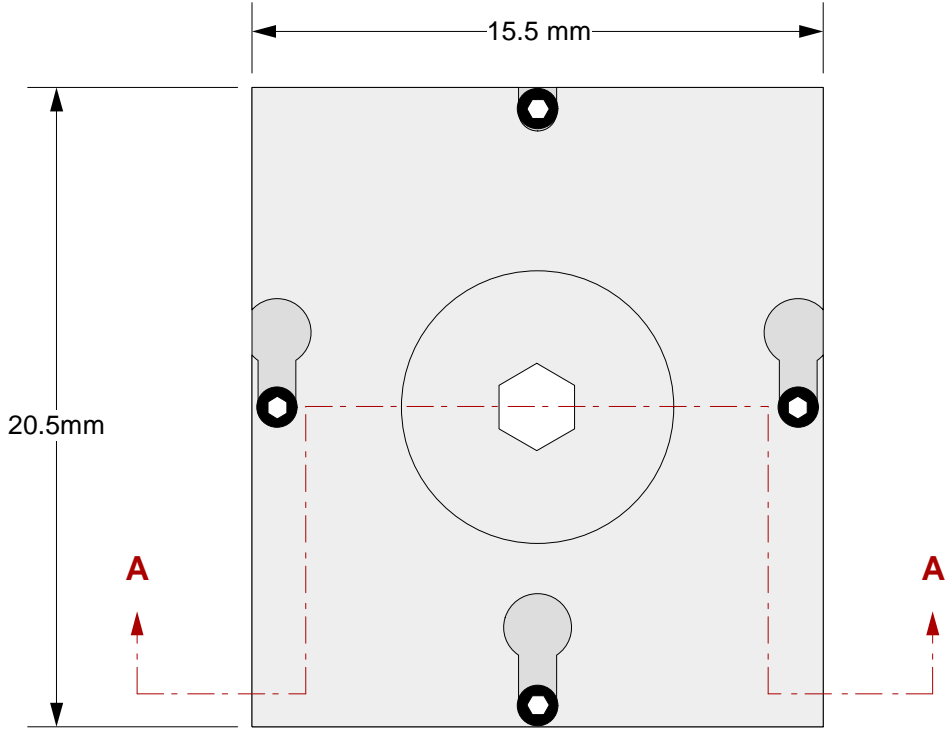


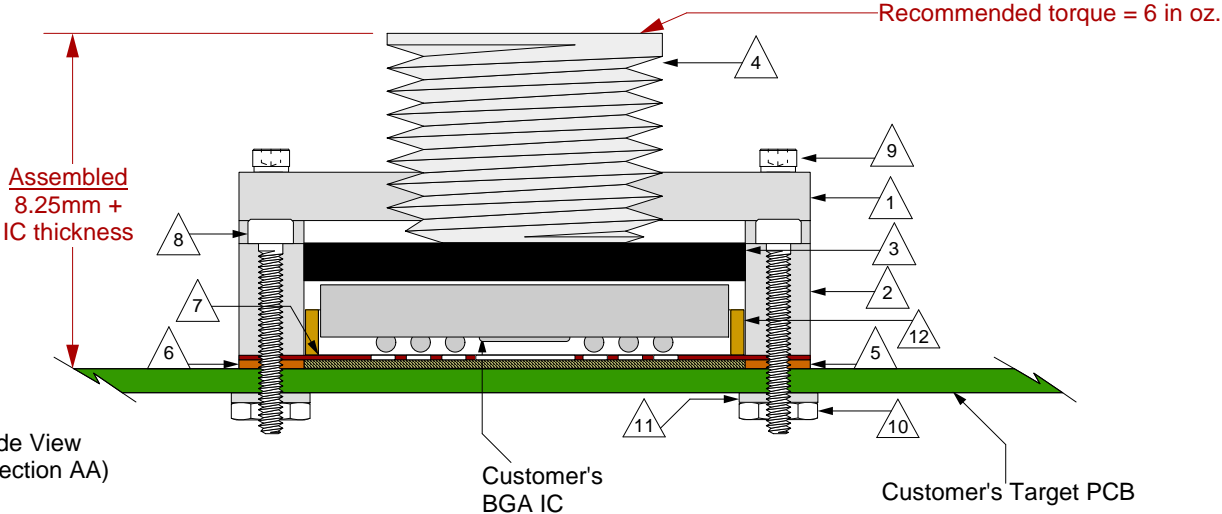
GHz BGA Socket - Direct mount, solderless

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




Top View



Side View
(Section AA)

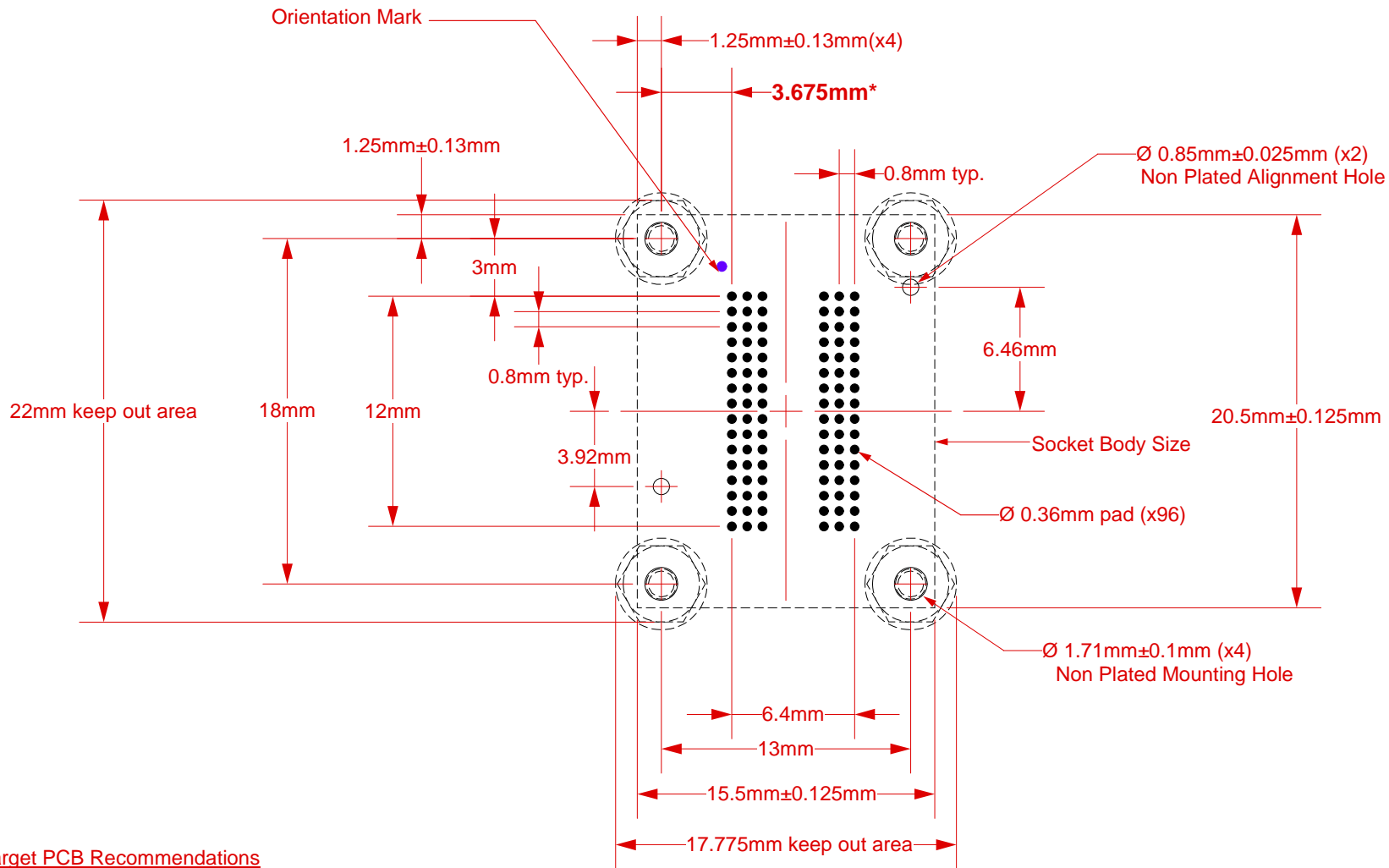
- △ 1 Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
- △ 2 Socket base: Black anodized Aluminum. Thickness = 5mm.
- △ 3 Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
- △ 4 Compression screw: Clear anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.
- △ 5 Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.75mm.
- △ 6 Elastomer Guide: Non-clad FR4. Thickness = 0.725mm.
- △ 7 Ball Guide: Kapton polyimide.
- △ 8 Socket base screw: Socket head cap, Alloy steel with black oxide finish, 0-80 fine thread , 9.525mm long.
- △ 9 Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.
- △ 10 Socket base nut: 18-8 Stainless steel, 0-80 fine thread.
- △ 11 Nylon washer: 1.73mm ID; 4.78mm OD 0.64mm thickness.
- △ 12 IC Guide: Ultem

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

| | | | | |
|---|---------------------------|------------------|----------------|--------|
| SG-BGA-6293 Drawing | | Status: Released | Scale: - | Rev: A |
|  <p>© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com</p> | Drawing: E Smolentseva | | Date: 10/22/09 | |
| | File: SG-BGA-6293 Dwg.mcd | | Modified: | |

Recommended PCB Layout
Top View

***Note: BGA pattern is *not* symmetrical with respect to the mounting holes. It is offset by 0.375mm to the right of center with respect to the mounting holes.**




Target PCB Recommendations

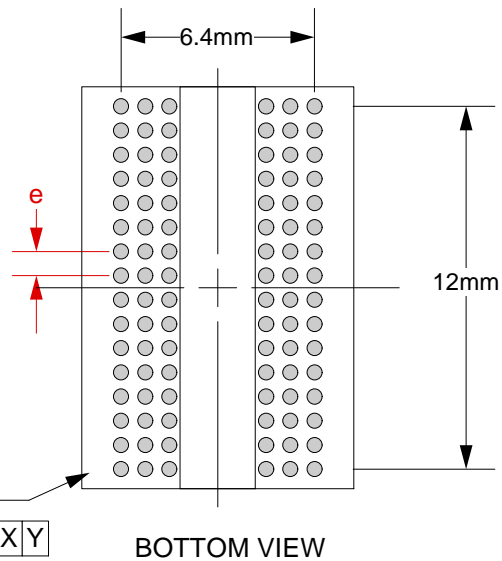
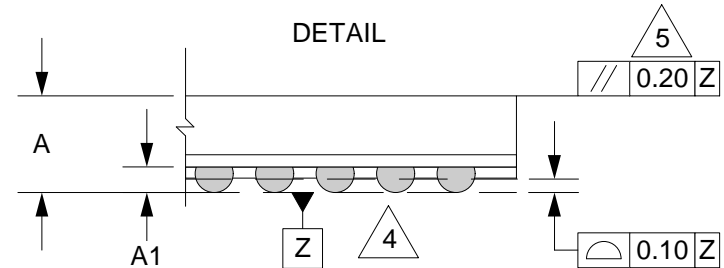
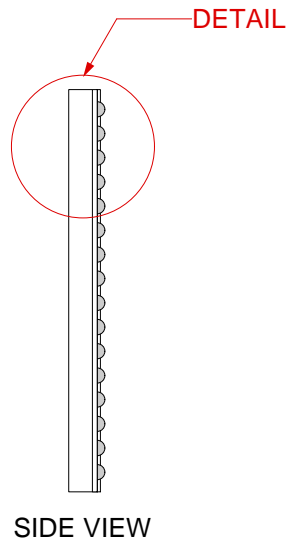
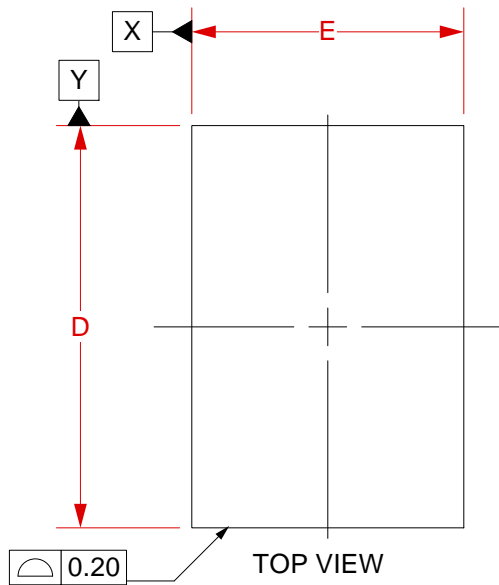
Total thickness: 1.6mm min.
Plating: Gold or Solder finish
PCB Pad height: Same or higher than solder mask

NOTE: 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-6293 Drawing | | Status: Released | Scale: - | Rev: A |
| | © 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com | | Drawing: E Smolentseva | | Date: 10/22/09 |
| | | | File: SG-BGA-6293 Dwg.mcd | | Modified: |


Compatible BGA Spec



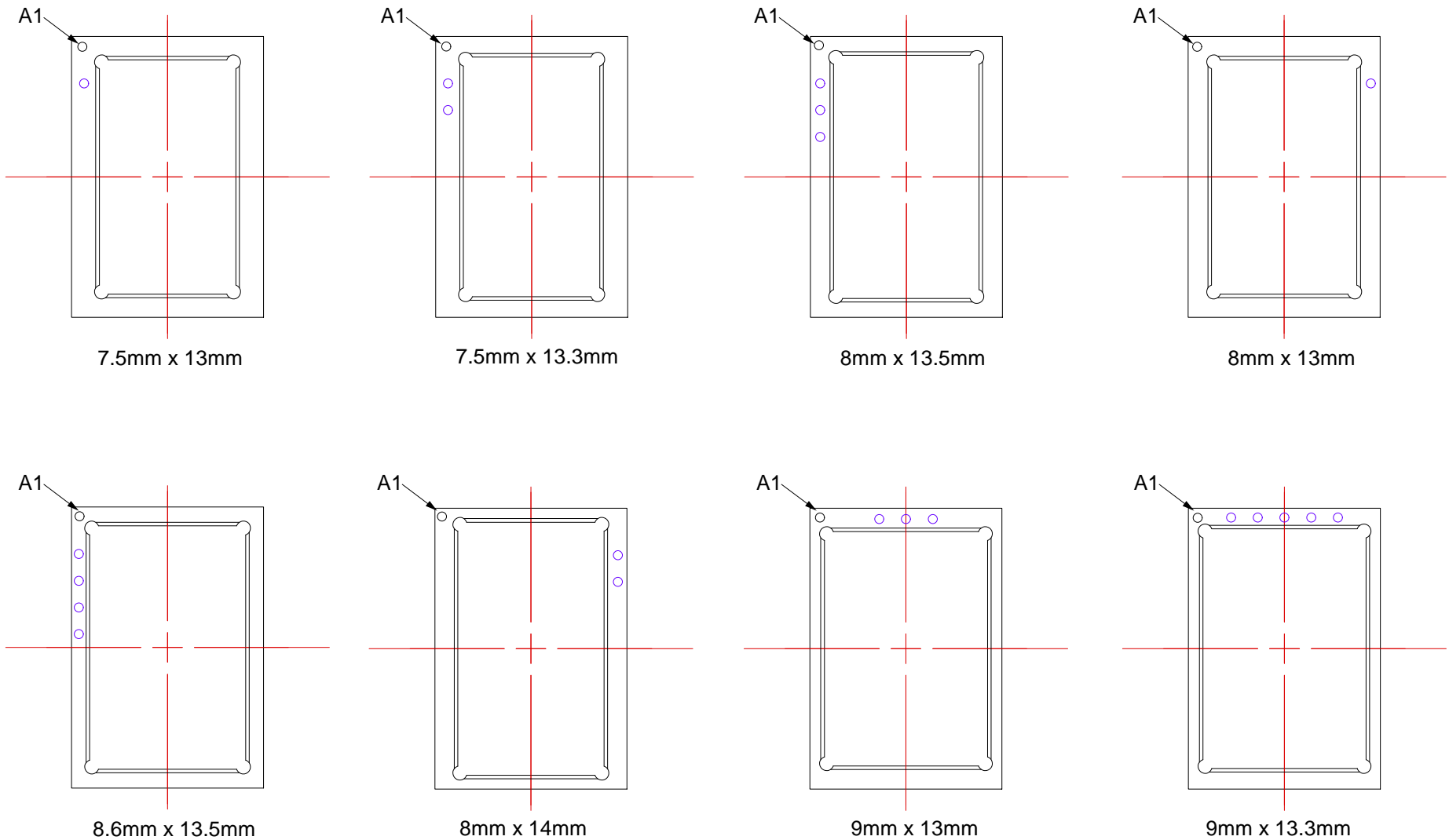
- 1 Dimensions are in millimeters.
- 2 Interpret dimensions and tolerances per ASME Y14.5M-1994.
- 3 Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
- 4 Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
- 5 Parallelism measurement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


| DIM | MIN | MAX |
|-----|-----------|------|
| A | | 1.2 |
| A1 | 0.30 | 0.40 |
| b | 0.40 | 0.50 |
| E | 9.00 BSC | |
| D | 13.30 BSC | |
| e | 0.80 BSC | |

Array 9x16

| | | | | | |
|---|---|--|------------------|---------------------------|----------------|
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| | | | | File: SG-BGA-6293 Dwg.mcd | Date: 10/22/09 |
| | | | | | Modified: |

IC Guides



| | | | | | | |
|---|---|--|------------------|---------------------------|--------|----------------|
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| | | | | File: SG-BGA-6293 Dwg.mcd | | Modified: |