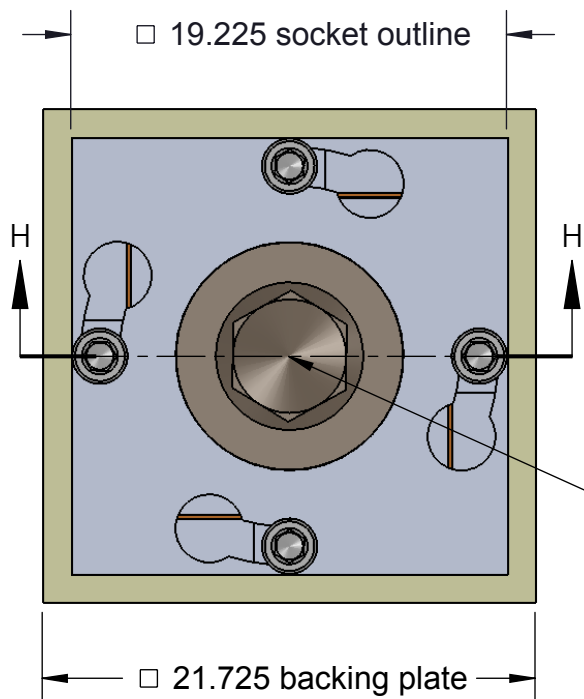


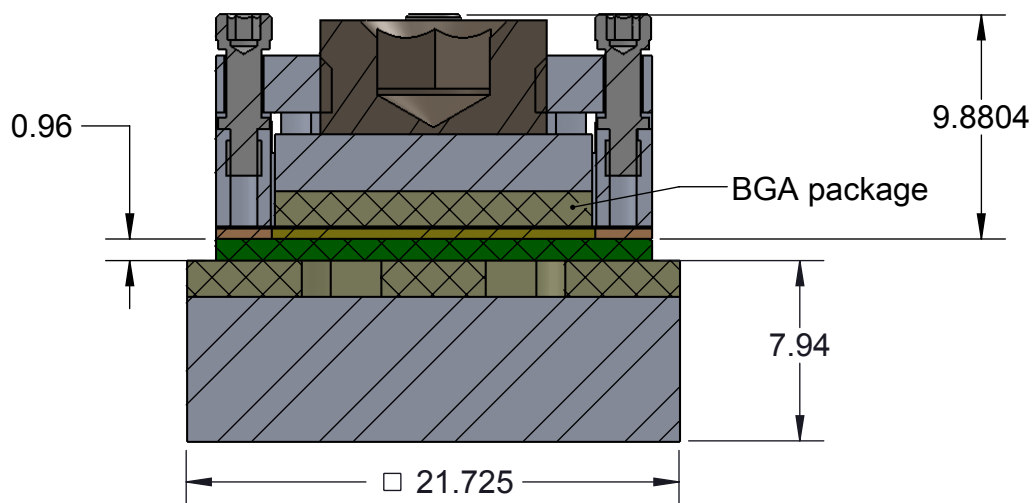
# GHz BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR TEST APPLICATIONS



## 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
- Easily removable swivel socket lid

recommended torque is 2 - 3.5 in lb.

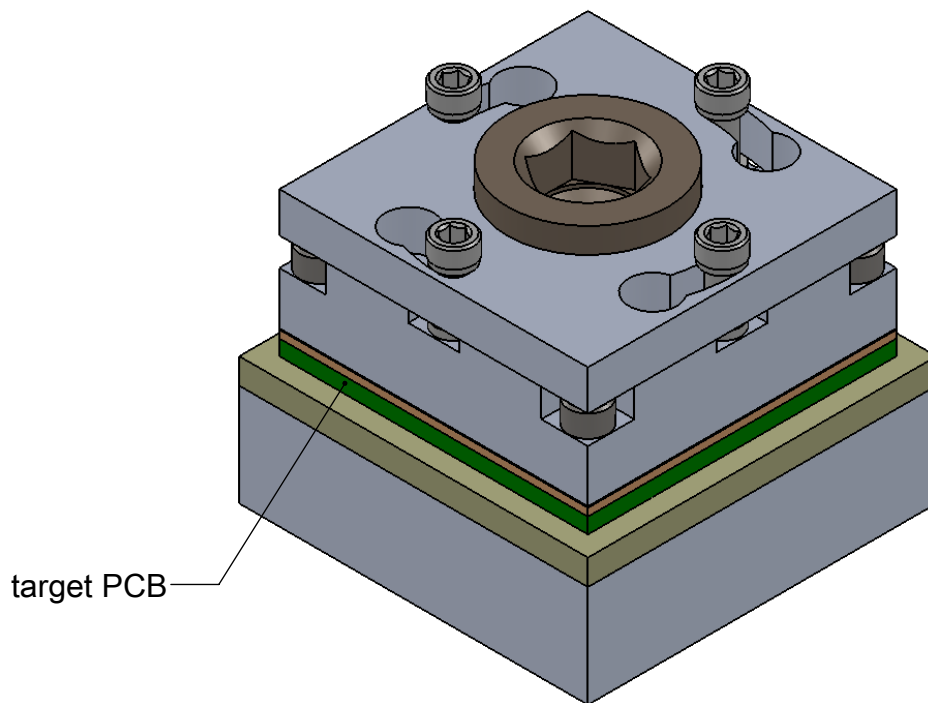


## SECTION H-H

Description: SG-BGA 14x14mm, 34x34 0.4mm pitch

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-7252 Drawing



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

Material: Material <not specified>  
Finish:  
Weight: 17.26

STATUS: Released

DRAWN BY: E. Smolentseva

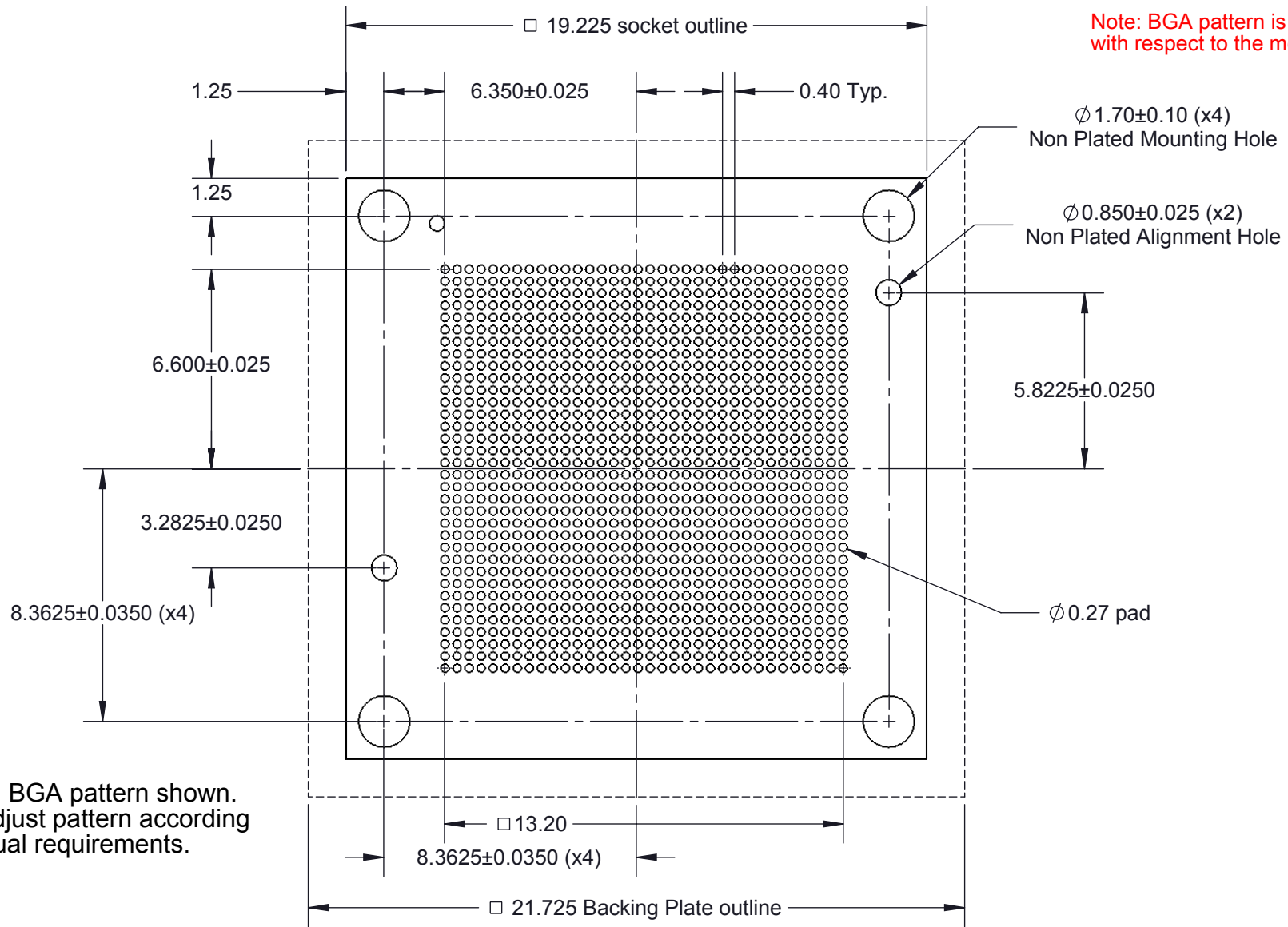
FILE: SG-BGA-7252 Dwg

SHEET: 1 OF 4

SCALE: 3:1

DATE: 1/28/2013

REV. A



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: 0.96mm min.  
 Plating: Gold or Solder finish  
 PCB Pad height: same or higher than solder mask

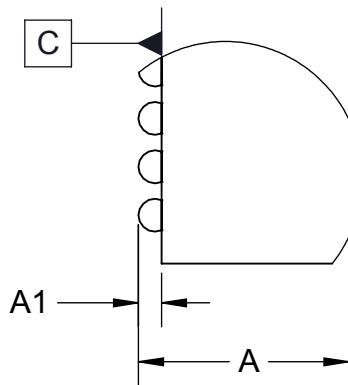
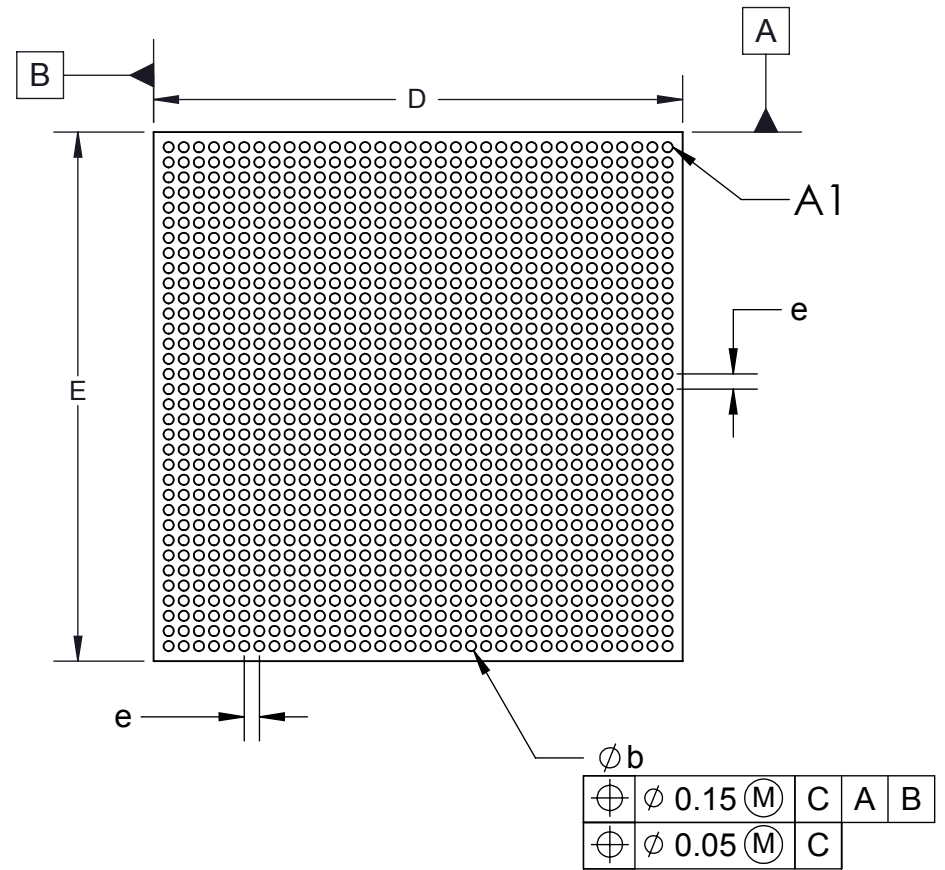
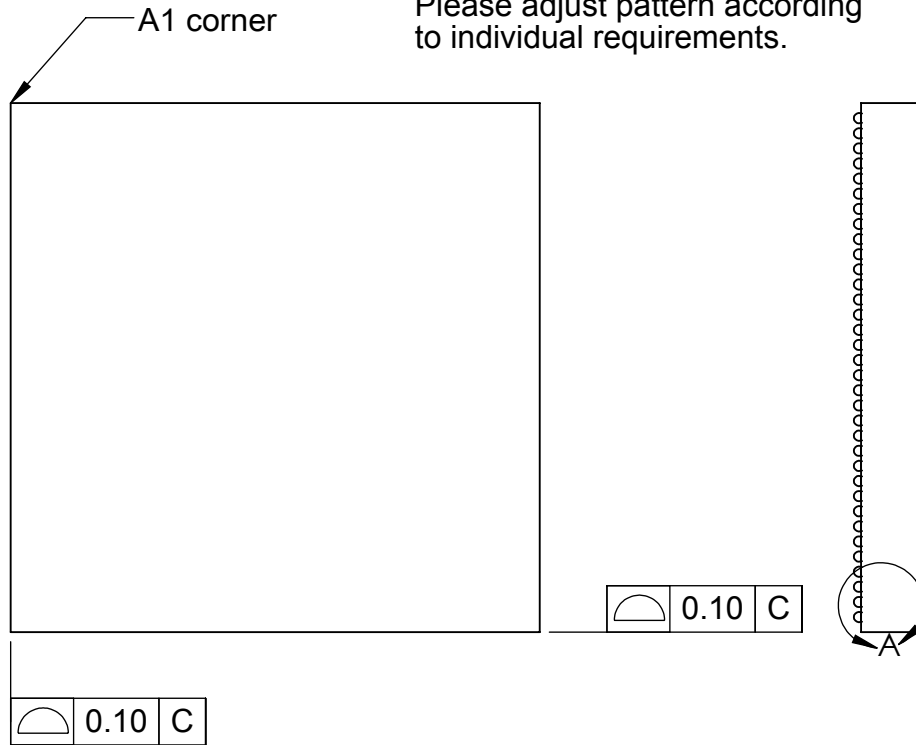
**Description: Recommended PCB Layout**

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

Tolerances: Hole diameters ±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: Material <not specified> Finish: Weight: 17.26	STATUS: Released DRAWN BY: E. Smolentseva FILE: SG-BGA-7252 Dwg	SHEET: 2 OF 4 SCALE: 5:1 DATE: 1/28/2013	REV. A
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Note: Full BGA pattern shown.  
Please adjust pattern according to individual requirements.



**DETAIL A**  
**SCALE 16 : 1**


DIM	Minimum	Maximum
A		1.59
A1	0.15	0.23
b	0.20	0.30
D	14.0 BSC	
E	14.0 BSC	
e	0.4	
ARRAY	34x34	
PIN COUNT	789	

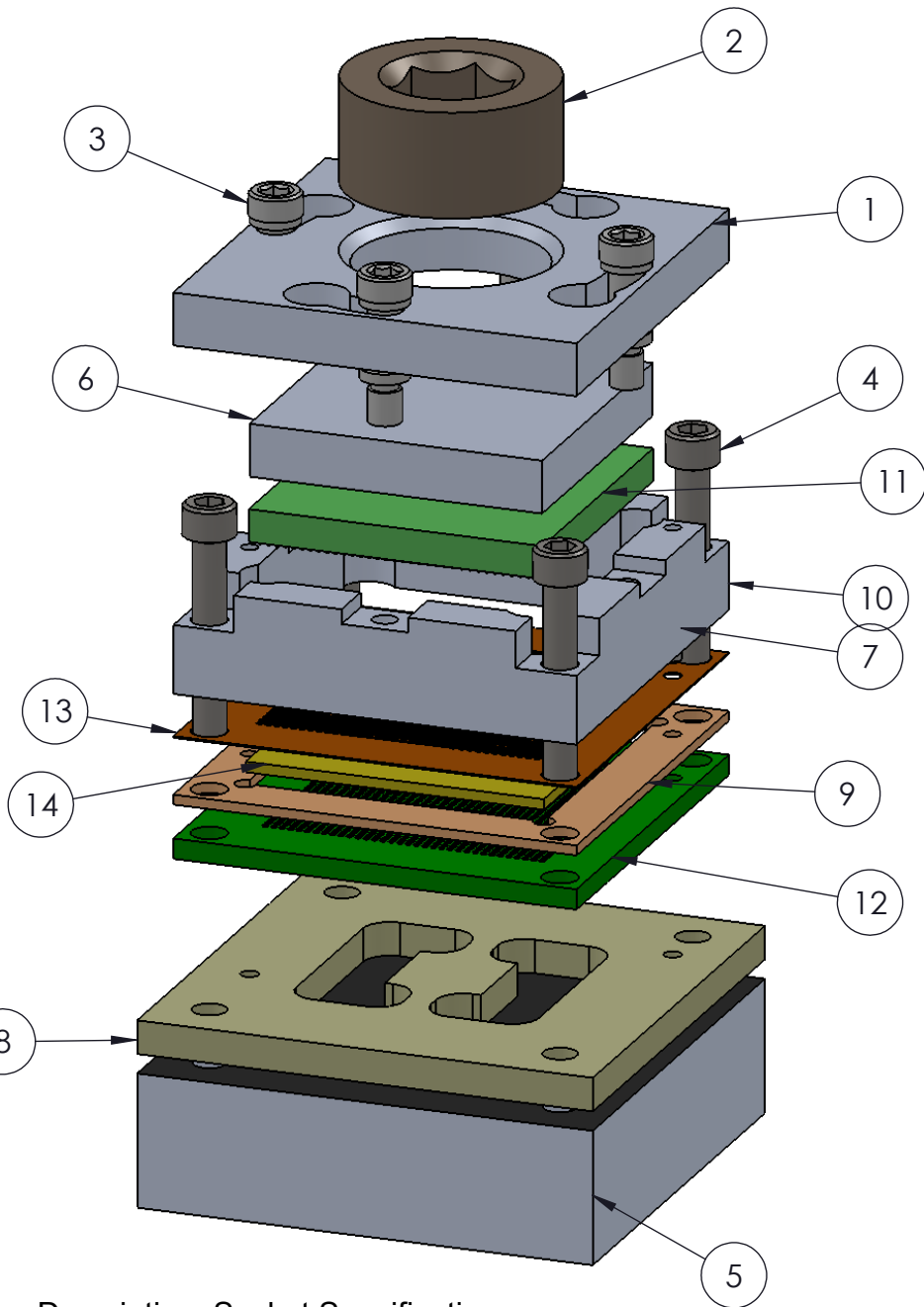
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane C.
4. Datum C (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

**Description: Compatible BGA**

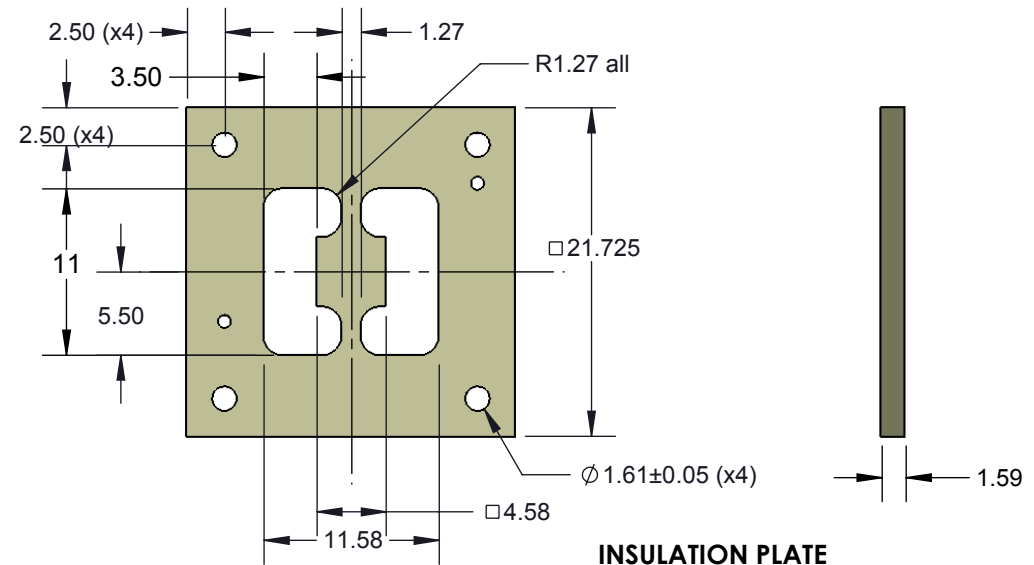
Primary dimension units are millimeters, Secondary dimension units are [inches]. Weight is in grams.

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  $\pm 0.13\text{mm}$  [ $\pm 0.005''$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified>	STATUS: Released	SHEET: 3 OF 4	REV. A
	Finish: Weight: 17.26	DRAWN BY: E. Smolentseva	SCALE: 5:1	
		FILE: SG-BGA-7252 Dwg	DATE: 1/28/2013	




ITEM NO.	Description	Material
1	GHz Swivel Socket Lid, 14mm IC	7075-T6 Aluminum Alloy
2	Compression Screw M10	7075-T6 Alumium Alloy
3	#0-80 Shoulder Screw, 0.062" thread length	Stainless Steel (303)
4	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
5	Backing Plate, 21.725 X 21.725	7075-T6 Aluminum Alloy
6	Compression Plate, 13.95 X 13.95	7075-T6 Aluminum Alloy
7	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
8	Insulation Plate	FR4 Standard
9	Elastomer Guide 14mm IC 0.475mm thk	Ultem 1000
10	Socket Base BGA 14x14	7075-T6 Aluminum Alloy
11	Customer's BGA 0.4mm pitch 34x34 array 14mm	High Temp FR4
12	Target PCB	Material <not specified>
13	Ball guide 34x34 0.4mm pitch	Kapton Polyimide
14	0.5mm thick, 0.05x 0.05mm pitch, 50mm sq, Z-axis conductive angled elastomer	20 Micron dia gold plated brass filaments arranged symettrically in a silicon rubber (63.5 degree angle), Thickness: 0.5mm



### Description: Socket Specification

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  $\pm 0.13\text{mm}$  [ $\pm 0.005''$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

 <b>SG-BGA-7252 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 17.26	STATUS: Released	SHEET: 4 OF 4	REV. A
		DRAWN BY: E. Smolentseva	SCALE: 1:1	
		FILE: SG-BGA-7252 Dwg	DATE: 1/28/2013	