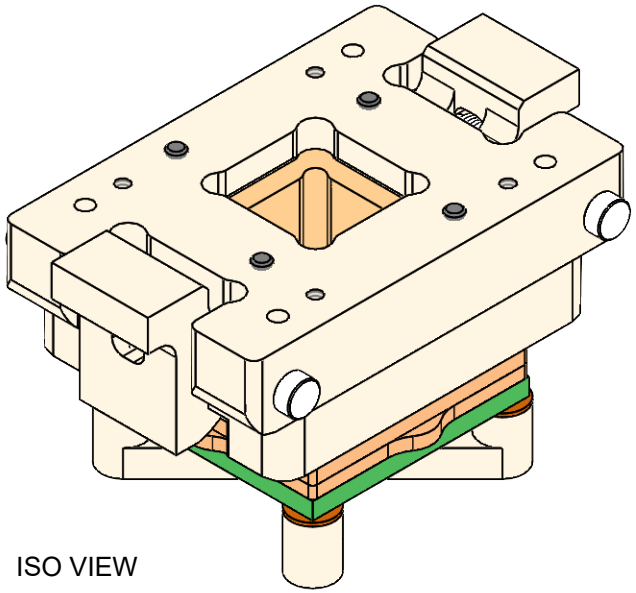
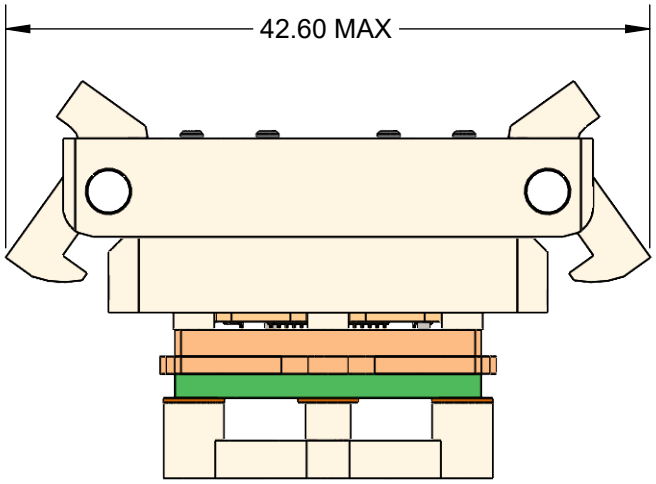
OPEN TOP DUAL LATCH CBT-QFE DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

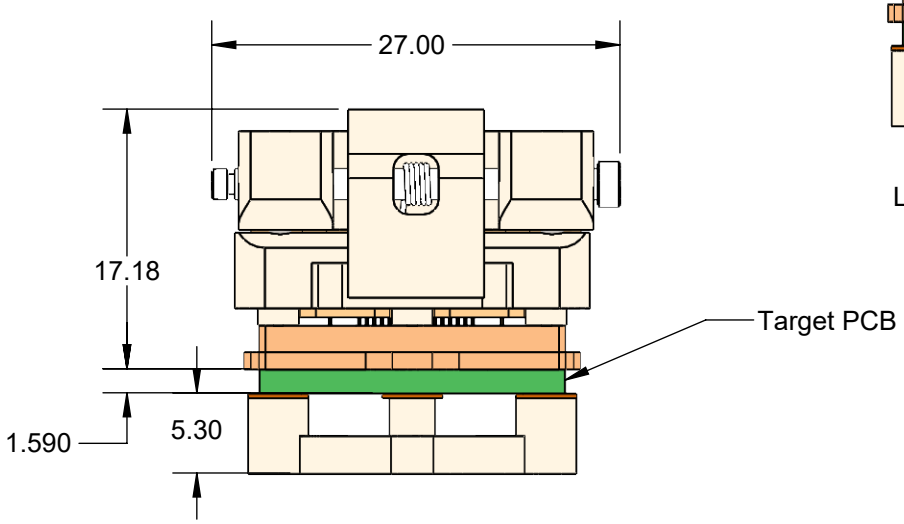
FEATURES:
Wide temperature range (-55C to +180C)
High current capability (up to 4A)
Excellent signal integrity at high frequencies
Low and stable contact resistance for reliable production yield
Highly compliant to accommodate wide co-planarity variations
Automated probe manufacturing enables low cost and short lead time



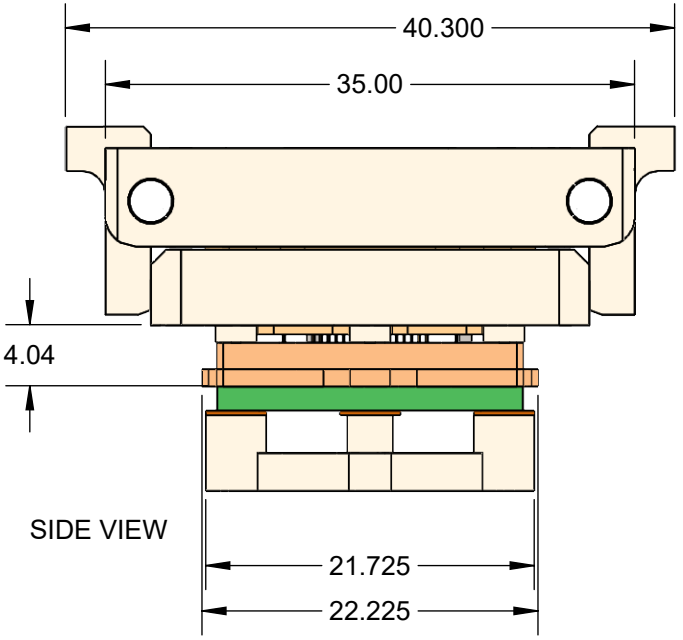
ISO VIEW



LATCH - OPEN POSITION



FRONT VIEW



SIDE VIEW

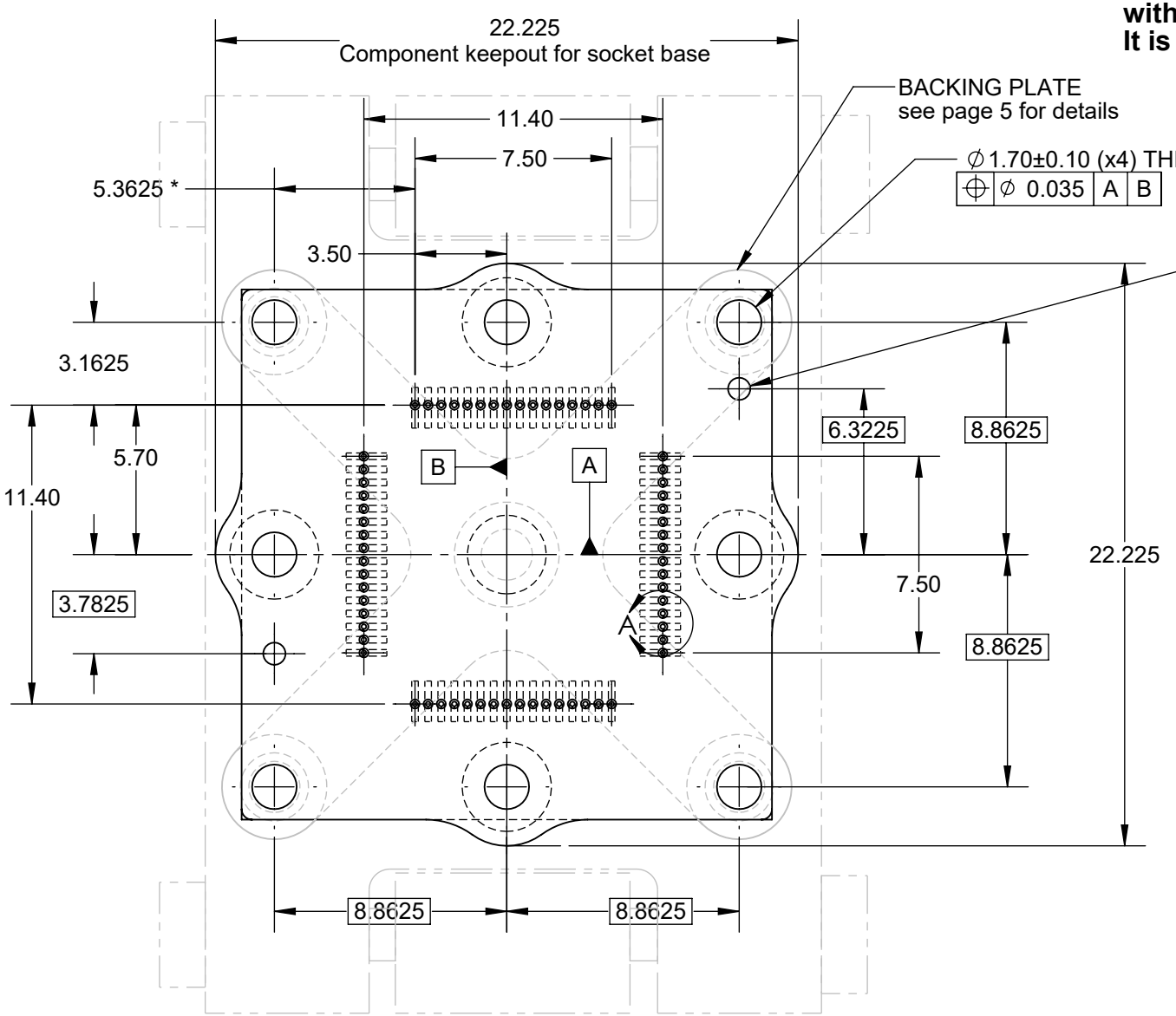
Description: Open Top CBT socket for 0.5mm pitch 10mm sq 12mm tip-tip 64 pin QFP package

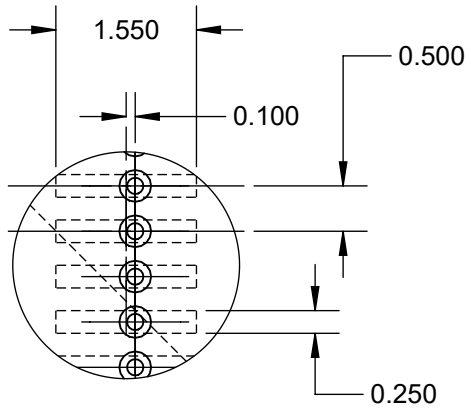
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters ±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-3007 Drawing	Material: N/A Finish: N/A Weight: 22.15	STATUS: Released	SHEET: 1 OF 6	REV. C
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-QFE-3007 Dwg	DATE: 12/15/2015	

***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

Target PCB DesignRecommendations:

Total thickness: 1.59mm min.
Plating: Gold or Solder finish

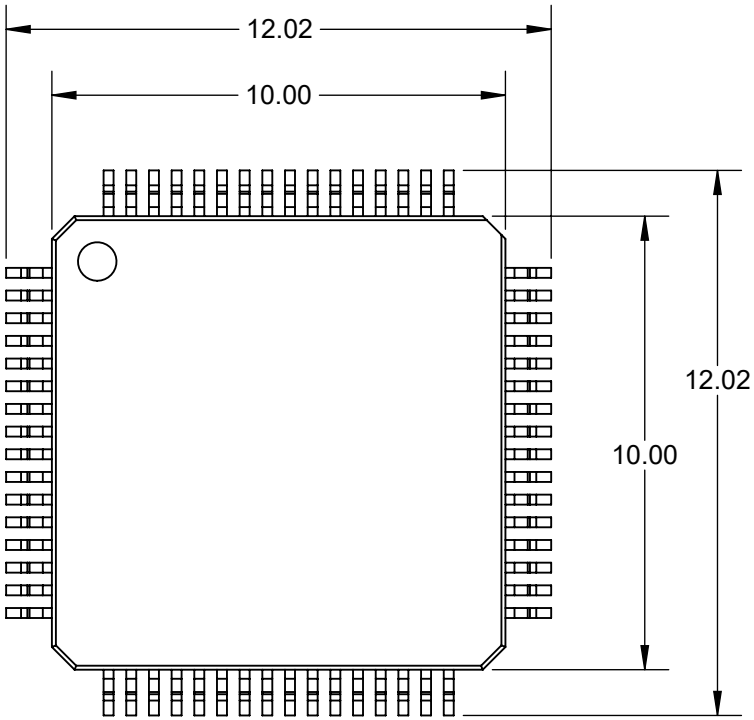
Description: Recommended PCB Layout

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

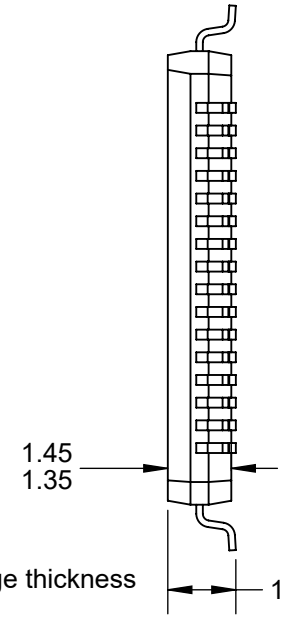
Tolerances: Hole diameters ±0.0254mm [±0.001"], Pitches (from true position) ±0.0762mm [±0.003"], substrate thickness tolerance ±10%, all other tolerances ±0.127mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

CBT-QFE-3007 Drawing	Material: N/A Finish: N/A Weight: 22.15	STATUS: Released	SHEET: 2 OF 6	REV. C
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: CBT-QFE-3007 Dwg	DATE: 12/15/2015	

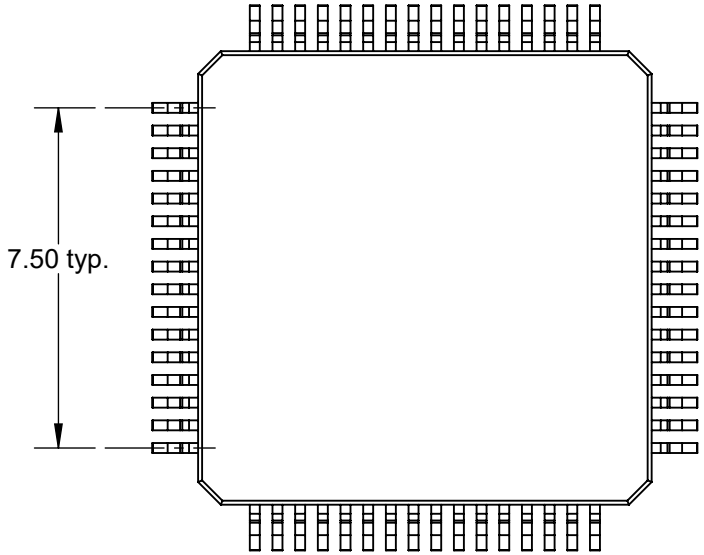
Ironwood package code: QFE64SD



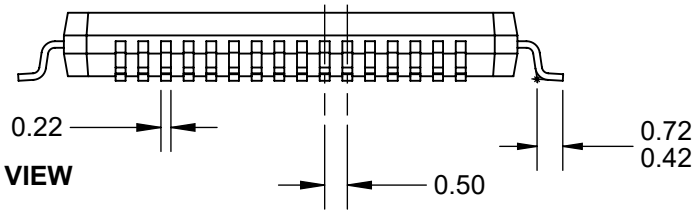
TOP VIEW



SIDE VIEW



BOTTOM VIEW



FRONT VIEW

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.

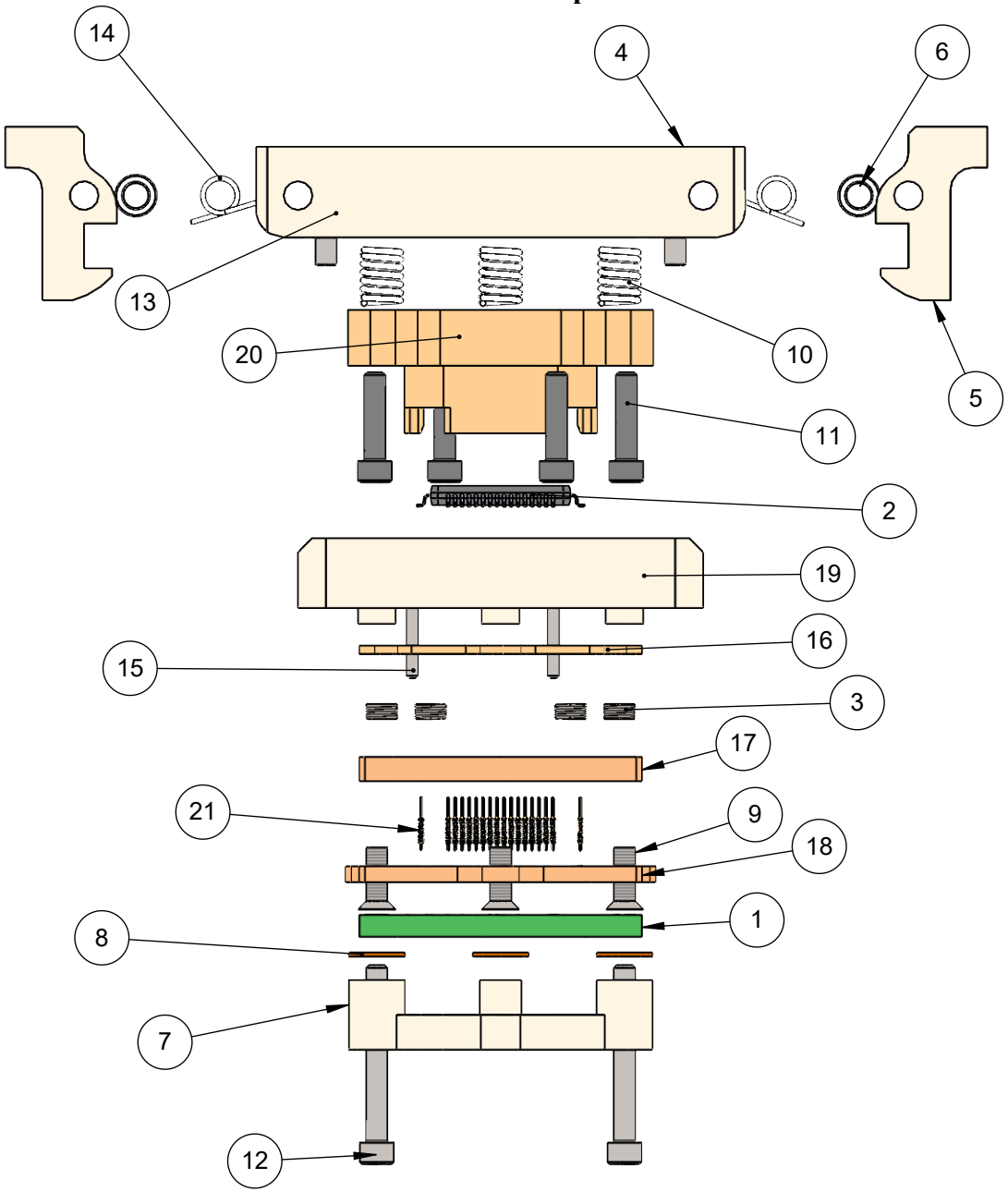
Description: Compatible Device

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

Tolerances: Hole diameters ±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-3007 Drawing	Material: N/A Finish: N/A Weight: 22.15	STATUS: Released	SHEET: 3 OF 6	REV. C
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 6:1
		FILE: CBT-QFE-3007 Dwg	DATE: 12/15/2015	

All Aluminum Machined Components are Nickel Plated



ITEM NO.	DESCRIPTION	Default/QTY.	Material
1	Target PCB QFE64SD 0.5mm pitch 10mm sq body 12mm tip to tip	1	FR4 High temp
2	CFE LQFP64_0.5mmm pitch 10mm sq body 12mm T-T	1	Material <not specified>
3	Floating Guide Spring	4	Alloy Steel (SS)
4	Lid, double latch socket	1	7075-T6 Aluminum Alloy w/ Ni plating
5	Z latch: 2mm, 9.00x12.44x8.00; 2.35x5.2	2	7075-T6 Aluminum Alloy w/ Ni plating
6	Hinge Pin, 2mm OD, 24mm Lg, SS	2	Stainless Steel (303)
7	Ni plt 5 POST BACKING PLATE 15MM	1	7075-T6 Aluminum Alloy w/ Ni plating
8	Insulating washer, 4mm OD.	5	Kapton Polyimide/Cirlex
9	#0-80, 90 deg., head pin guide screw, Peek material	4	PEEK unfilled
10	302SS Comp. Spring .375" Length, .125" OD, .016" Wire Dia.	4	Stainless Steel (302)
11	#0-80 X .25 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	4	Alloy Steel
12	#0-80 x 0.5, SH Cap Screw	5	Alloy Steel
13	Dowel Pin, M1.5 X 5mm LG, Hardened Steel	4	AISI 347 Annealed Stainless Steel (SS)
14	Coil Spring, 180 0.109" OD, SS	2	Stainless Steel (302)
15	Dowel pin, 1/32" X 1/4", SS	2	Stainless Steel (18-8)
16	CBT-QFE64SD Floating spring pin guide	1	Semitron MDS 100
17	Middle guide QFE64 12x12mm T-T, 0.5mm pitch	1	Semitron MDS 100
18	Bottom CBT pin guide QFE64SD	1	Semitron MDS 100
19	CBT socket base double latch	1	7075-T6 Aluminum Alloy w/ Ni plating
20	Compression plate QFE64 0.5mm pitch	1	Torlon 5530
21	Stamped Pin, 0.4mm SBT-BGA	64	N/A

Description: Socket Assy

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

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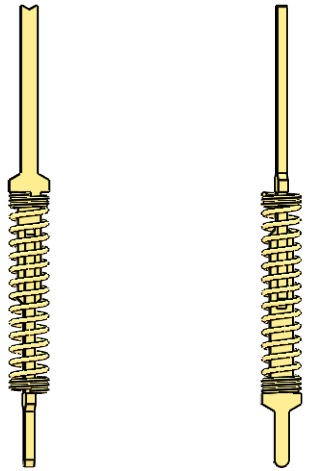
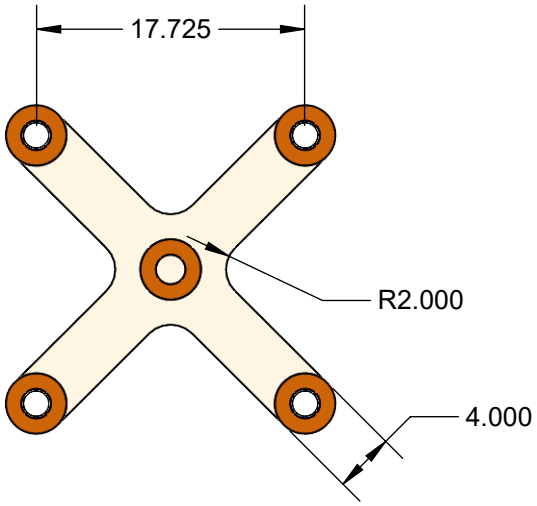
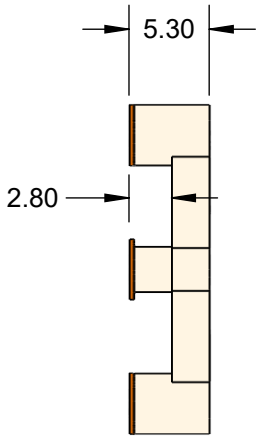
CBT-QFE-3007 Drawing	Material: N/A	STATUS: Released	SHEET: 4 OF 6	REV. C
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: N/A Weight: 22.15	ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-QFE-3007 Dwg	DATE: 12/15/2015	



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 ±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-3007 Drawing	Material: N/A Finish: N/A Weight: 22.15	STATUS: Released	SHEET: 5 OF 6	REV. C
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-QFE-3007 Dwg	DATE: 12/15/2015	

Rev	Date	Initials	Description
B	2/26/19	MR	M7401 was M2965, latch re-design
C	08/11/2025	GC	LATCH, LID, BASE & BACKING PLATE CHANGED FROM BLACK ANODIZED TO **7075-T6 Aluminum Alloy, Nickel plated**

Description: REVISIONS

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

Tolerances: Hole diameters ±0.0254mm [±0.001"], Pitches (from true position) ±0.0762mm [±0.003"], substrate thickness tolerance ±10%, all other tolerances ±0.127mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

CBT-QFE-3007 Drawing	Material:	STATUS: Released	SHEET: 6 OF 6	REV. C
 Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: Weight:	ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-QFE-3007 Dwg	DATE: 12/15/2015	