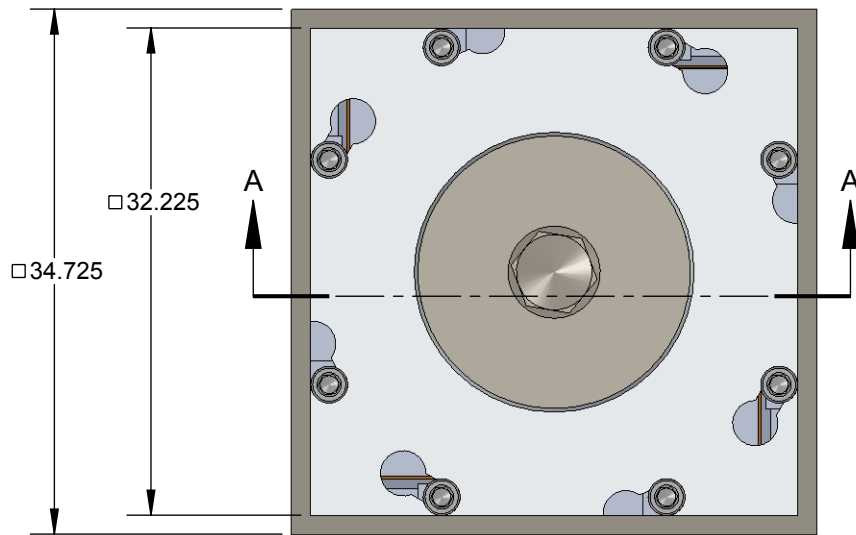


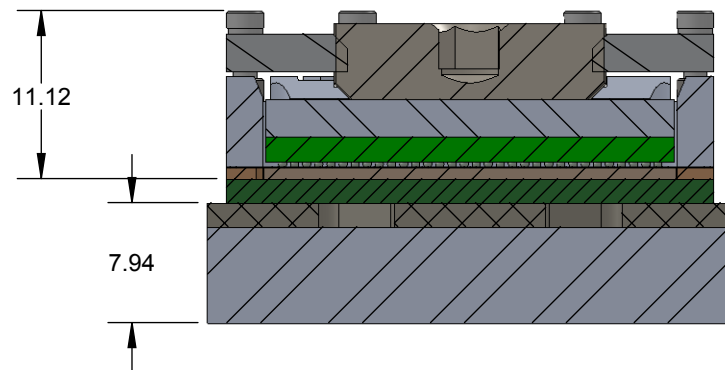
GHz BGA Socket - Direct mount, solderless

Features

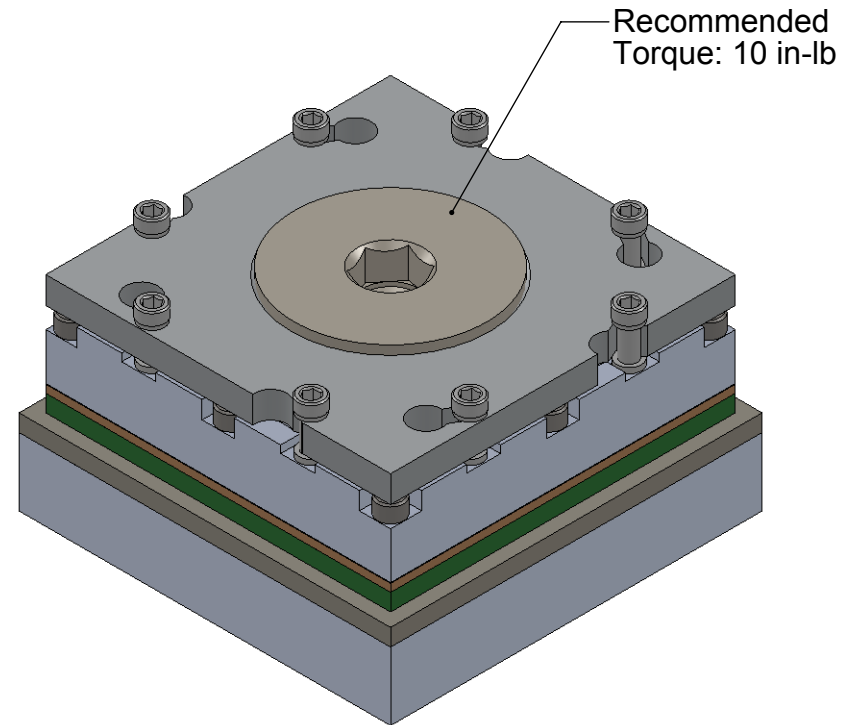
- Directly mounts to target PCB.
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Easily removable socket lid
- Ball guide prevents over compression of elastomer



TOP VIEW




SECTION A-A



Description: SG BGA socket for 27mm 0.8mm pitch 32x32 array BGA package

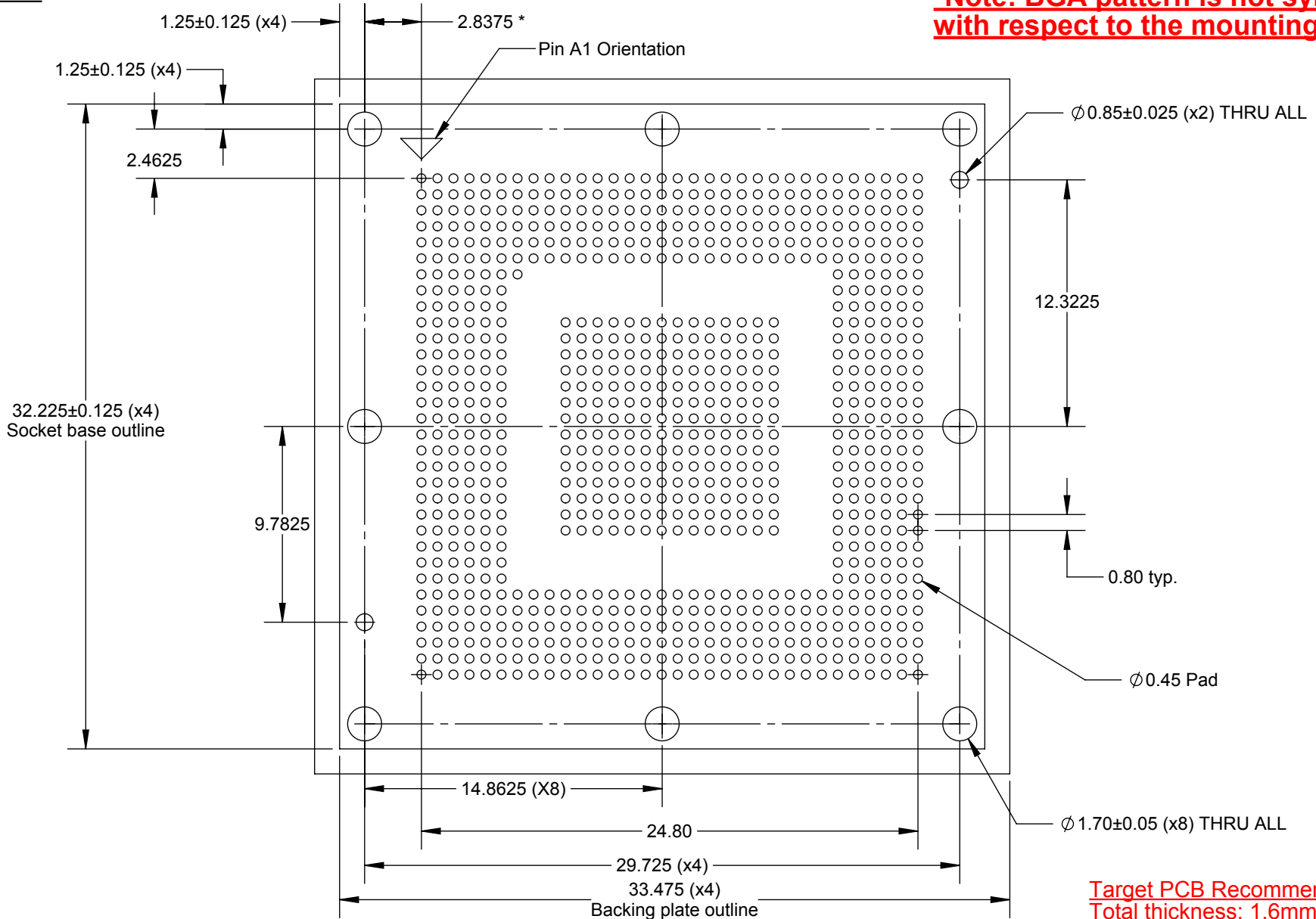
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

 SG-BGA-6398 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 47.55	STATUS: Released ENG: S. Faiz FILE: SG-BGA-6398 Dwg	SHEET: 1 OF 5 DRAWN BY: M. Raske DATE: 12-12-2013	REV. A SCALE: 2:1

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.

Description: SG BGA socket for 27mm 0.8mm pitch 32x32 array BGA package

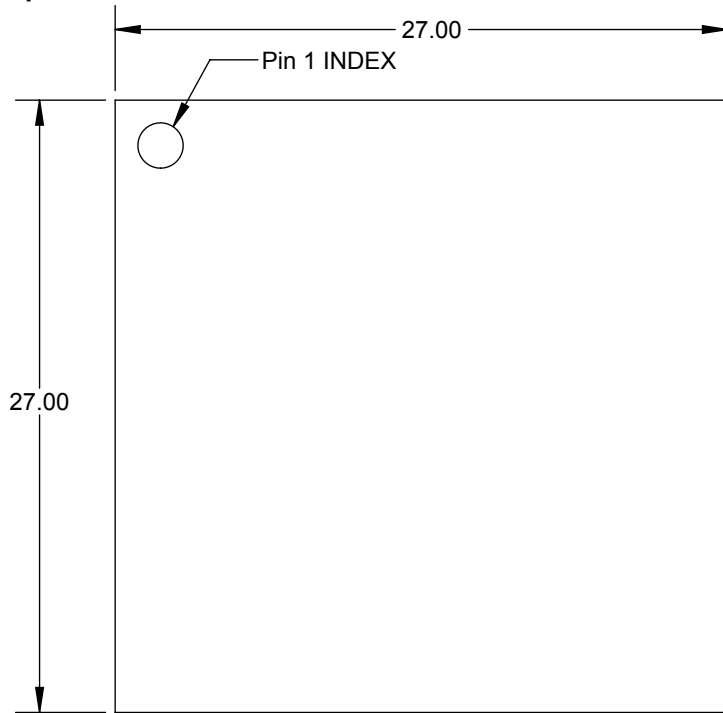
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

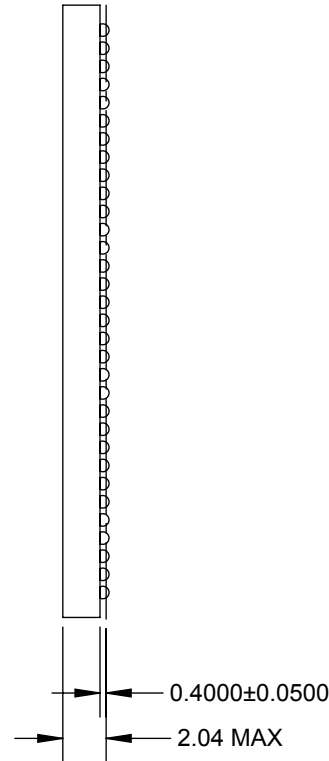
 SG-BGA-6398 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 47.55	STATUS: Released ENG: S. Faiz FILE: SG-BGA-6398 Dwg	SHEET: 2 OF 5 DRAWN BY: M. Raske DATE: 12-12-2013	REV. A SCALE: 3.5:1

Ironwood Package Code: BGA821A

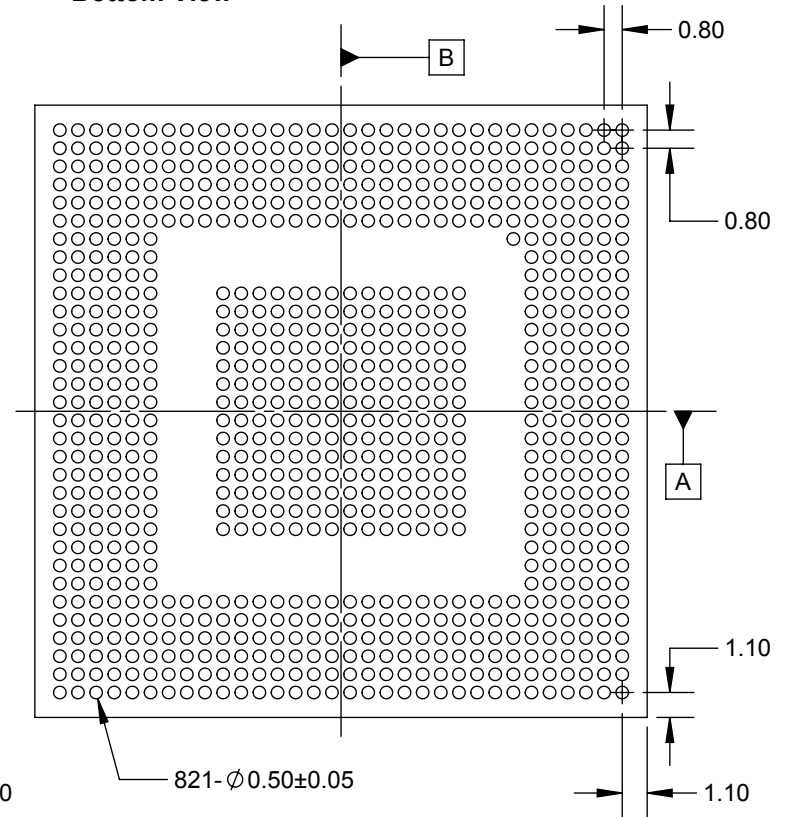
Top View



Side View



Bottom View




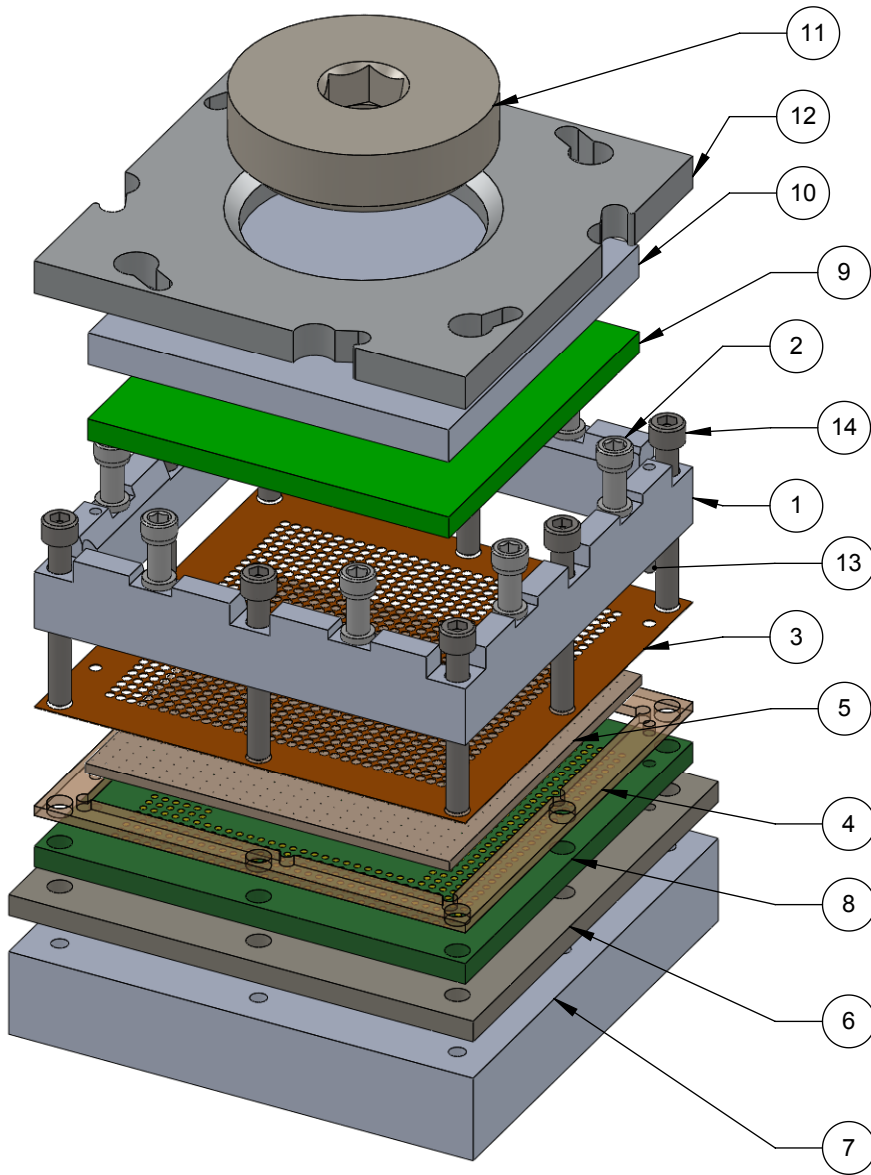
Description: Compatible BGA

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

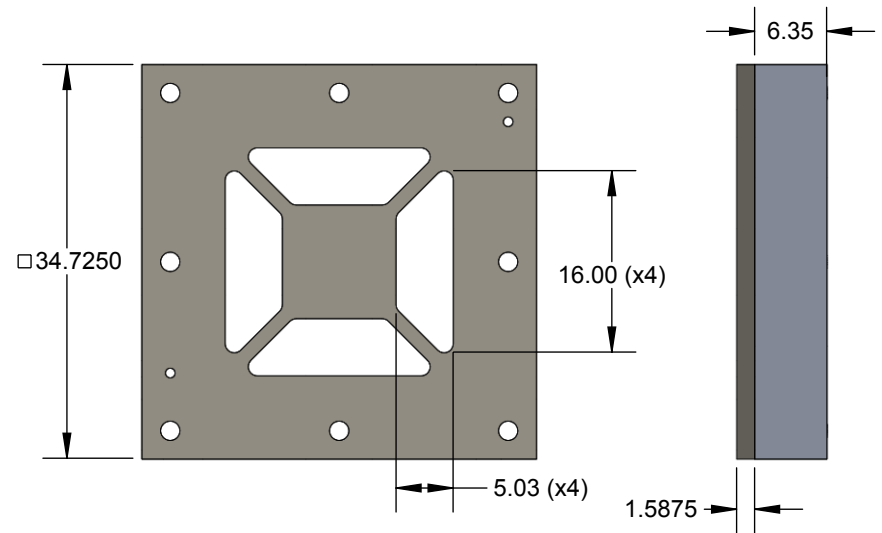
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [$\pm 0.001''$], Pitches (from true position) $\pm 0.025\text{mm}$ [$\pm 0.001''$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$ [$\pm 0.005''$] unless stated otherwise. Materials and specifications are subject to change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

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

 SG-BGA-6398 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 47.55	STATUS: Released	SHEET: 3 OF 5	REV. A
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: SG-BGA-6398 Dwg	DATE: 12-12-2013	



ITEM NO.	DESCRIPTION	Default/QTY.
1	GHz Socket Base 27mm w/ 8 mounting holes	1
2	#0-80 Shoulder Screw, 0.090" thread length	8
3	Ball Guide 0.8mm 32x32 array	1
4	Elastomer Guide 27mm IC 8 mounting holes	1
5	0.75mm thick 0.1mm pitch 63 deg angled elastomer - 27.225mm square	1
6	insulation plate 8 mounting holes 27mm package	1
7	Backing Plate, 34.725 X 34.725	1
8	Test PCB 30x30 array 0.8mm pitch	1
9	Test Chip	1
10	Compression Plate, 26.95 X 26.95	1
11	Compression Screw, M18	1
12	GHz Socket Lid 27mm IC with 8 mounting holes	1
13	Dowel Pin, 1/32" x 3/16", SS	2
14	#0-80 x 0.5, SH Cap Screw	8



Insulation plate and Backing plate (Not to Scale)

Description: Socket sub components

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.

SG-BGA-6398 Drawing



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Material: N/A
 Finish: N/A
 Weight: 47.55

STATUS: Released

ENG: S. Faiz

FILE: SG-BGA-6398 Dwg

SHEET: 4 OF 5

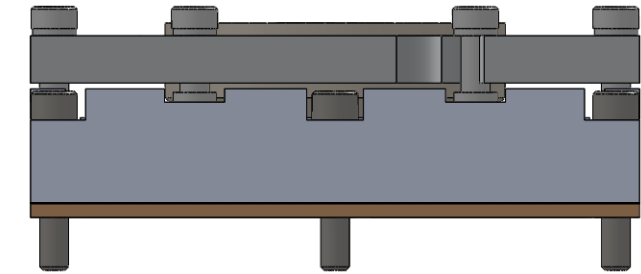
DRAWN BY: M. Raske

DATE: 12-12-2013

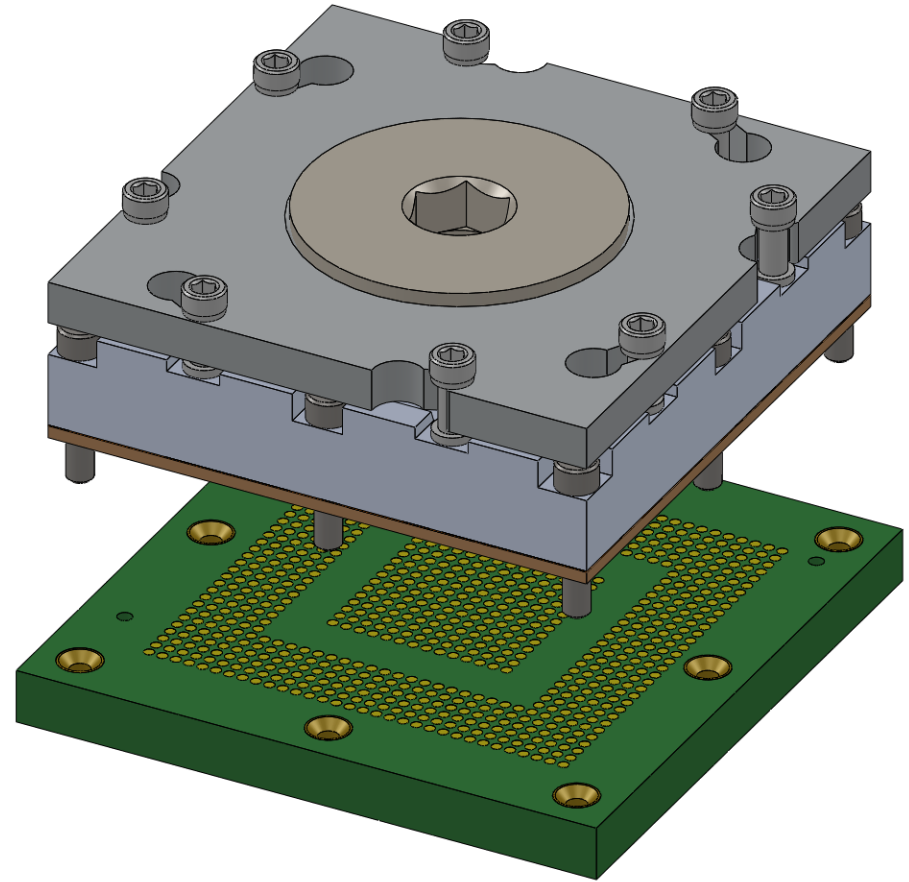
REV. A

SCALE: 2:1

Elastomer socket assembly
Sold Separately!



SMT adapter assembly
Sold Separately!



Description: with SMT adapter

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.

SG-BGA-6398 Drawing



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

Material: N/A
Finish: N/A
Weight: 47.55

STATUS: Released

ENG: S. Faiz

FILE: SG-BGA-6398 Dwg

SHEET: 5 OF 5

DRAWN BY: M. Raske

DATE: 12-12-2013

REV. A

SCALE: 2.5:1