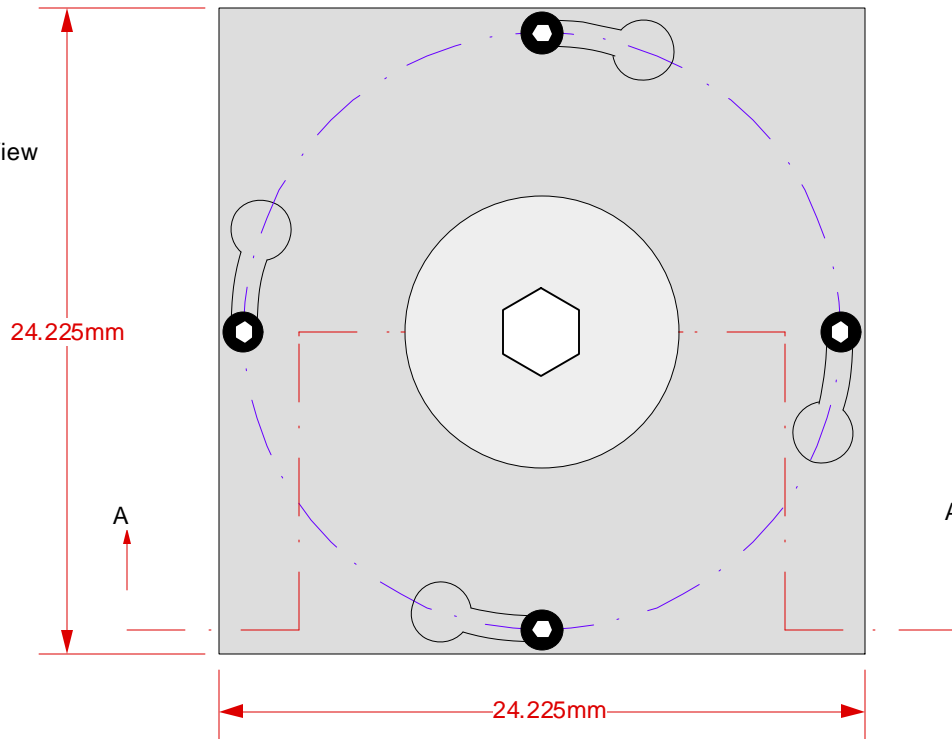


GHz BGA Socket - Direct mount, solderless

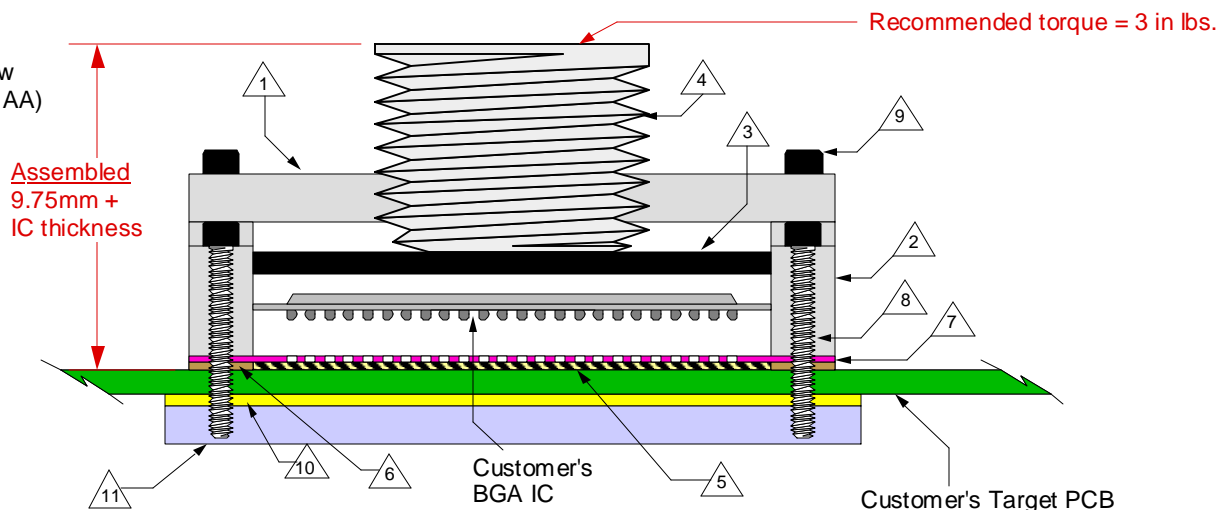
Top View



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

Side View
(Section AA)



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 = 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, 12.7mm long.
9	Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.
10	Insulation Plate: FR4/G10, 1.59mm thick.
11	Backing Plate: Anodized Aluminum 6.35mm thick.

SG-BGA-6144 Drawing

Status: Released

Scale: -

Rev: C

© 2009 IRONWOOD ELECTRONICS, INC.
11351 Rupp Dr. Suite 400, Burnsville MN 55337
Tele: (952) 229-8200
www.ironwoodelectronics.com

Drawing: H. Hansen

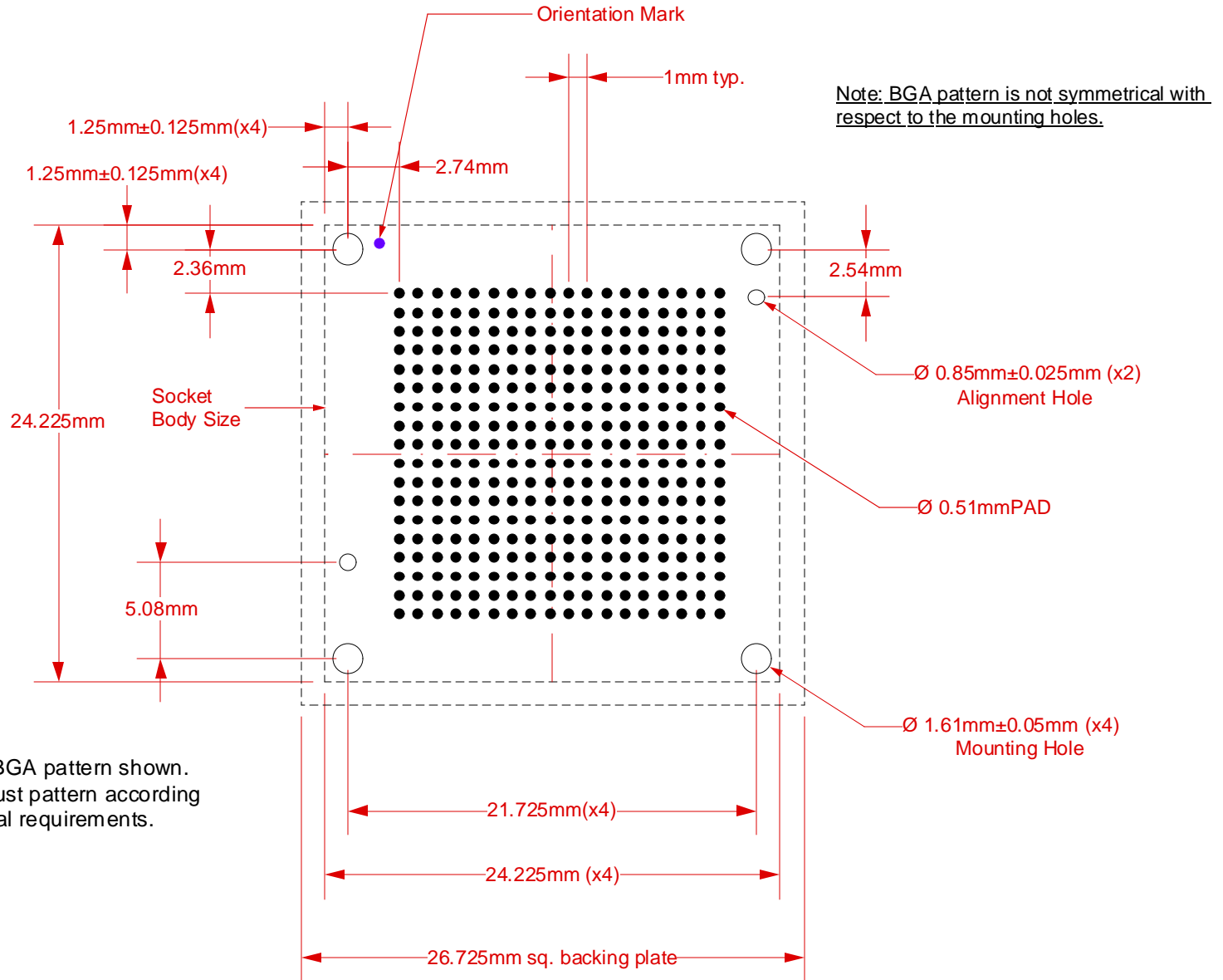
Date: 1/25/05

File: SG-BGA-6144 Dwg

Modified: 7/17/09, AE

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

Recommended PCB Layout
Top View




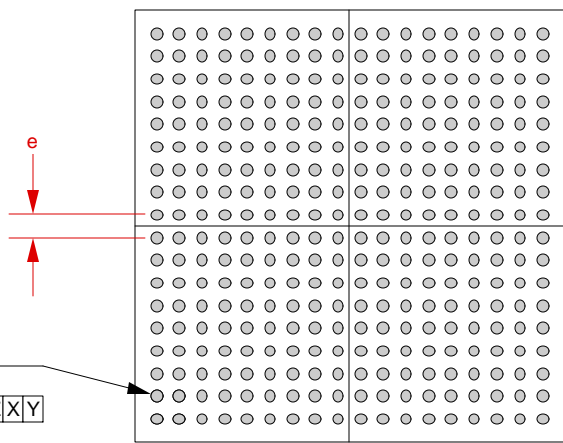
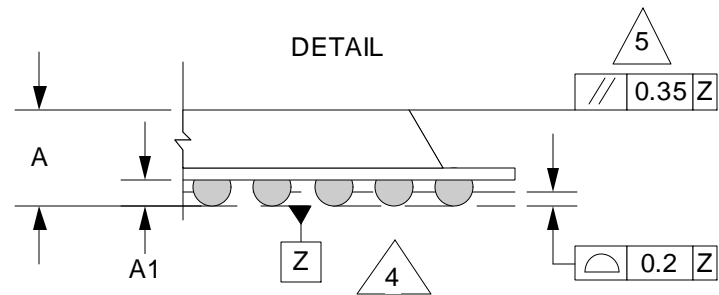
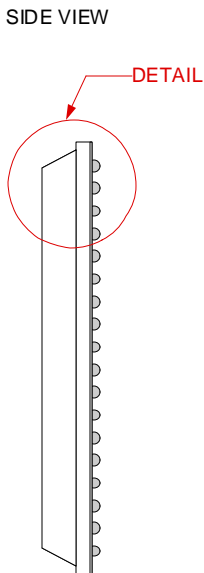
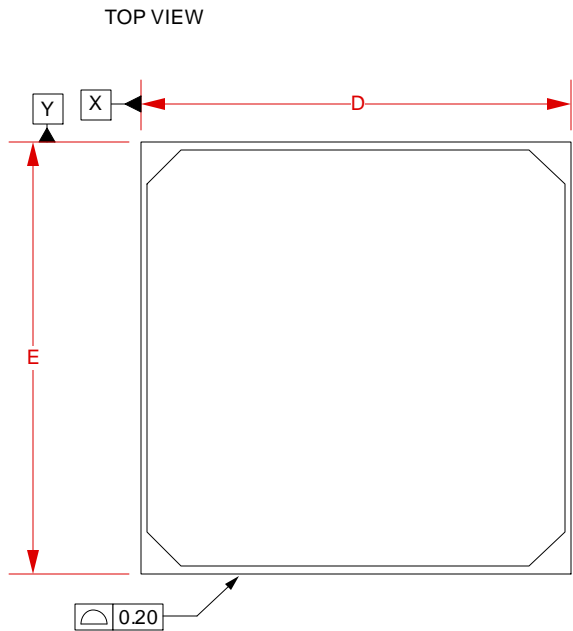
Target PCB Recommendations

Total thickness: 1.6mm 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-6144 Drawing			Status: Released	Scale: -	Rev: C
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com			Drawing: H. Hansen		Date: 1/25/05
				File: SG-BGA-6144 Dwg		Modified: 7/17/09, AE




BOTTOM VIEW

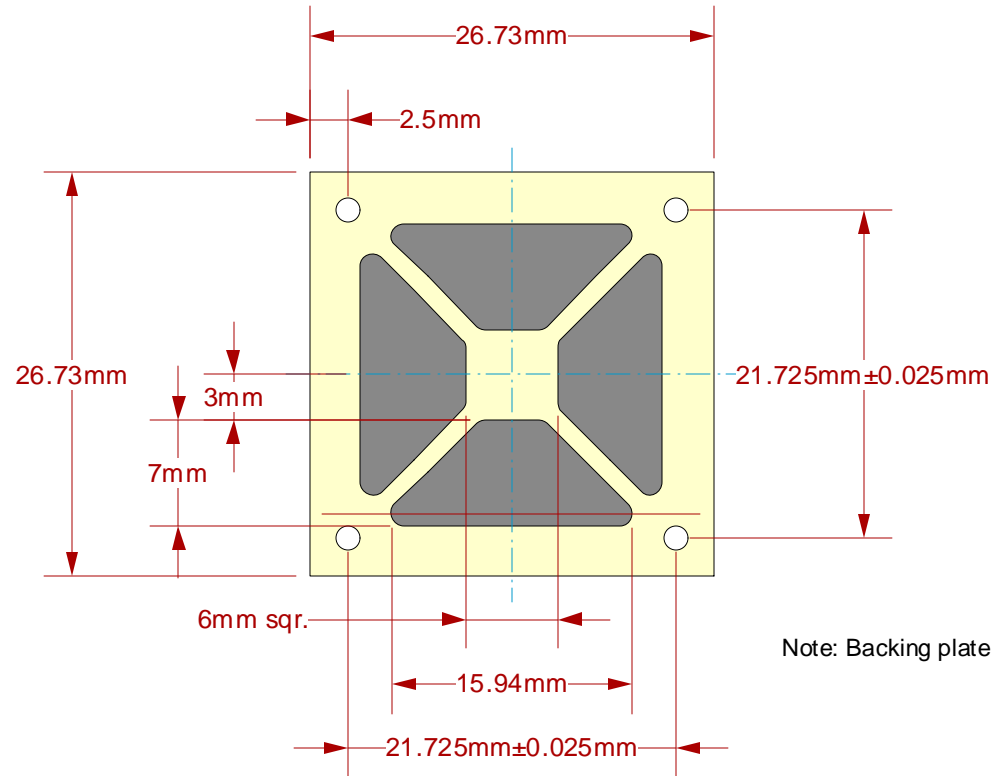
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

DIM	MIN	MAX
A		2.0
A1	0.4	0.6
b		0.70
D	19.00 BSC	
E	19.00 BSC	
e	1.0 BSC	

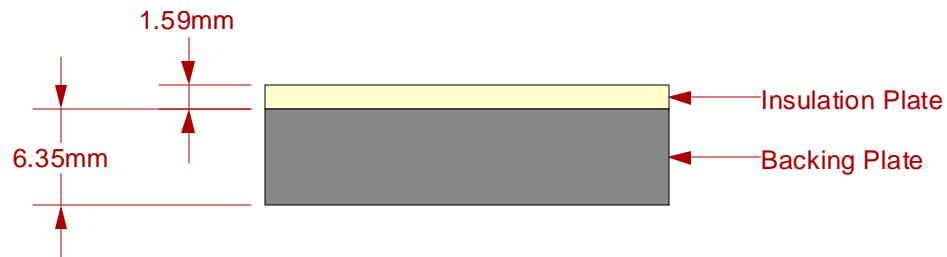
Array: 18x18

	SG-BGA-6144 Drawing	Status: Released	Scale: -	Rev: C
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 1/25/05
		File: SG-BGA-6144 Dwg	Modified: 7/17/09, AE	


Top View



Side View



Description: Backing Plate with Insulation Plate

	SG-BGA-6144 Drawing	Status: Released	Scale: -	Rev: C
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 1/25/05
		File: SG-BGA-6144 Dwg	Modified: 7/17/09, AE	

All tolerances: $\pm 0.125\text{mm}$ (unless stated otherwise). Materials and specifications are subject to change without notice.