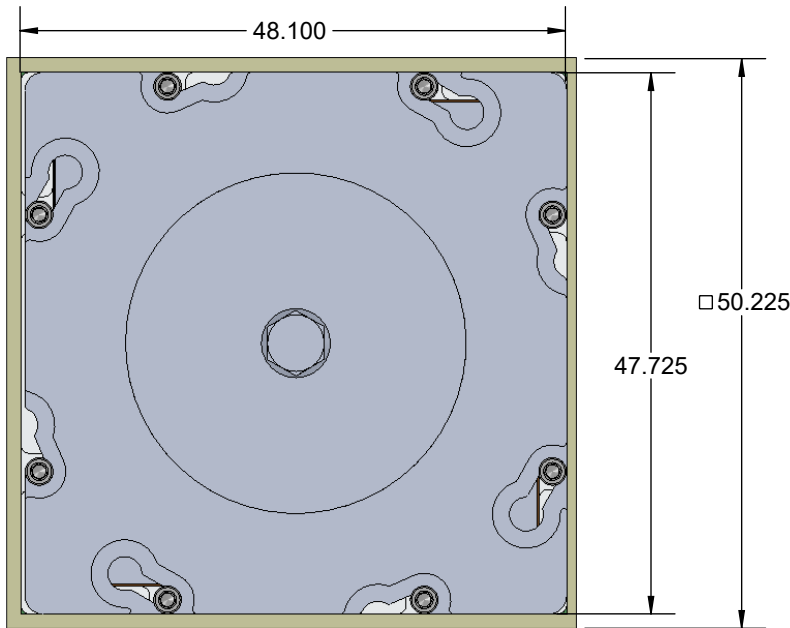


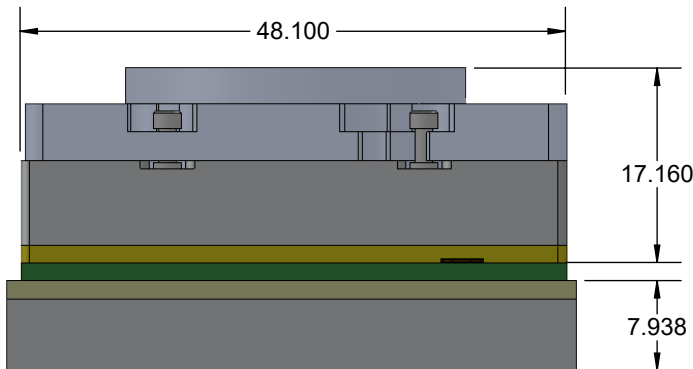
GHz BGA Socket - Direct mount, solderless

Features

- Directly mounts to target PCB (requires 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

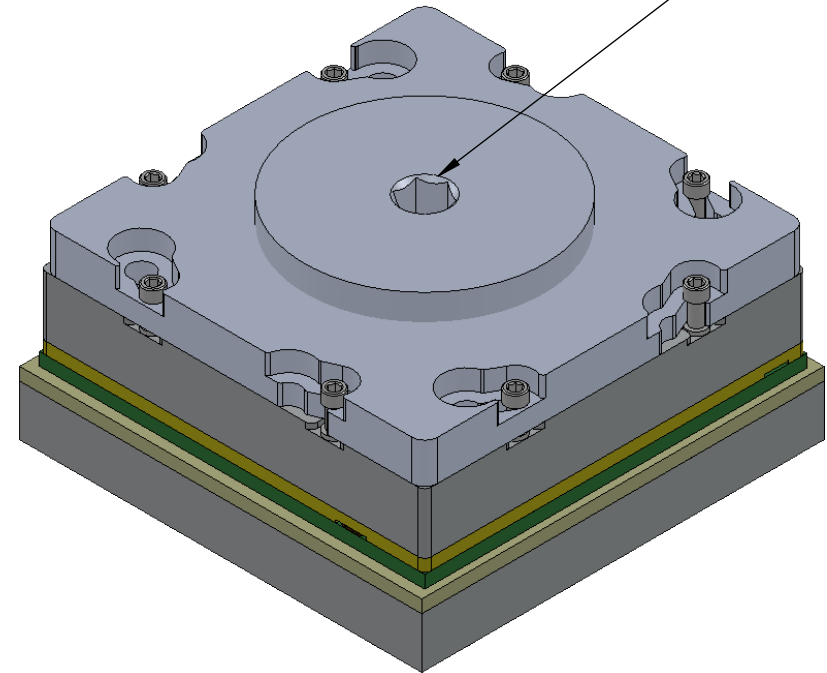


TOP VIEW



SIDE VIEW


Required torque = 519 N-cm [46 lbf-in]
Recommended Tool: TL-TORQUEDRIVER-11



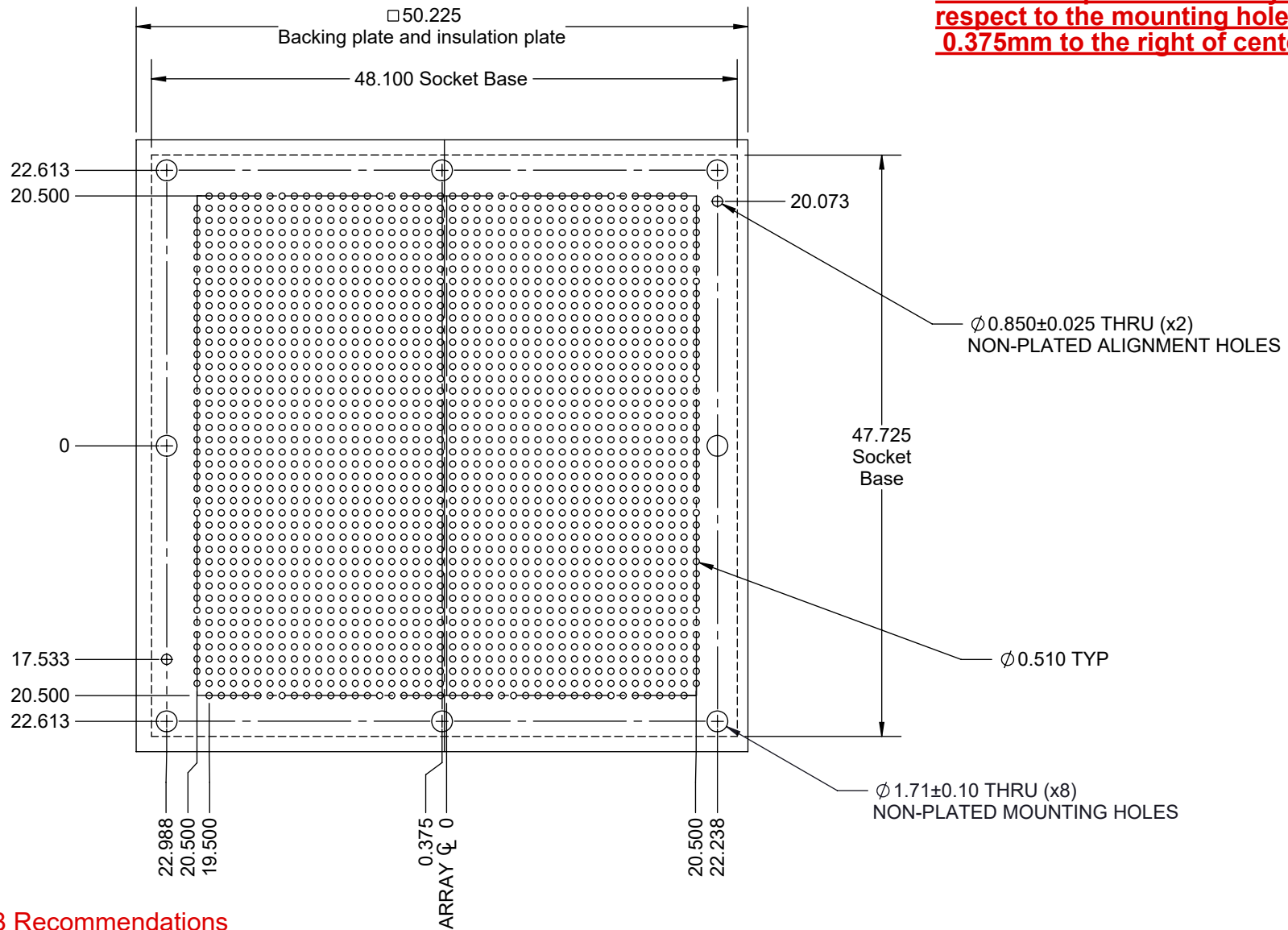
Description: GTL-BGA, 42.5x42.5, 42x42,1mm pitch

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

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

 <p>GT-BGA-2010 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 130.00</p>	STATUS: Quality Approval Pending	SHEET: 1 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:2
		FILE: GT-BGA-2010 Dwg	DATE: 10/31/2017	

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



Target PCB Recommendations

Total thickness: 2.4mm min.


Plating: Gold or Solder finish

PCB Pad height: Same or higher than solder mask

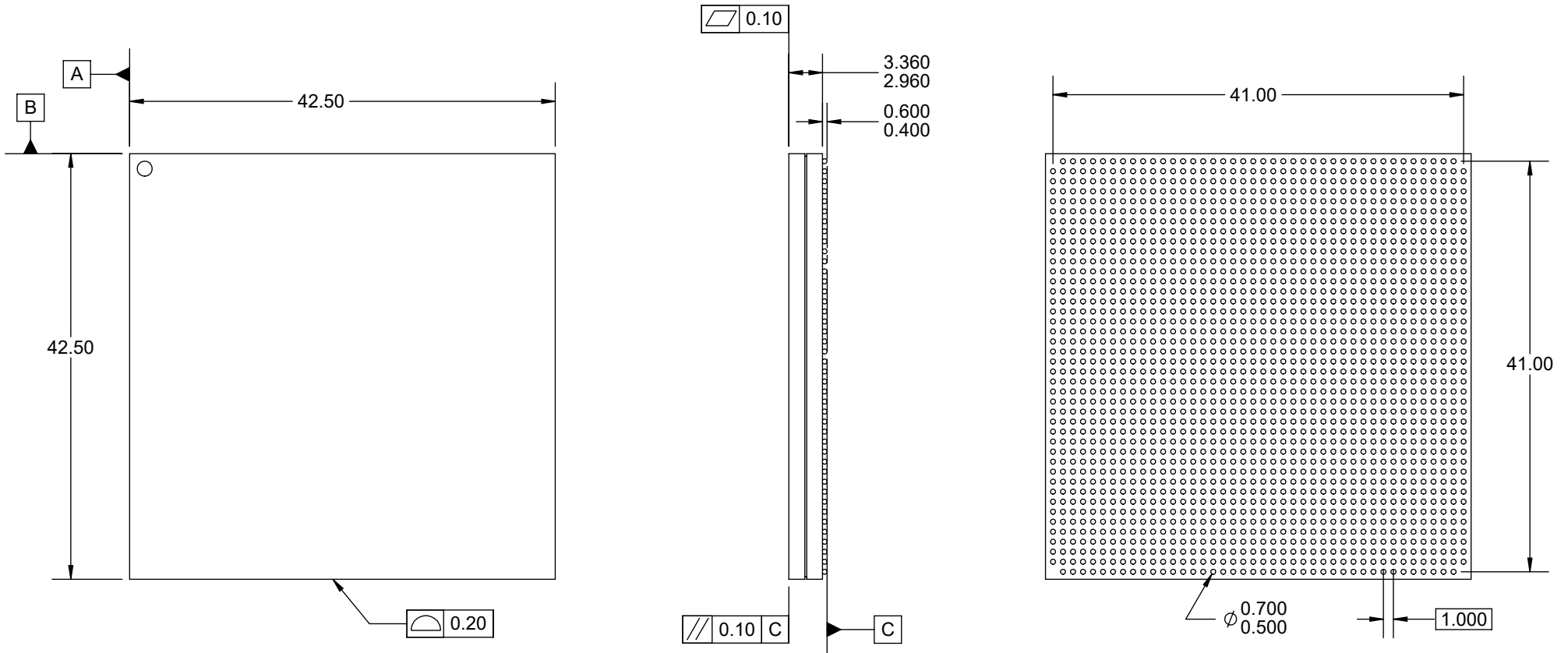
Description: Recommended PCB Layout

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.

 <p>GT-BGA-2010 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 130.00</p>	STATUS: Quality Approval Pending	SHEET: 2 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: GT-BGA-2010 Dwg	DATE: 10/31/2017	

Ironwood Package code is BGA1760A



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.

42 x 42 ARRAY

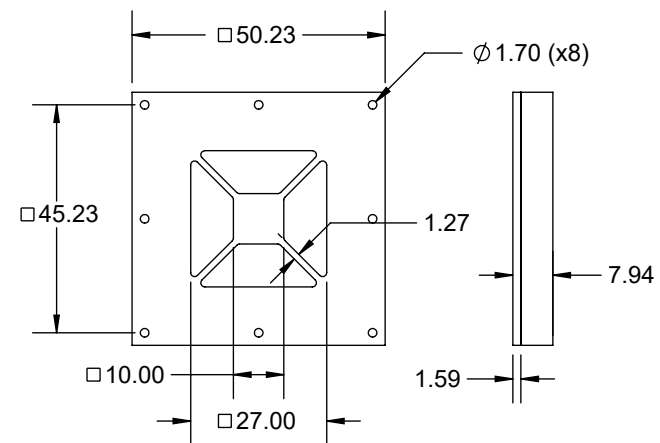
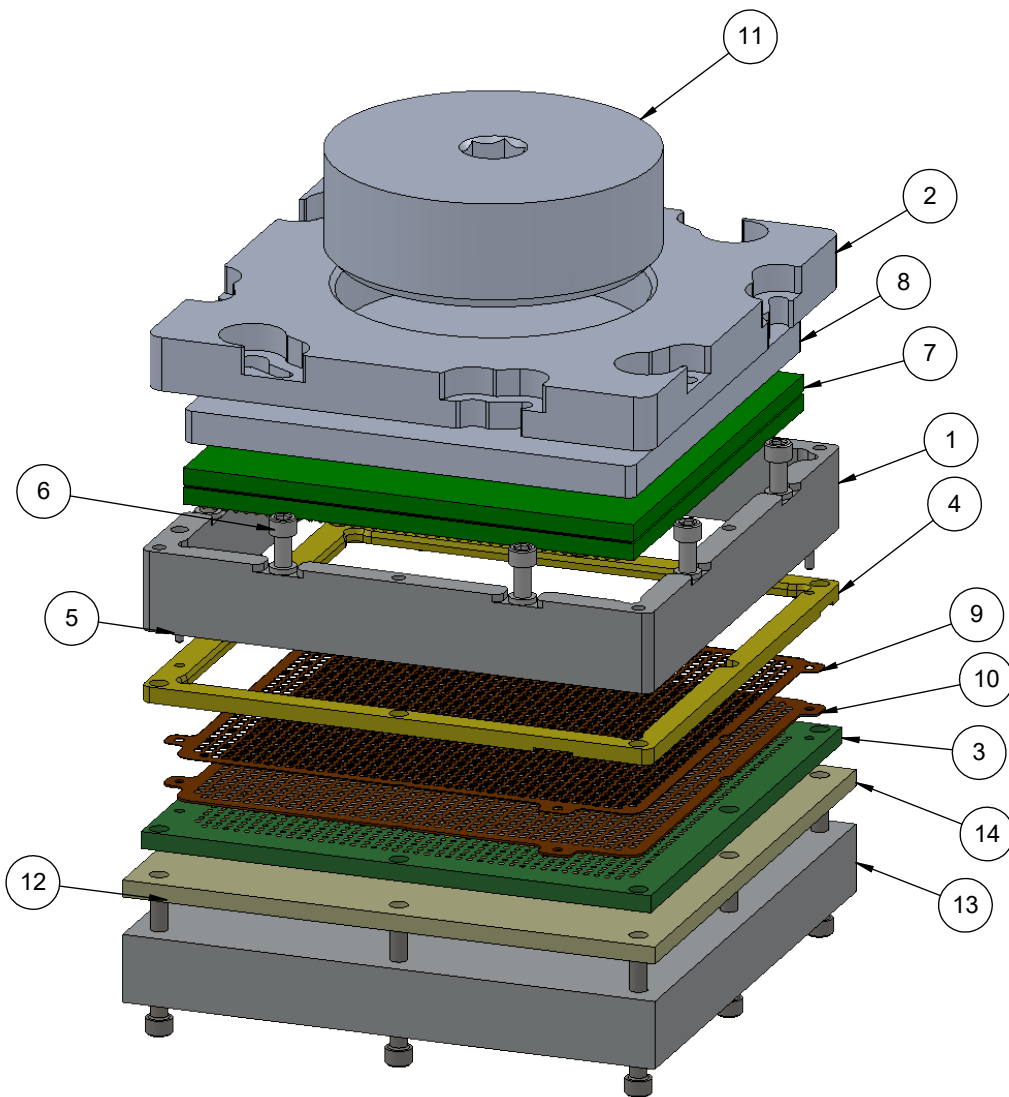
Description: Compatible Device

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.

 <p>GT-BGA-2010 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 130.00</p>	STATUS: Quality Approval Pending	SHEET: 3 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 1.7:1
		FILE: GT-BGA-2010 Dwg	DATE: 10/31/2017	


ITEM NO.	DESCRIPTION	Material
1	Socket Base	7075-T6 Aluminum Alloy
2	Swivel Socket Lid 42.5mm IC	7075-T6 Aluminum Alloy
3	Customer's target PCB	FR4 Standard
4	GT IC Guide 42.5x42.5mm	Torlon 4203
5	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
6	#0-80 Shoulder Screw, 2.29mm thread length	Stainless Steel (303)
7	Test chip 42.5mm IC 1mm pitch 42x42 array	FR4 High temp
8	Compression Plate, 42.45 X 42.45	7075-T6 Aluminum Alloy
9	GT ball guide 42.5mm IC 1mm pitch 0.375mm shifting	Kapton Polyimide/Cirlex
10	GTL BGA1760 42x42 array 1mm pitch	N/A
11	Compression Screw, M30 10mm Thick with 4mm diameter hole	7075-T6 Aluminum Alloy
12	#0-80 x 0.5, SH Cap Screw	Alloy Steel
13	Backing Plate	7075-T6 Aluminum Alloy
14	Insulation Plate, 50.225 X 50.225	FR4



Description: Socket assembly

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-2010 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 130.00	STATUS: Quality Approval Pending	SHEET: 4 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:2
		FILE: GT-BGA-2010 Dwg	DATE: 10/31/2017	

Rev	Date	Initials	Description
B	11/12/20	MR	added torque driver info

Description:

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.

 <p>©2017 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: Finish: Weight:</p>	STATUS: Quality Approval Pending	SHEET: 5 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:2
		FILE: GT-BGA-2010 Dwg	DATE: 10/31/2017	