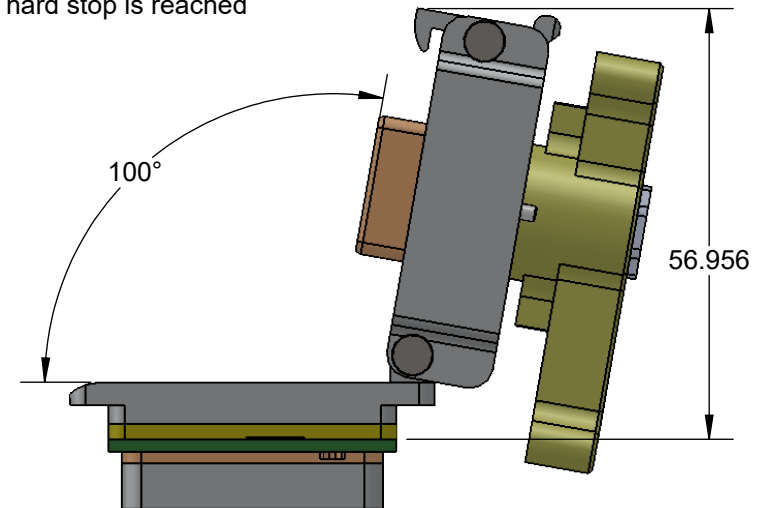
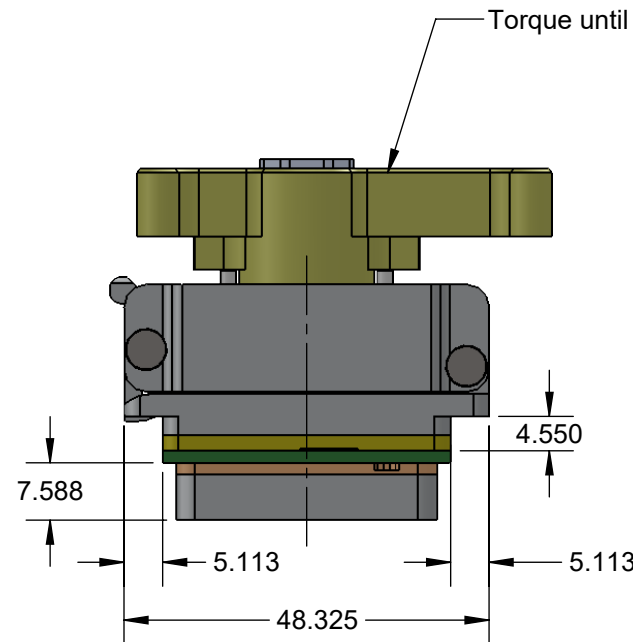
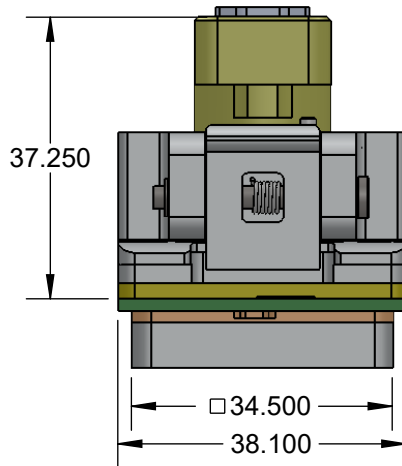
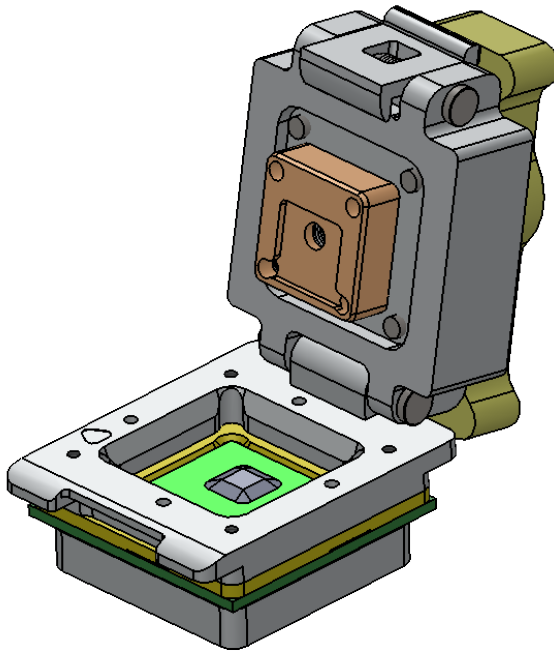


# GT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

## Features

- Wide temperature range (-55C to +160C).
- High current capability (up to 5A).
- Over 70GHz bandwidth @ -1dB for edge pins
- Low and stable contact resistance for reliable production yield.
- Highly compliant to accommodate wide co-planarity variations.



## Description: GT BGA484 19mm IC 22x22 array 0.8mm 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-2025 Drawing



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

Material: N/A  
Finish: N/A  
Weight: 133.04

STATUS: Released

ENG: J. Vavra

FILE: GT-BGA-2025 Dwg

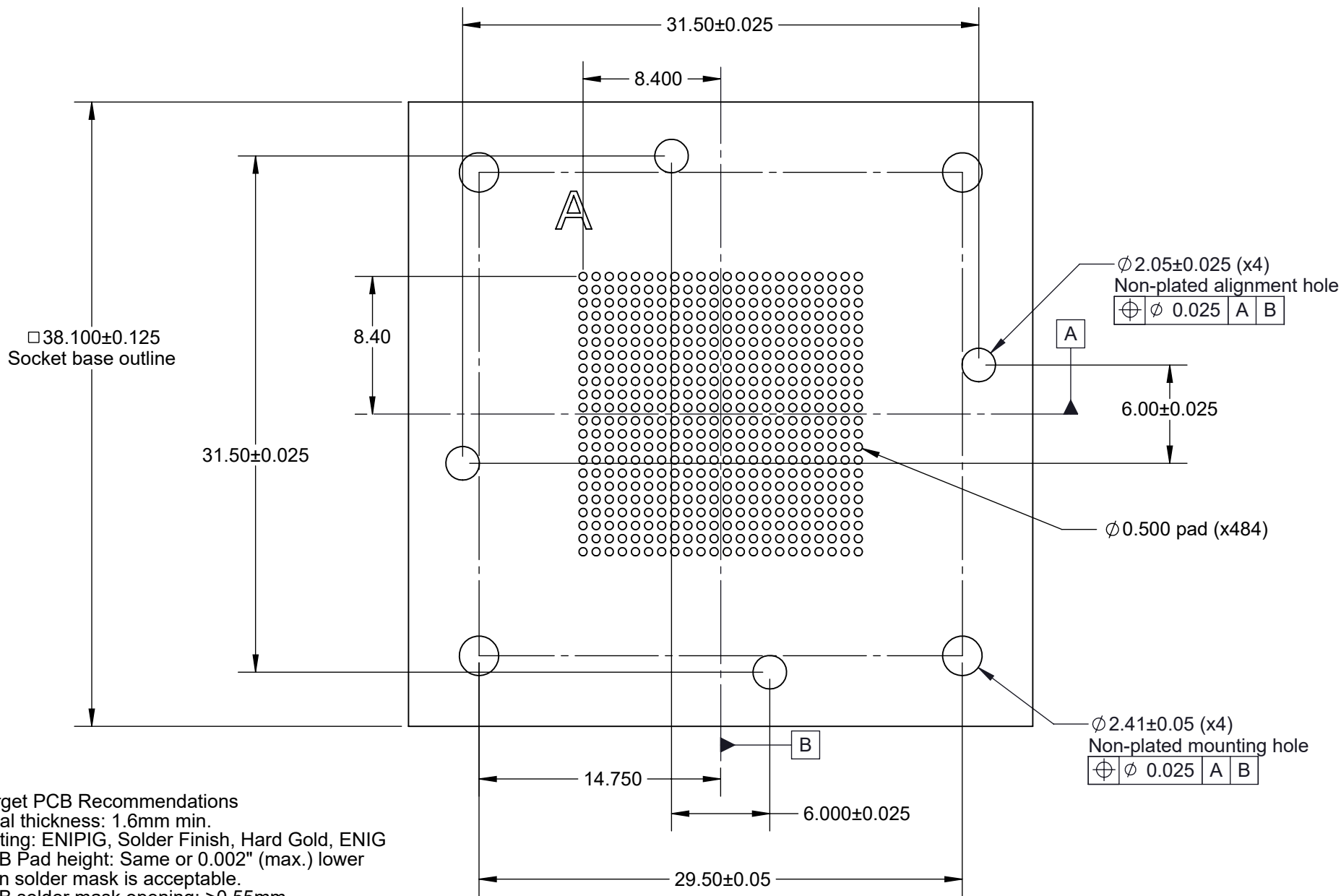
SHEET: 1 OF 7

DRAWN BY: M. Raske

DATE: 12/02/2015

REV. A


SCALE: 1:1



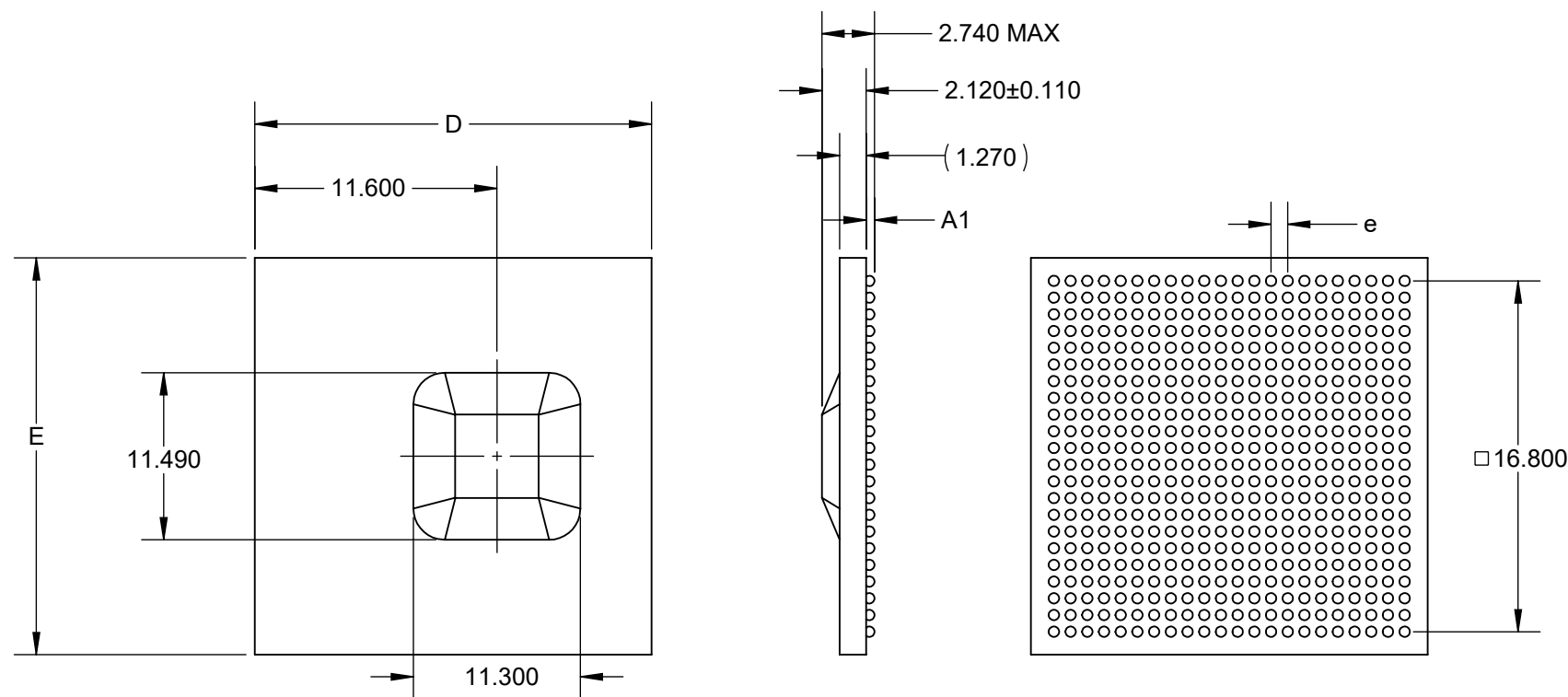
## Description: Recommended PCB Layout

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.

<b>GT-BGA-2025 Drawing</b>  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 133.04	STATUS: Released ENG: J. Vavra FILE: GT-BGA-2025 Dwg	SHEET: 2 OF 7 DRAWN BY: M. Raske DATE: 12/02/2015	REV. A SCALE: 3:1
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Ironwood Package Code: BGA484H



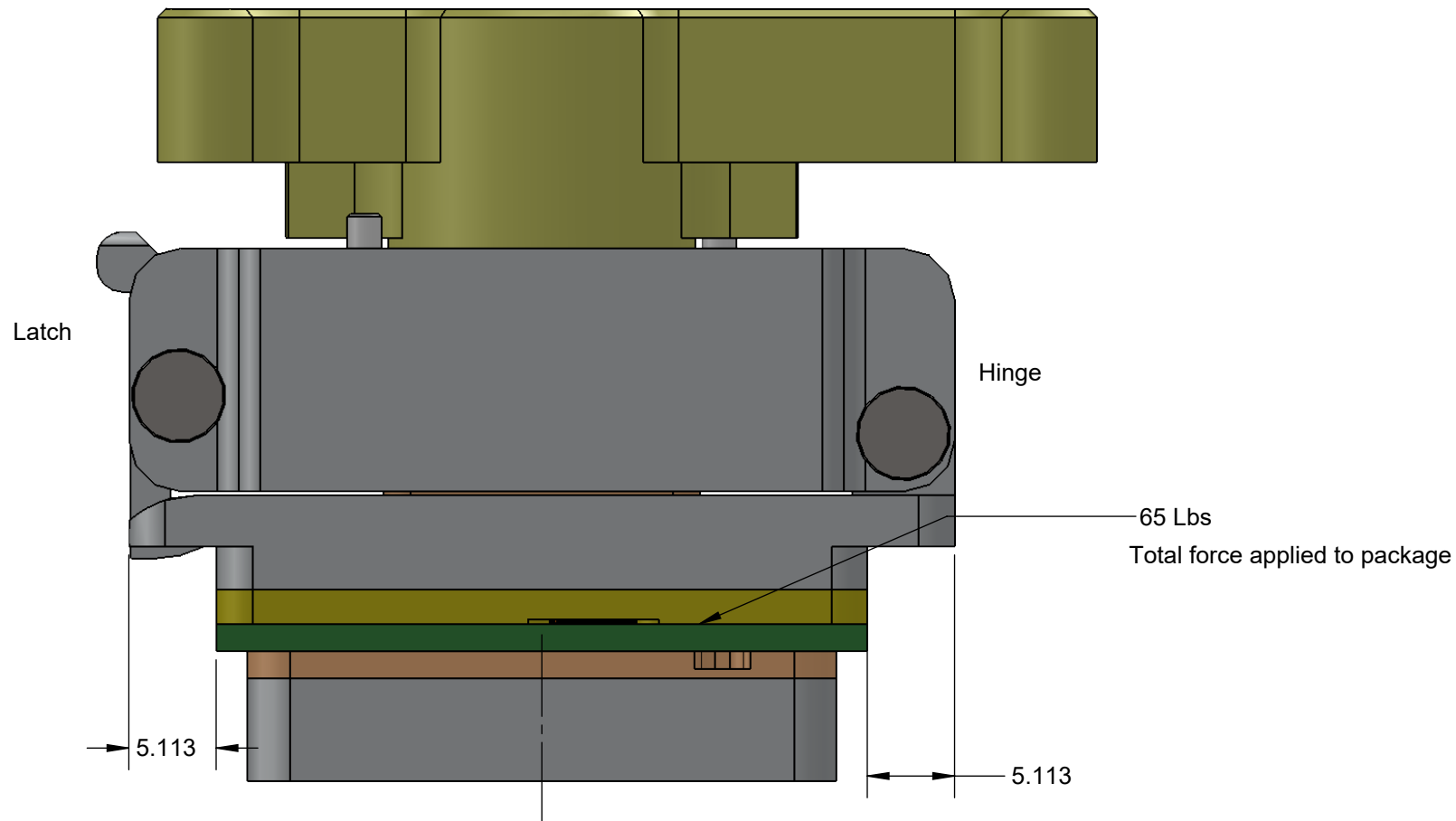
- 1. Dimensions are in millimeters.
- 2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
- 3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
- 4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
- 5. Parallelism measurement 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 ±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.

DIM	Minimum	Maximum
A1	0.3	0.5
b	0.5	0.7
D	19.00 BSC	
E	19.00 BSC	
e	0.80 BSC	
ARRAY	22 x 22	


<b>GT-BGA-2025 Drawing</b>		Material: N/A Finish: N/A Weight: 133.04	STATUS: Released	SHEET: 3 OF 7	REV. A
	Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: J. Vavra	DRAWN BY: M. Raske	SCALE: 3:1
			FILE: GT-BGA-2025 Dwg	DATE: 12/02/2015	

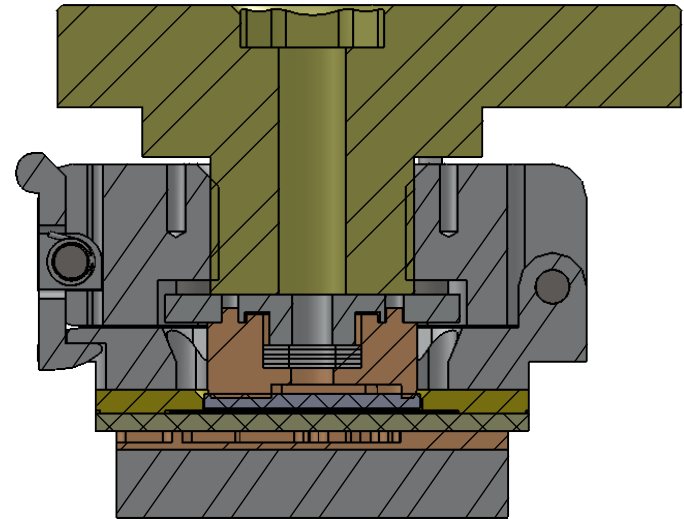
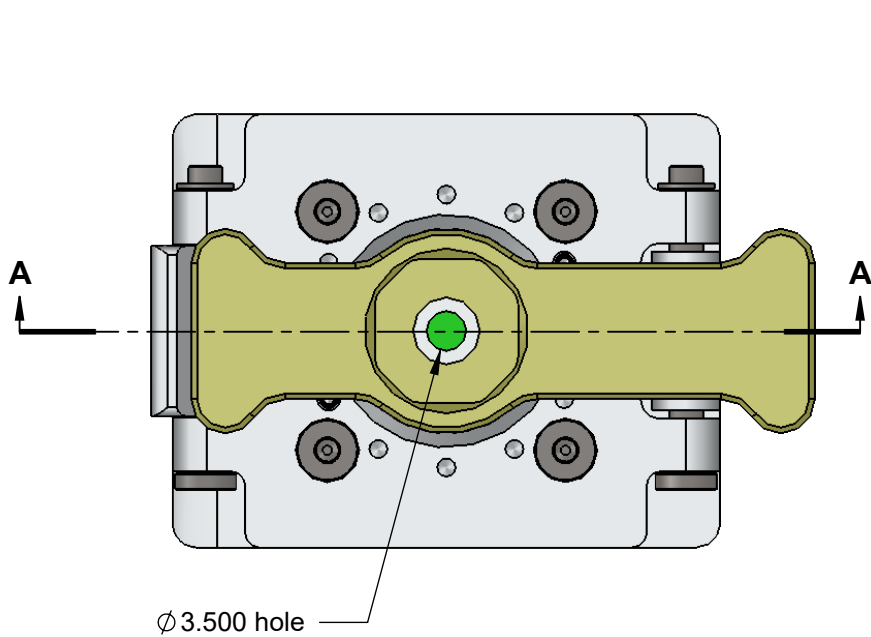


## Description: Force

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.

<b>GT-BGA-2025 Drawing</b>  ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 133.04	STATUS: Released ENG: J. Vavra FILE: GT-BGA-2025 Dwg	SHEET: 4 OF 7 DRAWN BY: M. Raske DATE: 12/02/2015	REV. A SCALE: 2.5:1
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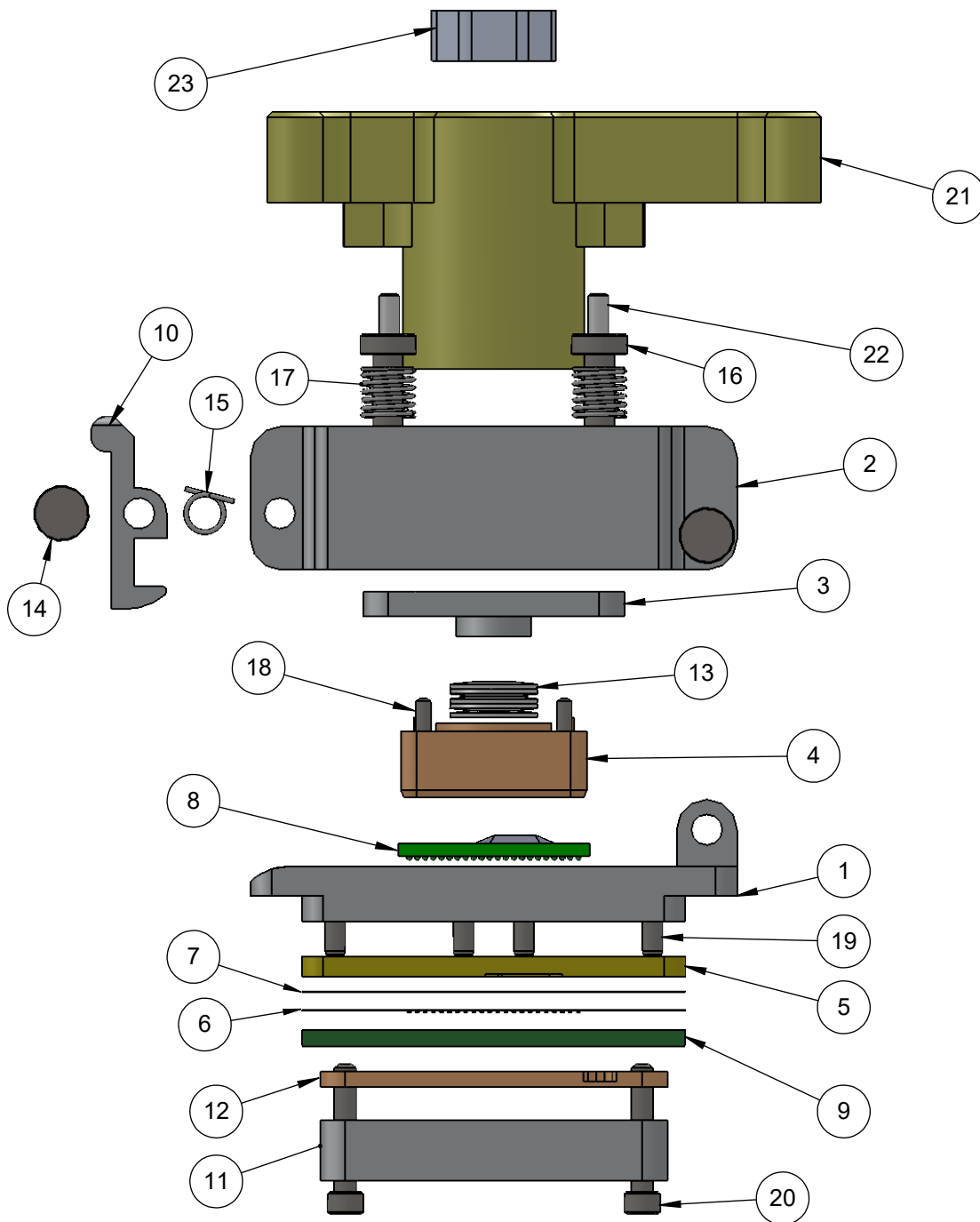
**SECTION A-A**

## Description: Spring Compression

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.

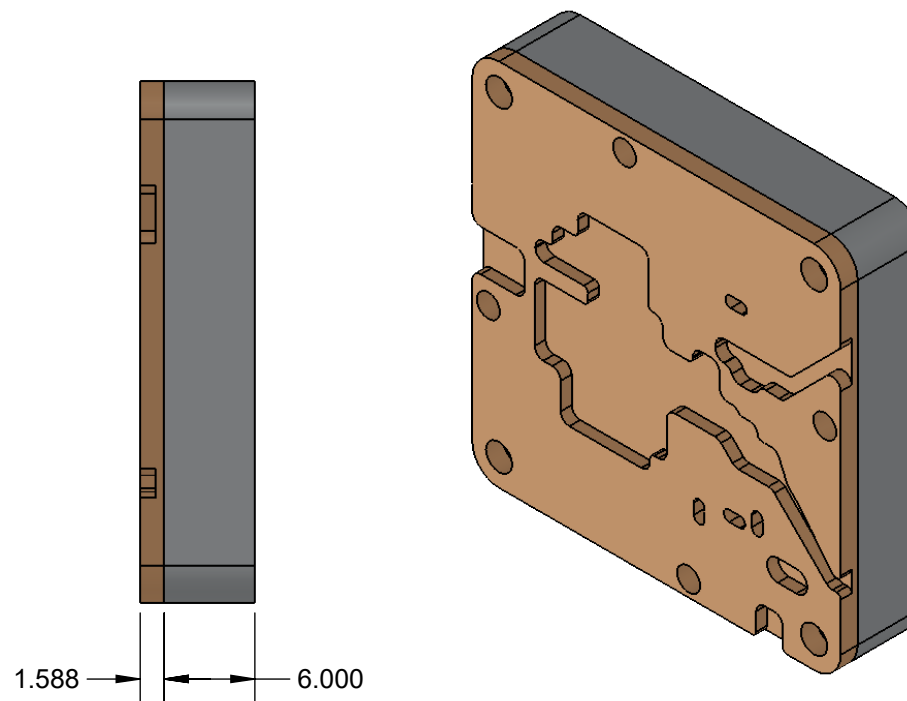
 <b>GT-BGA-2025 Drawing</b> ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 133.04	STATUS: Released ENG: J. Vavra FILE: GT-BGA-2025 Dwg	SHEET: 5 OF 7 DRAWN BY: M. Raske DATE: 12/02/2015	REV. A SCALE: 3:2




ITEM NO.	DESCRIPTION	Material
1	Cam level Socket Base 21mm IC	7075-T6 Aluminum Alloy
2	Cam Lid Compression lid 21mm IC	7075-T6 Aluminum Alloy
3	Cam Level Compression Plate top for 19mm IC	7075-T6 Aluminum Alloy
4	Compression Plate Bottom Cam level 19mm IC	Torlon 5530
5	IC guide 19mm IC	Torlon 4203
6	GT elastomer for 19mm IC 0.8mm pitch 22x22 array BGA484	N/A
7	Ball Guide BGA484 22x22 0.8mm	Kapton Polyimide/Cirlex
8	Test Chip 19x19mm 22x22 array 0.8mm Pitch	FR4 High temp
9	Test PCB 19mm IC 22x22 0.8mm Pitch	FR4 High temp
10	15mm clamshell latch	7075-T6 Aluminum Alloy
11	21mm IC Backing Plate	7075-T6 Aluminum Alloy
12	Insulation Spacer for 22mm	Ultem 1000
13	Belleville Disc Spring .164" ID, .343" OD, .016" Thick	303 Stainless Steel
14	Hinge Pin and Snap Ring, 3mm OD, 25mm long, SS	Stainless Steel (ferritic)
15	180° Torsion Spring for 3mm pin	Steel Music Wire
16	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
17	Spring Clamshell lid assembly	Steel Music Wire
18	#0-80 Socket Head Cap 0.25" Lenght 18-8 SS	Stainless Steel (18-8)
19	Dowel Pin, 6 lg x 2mm dia. 18-8 SS	Stainless Steel (18-8)
20	Socket Head Cap Screw 2-56 Thread, 1/2" Length, 18-8 SS	Stainless Steel (18-8)
21	Compression Screw M18 Hard stop	7075-T6 Aluminum Alloy
22	Set Screw M2 Size, 6mm Long, 0.4mm Pitch	Stainless Steel (316)
23	Compression Screw Hex key block	7075-T6 Aluminum Alloy

**Description: Socket Assy, Insulation Plate**

 <b>GT-BGA-2025 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 133.04	STATUS: Released	SHEET: 6 OF 7	REV. A
		ENG: J. Vavra	DRAWN BY: M. Raske	SCALE: 3:2
		FILE: GT-BGA-2025 Dwg	DATE: 12/02/2015	



 <b>GT-BGA-2025 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 <a href="http://www.ironwoodelectronics.com">www.ironwoodelectronics.com</a>	Material: N/A Finish: N/A Weight: 133.04	STATUS: Released	SHEET: 7 OF 7	REV. A
		ENG: J. Vavra	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: GT-BGA-2025 Dwg	DATE: 12/02/2015	