

# GHz BGA Socket - Direct mount, solderless

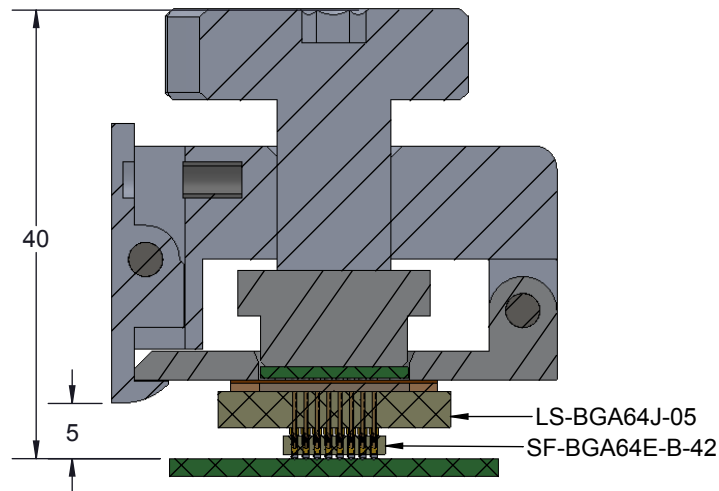
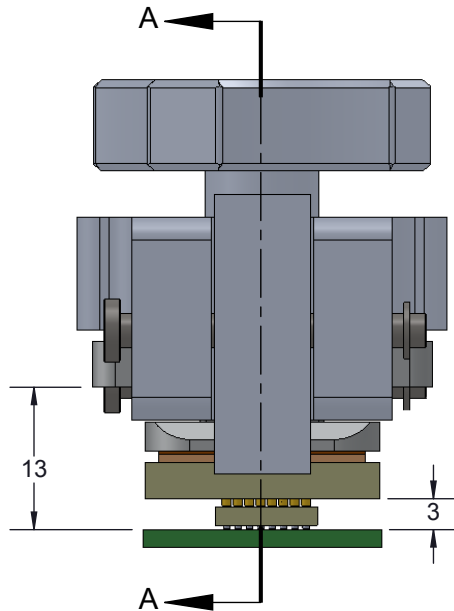
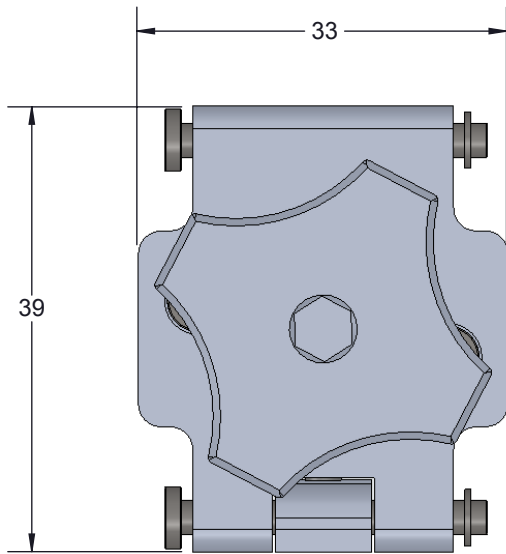
## Features

- Mounts to land socket that plugs into Giga-snaP part soldered to target PCB
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Ball guide prevents over compression of elastomer

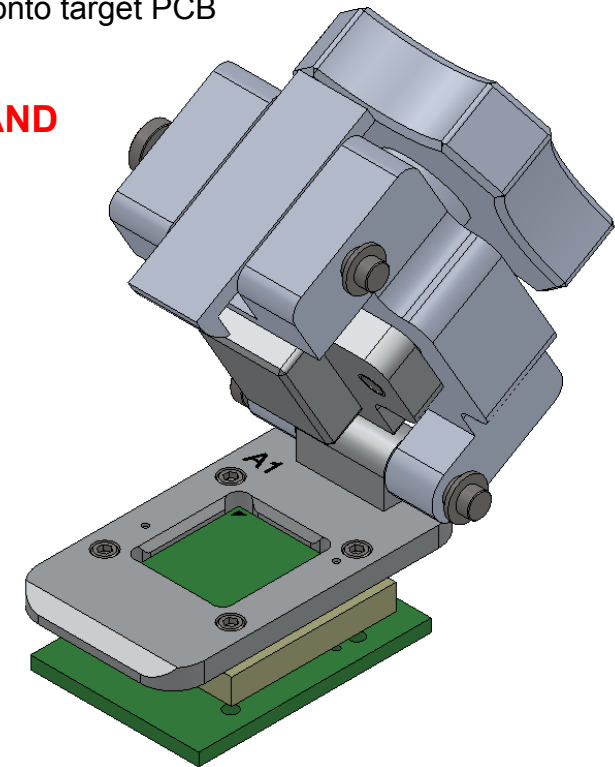
## User Instructions

- Attach socket to LS-BGA64J-05
- Place chip into socket
- Apply 14.4 in-oz torque to compression screw
- Plug assembly into SF-BGA64E-B-42 soldered onto target PCB

**\*NOTE REQUIRED PARTS LS-BGA64J-05 AND SF-BGA64E-B-42 SOLD SEPERATELY**




SECTION A-A

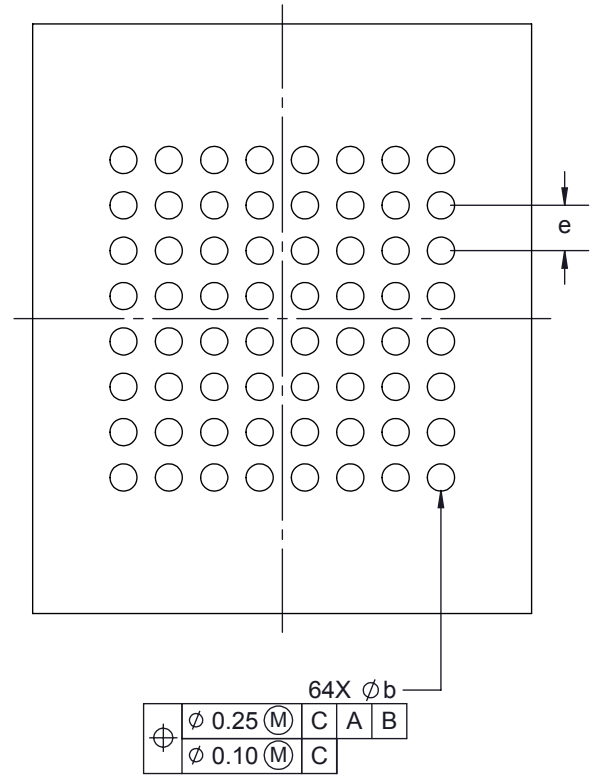
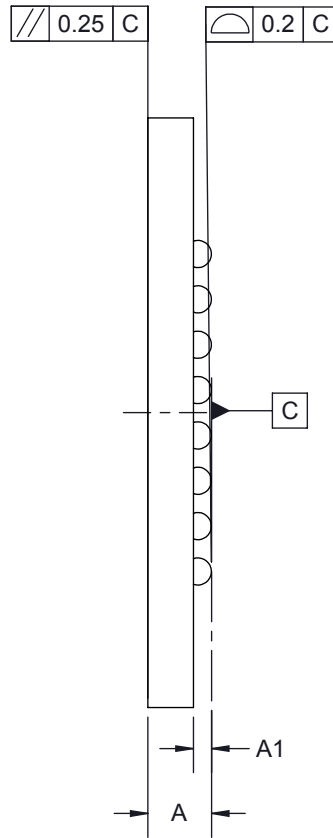
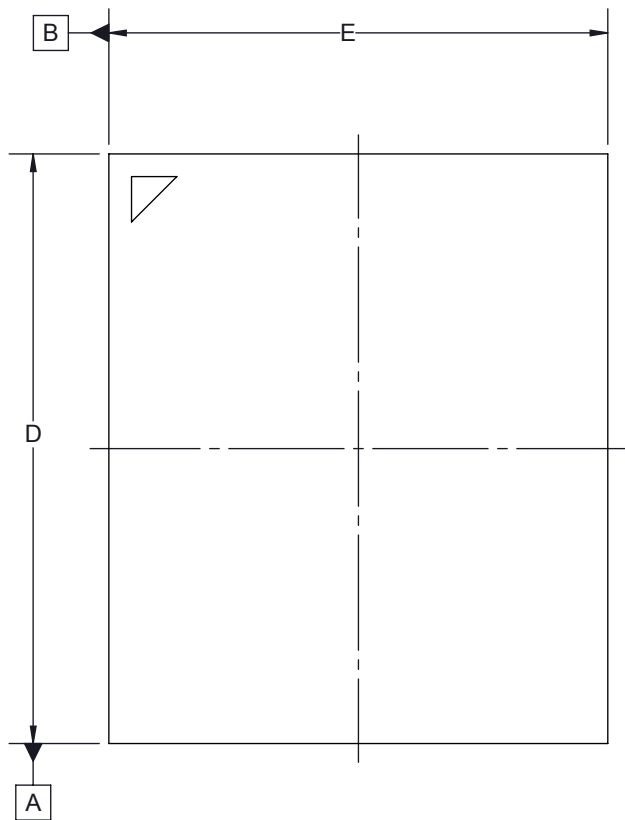


## Description: CG-BGA64 for LS-BGA64J-05

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

Tolerances: Hole diameters  $\pm 0.0254\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.0762\text{mm}$  [ $\pm 0.003"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.127\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

 <b>CG-BGA-4019 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 64.97	STATUS: Released ENG: B. Schatz FILE: CG-BGA-4019 Dwg	SHEET: 1 OF 3 DRAWN BY: M. Raske DATE: 3/20/2014	REV. A SCALE: 3:2



$\phi$	0.25 (M)	C	A	B
$\phi$	0.10 (M)	C		

## IRONWOOD COMPATIBLE PACKAGE: BGA64N

Dimensions are in millimeters.

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

### Description: Compatible Device

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.

DIM	MIN	MAX
A	-	3.5
A1	0.4	0.6
b	0.5	0.7
D	12.8	13.2
E	10.8	11.2
e	1.0	

#### CG-BGA-4019 Drawing



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

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Finish: N/A  
Weight: 64.97

STATUS: Released

ENG: B. Schatz

FILE: CG-BGA-4019 Dwg

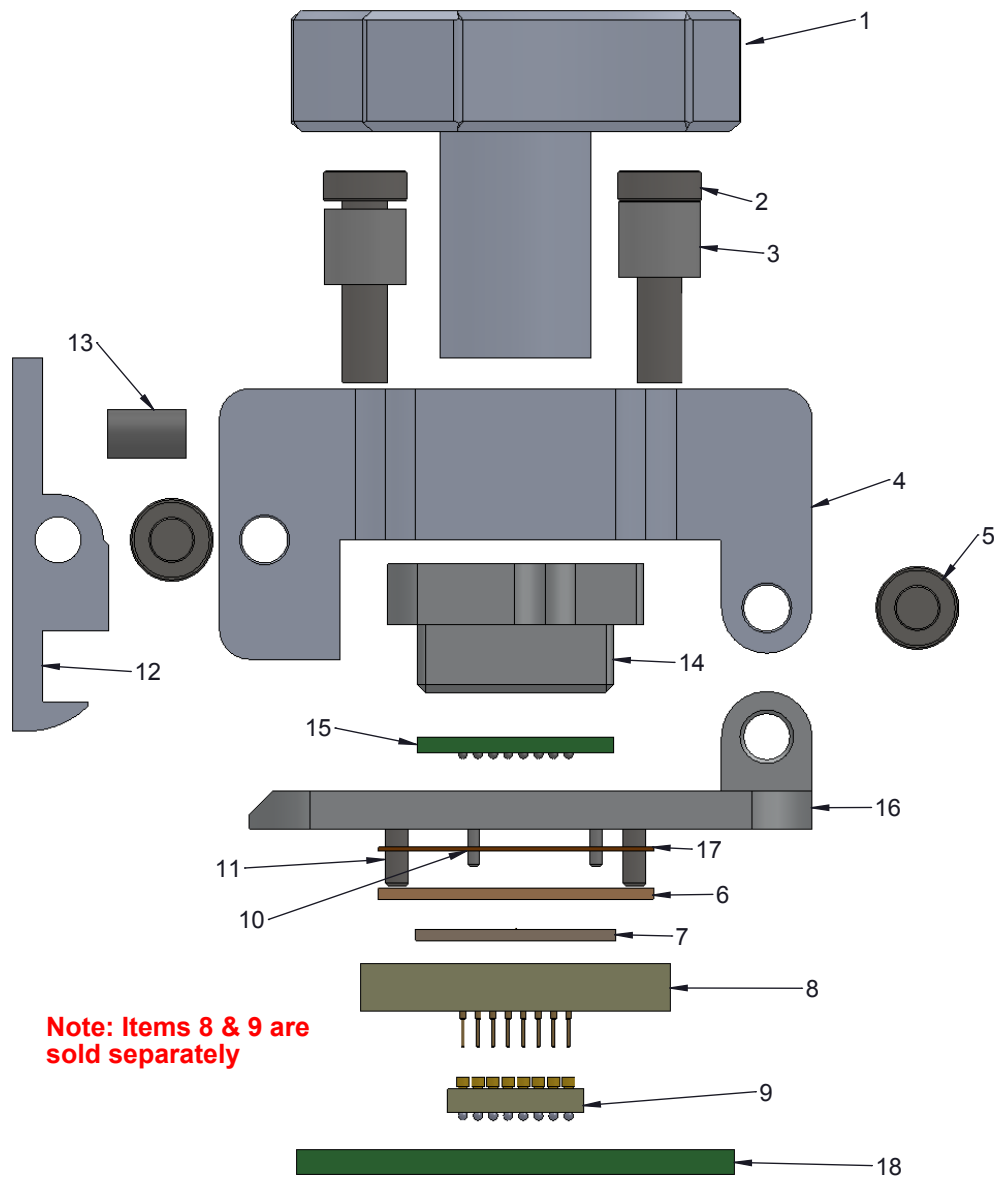
SHEET: 2 OF 3

DRAWN BY: M. Raske

DATE: 3/20/2014

REV. A

SCALE: 6:1



ITEM NO.	DESCRIPTION	Material
1	M10 Compression Screw	7075-T6 Aluminum Alloy
2	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
3	Spring Clamshell lid assembly	Steel Music Wire
4	Clam shell lid for 17mm IC	7075-T6 Aluminum Alloy
5	Hinge Pin and Snap Ring, 3mm OD, 25mm long, SS	Stainless Steel (ferritic)
6	Elastomer Guide 13x13mm	Ultem
7	0.75mm thick 0.1mm pitch 63 deg angled elastomer	Silicon Rubber
8	Male Land Socket BGA64 13mm 8x8 array 1.0mm pitch	N/A
9	Female Giga-snaP BGA64 9x9mm 8x8 array 1.0mm pitch	N/A
10	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
11	#0-80 X .188 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
12	Clamshell Latch	7075-T6 Aluminum Alloy
13	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
14	CG Compression Plate 13mm	7075-T6 Aluminum Alloy
15	BGA64 13x11mm 8x8 array 1.0mm pitch	FR4 High temp
16	Clamshell Socket Base 13mm IC	7075-T6 Aluminum Alloy
17	Ball Guide BGA64 13mm 8x8 array 1.0mm pitch	Kapton Polyimide/Cirlex
18	Target PCB BGA64 13mm 8x8 array 1.0mm pitch	FR4 High temp


**Note: Items 8 & 9 are sold separately**

### Description: Socket, Backing Plate Detail

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

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Rev	Date	Initials	Description
A	2/13/14	BJS	Original

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