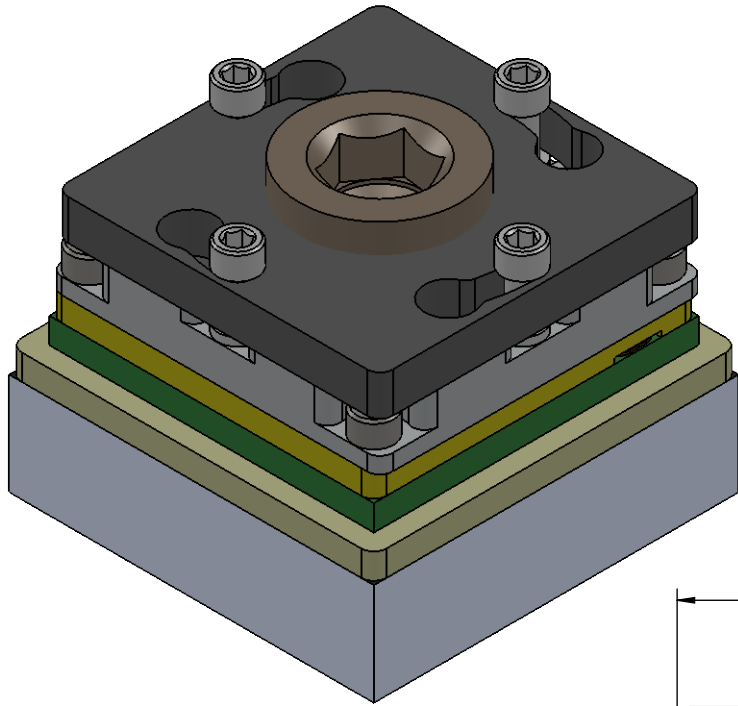


# GT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR TEST APPLICATIONS

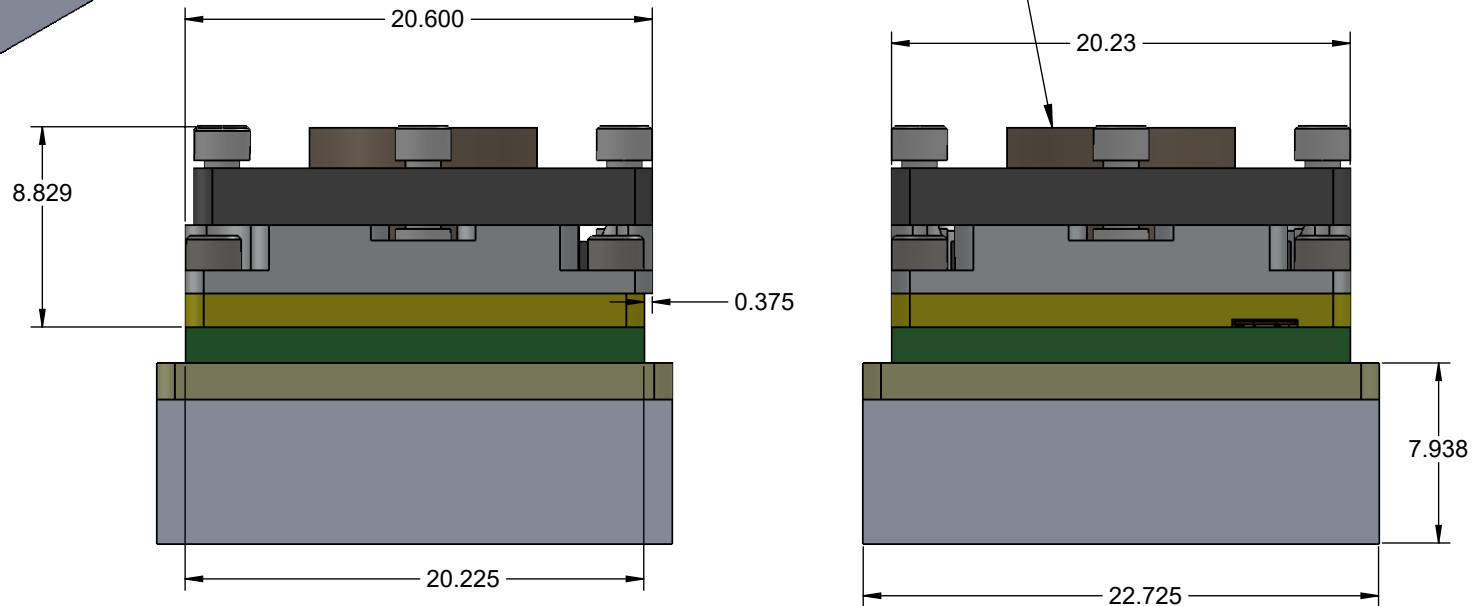
## Features

- Wide temperature range (-55C to +160C).
- High current capability (up to 5A).
- Excellent signal integrity at high frequencies.



Required torque = 4.5 in-lbs (50.8 N-cm)

Recommended Tool: Contact Ironwood



**Description: GT-BGA 15x15mm 0.8mm pitch 18x18 array**

Primary dimension units are millimeters, Secondary dimension units are [inches].

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-2059 Drawing



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

Material: N/A  
Finish: N/A  
Weight: 18.62

STATUS: Released

DRAWN BY: M. Raske

FILE: GT-BGA-2059 Dwg

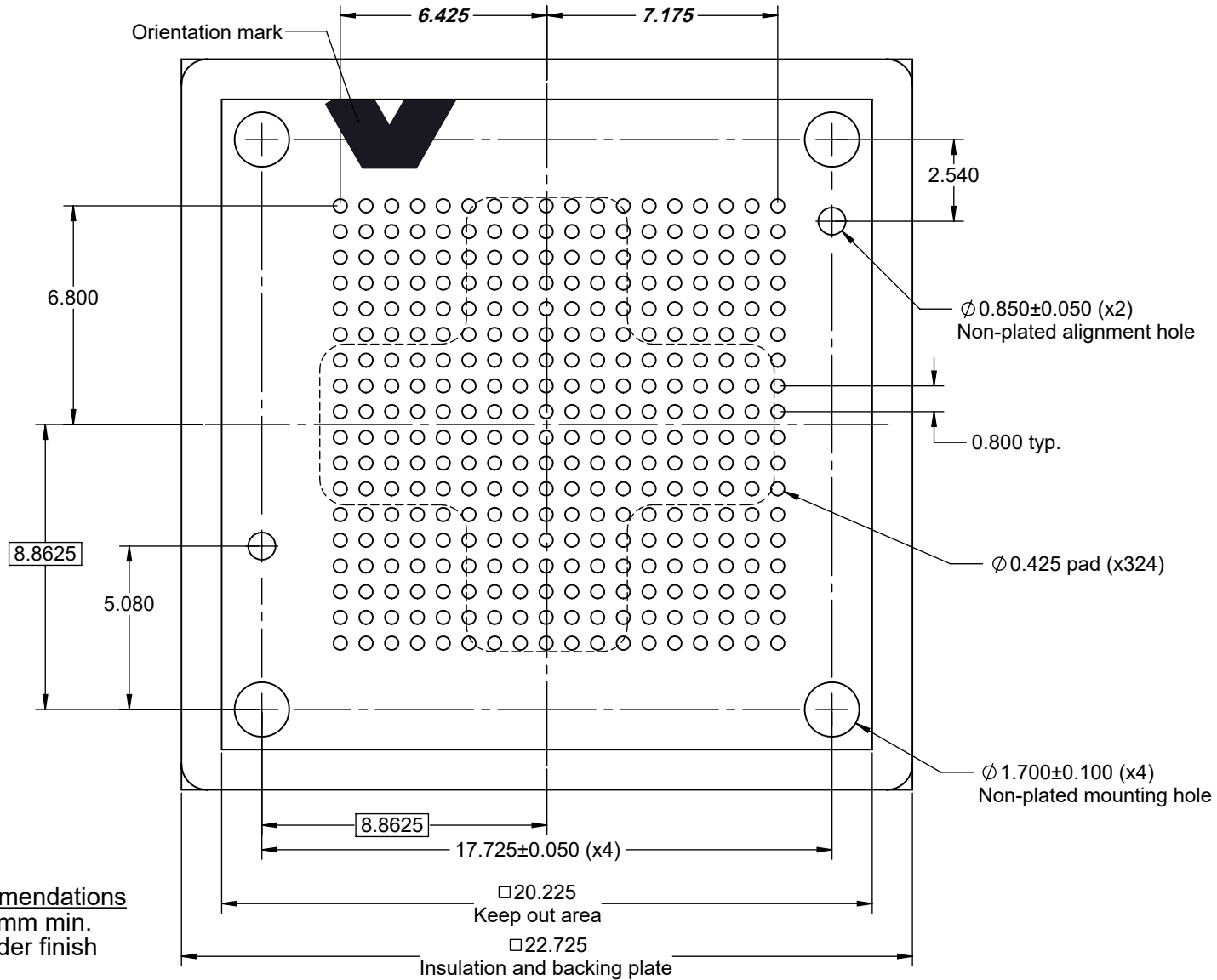
SHEET: 1 OF 4

SCALE: 3:1

DATE: 1/10/2017

REV. A

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




**Target PCB Recommendations**

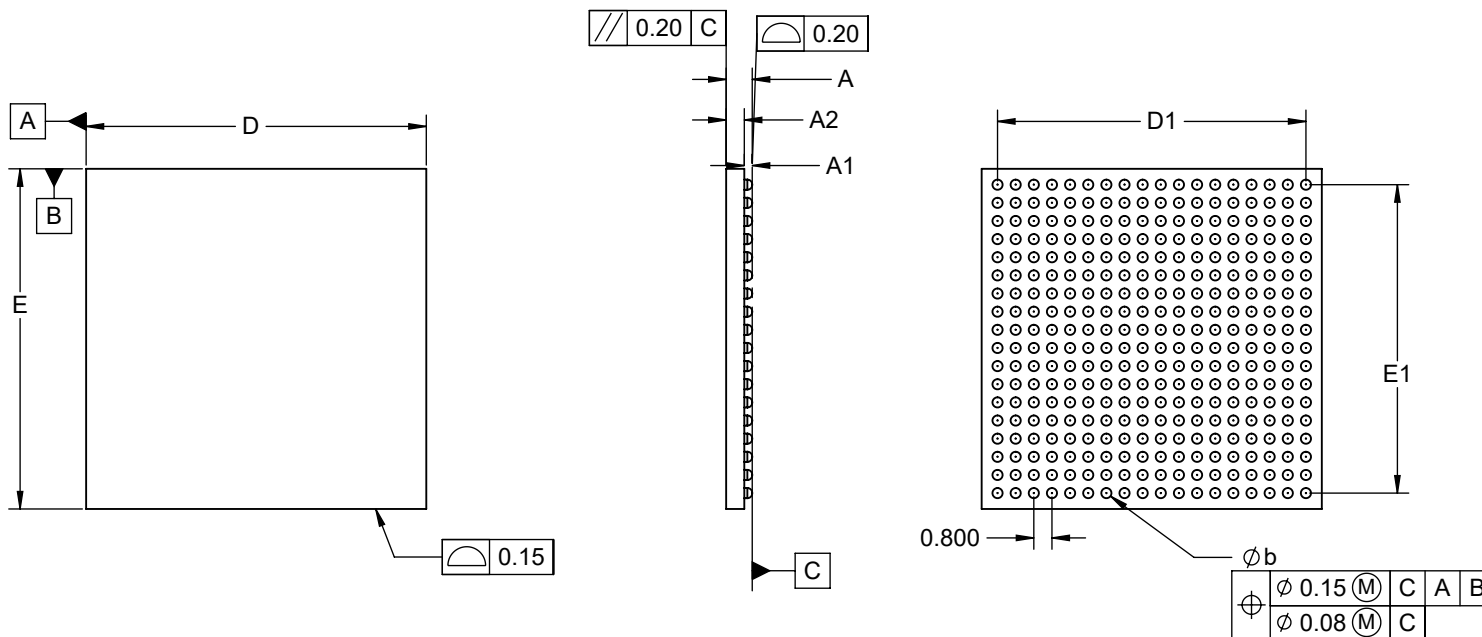
Total thickness: 1.5mm min.  
Plating: Gold or Solder finish

**Description: Recommended PCB layout**

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><b>GT-BGA-2059 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 18.62</p>	STATUS: Released	SHEET: 2 OF 4	REV. A
		DRAWN BY: M. Raske	SCALE: 5:1	
		FILE: GT-BGA-2059 Dwg	DATE: 1/10/2017	



## Ironwood Package Code: BGA324M


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.

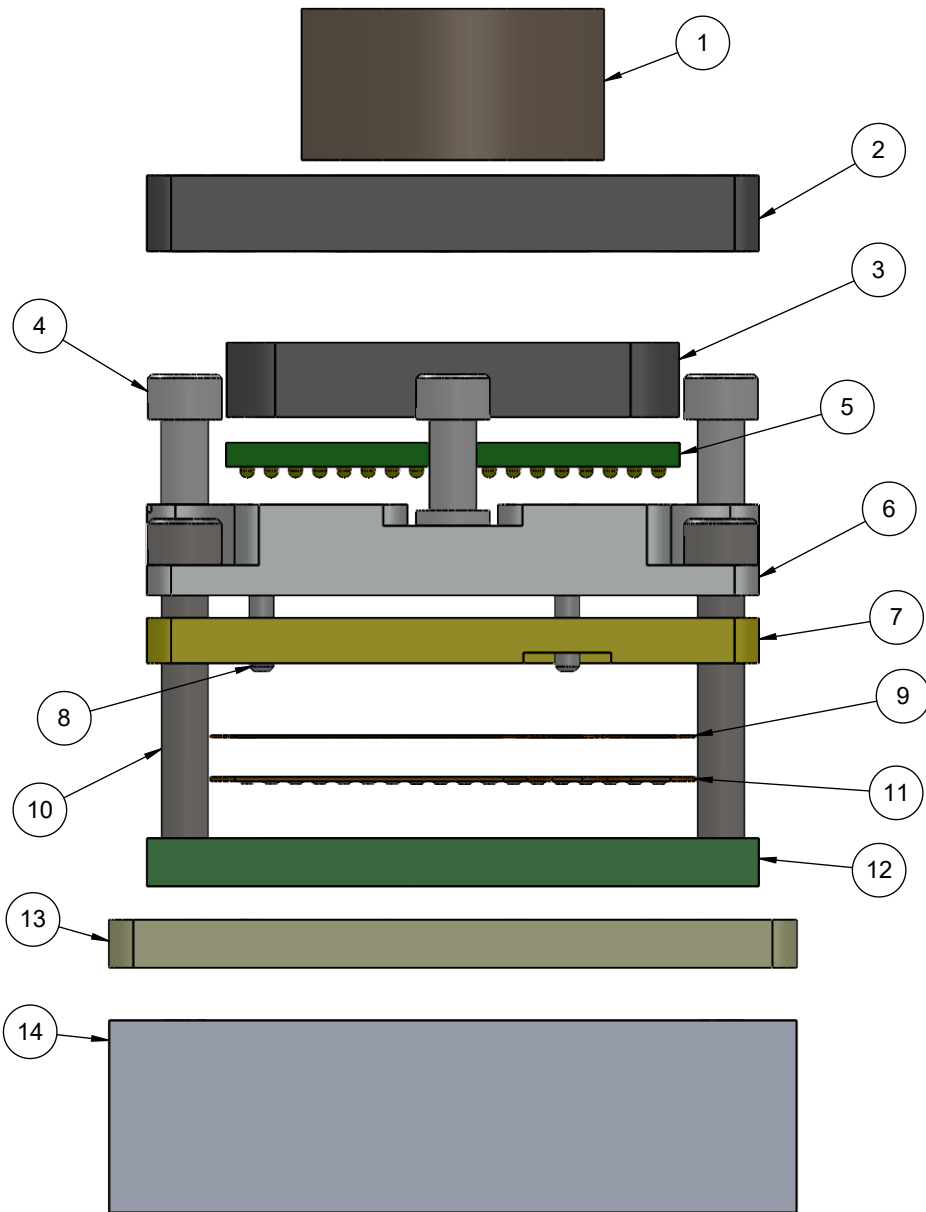
DIM	MIN	MAX
A	1.10	1.5
A1	0.25	0.40
A2	0.75	1.1
b	0.40	0.50
D/E	15.00	
D1/E1	13.60	
e	0.80	

### Description: BGA

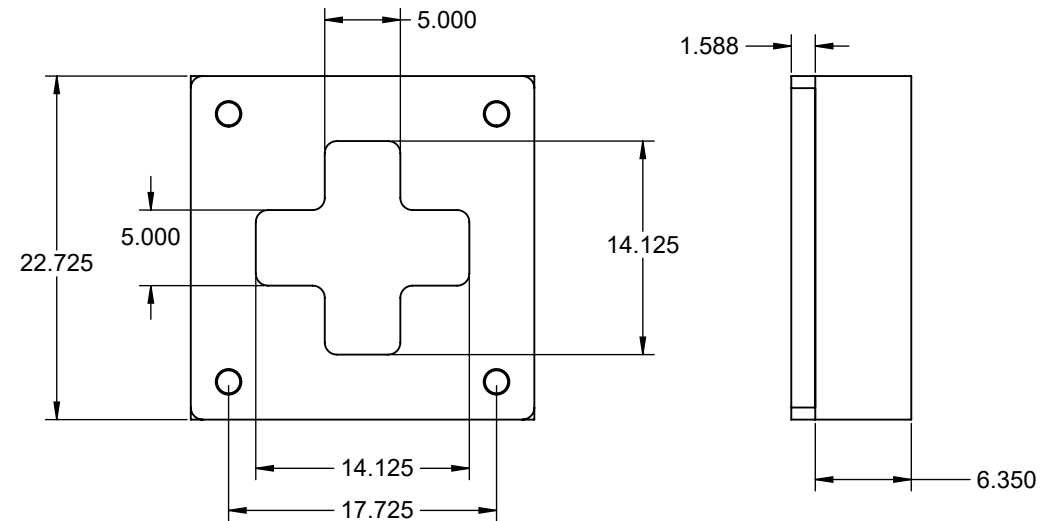
Primary dimension units are millimeters. Secondary dimension units are [inches]. Weight is in grams.

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.

 <b>GT-BGA-2059 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 18.62	STATUS: Released	SHEET: 3 OF 4	REV. A
		DRAWN BY: M. Raske	SCALE: 3:1	
		FILE: GT-BGA-2059 Dwg	DATE: 1/10/2017	




ITEM NO.	DESCRIPTION	Material
1	Compression Screw M10	7075-T6 Alumium Alloy
2	Socket Lid 15mm	7075-T6 Aluminum Alloy
3	Compression Plate 15mm	7075-T6 Aluminum Alloy
4	#0-80 Shoulder Screw, 1.59mm thread length	Stainless Steel (303)
5	BGA324 ,0.8mm Pitch	FR4
6	Socket Base 15mm IC 3mm thick 0.375mm shifting	7075-T6 Alumium Alloy
7	GT IC Guide 15x15mm	Torlon 4203
8	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
9	Ball Guide 0.8mm pitch 18x18 array 0.375mm shifting	Kapton Polyimide/Cirlex
10	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
11	GT BGA324 18x18 array 0.8mm pitch	N/A
12	Target PCB BGA324 0.375mm shift 0.8mm pitch	FR4 High temp
13	Custom insulation plate 15mm	FR4 Standard
14	Backing Plate 15mm GHZ	7075-T6 Aluminum Alloy



**Description: Skt, Insulation Plate, Pin Det**

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.

 <b>GT-BGA-2059 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 18.62	STATUS: Released	SHEET: 4 OF 4	REV. A
		DRAWN BY: M. Raske	SCALE: 4:1	
		FILE: GT-BGA-2059 Dwg	DATE: 1/10/2017	