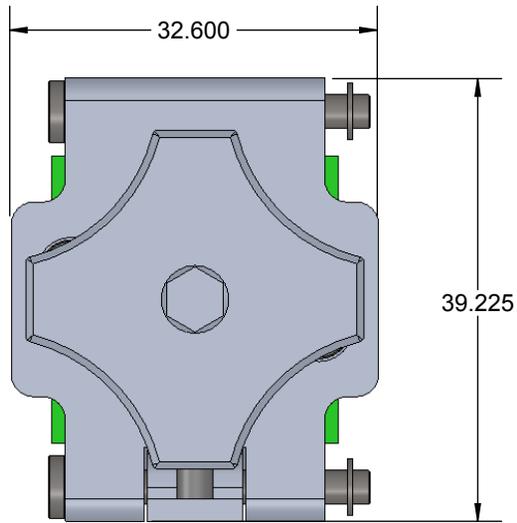
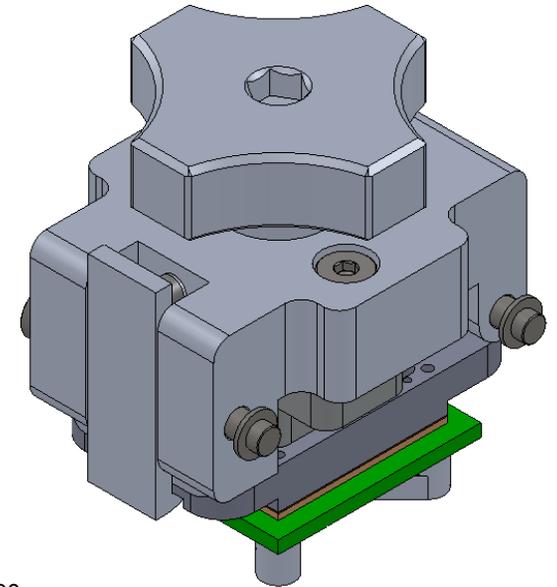
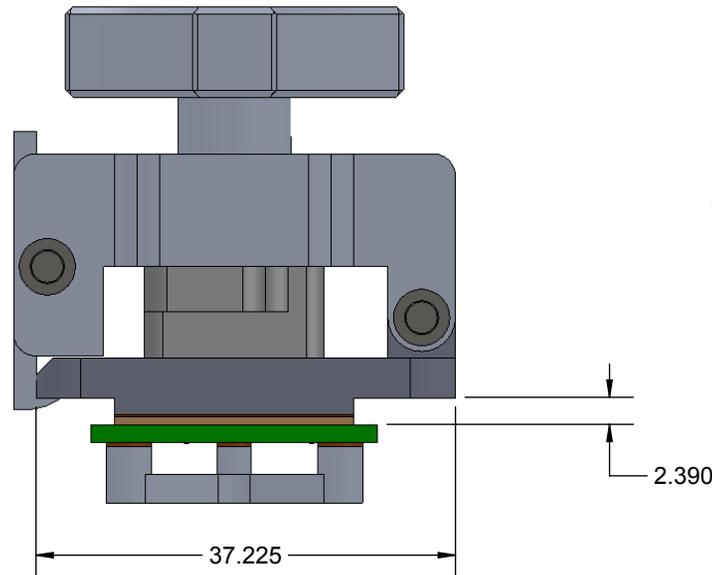
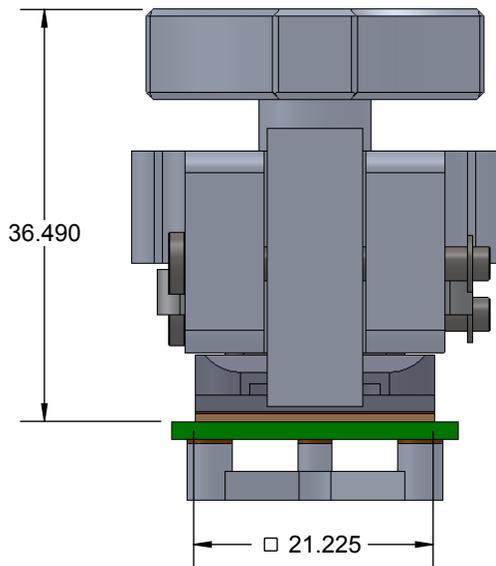


GHz BGA Socket - Direct mount, solderless



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
- Recommended Torque: 1.3in-lbs



Description: CG-BGA225 16x16mm IC 15x15array

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.

CG-BGA-4021 Drawing



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

Material: N/A
Finish: N/A
Weight: 71.13

STATUS: Released

ENG: B. Fedde

FILE: CG-BGA-4021 Dwg

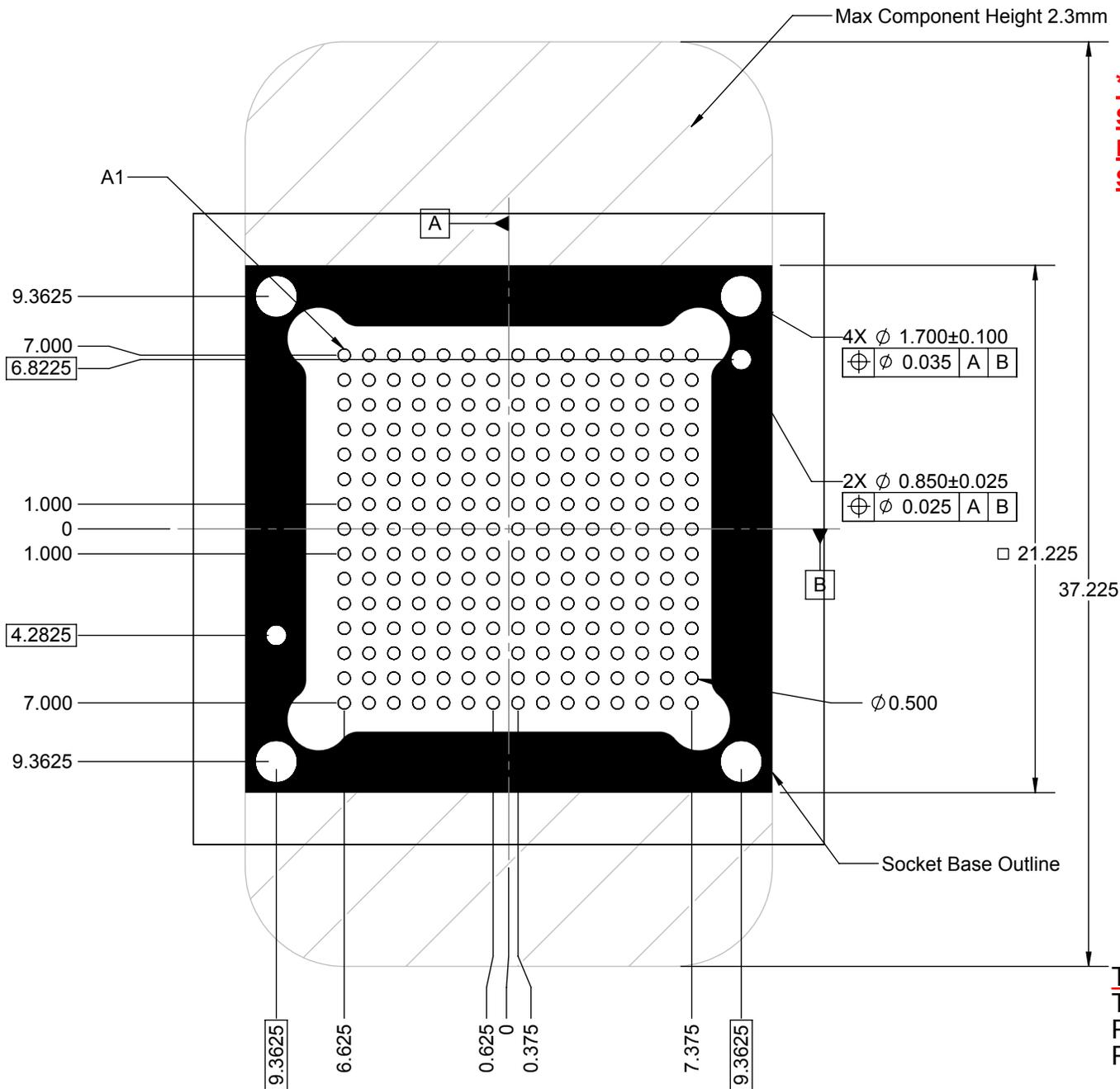
SHEET: 1 OF 4

DRAWN BY: M. Raske

DATE: 07/15/2014

REV. A

SCALE: 3:2



***Note: BGA pattern is not symmetrical with respect to the mounting holes. The pattern is shifted 0.375mm right of center**

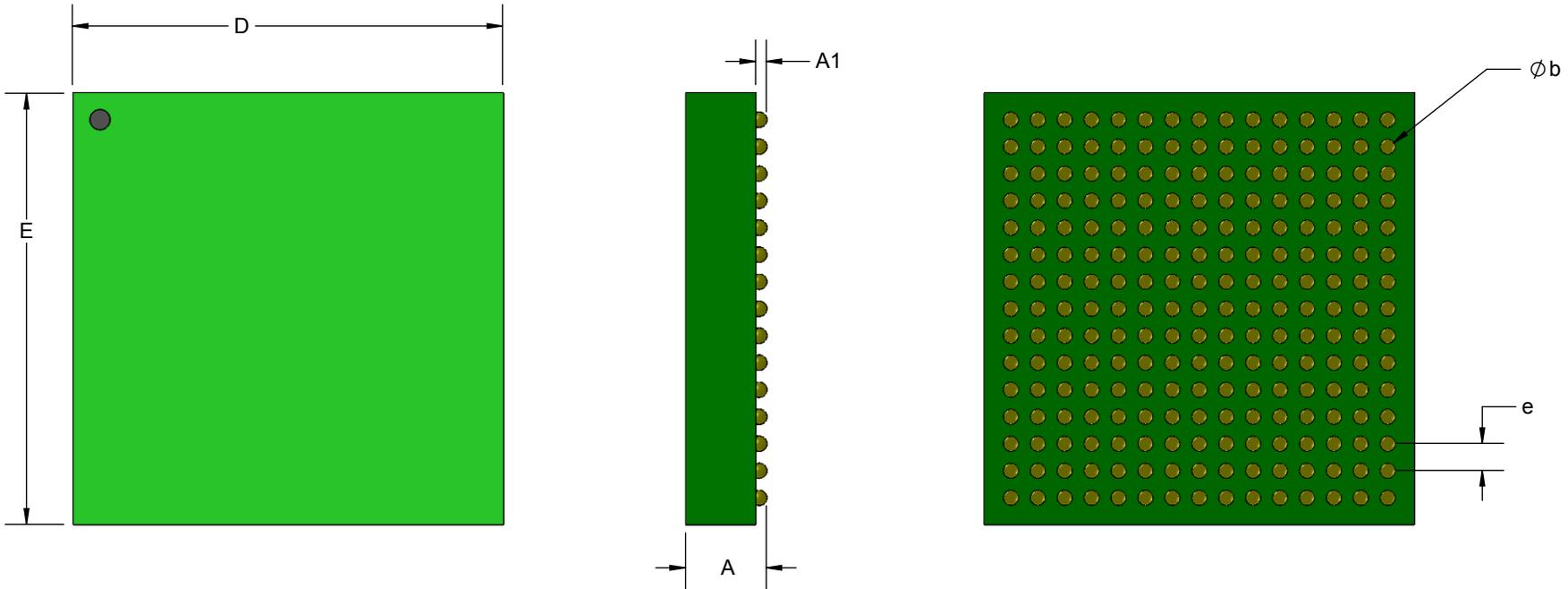
Target PCB Recommendations
 Total Thickness: 1.6mm minimum
 Plating: Gold or Solder finish
 PCB Pad height: Same or higher than solder mask

Description: Recommended PCB Layout

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.
 Tolerances: Hole diameters \pm 0.03mm [\pm 0.001"], Pitches (from true position) \pm 0.025mm [\pm 0.001"], substrate thickness tolerance \pm 10%, all other tolerances \pm 0.13mm [\pm 0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

 CG-BGA-4021 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 71.13	STATUS: Released	SHEET: 2 OF 4	REV. A
		ENG: B. Fedde	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: CG-BGA-4021 Dwg	DATE: 07/15/2014	

Ironwood Package code: BGA225K



DIM	MIN	MAX
A		3.0
A1	0.40	0.60
b	0.45	0.7
D	15.90	16.10
E	15.90	16.10
e	1.0 BSC	

Dimensions are in millimeters.

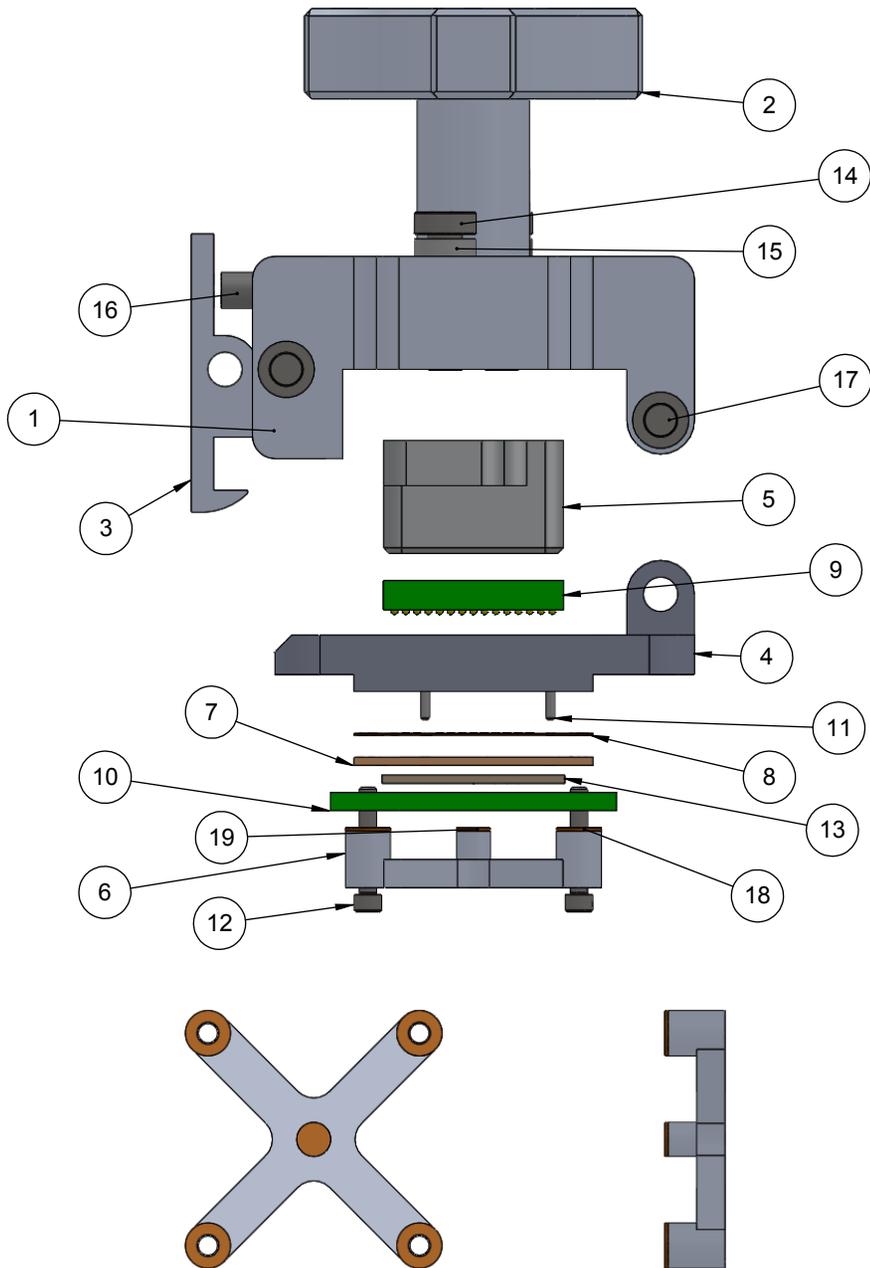
1. Interpret dimensions and tolerances per ASME Y14.5M-1994.
2. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
3. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
4. Parallelism measurement shall exclude any effect of mark on top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

 CG-BGA-4021 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 71.13	STATUS: Released	SHEET: 3 OF 4	REV. A
		ENG: B. Fedde	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: CG-BGA-4021 Dwg	DATE: 07/15/2014	



Description: Socket, Backing Plate Detail

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.

ITEM NO.	DESCRIPTION	Material
1	Clam shell lid for 17mm IC	7075-T6 Aluminum Alloy
2	M10 Comression Screw	7075-T6 Aluminum Alloy
3	Clamshell Latch	7075-T6 Aluminum Alloy
4	CG Socket Base 16.325mm Pocket 18.725mm Holes	7075-T6 Aluminum Alloy
5	Clamshell 16mm IC Compression Plate	7075-T6 Alumium Alloy
6	16x16mm Clamshell Backing Plate	7075-T6 Aluminum Alloy
7	Elastomer Guide 16mm IC	Ultem 1000
8	Ball Guide BGA 225 1.0mm pitch	Kapton Polyimide/Cirlex
9	BGA 225 Test Chip 16x16mm 15x15 array	Material <not specified>
10	BGA 225 Test PCB	FR4 Standard
11	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
12	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
13	0.75mm thick 0.1mm pitch 63 deg angled elastomer	Silicon Rubber
14	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
15	Spring Clamshell lid assembly	Steel Music Wire
16	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
17	Hinge Pin and Snap Ring, 3mm OD, 25mm long, SS	Stainless Steel (ferritic)
18	Insulating washer, 4mm OD.	Kapton Polyimide/Cirlex
19	Insulating washer, 3mm OD.	Kapton Polyimide/Cirlex

CG-BGA-4021 Drawing
 Ironwood Electronics, Inc.
 Tele: (800) 404-0204
 www.ironwoodelectronics.com

Material: N/A
 Finish: N/A
 Weight: 71.13

STATUS: Released
 ENG: B. Fedde
 FILE: CG-BGA-4021 Dwg

SHEET: 4 OF 4
 DRAWN BY: M. Raske
 DATE: 07/15/2014

REV. A
 SCALE: 3:2