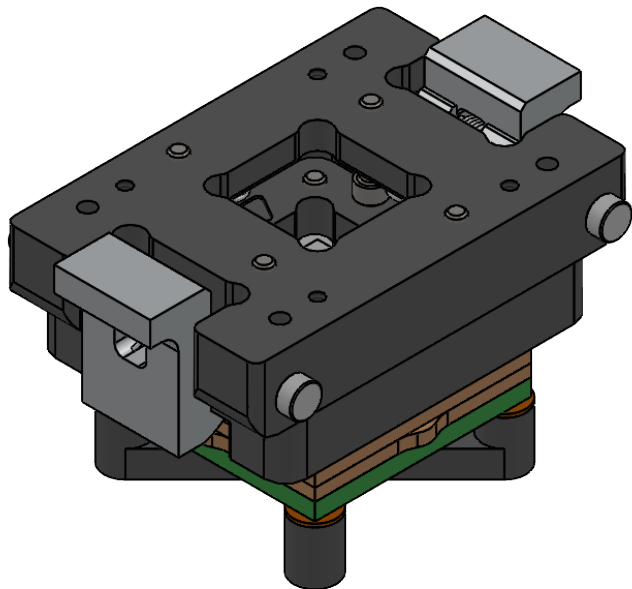
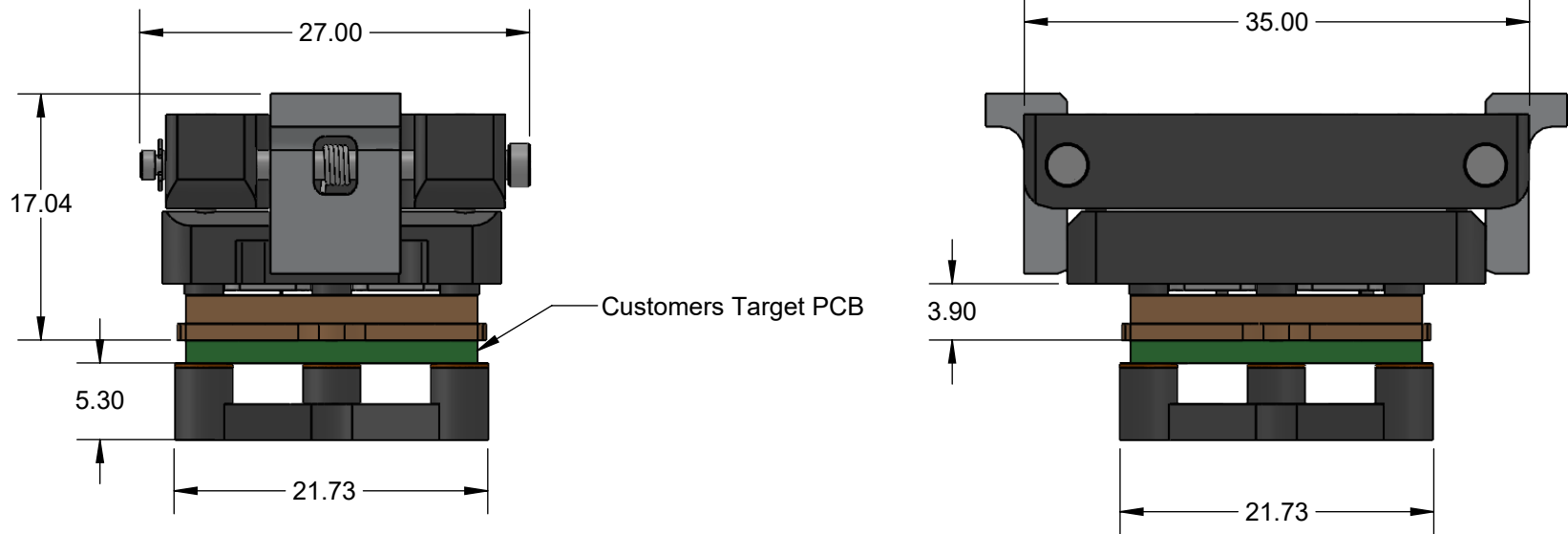


OPEN TOP DUAL LATCH CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



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

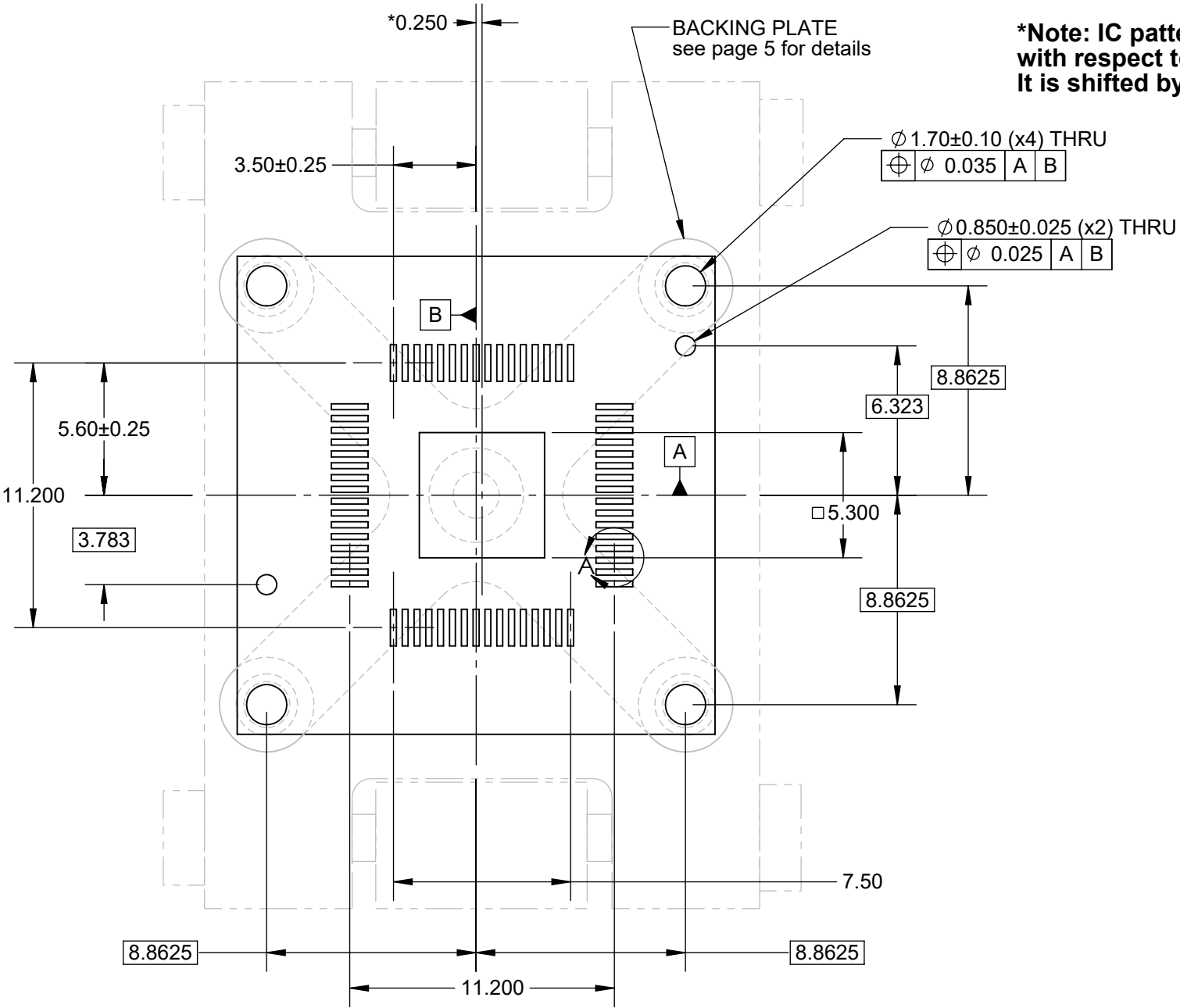


Description: Open Top CBT socket for 0.5mm pitch 10mm sq 12mm tip-tip 64 pin QFP package

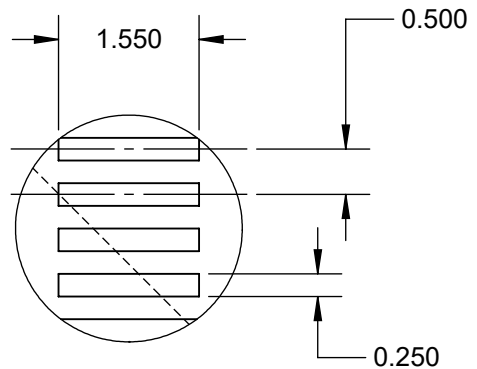
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

 <p>CBT-QFE-3001 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 21.31</p>	STATUS: Quality Approval Pending	SHEET: 1 OF 6	REV. F
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-QFE-3001 Dwg	DATE: 01/15/2014	




***Note: IC pattern is not symmetrical with respect to the mounting holes. It is shifted by 0.25mm to the right. of center.**

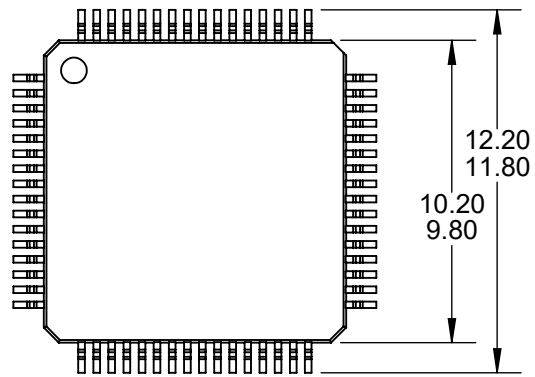


**DETAIL A
SCALE 12 : 1**

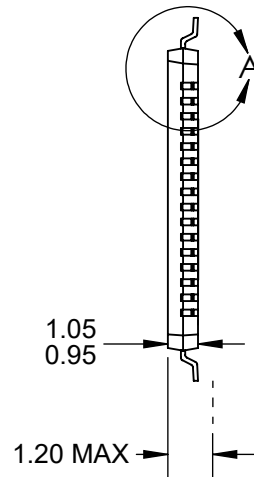
Description: Recommended PCB Layout

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.

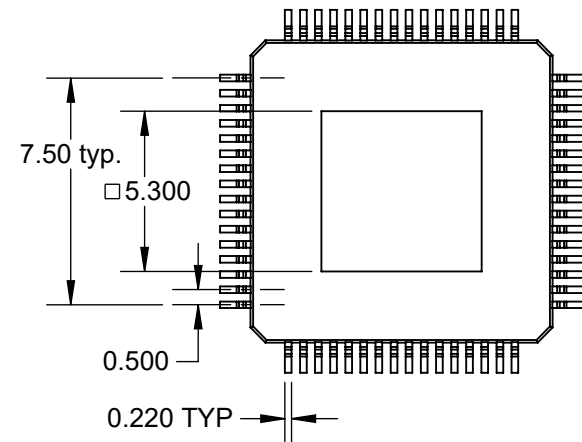
 <p>CBT-QFE-3001 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 21.31</p>	STATUS: Quality Approval Pending	SHEET: 2 OF 6	REV. F
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: CBT-QFE-3001 Dwg	DATE: 01/15/2014	



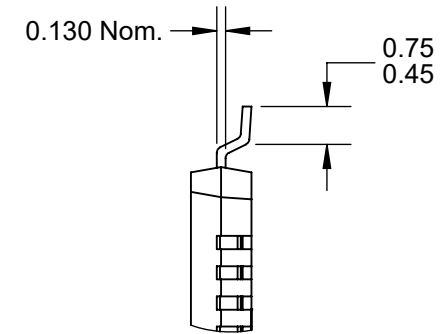
TOP VIEW



SIDE VIEW



BOTTOM VIEW




DETAIL A
SCALE 8 : 1

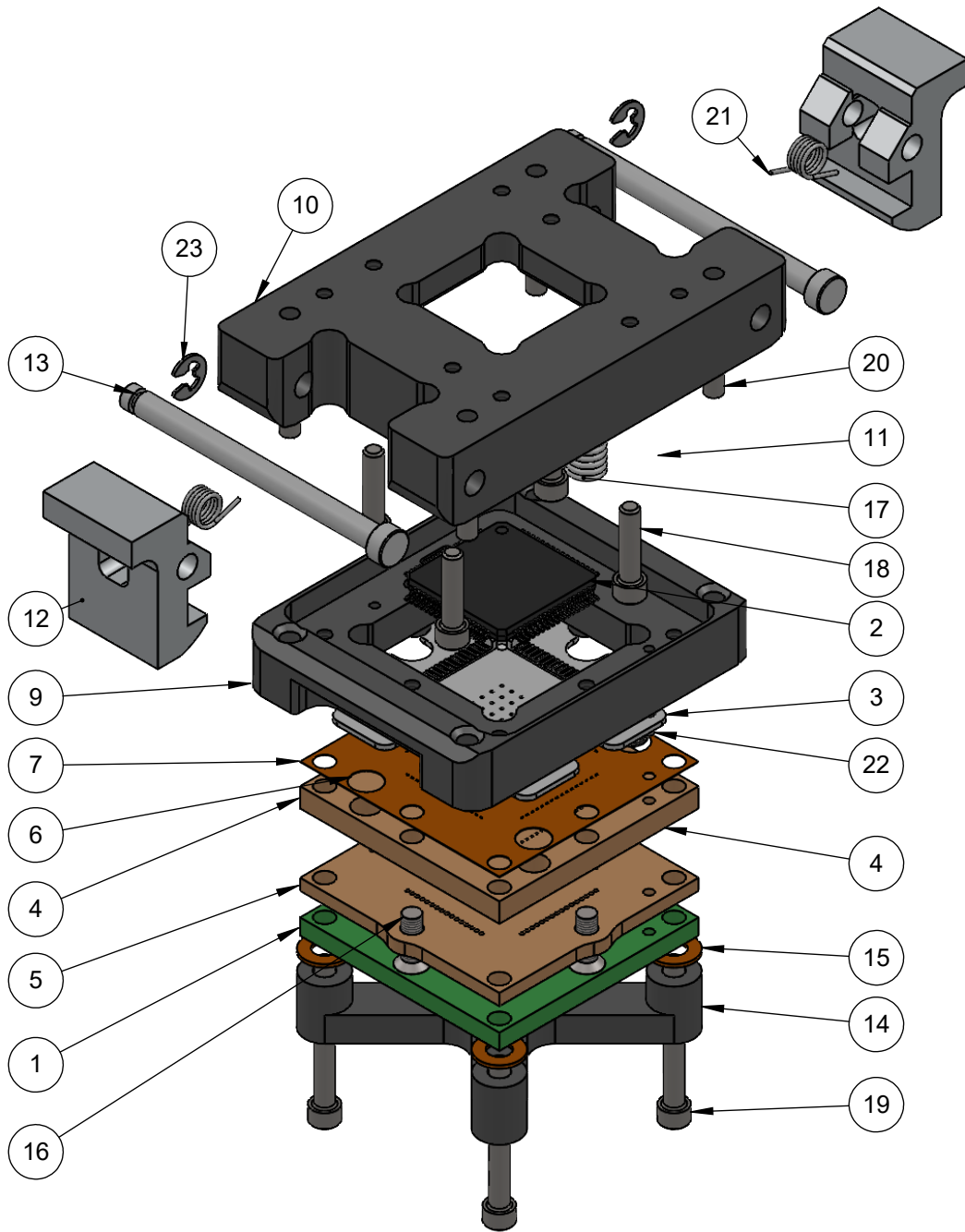
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

Description: Compatible 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>CBT-QFE-3001 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 21.31</p>	STATUS: Quality Approval Pending	SHEET: 3 OF 6	REV. F
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: CBT-QFE-3001 Dwg	DATE: 01/15/2014	

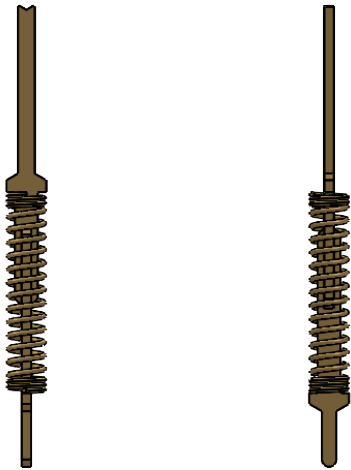


ITEM NO.	DESCRIPTION	Material
1	Target PCB QFE64SD 0.5mm pitch 10mm sq body 12mm tip to tip	FR4 High temp
2	CFE TQFP64_w_E_PAD TEST CHIP	Material <not specified>
3	CBT-QFE64 Floating spring pin guide	PEEK Ceramic filled
4	Middle guide QFE64 12x12mm T-T	Semitron MDS 100
5	Bottom CBT pin guide QFE64	Semitron MDS 100
6	Floating Guide Spring	Alloy Steel (SS)
7	Pin Orientation Guide QFE64	Kapton Polyimide/Cirlex
8	Stamped Pin, 0.4mm SBT-BGA	N/A
9	Base, CBT double latch	7075-T6 Alumium Alloy
10	Lid, double latch socket	7075-T6 Alumium Alloy
11	Compression plate QFE64 0.5mm pitch	PEEK
12	Z latch; 2mm, 9.00x12.44x8.00; 2.35x5.2	7075-T6 Alumium Alloy
13	Hinge Pin, 2mm OD, 24mm Lg, SS	Stainless Steel (303)
14	15x15mm Clamshell Backing Plate	7075-T6 Aluminum Alloy
15	Insulating washer, 4mm OD.	Kapton Polyimide/Cirlex
16	#0-80, 90 deg., head pin guide screw, Peek material	PEEK unfilled
17	302SS Comp. Spring .375" Length, .125" OD, .016" Wire Dia.	Stainless Steel (302)
18	#0-80 X .25 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
19	#0-80 x 0.5, SH Cap Screw	Alloy Steel
20	Dowel Pin, M1.5 X 5mm LG, Hardened Steel	AISI 347 Annealed Stainless Steel (SS)
21	Coil Spring, 180 0.109" OD, SS	Stainless Steel (302)
22	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
23	Snap ring for 2mm Hinge pin 0.15" OD	

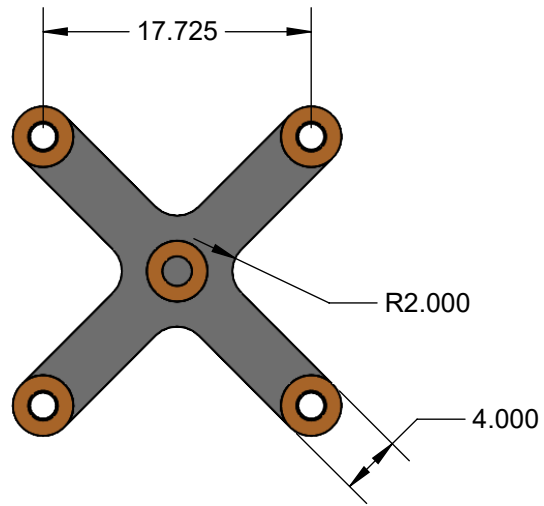
Description: Socket Assy, Insulation Plate

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.

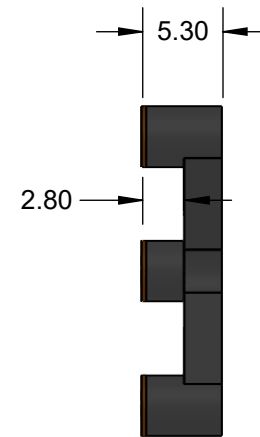
 CBT-QFE-3001 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 21.31	STATUS: Quality Approval Pending	SHEET: 4 OF 6	REV. F
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-QFE-3001 Dwg	DATE: 01/15/2014	



**PIN DETAIL
SCALE 16:1**




BACKING PLATE DETAIL



Description: PIN, BACKING PLT DETAIL

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>CBT-QFE-3001 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 21.31</p>	STATUS: Quality Approval Pending	SHEET: 5 OF 6	REV. F
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-QFE-3001 Dwg	DATE: 01/15/2014	

Rev	Date	Initials	Description
B	3/25/16	MR	Replaced plastic screws with peek screws
C	2/26/19	MR	latch re-design
D	4/27/21	MR	added missing dims per MAF
E	08/12/21	ELS	Changed plastic latch to metal one.
F	2/28/23	MR	Obsolete spring pin changed to new model

Description: Revision History

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.

 CBT-QFE-3001 Drawing ©2018 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Finish: Weight:	STATUS: Quality Approval Pending	SHEET: 6 OF 6	REV. F
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-QFE-3001 Dwg	DATE: 01/15/2014	