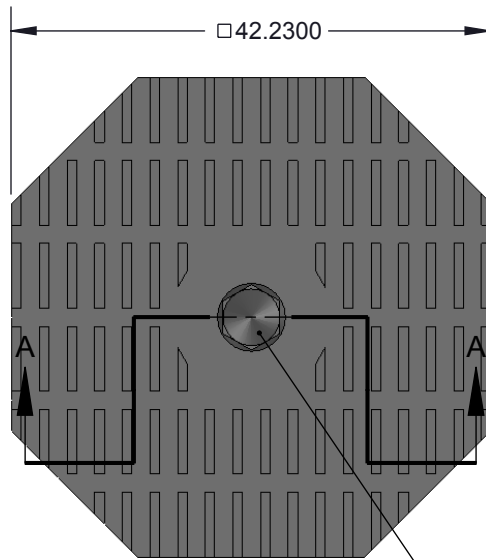


GHz BGA Socket - Direct mount, solderless

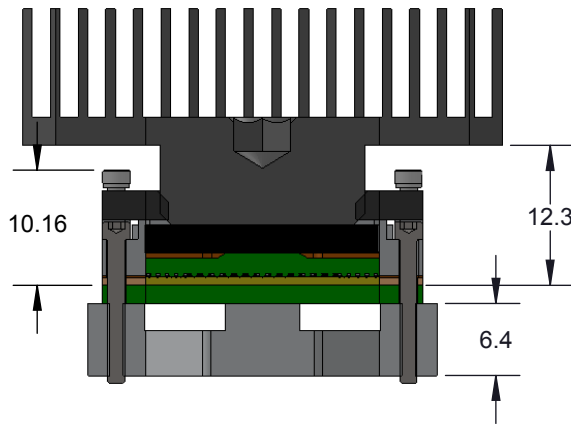
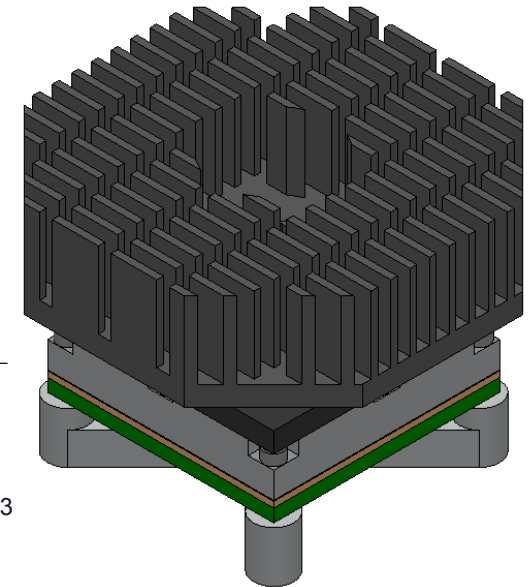
Features

- Directly mounts to target PCB.
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Easily removable socket lid

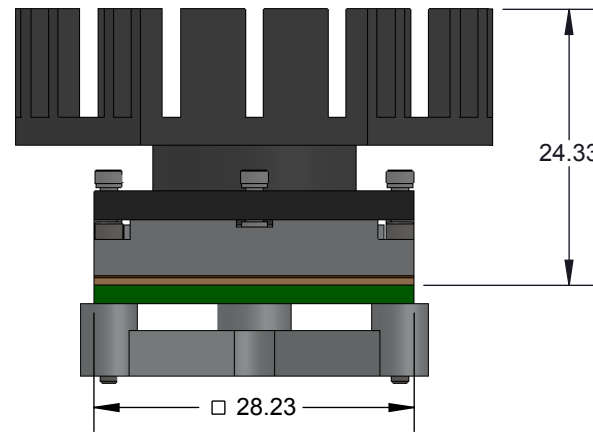


TOP VIEW

Recommended torque = 6 in-lbs (500-550 pins)
= 7 in-lbs (550-600 pins)



SECTION A-A



SIDE VIEW

Description: SG-BGA529 23x23mm 1.00/0.8mm pitch 27x27 array w/ heat sink screw

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.

SG-BGA-6369 Specification



Ironwood Electronics, Inc.
Tele: (800) 404-0204
www.ironwoodelectronics.com

Material: N/A
Finish: N/A
Weight: 44.95

STATUS: Released

DRAWN BY: V. Panavala

FILE: SG-BGA-6369

SHEET: 1 OF 4

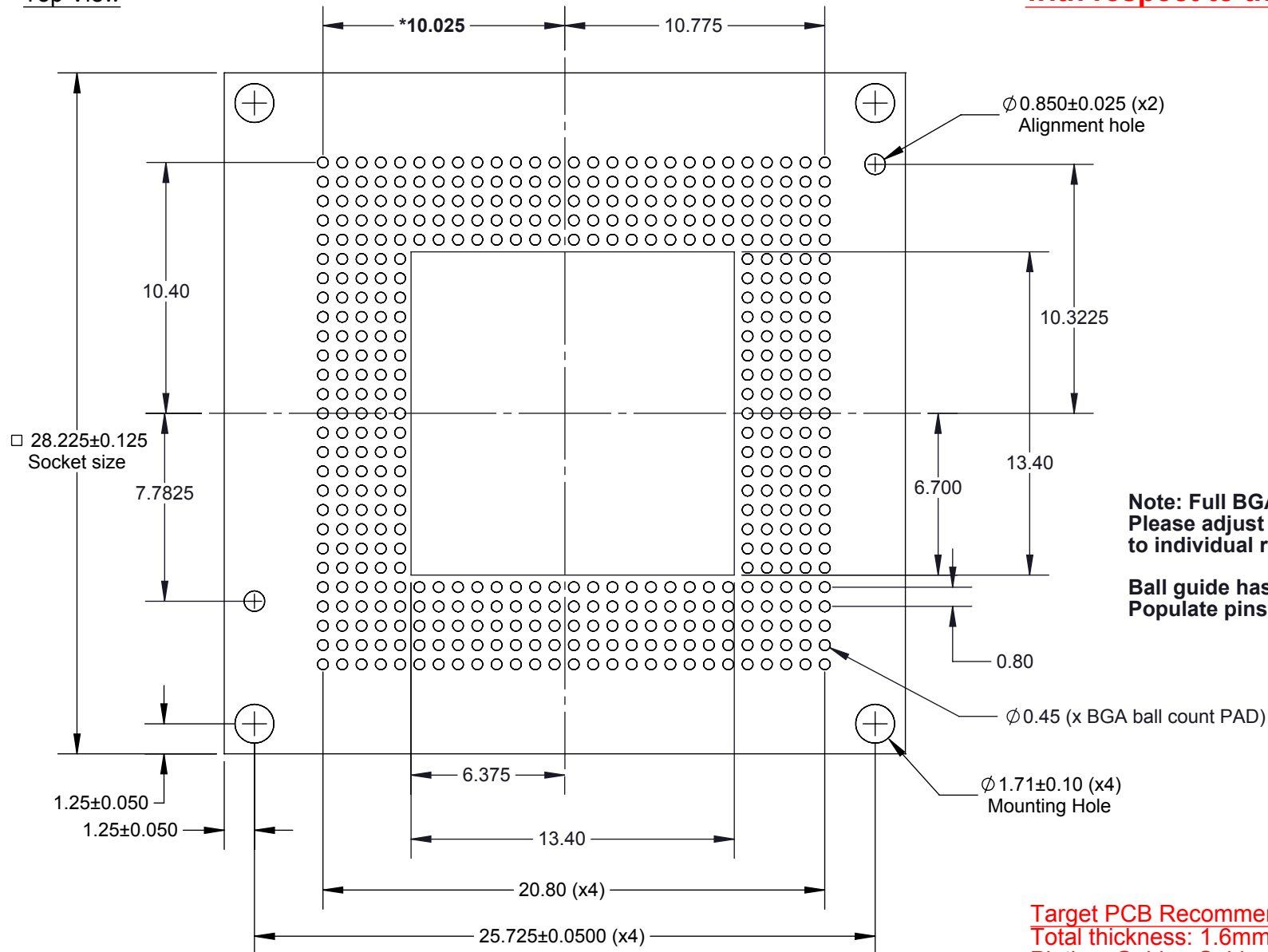
SCALE: 3:2

DATE: 12/11/2012

REV. A

**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.**


**Ball guide has a 13.4mm sqr. center pocket.
Populate pins within this area as needed.**

Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish.
PCB Pad height: Same or higher than solder mask.

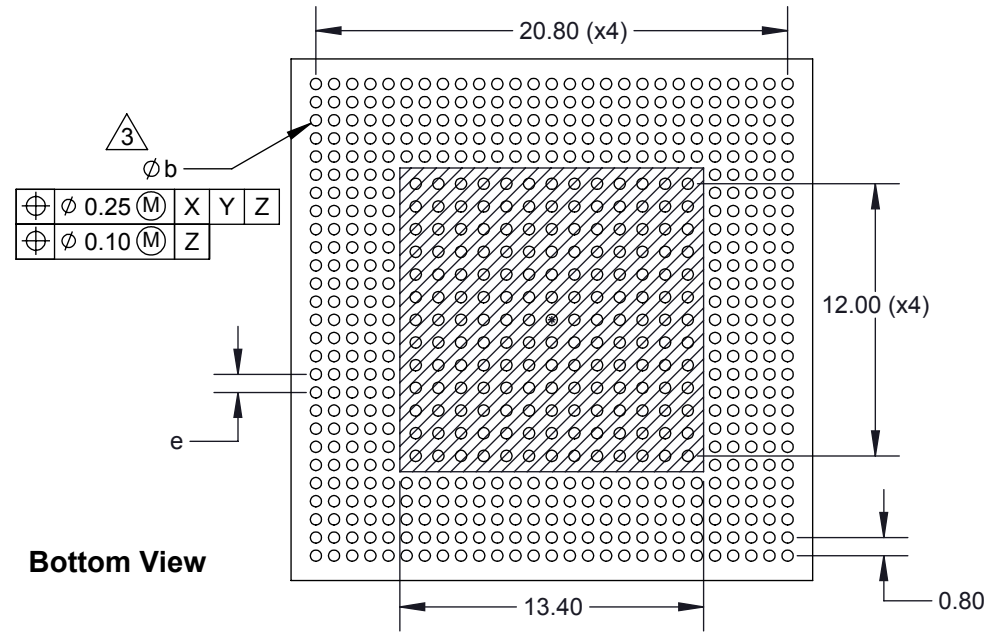
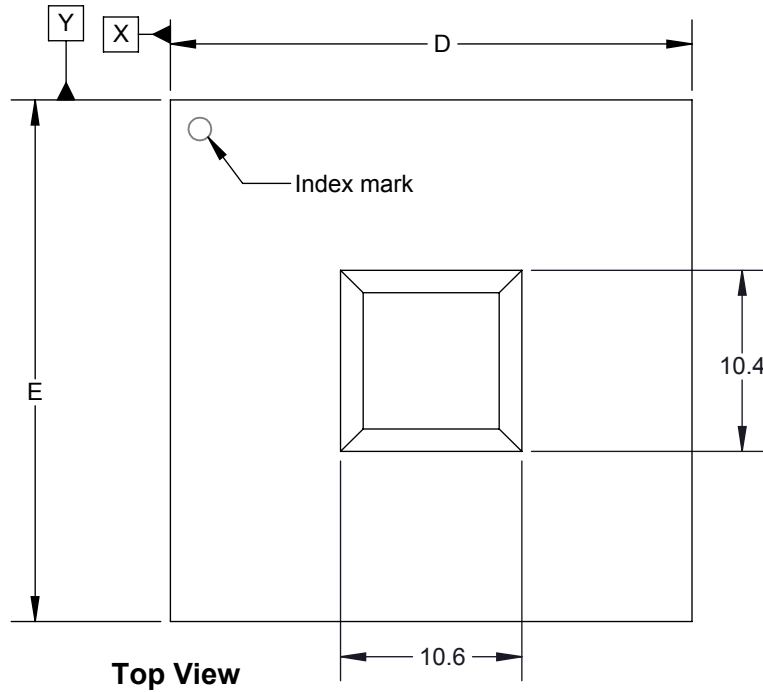
Description: Recommended PCB Layout

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

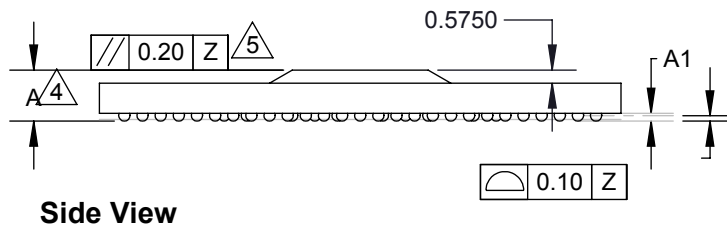
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [$\pm 0.001''$], Pitches (from true position) $\pm 0.025\text{mm}$ [$\pm 0.001''$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.025\text{mm}$ [$\pm 0.001''$] unless stated otherwise. Materials and specifications are subject to change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

 SG-BGA-6369 Specification Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 44.95	STATUS: Released DRAWN BY: V. Panavala FILE: SG-BGA-6369	SHEET: 2 OF 4 SCALE: 4:1 DATE: 12/11/2012	REV. A

Compatible BGA Spec



Ball guide has a 13.4mm sqr. center pocket. Populate pins within this area as needed.




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.

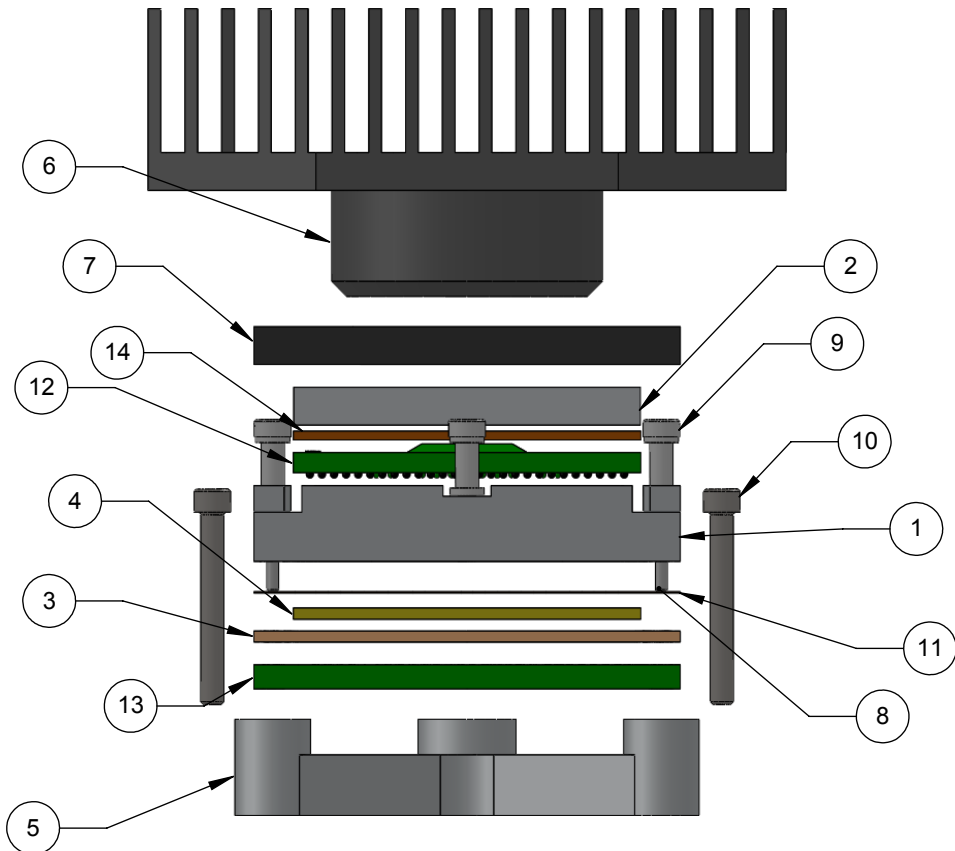
DIM	MIN	MAX
A		2.5
A1	0.3	0.41
b		0.6
D	23.0 BSC	
E	23.0 BSC	
e	0.8/1.0 BSC	

Description: Compatible BGA Spec

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

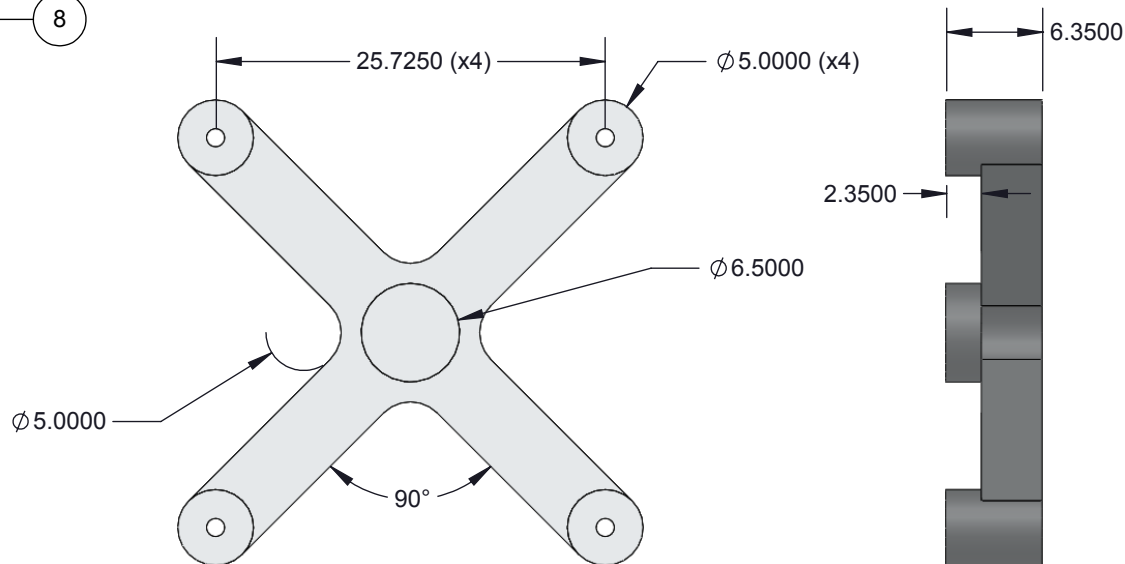
Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 44.95	STATUS: Released	SHEET: 3 OF 4	REV. A
		DRAWN BY: V. Panavala	SCALE: 3:1	
		FILE: SG-BGA-6369	DATE: 12/11/2012	



ITEM NO.	DESCRIPTION	MATERIAL
1	Socket base, for 23x3mm IC	7075-T6, Plate (SS)
2	Compression Plate	7075-T6 Aluminum Alloy
3	Elastomer Guide	Ultem 1000
4	0.75mm thick 0.1mm pitch 63 deg angled elastomer	Shin-etsu Elastomer
5	Backing PLate	7075-T6 Alumium Alloy
6	compression screw	7075-T6 Aluminum Alloy
7	Socket Lid	7075-T6 Aluminum Alloy
8	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
9	#0-80 Shoulder Screw, 0.090" thread length	Stainless Steel (303)
10	#0-80 x 0.5, SH Cap Screw	Material <not specified>
11	Ball Guide 23x23mm 1.00/0.8mm pitch 27x27 array	Kapton Polyimide/Cirlex
12	BGA529 23x23mm 1.00/0.8mm pitch 27x27 array	Material <not specified>
13	PCB BGA529 23x23mm 1/0.8mm pitch	Material <not specified>
14	IC frame C11903 23mm IC	Kapton Polyimide/Cirlex/Ultem


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



Description: Skt, Insulation Plate, Pin Det

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A	STATUS: Released	SHEET: 4 OF 4	REV. A
	Finish: N/A	DRAWN BY: V. Panavala	SCALE: 2:1	
	Weight: 44.95	FILE: SG-BGA-6369	DATE: 12/11/2012	