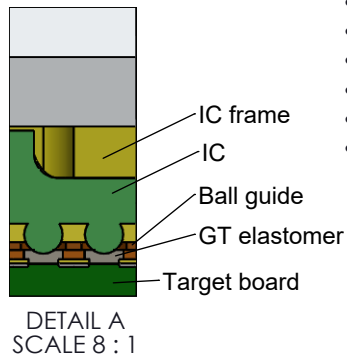
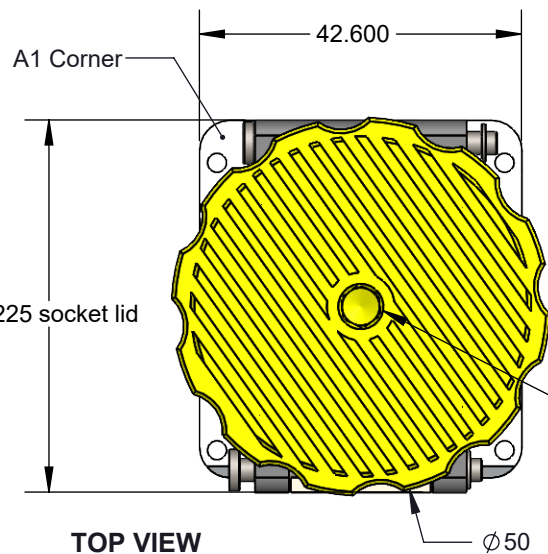


# GT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

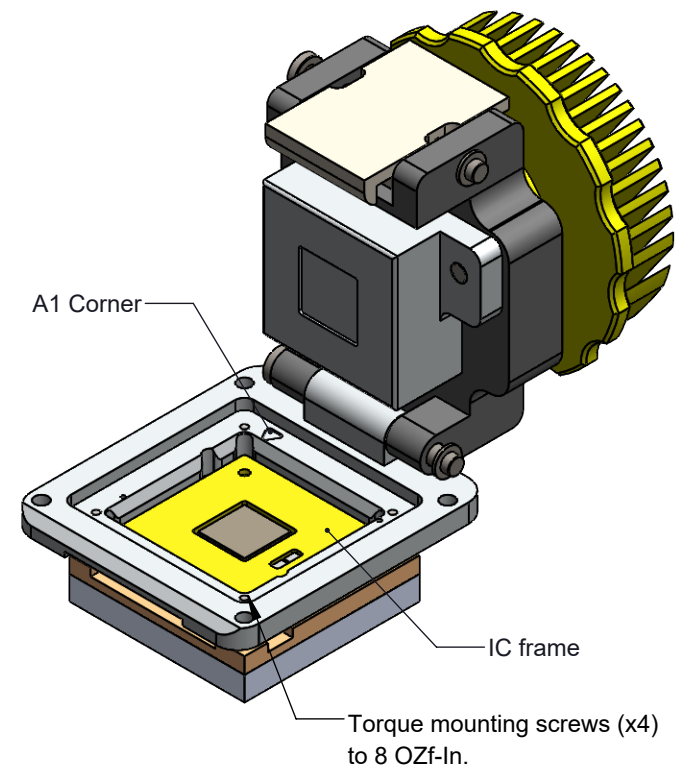
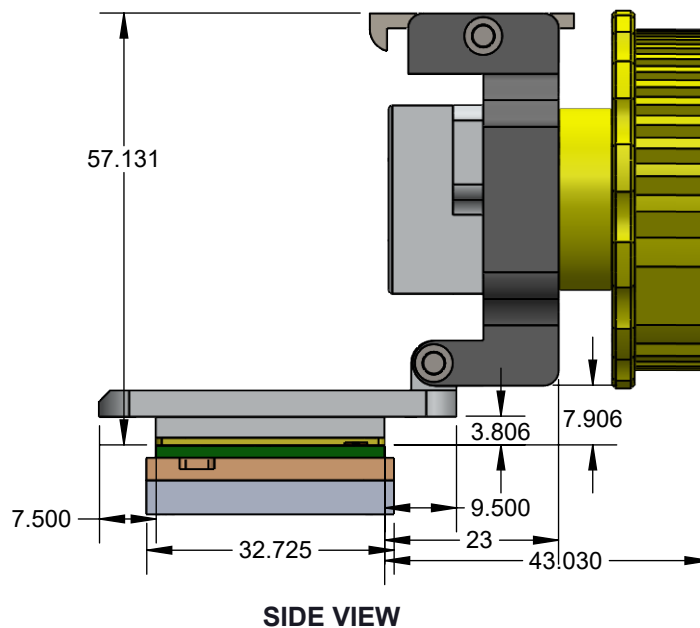
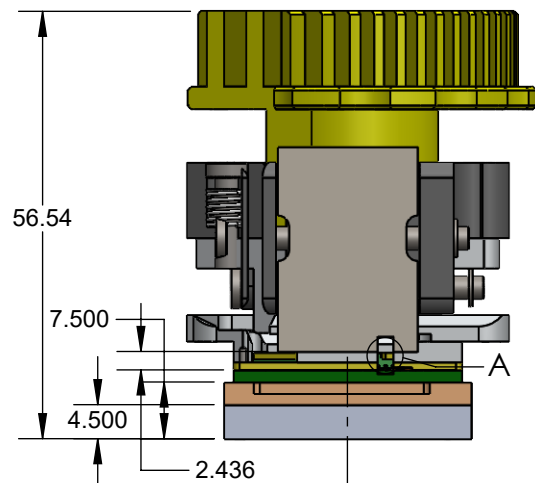


## Features

- Wide temperature range (-55C to +160C).
- High current capability (up to 5A).
- Excellent signal integrity at high frequencies.
- Low and stable contact resistance for reliable production yield.
- Highly compliant to accommodate wide co-planarity variations.
- Automated probe manufacturing enables low cost and short lead time.

**REQUIRED TORQUE:**  
12.4 IN-LBF, 198.6 IN-OZF, 140.2 N-CM

**RECOMMENDED TORQUE DRIVER:**  
TL-TORQUEDRIVER-13



## Description: Clamshell GT-BGA572 24x24 array 25x25 mm 1mm pitch

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-2019 Drawing



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

Material: Material <not specified>  
Finish:  
Weight: 159.99

STATUS: Released

ENG: S. Huang

FILE: GT-BGA-2019 Dwg

SHEET: 1 OF 5

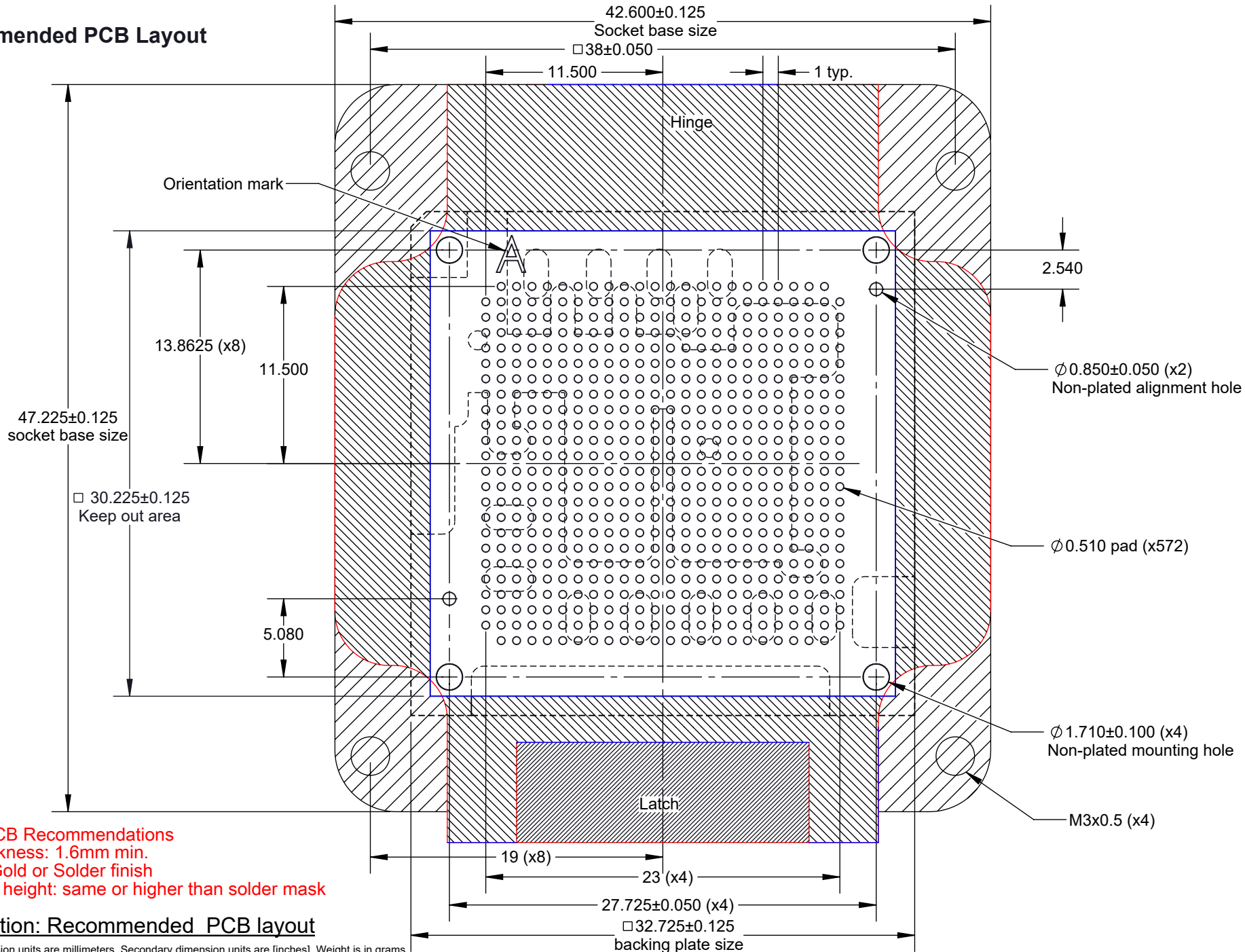
DRAWN BY: M. Raske

DATE: 3/20/2015

REV. B

SCALE: 1:1


Target PCB Recommendations  
Total thickness: 1.6mm min.  
Plating: Gold or Solder finish  
PCB Pad height: same or higher than solder mask

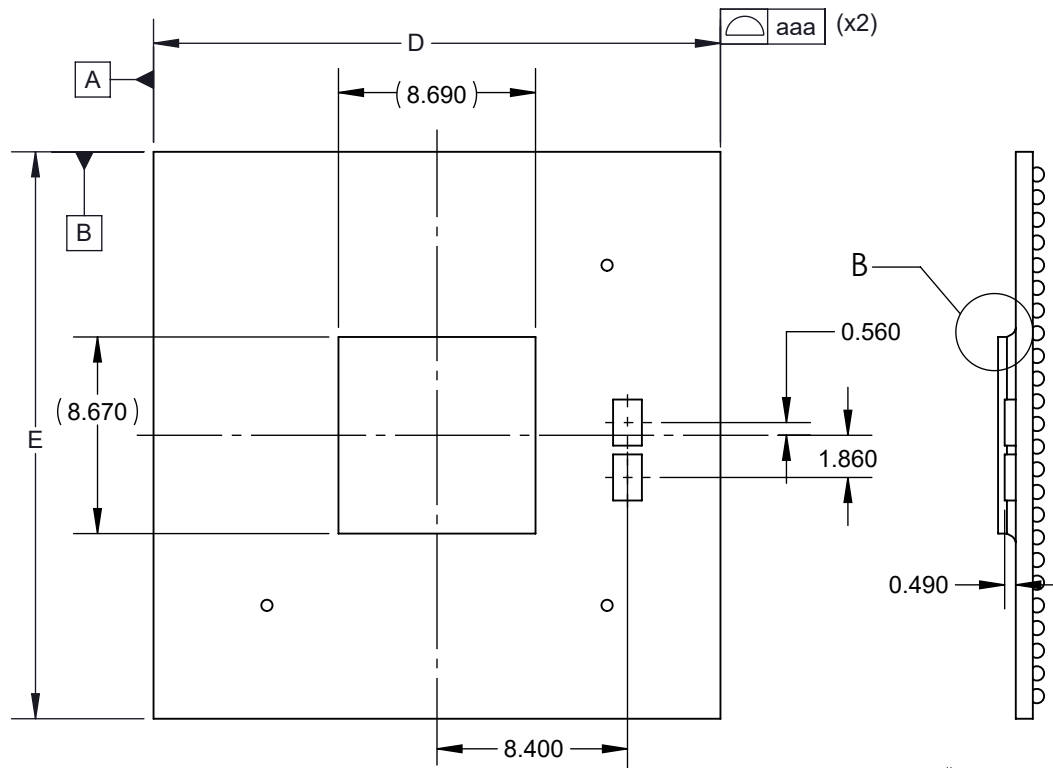


Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

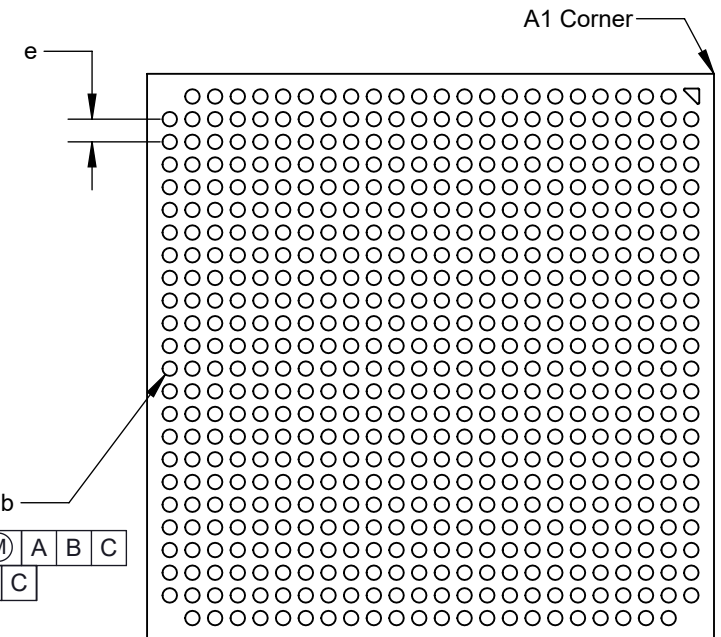
Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject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

Description: Recommended PCB layout

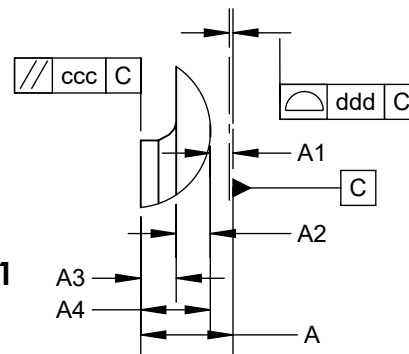
 <b>GT-BGA-2019 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 159.99	STATUS: Released	SHEET: 2 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: GT-BGA-2019 Dwg	DATE: 3/20/2015	



Ironwood package code: BGA572A



**DETAIL B  
SCALE 6 : 1**



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 C.
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	NOM	MAX
A	1.893	2.033	2.173
A1	0.40	0.50	0.60
A2	--	0.752	--
A3	0.746	0.781	0.816
A4	1.408	1.533	1.658
D	24.90	25.00	25.10
E	24.90	25.00	25.10
e	--	1.00	--
b	0.54	0.64	0.74
aaa	0.20		
ccc	0.25		
ddd	0.20		
eee	0.25		
fff	0.10		

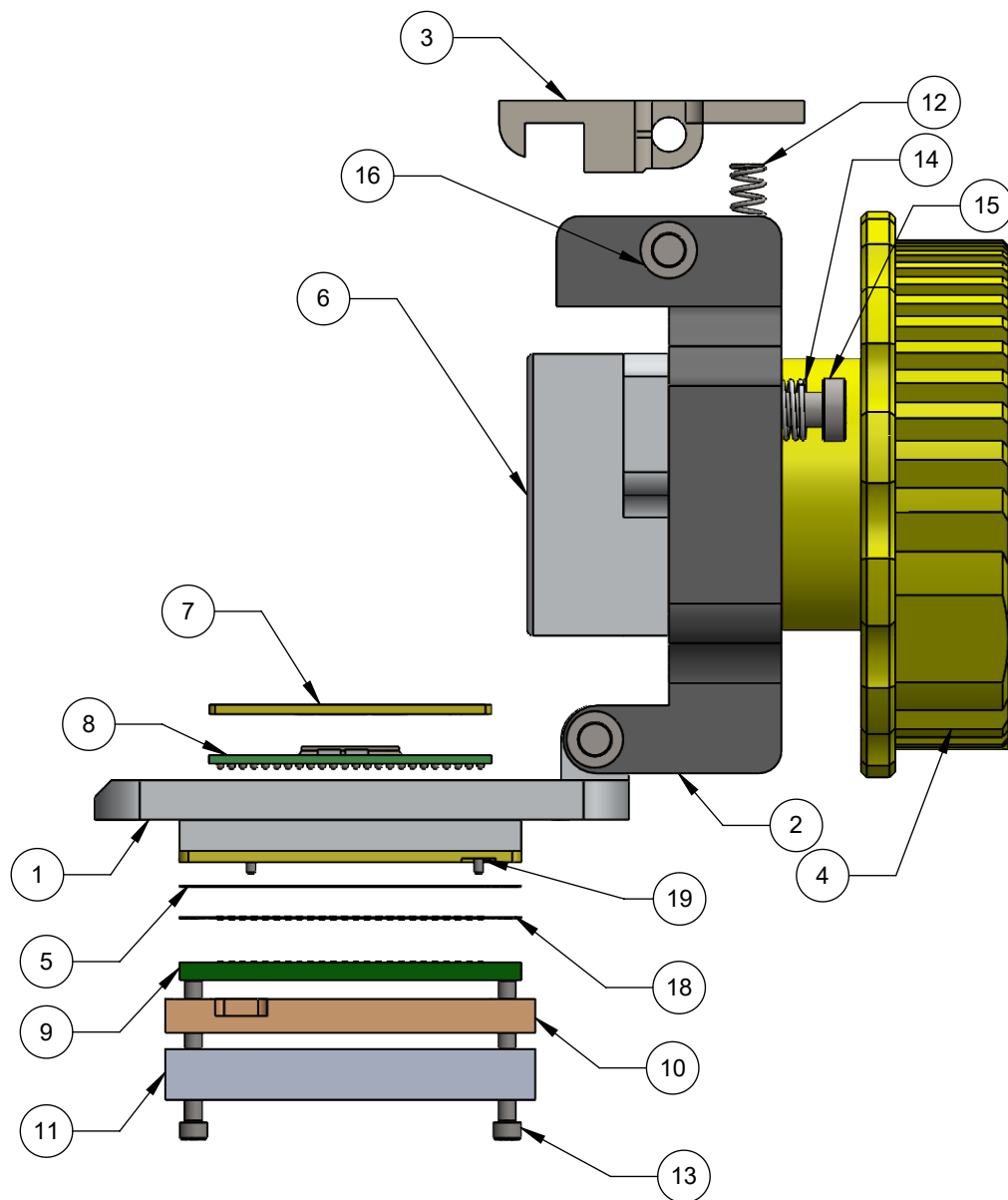
## Description: BGA

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

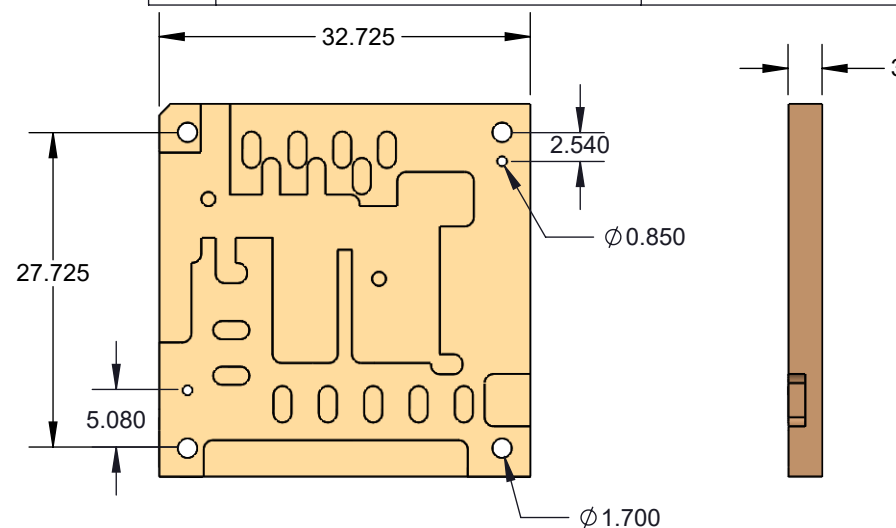
**Tolerances:** Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are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

Array: 24x24

 <b>GT-BGA-2019 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 159.99	STATUS: Released	SHEET: 3 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: GT-BGA-2019 Dwg	DATE: 3/20/2015	



ITEM NO.	DESCRIPTION	Material
1	Clamshell Socket Base 25mm IC	7075-T6 Aluminum Alloy
2	Socket Lid	7075-T6 Aluminum Alloy
3	Latch	7075-T6 Aluminum Alloy
4	Heat sink Compression Screw M24 threads	7075-T6 Aluminum Alloy
5	Ball Guide 24x24mm 1mm pitch	Kapton Polyimide/Cirlex
6	Clamshell Compression Plate for 25mm IC	7075-T6 Aluminum Alloy
7	IC frame for 25mm IC	Torlon 4203
8	BGA572 24x24 array 25x25 mm 1mm pitch	FR4 High temp
9	PCB BGA572 24x24 array 25x25 mm 1mm pitch	FR4
10	Custom Insulation Plate 25x25mm IC	Ultem 1000
11	Backing Plate 25x25mm	7075-T6 Aluminum Alloy
12	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
13	#0-80 x 0.5, SH Cap Screw	Alloy Steel
14	Spring Clamshell lid assembly	Steel Music Wire
15	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
16	Hinge Pin (R1774) and Snap Ring (R4681), 3mm OD, 30mm long, 1045 Stl, Blk Oxide	AISI 1045 Steel, cold drawn
17	IC Guide, 25x25mm IC, GT	Torlon 4203
18	GT Elastomer 25x25mm IC 1mm pitch 24x24 array	Conductive Elastomer
19	Dowel Pin, 1/32" 5/32" long, SS	Stainless Steel (18-8)



**Insulation plate specification**

## Description: Socket Assy

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-2019 Drawing



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

Material: Material <not specified>  
Finish:  
Weight: 159.99

STATUS: Released

ENG: S. Huang

FILE: GT-BGA-2019 Dwg

SHEET: 4 OF 5

DRAWN BY: M. Raske

DATE: 3/20/2015

REV. B

SCALE: 1.5:1

Rev	Date	Initials	Description
A	3/20/2015	SH	Original
B	12/28/2024	SH	Updated GT to floating design; Added IC guide; Updated Ball guide with floating design. Corrected torque value.

### Description: Revision History

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-2019 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	<b>Material:</b> <b>Finish:</b> <b>Weight:</b>	STATUS: Released	SHEET: 5 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 1.5:1
		FILE: GT-BGA-2019 Dwg	DATE: 3/20/2015	