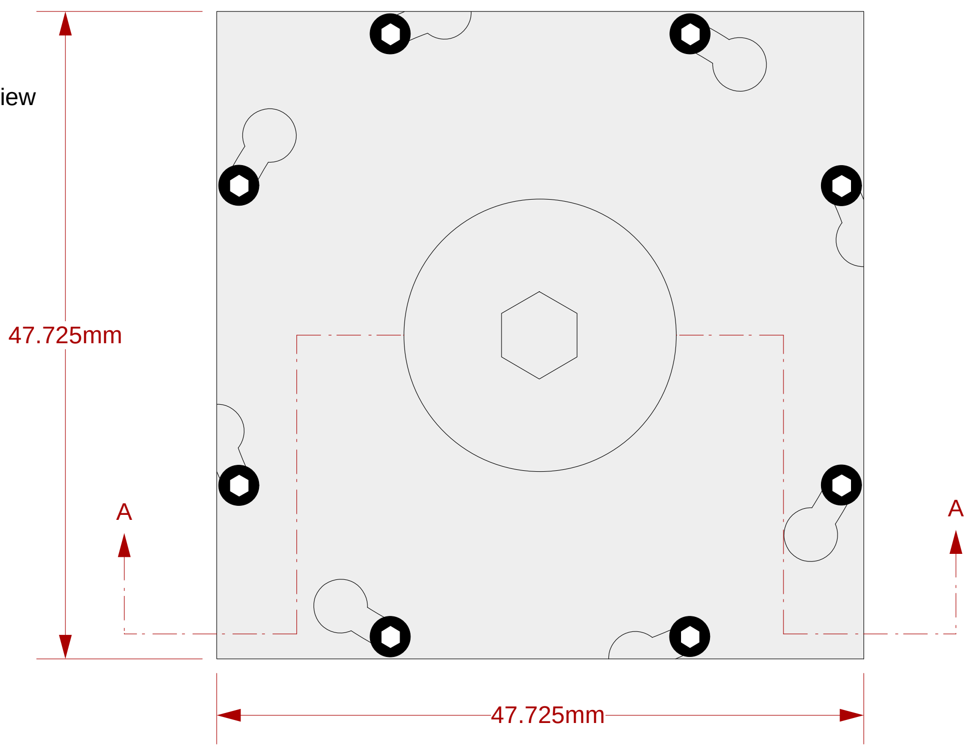
GHz BGA Socket - Direct mount, solderless

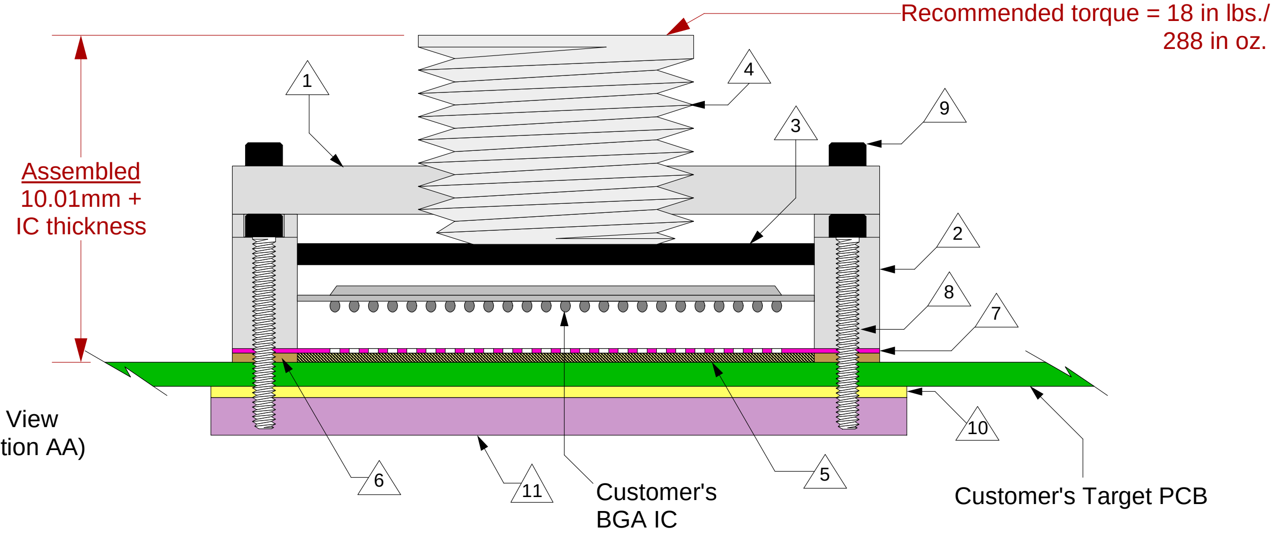
Top View



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

1	Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
2	Socket base: Black anodized Aluminum. Thickness = 6.5mm.
3	Compression Plate: Black anodized Aluminum. Thickness = 4.0mm.
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: Cirlex or equivalent. Thickness = 0.75mm.
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.



Side View
(Section AA)

SG-BGA-6041 Drawing

Status: Released

Scale: -

Rev: F

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

Drawing: Heidi Hansen

Date: 3/11/02

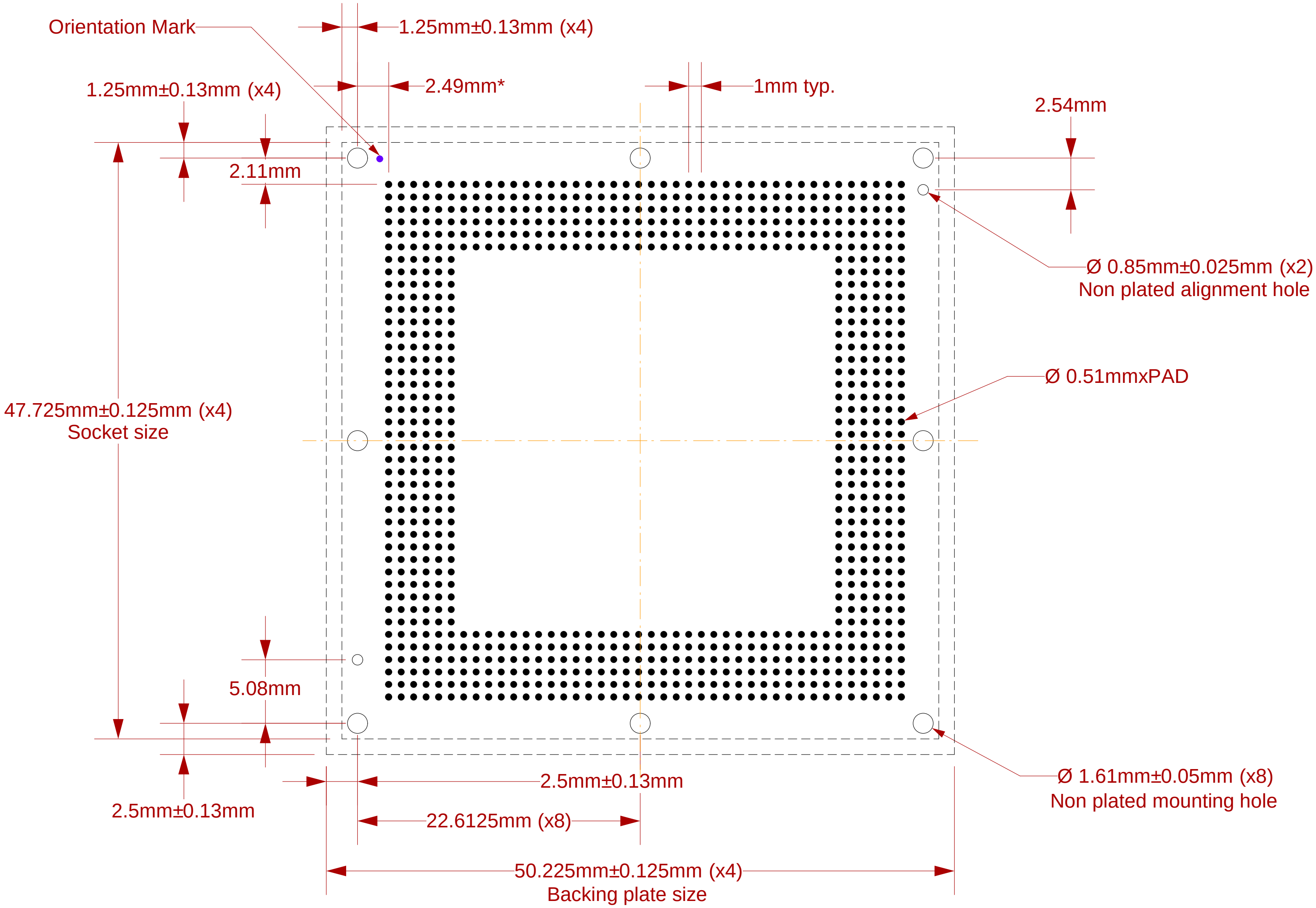
File: **SG-BGA-6041** Dwg

Modified: 7/16/09, AE

All tolerances: ±0.125mm (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: 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.

SG-BGA-6041 Drawing	Status: Released	Scale: 2:1	Rev: F
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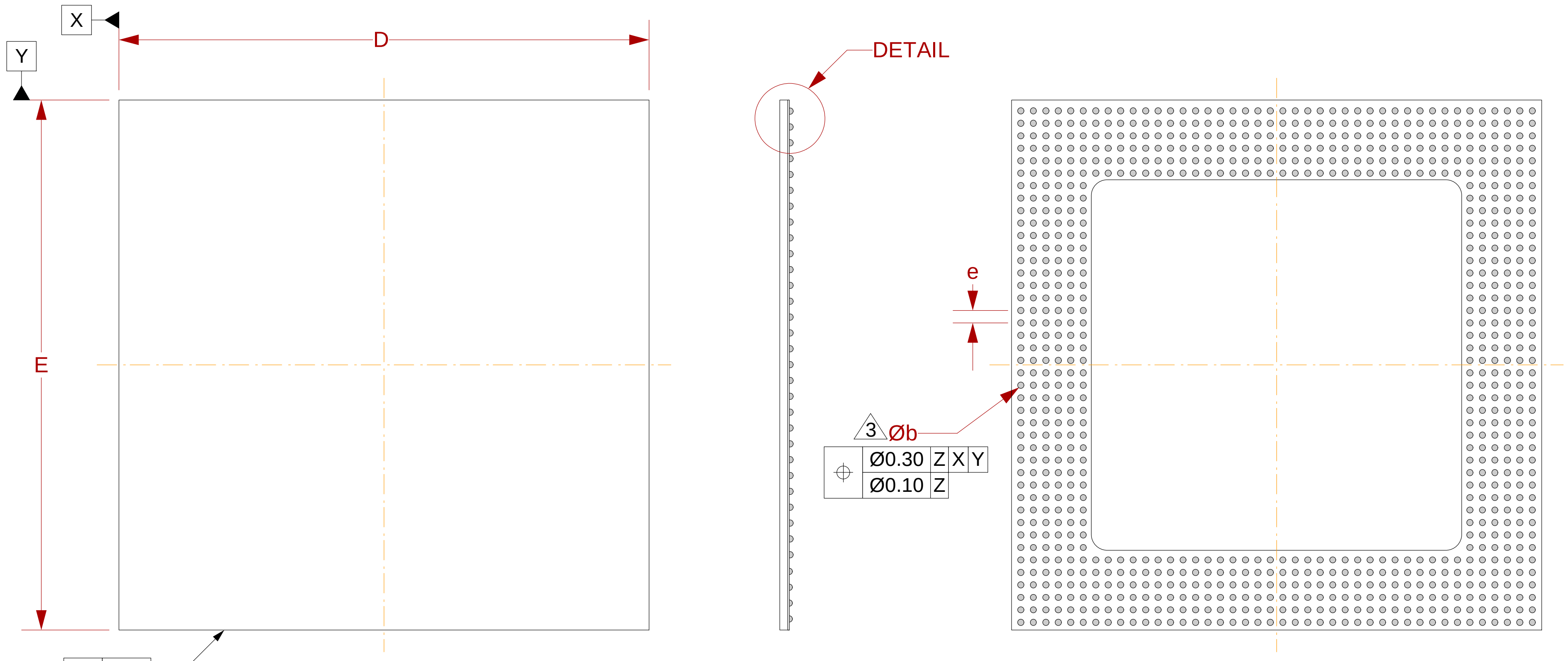
Compatible BGA Spec

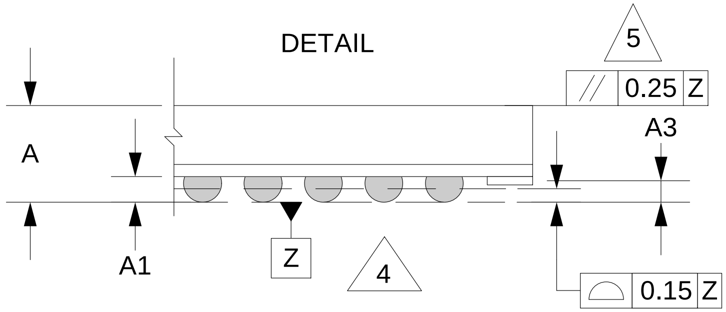


TOP VIEW

SIDE VIEW

BOTTOM VIEW

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		2.3
A1	0.4	0.6
A3	0.2	
b		0.7
D	42.50 BSC	
E	42.50 BSC	
e	1.0 BSC	

Array: 42x42

SG-BGA-6041 Drawing

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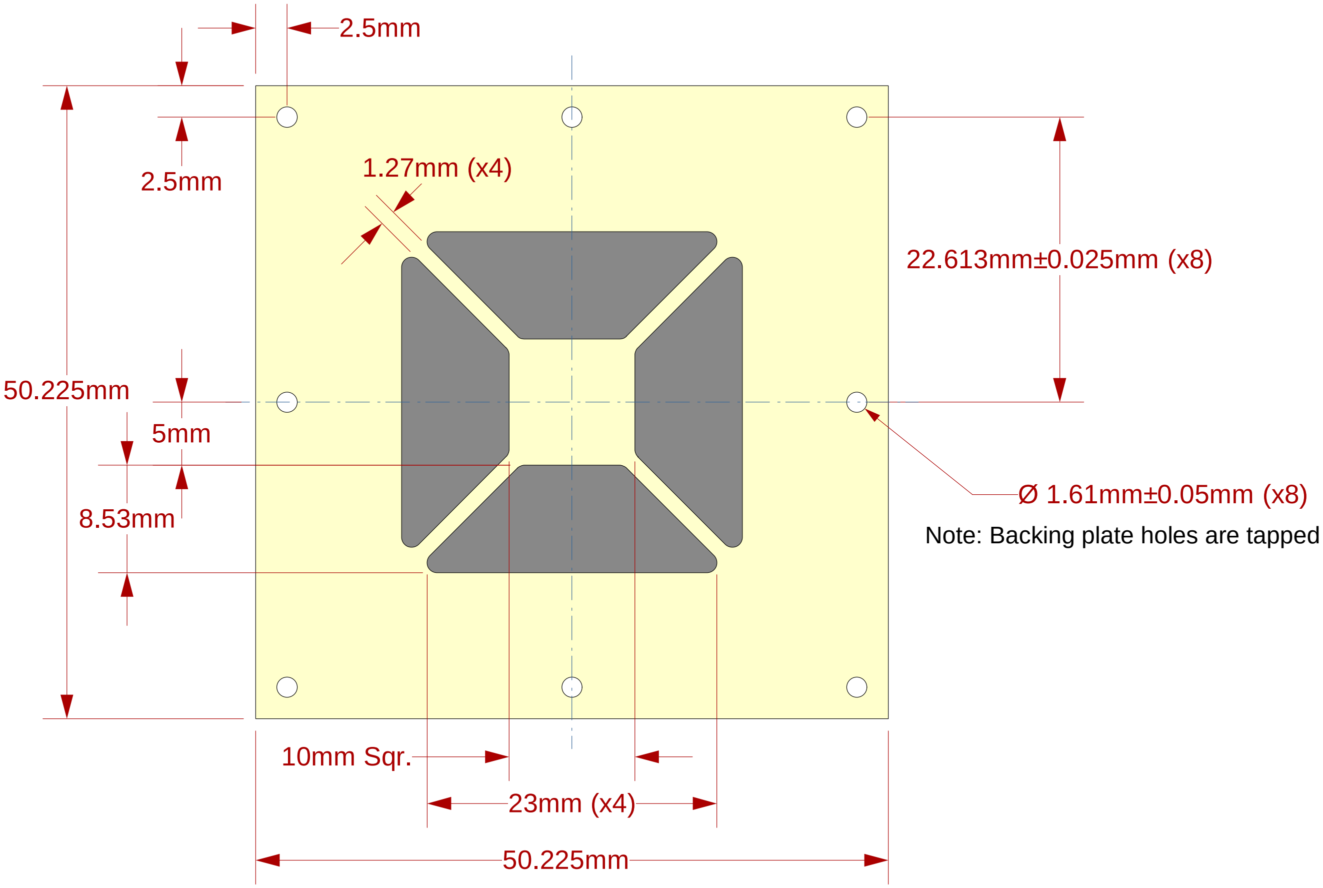
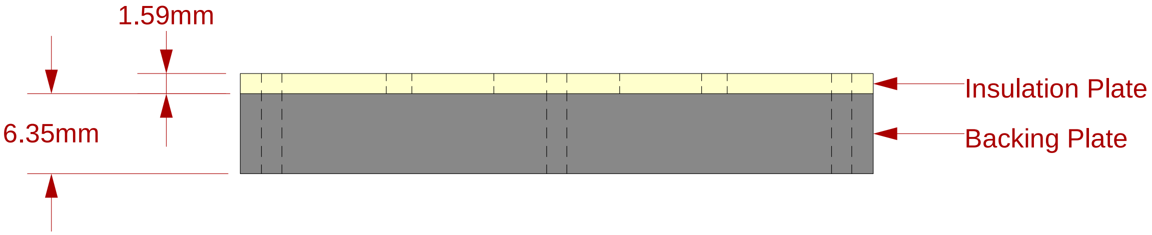
Top View



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

Side View



Description: Insulation Plate and Backing Plate

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