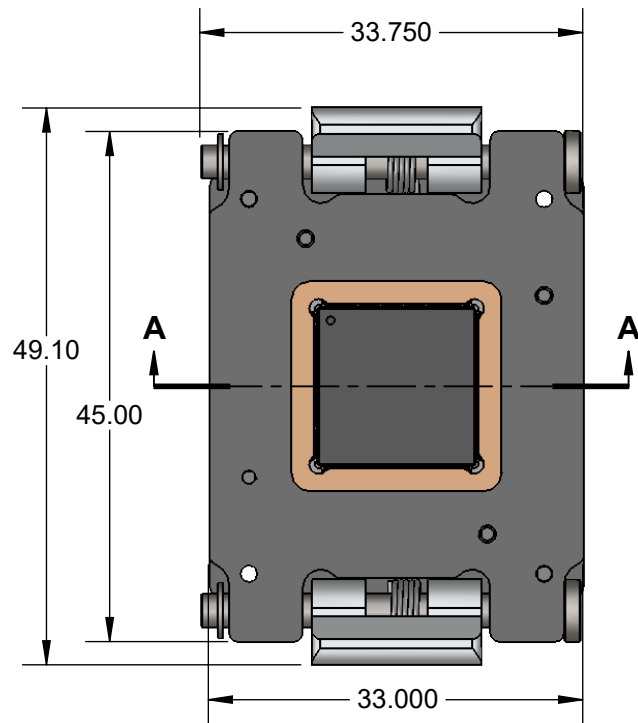
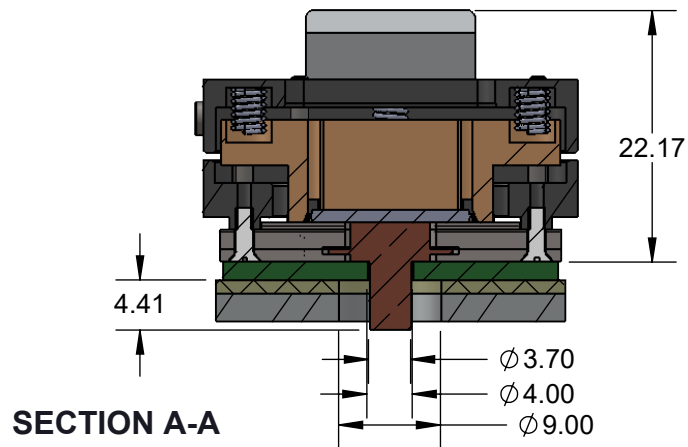


# OPEN TOP DUAL LATCH CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



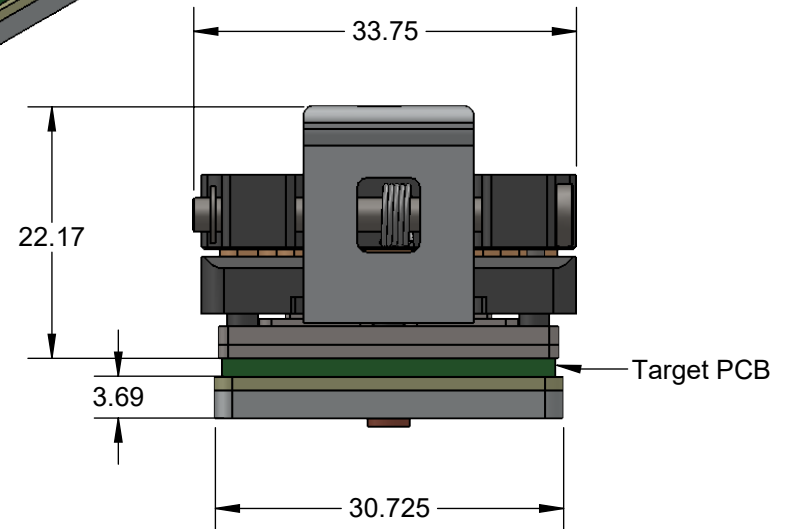
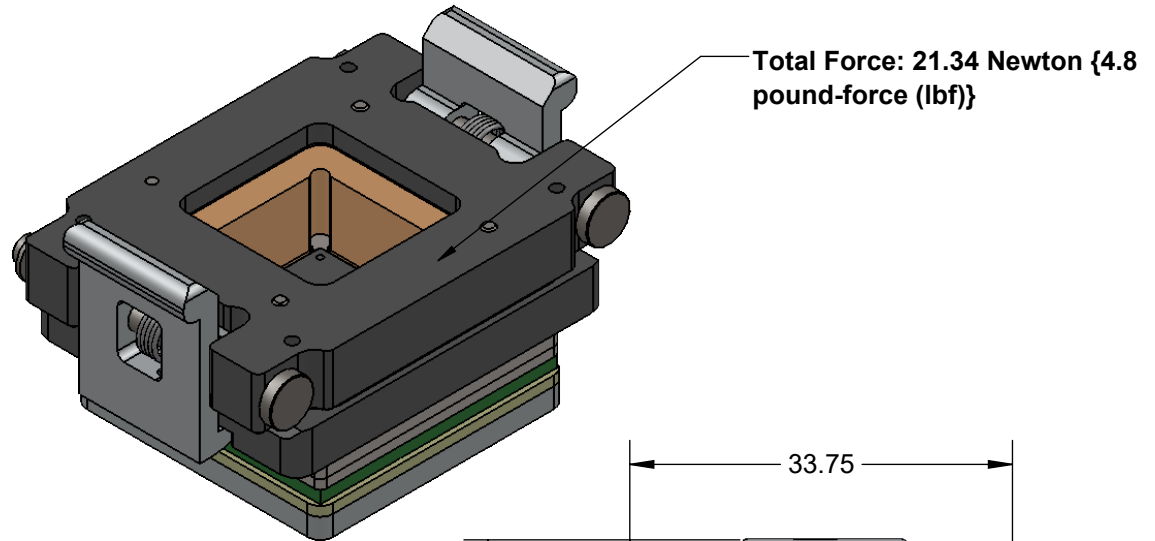
TOP VIEW



SECTION A-A

## FEATURES:


- Wide temperature range (-55C to +180C )
- High current capability (up to 4A )
- 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

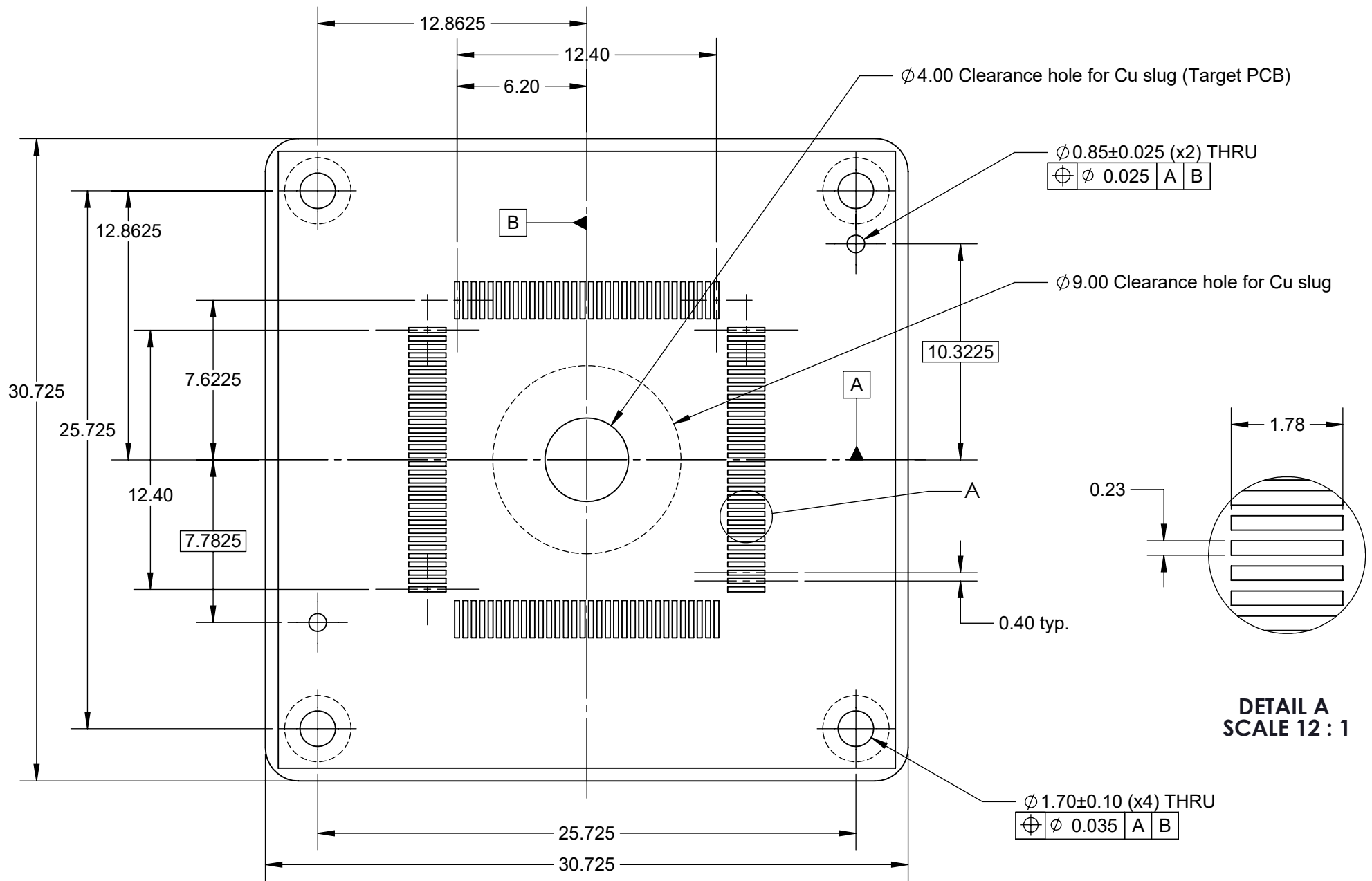


**Description:** Open Top CBT socket for 0.4mm pitch 14mm sq 16mm tip-tip 128 pin QFP package

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>CBT-QFE-3008 Drawing</b>  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 46.86	STATUS: Released	SHEET: 1 OF 5	REV. A
		ENG: S, Faiz	DRAWN BY: S. Faiz	SCALE: 1.5:1
		FILE: CBT-QFE-3008 Dwg	DATE: 11/3/2015	

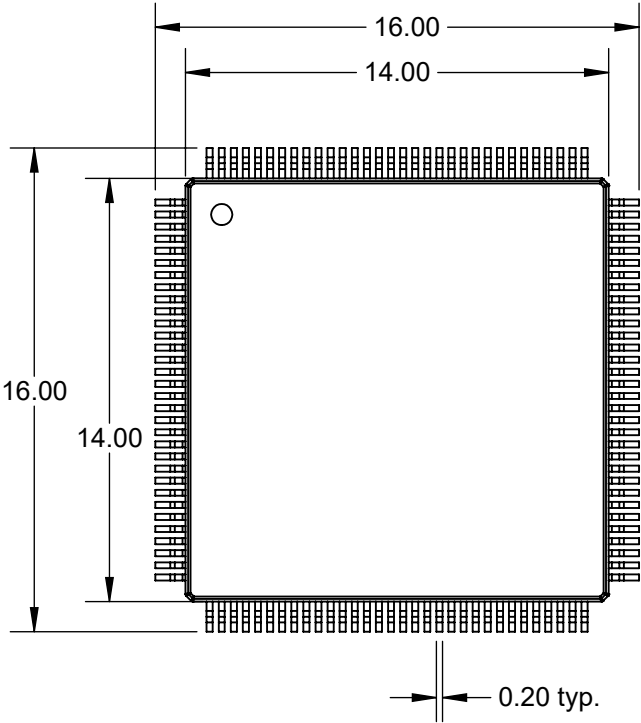


## Description: Recommended PCB Layout

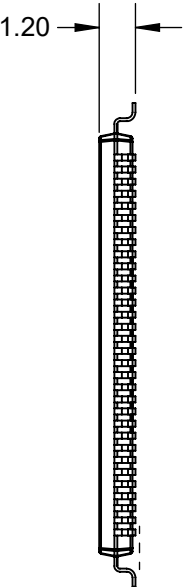
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

**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.

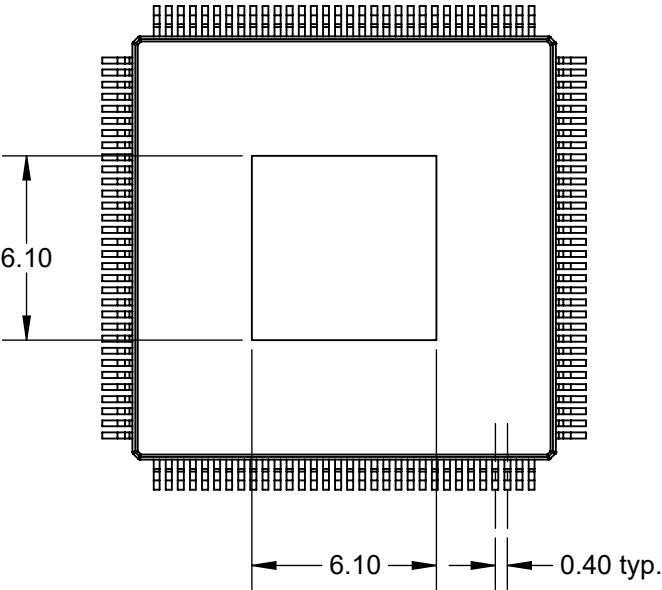
<b>CBT-QFE-3008 Drawing</b>  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 46.86	STATUS: Released ENG: S, Faiz FILE: CBT-QFE-3008 Dwg	SHEET: 2 OF 5 DRAWN BY: S. Faiz DATE: 11/3/2015	REV. A SCALE: 4:1



TOP VIEW



SIDE VIEW




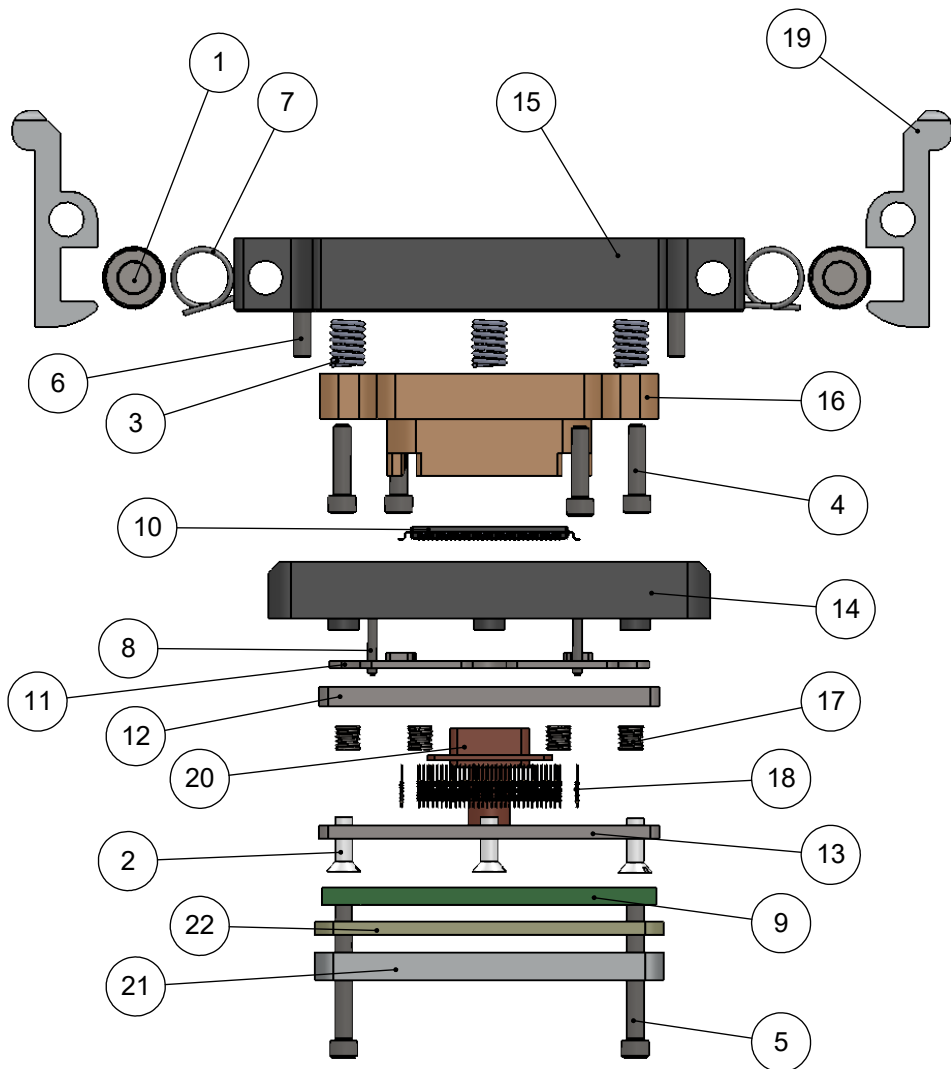
BOTTOM VIEW

- 1. Dimensions are in millimeters.
- 2. Interpret dimensions and tolerances per ASME Y14.5M-1994.

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.

<b>CBT-QFE-3008 Drawing</b>		STATUS: Released	SHEET: 3 OF 5	REV. A
	Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	ENG: S, Faiz	DRAWN BY: S. Faiz	SCALE: 4:1
		FILE: CBT-QFE-3008 Dwg	DATE: 11/3/2015	
		Material: N/A Finish: N/A Weight: 46.86		




ITEM NO.	DESCRIPTION	Default/QTY.	Material
1	Hinge Pin and Snap Ring, 3mm OD, 30mm long, 1045 Stl, Blk Oxide	2	AISI 1045 Steel, cold drawn
2	#0-80 X .188" LG FL HD, Slotted, Polypropylene	4	PP Homopolymer
3	302SS Comp. Spring .375" Length, .125" OD, .016" Wire Dia.	4	Material <not specified>
4	#0-80 X .25 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	4	Alloy Steel
5	#0-80 x 0.5, SH Cap Screw	4	Alloy Steel
6	Dowel Pin, M1.5 X 5mm LG, Hardened Steel	2	AISI 347 Annealed Stainless Steel (SS)
7	180° Left-Hand Torsion Spring	2	Steel Music Wire
8	Dowel pin, 1/32" X 1/4", SS	2	Stainless Steel (18-8)
9	Test PCB	1	FR4 per IPC 4101/21/26/83/98, Td>=345C
10	QFP, 128-Leads, Body 14x14mm, Pitch 0.4mm,	1	
11	Floating pin guide QFE128SD	1	PEEK
12	Middle pin guide QFE128SD CBT-QFE-3008	1	PEEK
13	Bottom pin guide QFE128SD CBT-QFE-3008	1	PEEK
14	CBT socket base double latch 20.725mm cavity	1	7075-T6 Alumium Alloy
15	Lid, double latch socket	1	7075-T6 Alumium Alloy
16	Compression plate QFE128SD 16mm tip-tip	1	Torlon 5530
17	Floating Guide Spring	4	Alloy Steel (SS)
18	Stamped Pin, 0.4mm SBT-BGA	128	N/A
19	15mm clamshell latch	2	7075-T6 Aluminum Alloy
20	Cu slug for CBT-QFE-3008	1	Copper
21	backing plate	1	7075-T6 Aluminum Alloy
22	Custom Insulation Plate CBT-QFE-3008	1	High temp Substrate

## Description: Socket Assy, Insulation Plate

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

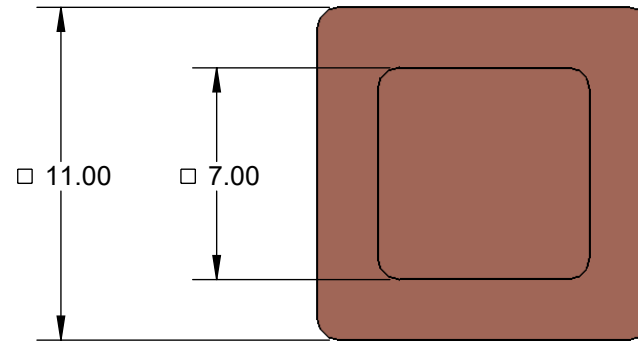
**Tolerances:** Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are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

<b>CBT-QFE-3008 Drawing</b>		STATUS: Released	SHEET: 4 OF 5	REV. A
 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A	ENG: S, Faiz	DRAWN BY: S. Faiz	SCALE: 1.5:1
	Finish: N/A	FILE: CBT-QFE-3008 Dwg	DATE: 11/3/2015	
	Weight: 46.86			

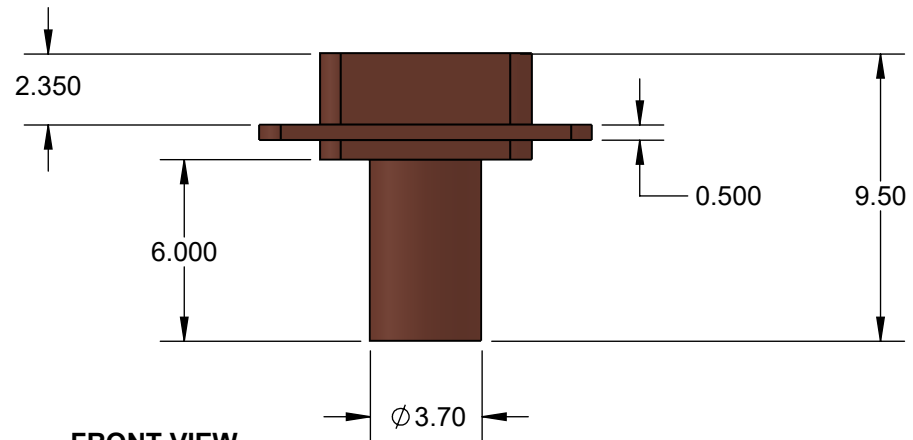
## Cu Slug DETAIL



**PIN DETAIL  
SCALE 16:1**



**TOP VIEW**




**FRONT VIEW**

### Description: PIN, Cu slug

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>CBT-QFE-3008 Drawing</b>	Material: N/A Finish: N/A Weight: 46.86	STATUS: Released	SHEET: 5 OF 5	REV. A
 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S, Faiz	DRAWN BY: S. Faiz	SCALE: 4:1
		FILE: CBT-QFE-3008 Dwg	DATE: 11/3/2015	