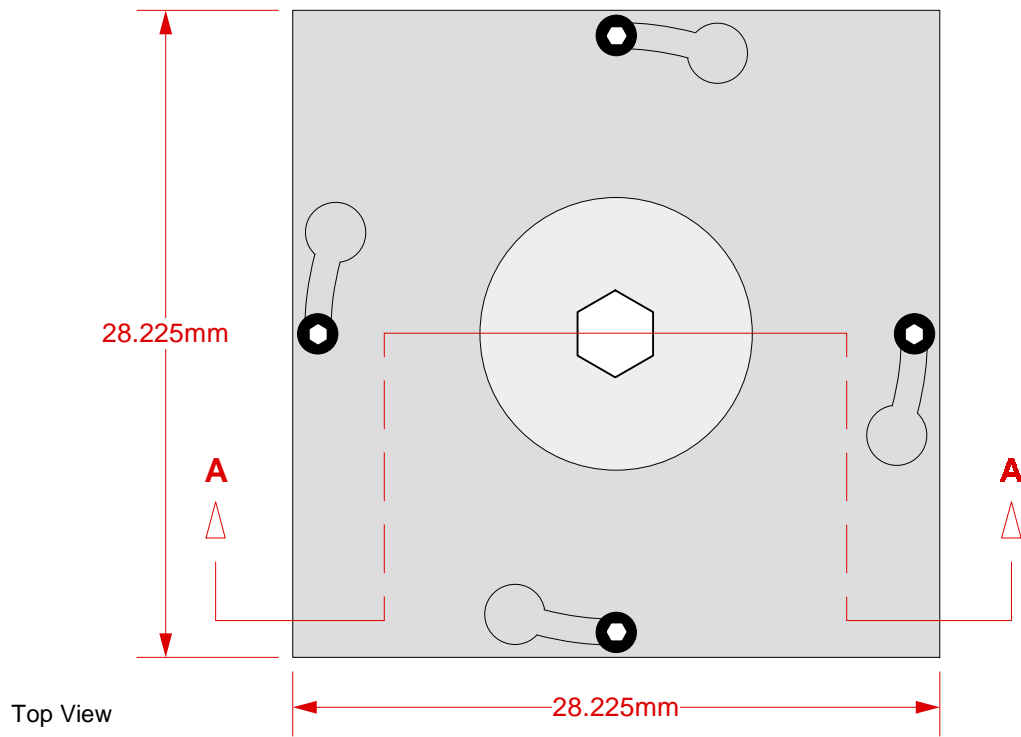


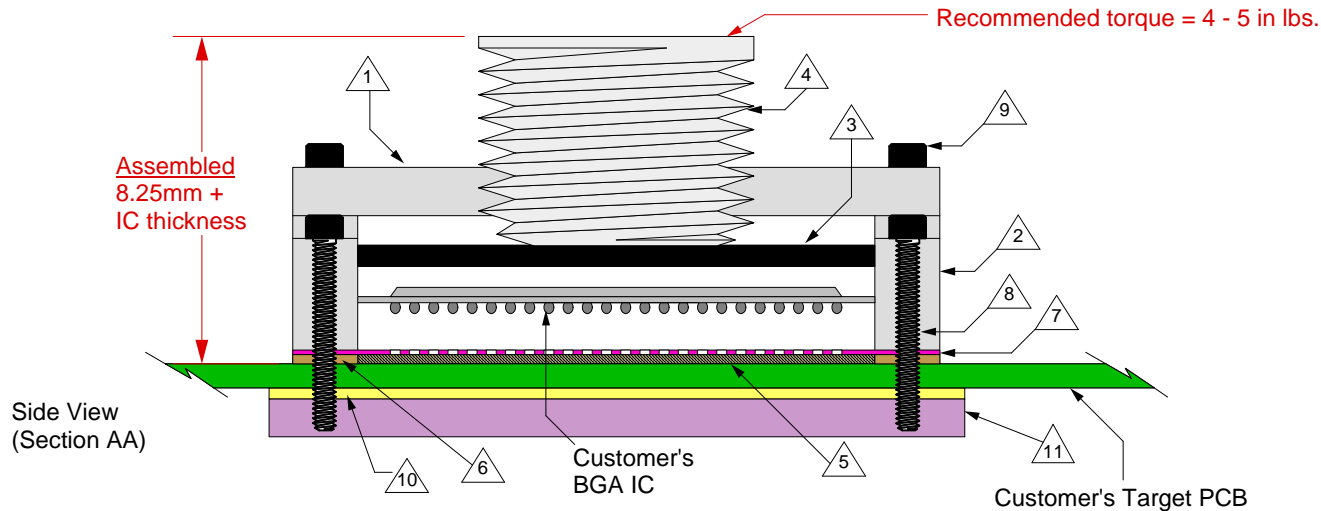
GHz BGA Socket - Direct mount, solderless

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



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: Black 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, 12.7mm 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-6031 Drawing

Status: Released

Scale: -

Rev: E



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Tele: (952) 229-8200
www.ironwoodelectronics.com

Drawing: W. Watson

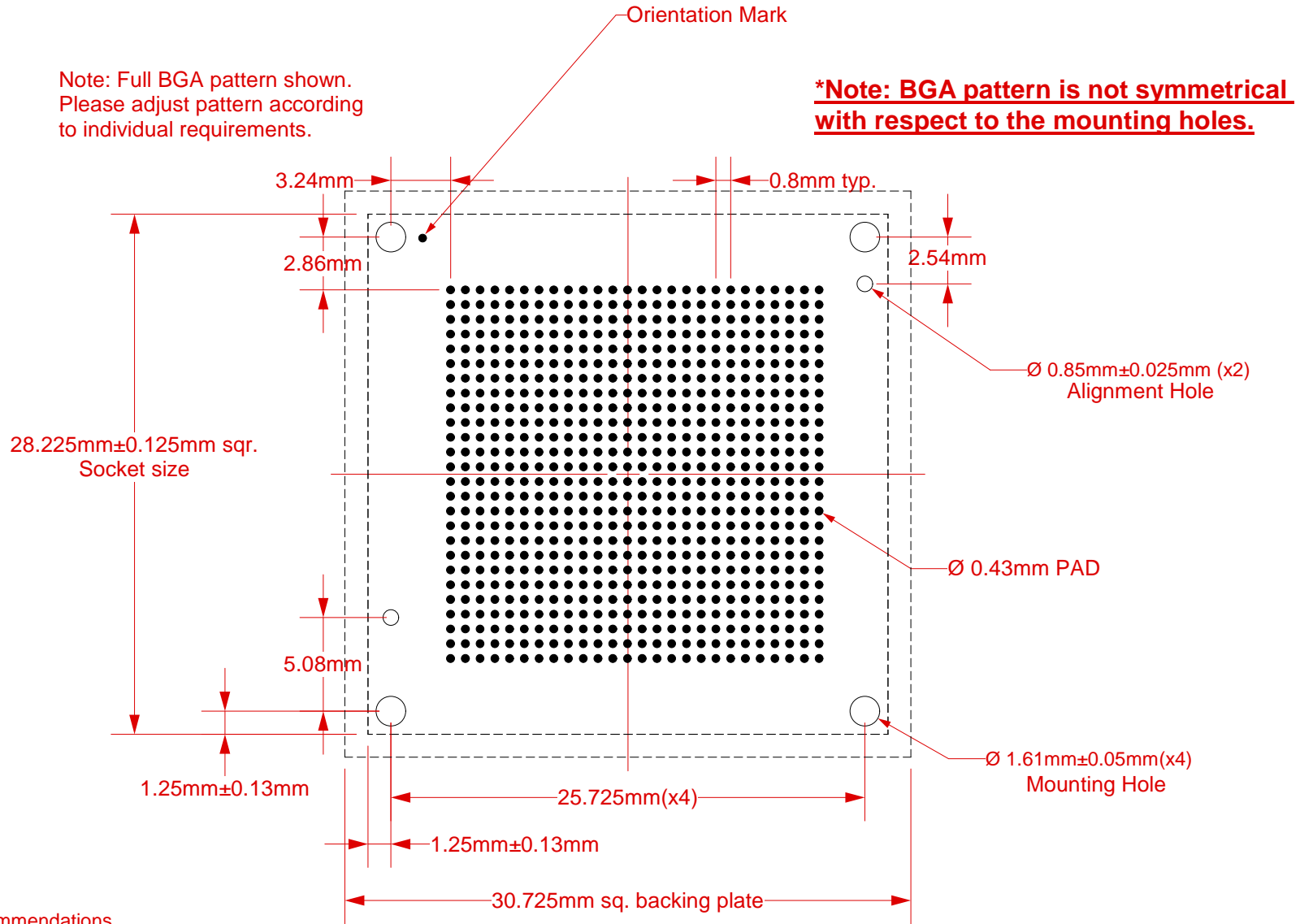
Date: 12/17/01

File: SG-BGA-6031 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.

Recommended PCB Layout
Top View




Target PCB Recommendations

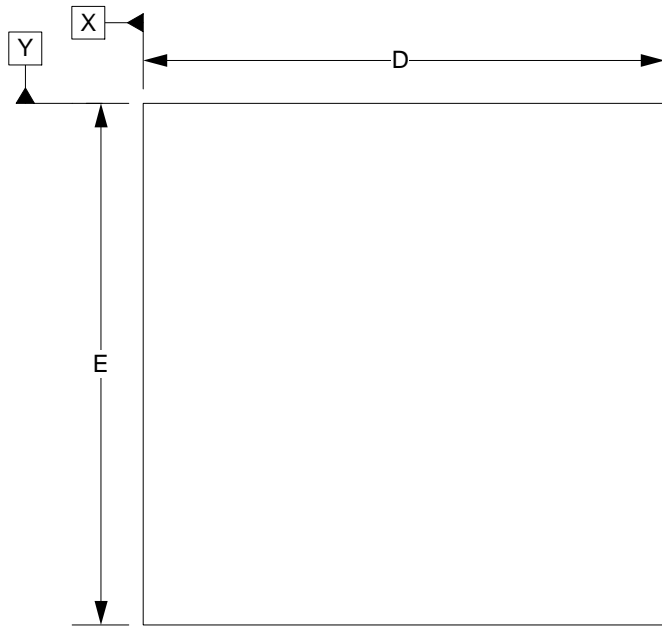
Total thickness: 2.4mm min.
 Plating: Gold or Solder finish
 PCB Pad height: Same or higher than solder mask

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

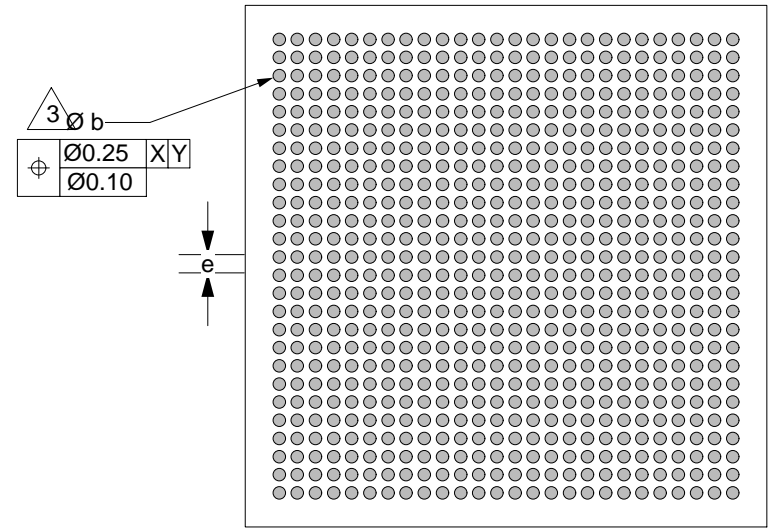
Recommended PCB Layout Tolerances: ±0.025mm [±0.001"] unless stated otherwise.

| | | | | |
|--|-----------------------------------|-----------------------------|-------------------|---------------|
|  <p>© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com</p> | <p>SG-BGA-6031 Drawing</p> | <p>Status: Released</p> | <p>Scale: 3:1</p> | <p>Rev: E</p> |
| | <p>Drawing: W. Watson</p> | <p>Date: 12/17/01</p> | | |
| | <p>File: SG-BGA-3031 Dwg.mcd</p> | <p>Modified: 7/6/09, AE</p> | | |

Compatible BGA Spec.

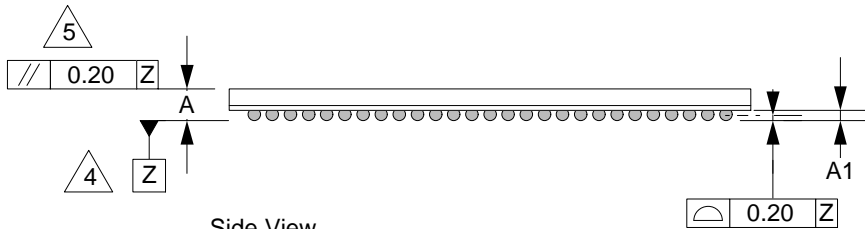


Top View



Bottom View

Array: 26x26




Side View

1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.

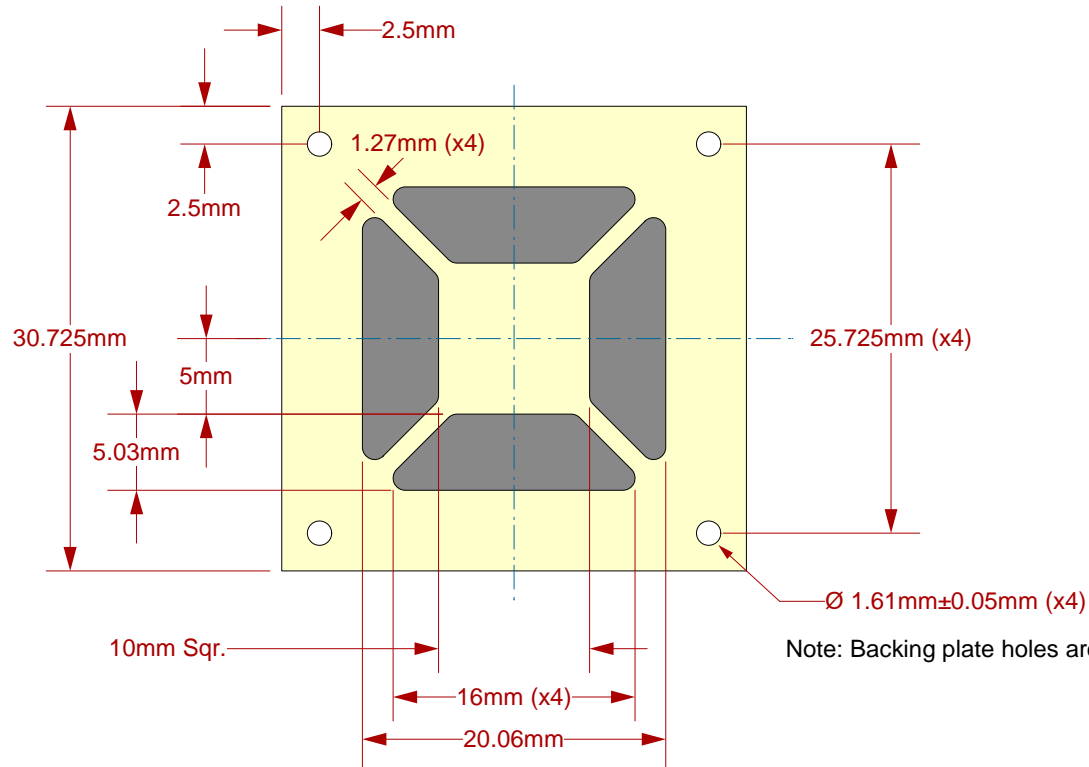
- △ 3 Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z .
- △ 4 Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
- △ 5 Parallelism measurement shall exclude any effect of mark on top surface of package.

| DIM | MIN | MAX |
|-----|----------|------|
| A | | 1.4 |
| A1 | 0.35 | 0.45 |
| b | | 0.55 |
| D | 23.0 BSC | |
| E | 23.0 BSC | |
| e | 0.8 BSC | |

Array: 39x39

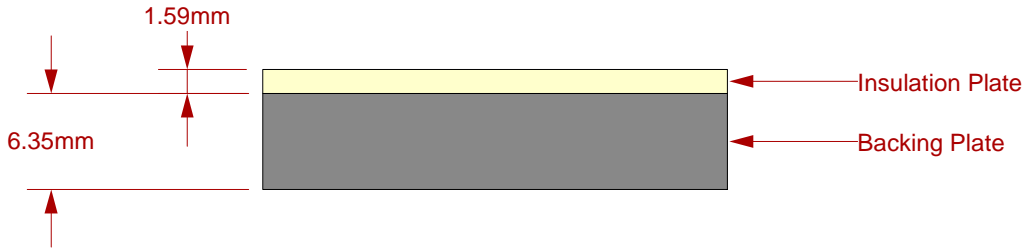
| | | | | | | |
|---|---|--|------------------|---------------------------|----------------------|----------------|
|  | SG-BGA-6031 Drawing | | Status: Released | Scale: - | Rev: E | |
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| | | | | File: SG-BGA-6031 Dwg.mcd | Modified: 7/6/09, AE | |

Top View




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

Side View



Description: Backing Plate with Insulation Plate

| | | | | |
|---|-----------------------------------|-----------------------------|-----------------|---------------|
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| | <p>Drawing: W. Watson</p> | <p>Date: 12/17/01</p> | | |
| | <p>File: SG-BGA-6031 Dwg.mcd</p> | <p>Modified: 7/6/09, AE</p> | | |

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