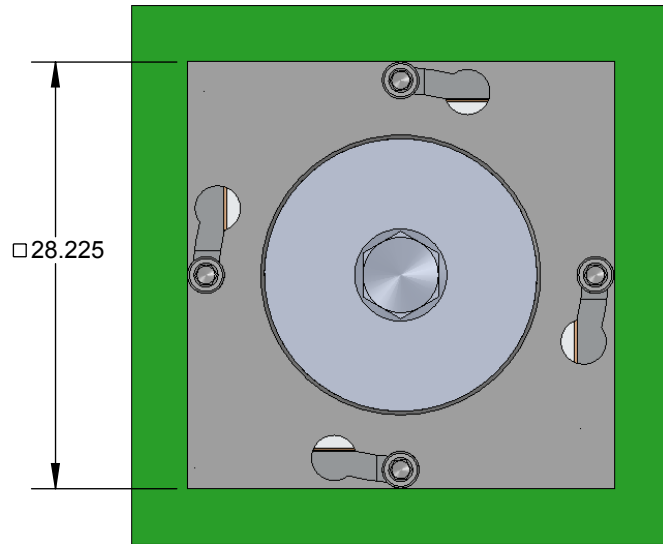


# GHz BGA Socket - Direct mount, solderless

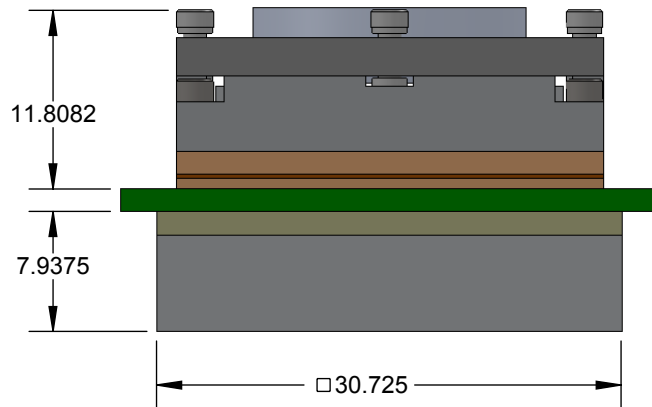
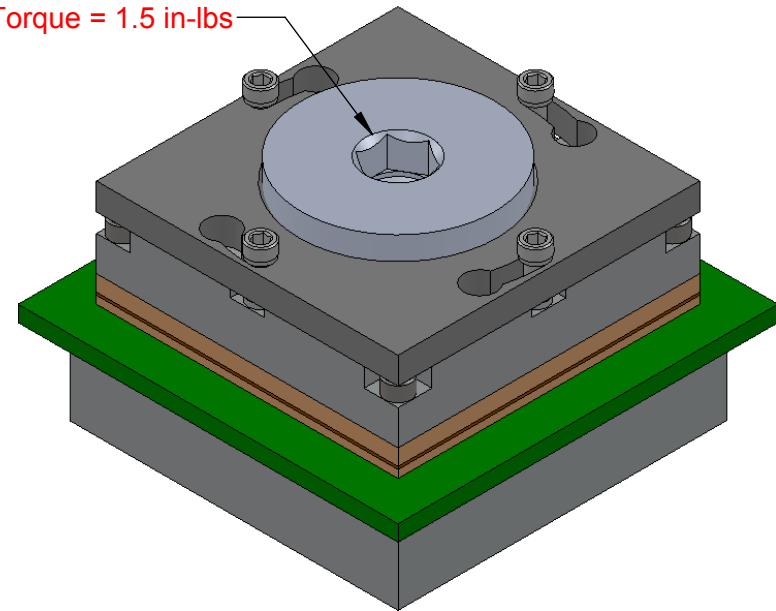
## Features

- 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

Recommended Torque = 1.5 in-lbs



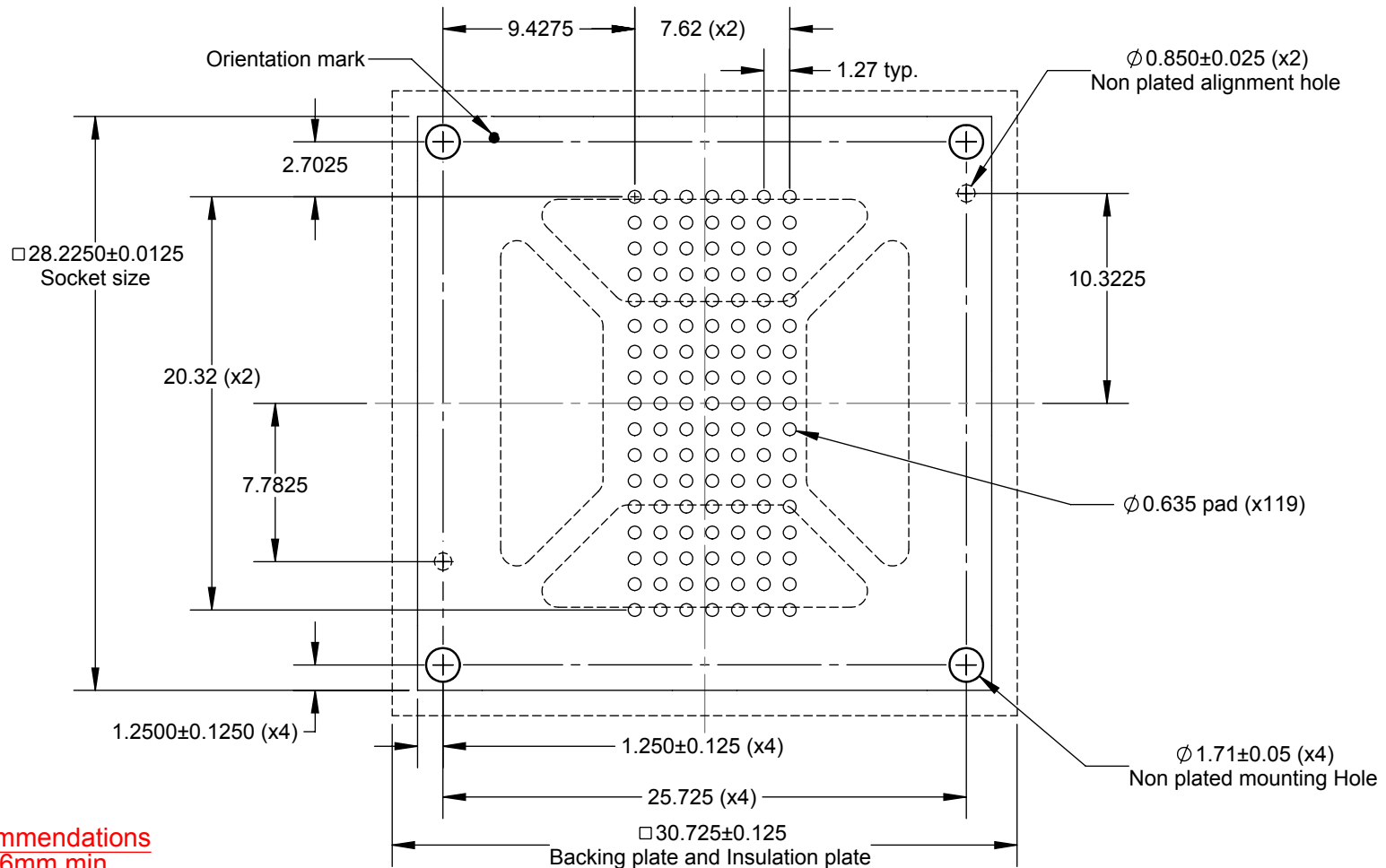
SIDE VIEW

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

 <b>SG-BGA-6362 Specification</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 36.71	STATUS: Released	SHEET: 1 OF 5	REV. A
		DRAWN BY: S. Huang	SCALE: 2:1	
		FILE: SG-BGA-6362	DATE: 5/15/2012	

Recommended PCB Layout  
Top View

**\*Note: BGA pattern is not symmetrical 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.

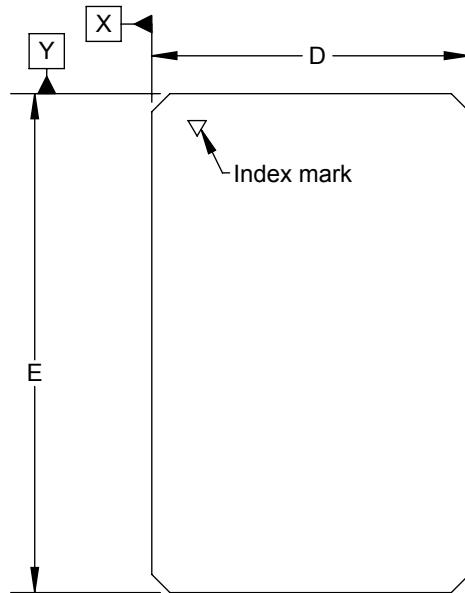
**NOTE: Steel backing plate may be required based on end user's application.**

All dimension units are millimeter.

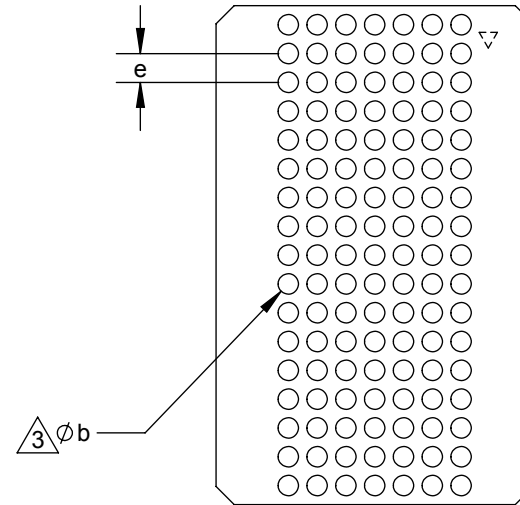
Recommended PCB Layout Tolerances: ±0.025mm [±0.001"], unless stated otherwise.

 <p>Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p><b>SG-BGA-6362 Specification</b></p>	<p>Material: N/A Finish: N/A Weight: 36.71</p>	<p>STATUS: Released DRAWN BY: S. Huang FILE: SG-BGA-6362</p>	<p>SHEET: 2 OF 5 SCALE: 3:1 DATE: 5/15/2012</p>	<p>REV. A</p>
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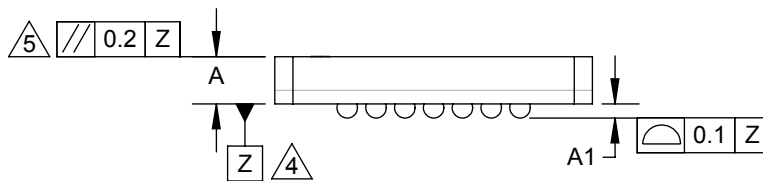
Compatible BGA Spec



Top View



Bottom View




Side View

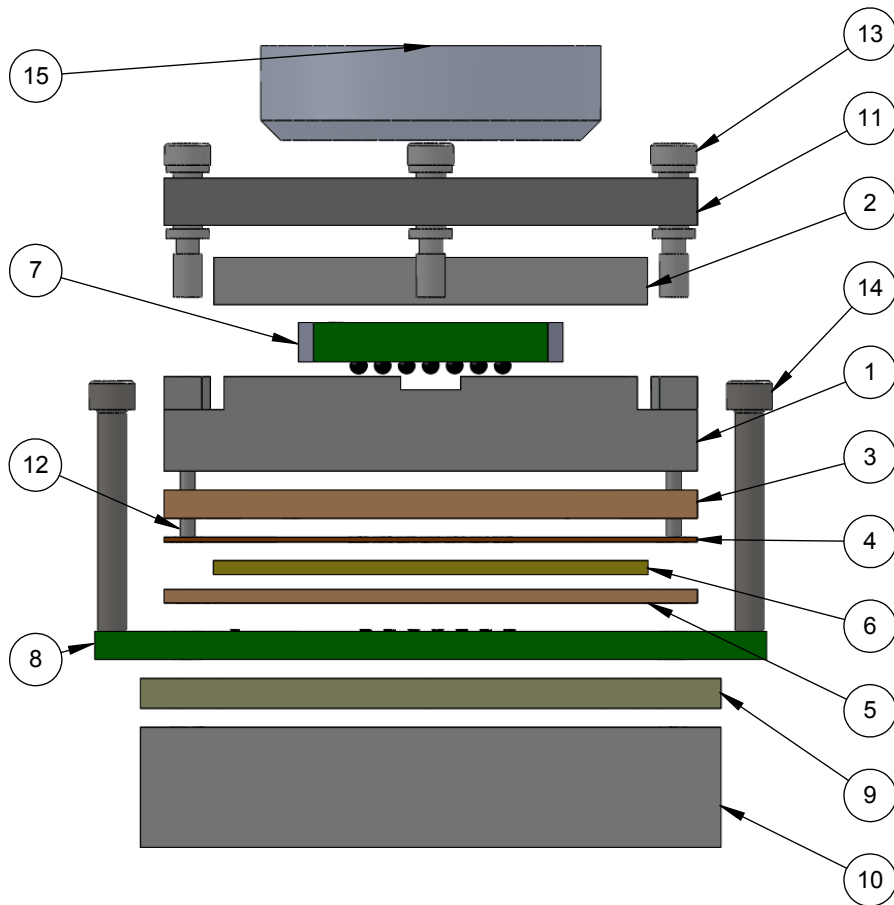
DIM	MIN	MAX
A		2.79
A1		0.711
b	0.60	0.90
D	14.0 BSC	
E	22.0 BSC	
e	1.0 BSC	

Array: 7x17

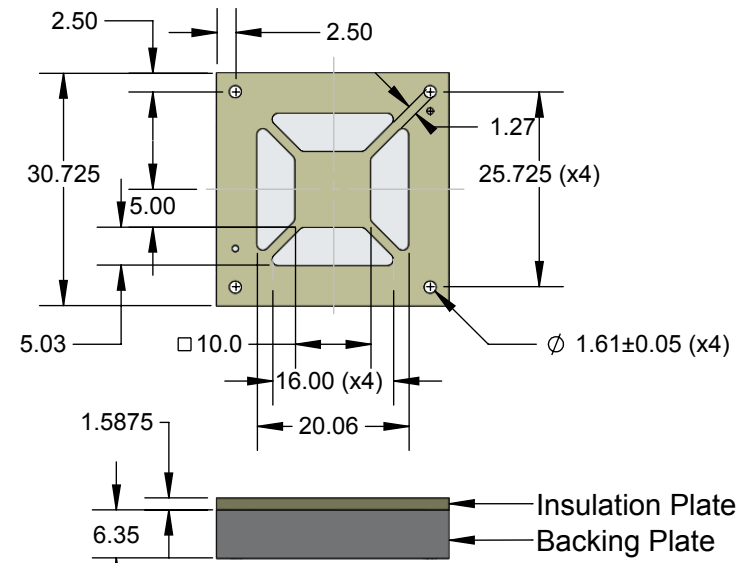
**Package Code: BGA119A**

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

 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 36.71	STATUS: Released	SHEET: 3 OF 5	REV. A
		DRAWN BY: S. Huang	SCALE: 3:1	
		FILE: SG-BGA-6362	DATE: 5/15/2012	




ITEM NO.	DESCRIPTION	Material
1	SBT Ni Plt socket base, for 23x3mm IC	7075-T6, Plate (SS)
2	Compression Plate	7075-T6 Aluminum Alloy
3	IC Guide 14x22mm IC	Ultem 1000
4	Ball Guide 7x17 array 1.27mm pitch	Kapton Polyimide/Cirlex
5	Elastomer Guide	Ultem 1000
6	0.75mm thick 0.1mm pitch 63 deg angled elastomer	Shin-etsu Elastomer
7	Test Chip	Material <not specified>
8	Test PCB	Material <not specified>
9	Insulation plate for 23x23mm IC	FR4 High temp
10	Backing Plate	7075-T6 Aluminum Alloy
11	Socket Lid	7075-T6 Aluminum Alloy
12	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
13	#0-80 Shoulder Screw, 0.090" thread length	Stainless Steel (303)
14	#0-80 x 0.5, SH Cap Screw	Material <not specified>
15	Compression Screw, M18	7075-T6 Aluminum Alloy



### Description: SK Assem and B P w/ Ins P

All dimension units are millimeters.

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


 <b>SG-BGA-6362 Specification</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 36.71	STATUS: Released	SHEET: 4 OF 5	REV. A
		DRAWN BY: S. Huang	SCALE: 2.5:1	
		FILE: SG-BGA-6362	DATE: 5/15/2012	

Rev	Date	Initials	ECO	Description
A	-	-		Original

### Description: Revision History

Primary dimension units are millimeters, Secondary dimension units are [inches].

Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

 <b>SG-BGA-6362 Specification</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	<b>Material:</b> <b>Finish:</b> <b>Weight:</b>	STATUS: Released	SHEET: 5 OF 5	REV. A
		DRAWN BY: S. Huang	SCALE: 2:1	
		FILE: SG-BGA-6362	DATE: 5/15/2012	