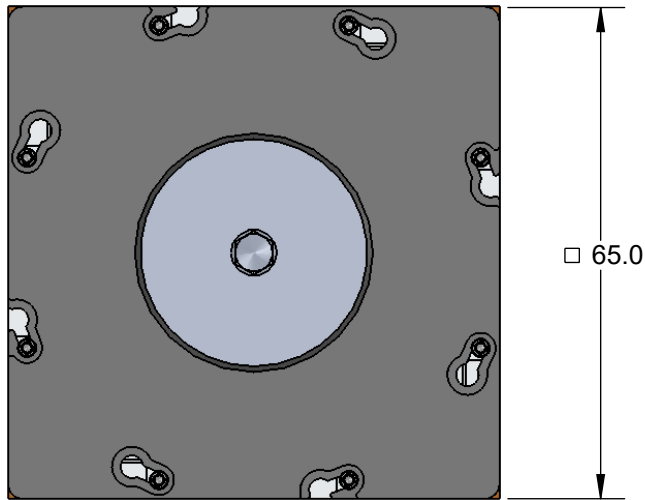


GT-BGA DIRECT MOUNT, SOLDERLESS SOCKET

Features

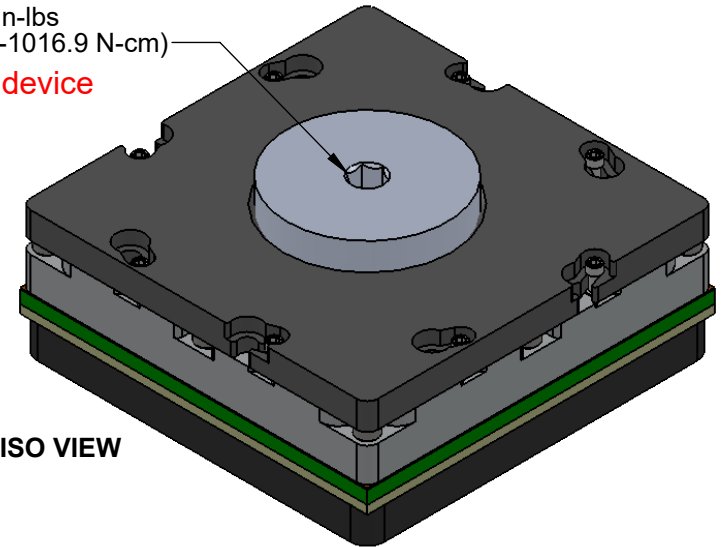
- Directly mounts to target PCB (needs tooling holes) with hardware
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Ball guide prevents over compression of elastomer
- Easily removable swivel socket lid



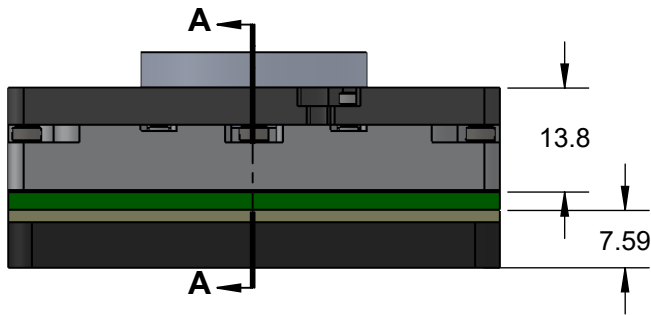
TOP VIEW

Recommended torque= 80-90 in-lbs
(903.8-1016.9 N-cm)

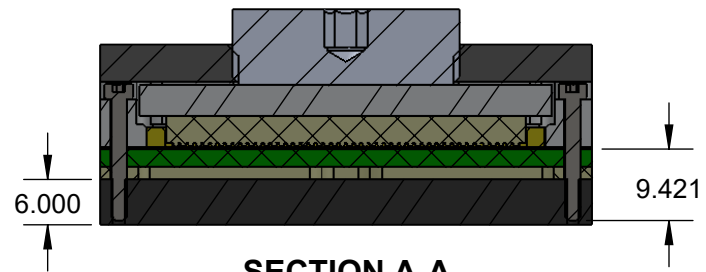
remove the torque when the device
is not under test.



ISO VIEW



FRONT VIEW



SECTION A-A

Description: GT-BGA skt 47.5x47.5mm 1mm 46x46array

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.

GT-BGA-2050 Drawing



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

Material: N/A
Finish: N/A
Weight: 240.49

STATUS: Released

ENG: S. Huang

FILE: GT-BGA-2050 Dwg

SHEET: 1 OF 4

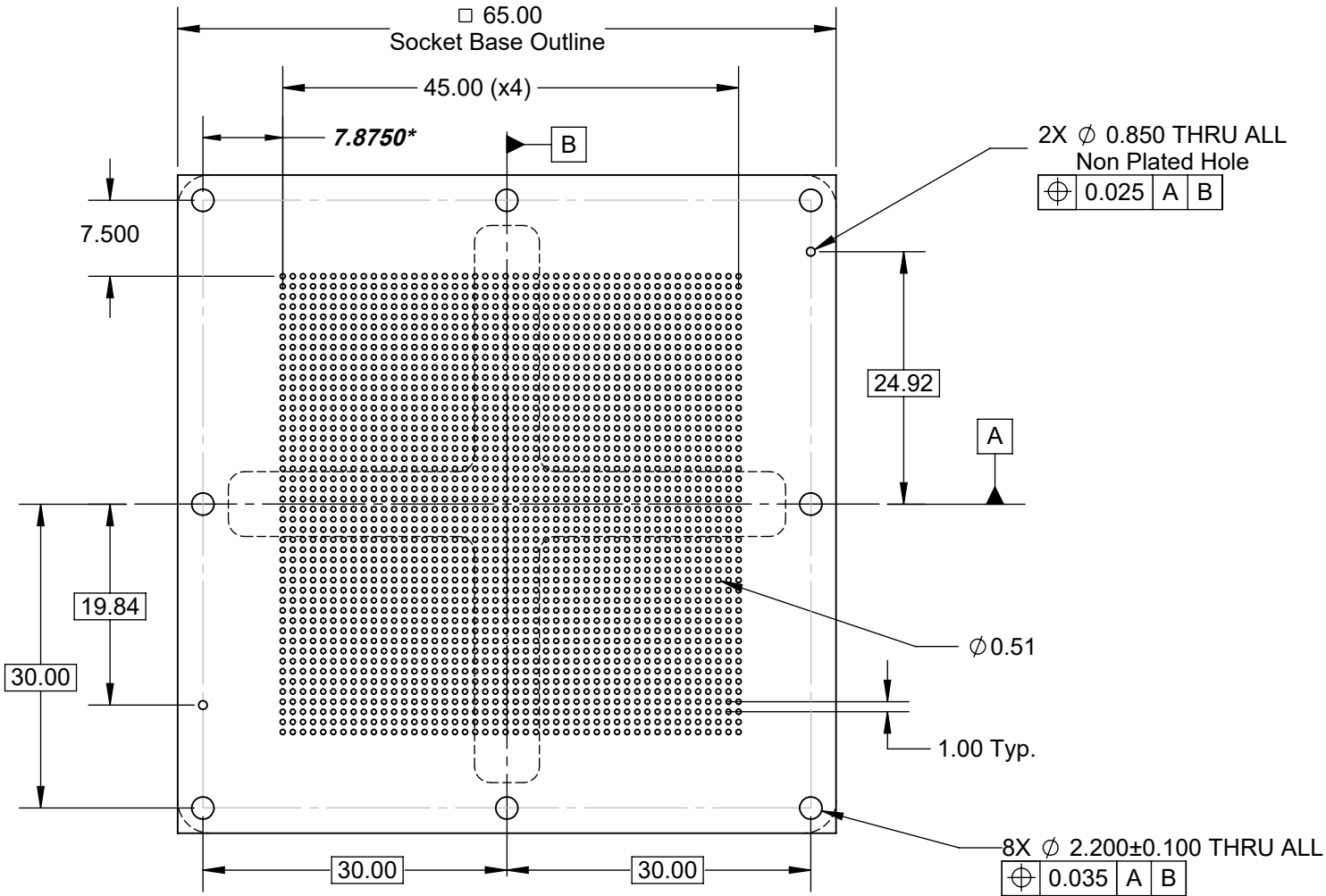
DRAWN BY: M. Raske

DATE: 05/19/2016

REV. A

SCALE: 1:1

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




Description: Recommended PCB Layout

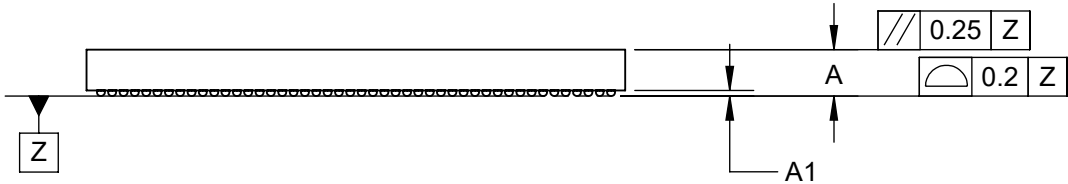
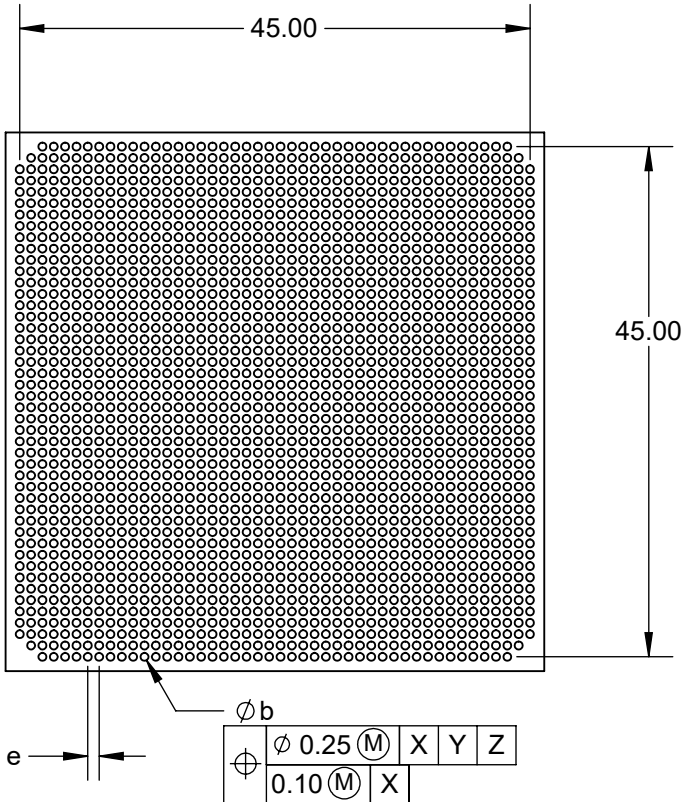
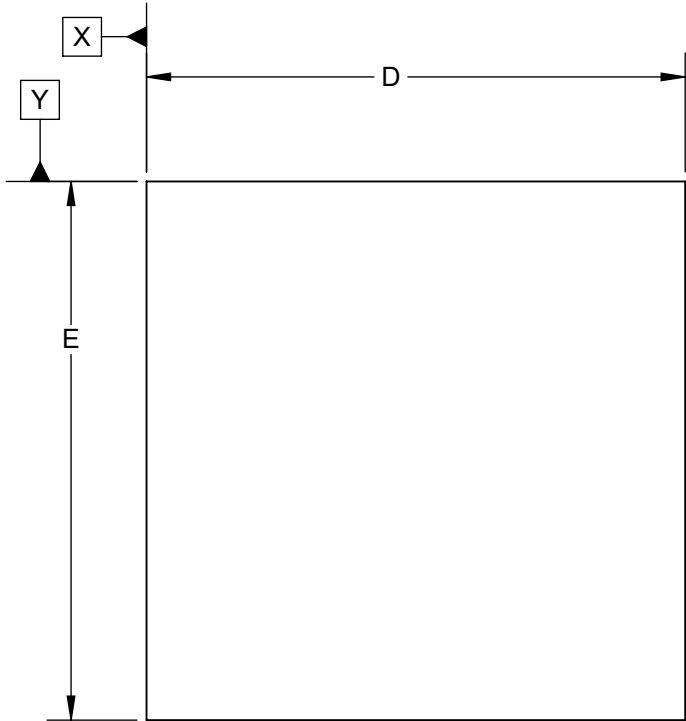
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

Target PCB Recommendations
 Total thickness: 2mm min.
 Plating: Gold or Solder finish
 PCB Pad height: Same or higher than solder mask

 GT-BGA-2050 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 240.49	STATUS: Released ENG: S. Huang FILE: GT-BGA-2050 Dwg	SHEET: 2 OF 4 DRAWN BY: M. Raske DATE: 05/19/2016	REV. A SCALE: 3:2

Ironwood Package Code: BGA2104A




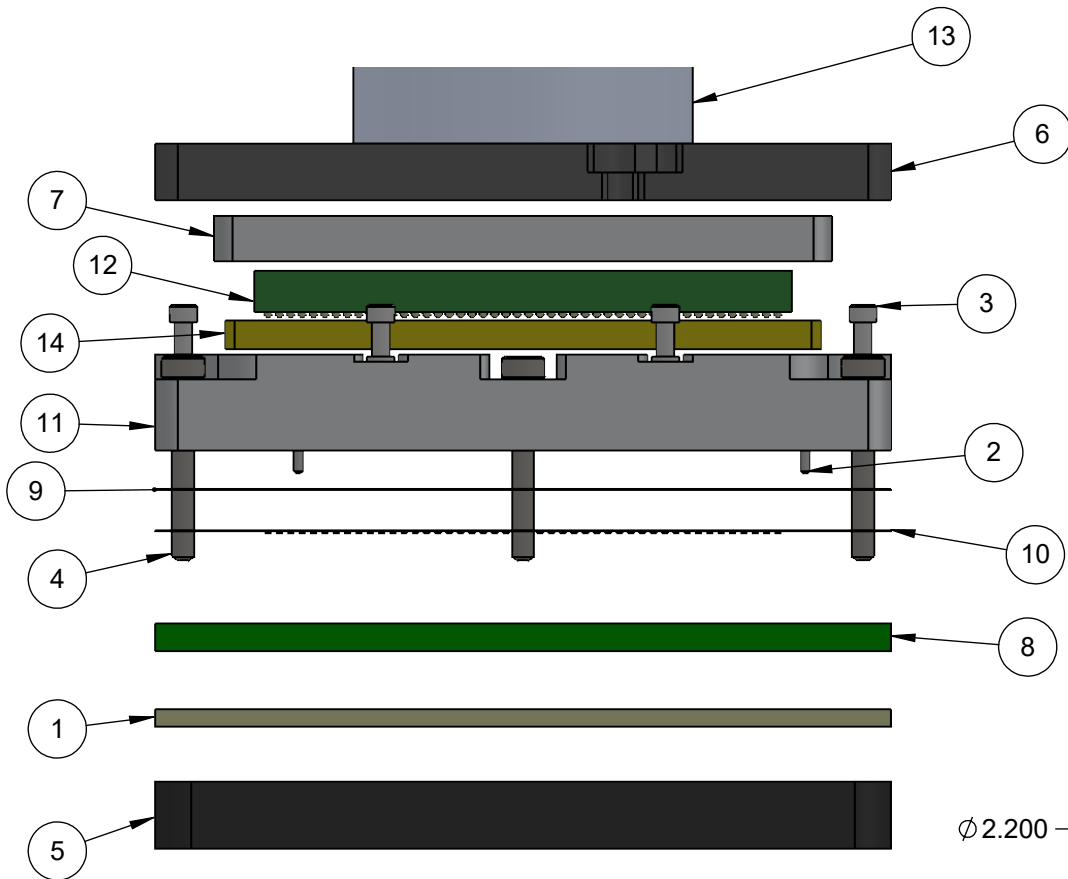
DIM	Minimum	Maximum
A	3.91	4.31
A1	0.40	0.60
b	0.50	0.70
D	47.50 BSC	
E	47.50 BSC	
e	1.00 BSC	
ARRAY	46x46	
PIN COUNT	2104	

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 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.

Description: Compatible BGA

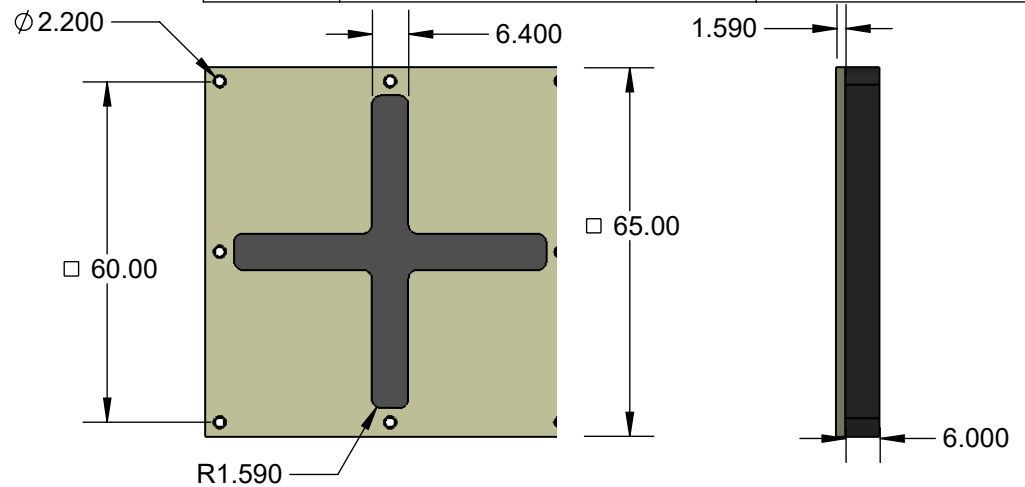
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.
 Tolerances: Hole diameters $\pm 0.03\text{mm}$ [$\pm 0.001"$], Pitches (from true position) $\pm 0.025\text{mm}$ [$\pm 0.001"$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$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

 GT-BGA-2050 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 240.49	STATUS: Released	SHEET: 3 OF 4	REV. A
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:2
		FILE: GT-BGA-2050 Dwg	DATE: 05/19/2016	



ITEM NO.	Description	Material
1	Insulation Plate 55mm	FR4 High temp
2	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
3	#0-80 Shoulder Screw, 2.29mm thread length	Stainless Steel (303)
4	Screw, M2x0.4 x 16mm, Cap, SS	Stainless Steel (18-8)
5	Backing Plate 55mm IC	7075-T6 Aluminum Alloy
6	Socket Lid for 55mm IC	7075-T6 Aluminum Alloy
7	Compression Plate for 55mm IC	7075-T6 Aluminum Alloy
8	PCB 46x46array 1mm pitch	FR4
9	Ball Guide 46x46array 1mm pitch shifted	Kapton Polyimide/Cirlex
10	GT Elastomer 47.5mm 46x46 1mm pitch	Conductive Elastomer
11	Swivel Socket Base 52.5x52.5mm IC 8.5mm ht shifted	7075-T6 Aluminum Alloy
12	BGA device 47.5x47.5, 46x46array 1mm pitch	FR4 Standard
13	Compression Screw, M30 10mm Thick	7075-T6 Aluminum Alloy
14	Drop in IC Guide	Torlon 4203

Note: GT elastomer (item 10) is made as a full 46x46 array BGA2116.




BACKING AND INSULATION PLATE

Description: Socket Assy, Insulation Plate

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.

 GT-BGA-2050 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 240.49	STATUS: Released	SHEET: 4 OF 4	REV. A
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:2
		FILE: GT-BGA-2050 Dwg	DATE: 05/19/2016	