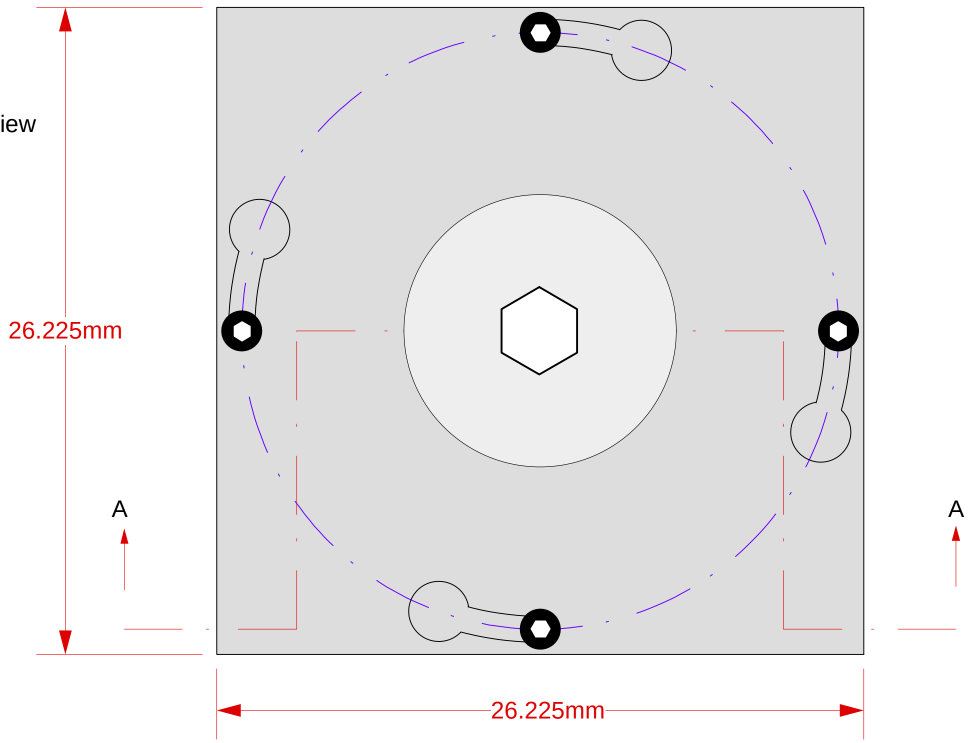
GHz BGA Socket - Direct mount, solderless

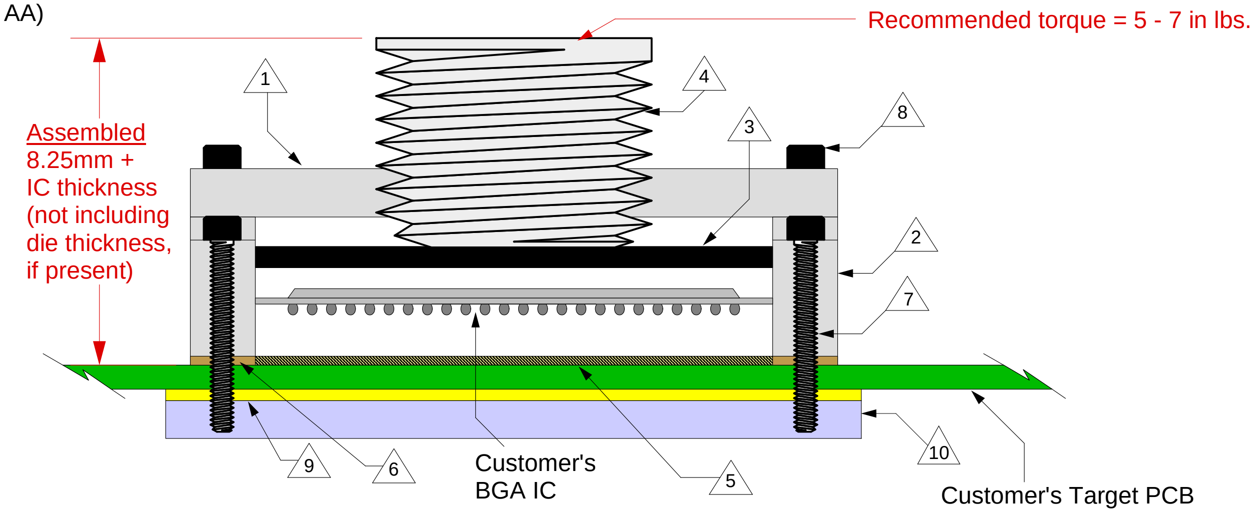
Top View



Features

- Socket supports **IBM PowerPC 750FX** as well as other BGA devices.
- Directly mounts to target PCB (needs tooling holes) with included hardware.
- High speed, reliable elastomer connection.
- Minimum real estate required.
- Compression plate distributes forces evenly.
- Easily removable swivel socket lid.

Side View
(Section AA)



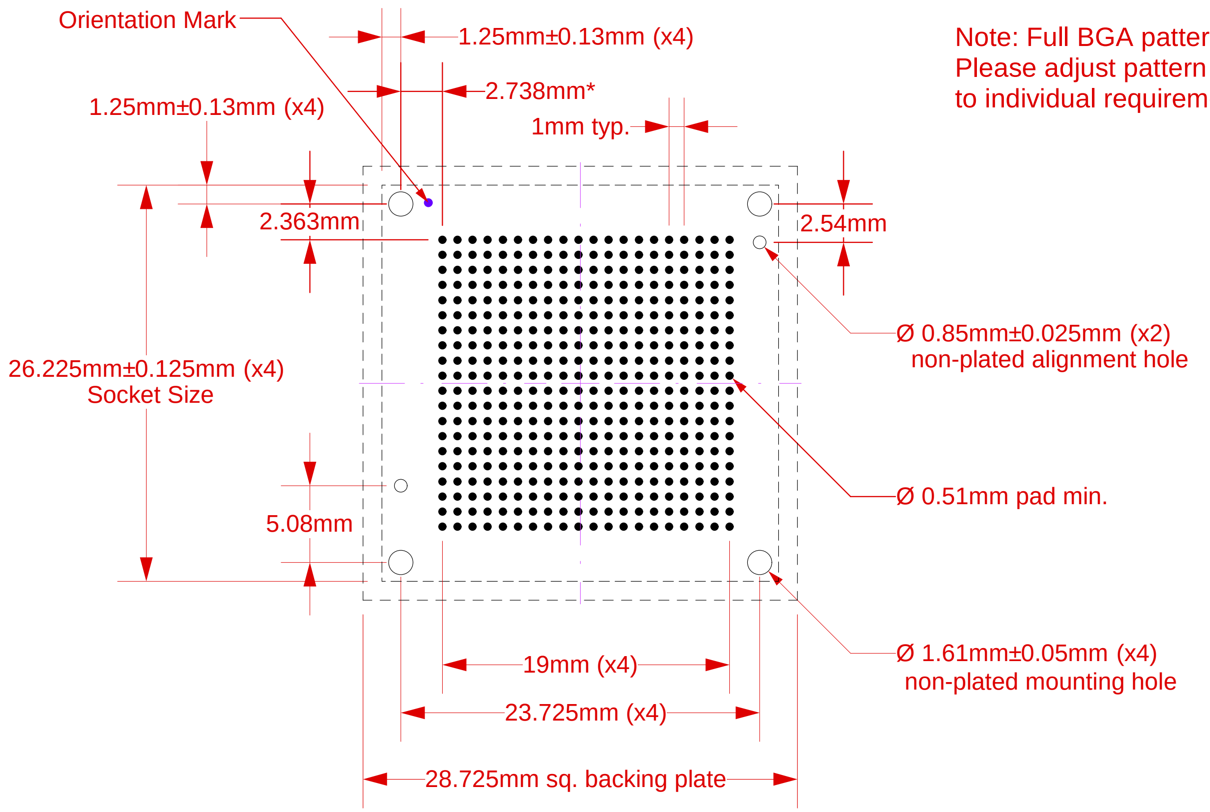
1	Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
2	Socket base: Black anodized Aluminum. Thickness = 5.0mm.
3	Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
4	Compression screw: Clear anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.
5	Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.75mm.
6	Elastomer Guide: Cirlex or equivalent. Thickness = 0.725mm.
7	Socket base screw: Socket head cap, alloy steel with black oxide finish, 0-80 fine thread , 12.7mm long.
8	Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.
9	Insulation Plate: FR4/G10, 1.59mm thick.
10	Backing Plate: Anodized Aluminum 6.35mm thick.

SG-BGA-6051 Drawing	Status: Released	Scale: N/A	Rev: C
© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: D Megran	Date: 10/29/02	
	File: SG-BGA-6051 Dwg.mcd	Modified: 07/08/09, 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.**



Note: Full BGA pattern shown.
Please adjust pattern according
to individual requirements.

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-6051 Drawing	Status: Released	Scale: 2:1	Rev: C
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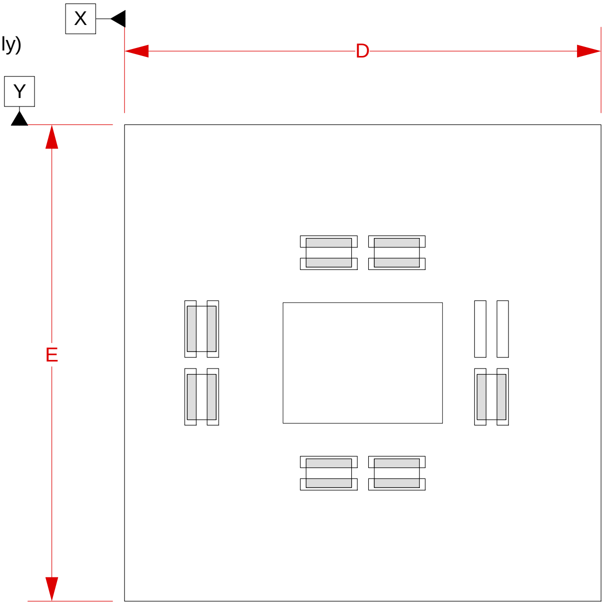
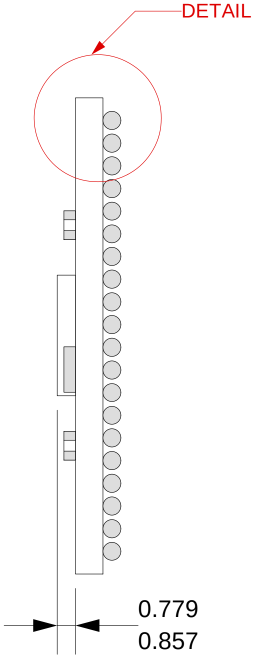
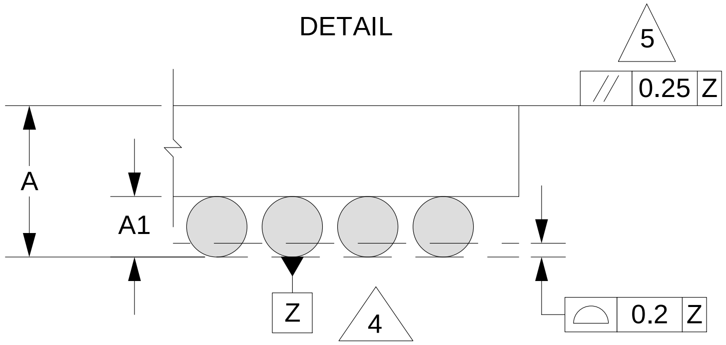
Compatible BGA Spec: PPC750FX BGA shown, any other ball pattern with pitch 0.8mm and up is compatible. BGA's with flat top surfaces are also compatible. PCB layout may need to be adjusted. Call for more information.

TOP VIEW
(Reference Only)

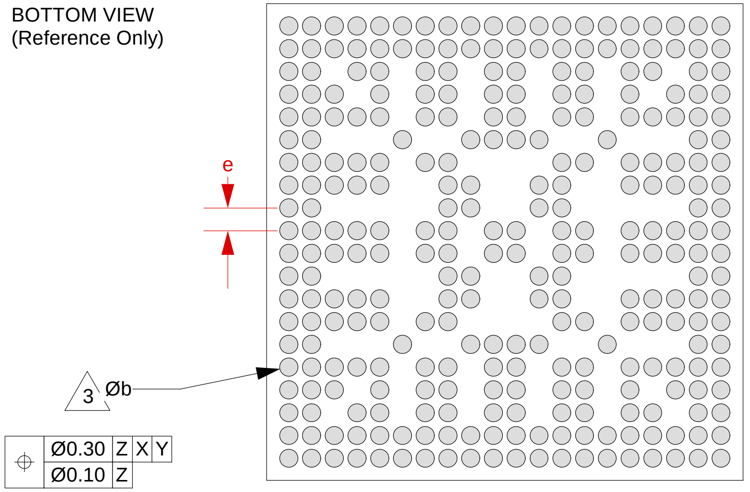


SIDE VIEW
(Reference Only)





BOTTOM VIEW
(Reference Only)



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	1.79	2.23
A1	0.71	0.91
b	0.76	0.84
D	21.0 +/-0.2	
E	21.0 +/-0.2	
e	1.0 BSC	

Array 20x20

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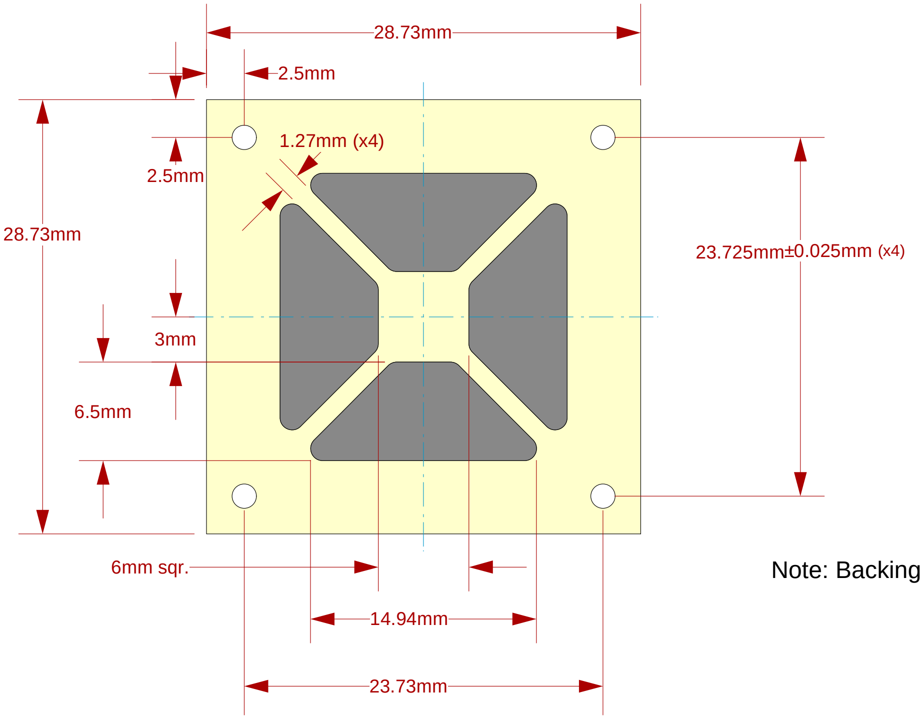
Top View



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

Side View

Description: Backing Plate with Insulation Plate

SG-BGA-6051 Drawing

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Scale: N/A
Rev: C

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