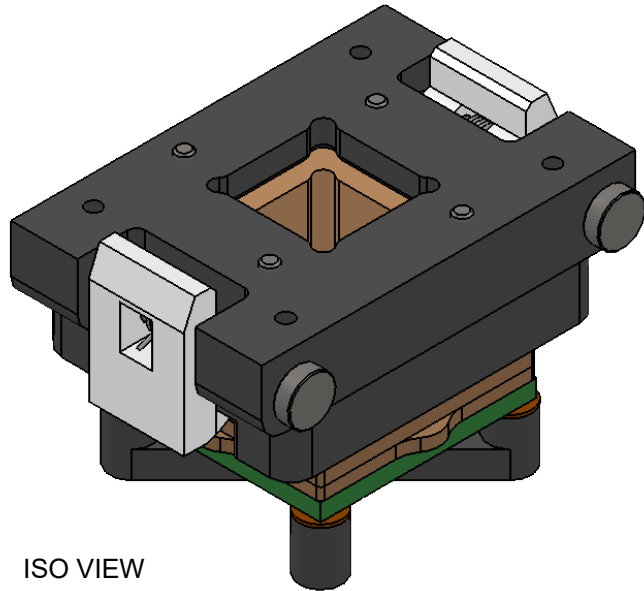


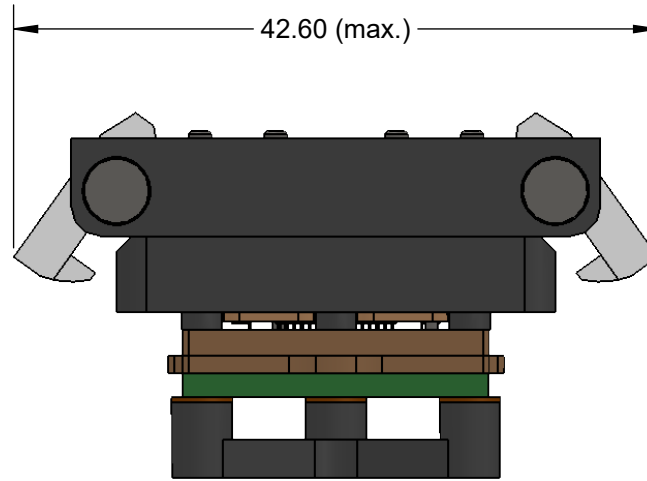
# OPEN TOP DUAL LATCH CBT-QFE DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

## FEATURES:

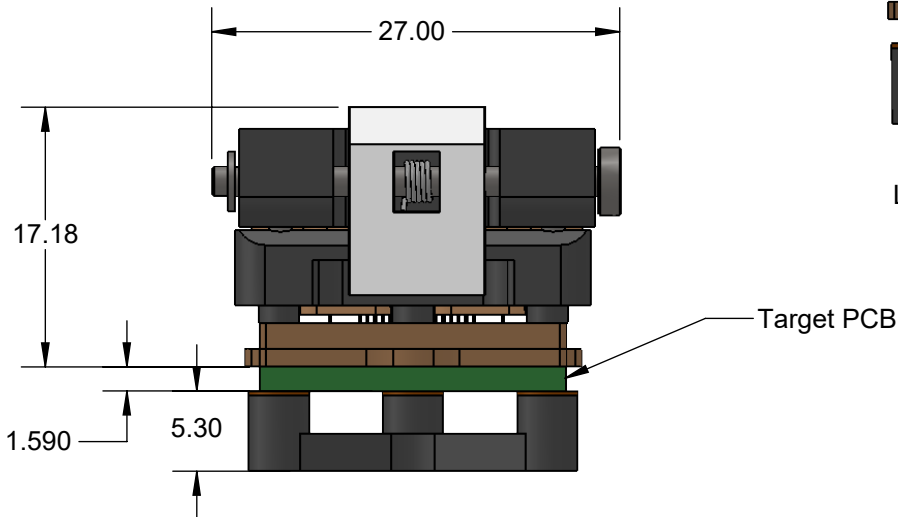
- Wide temperature range (-55C to +180C )
- High current capability (up to 4A )
- Excellent signal integrity at high frequencies
- Low and stable contact resistance for reliable production yield
- Highly compliant to accommodate wide co-planarity variations
- Automated probe manufacturing enables low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



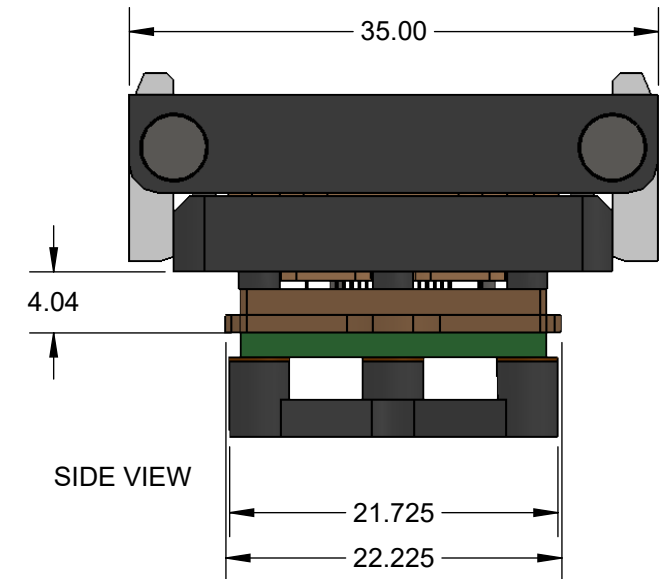
ISO VIEW



LATCH - OPEN POSITION



FRONT VIEW




SIDE VIEW

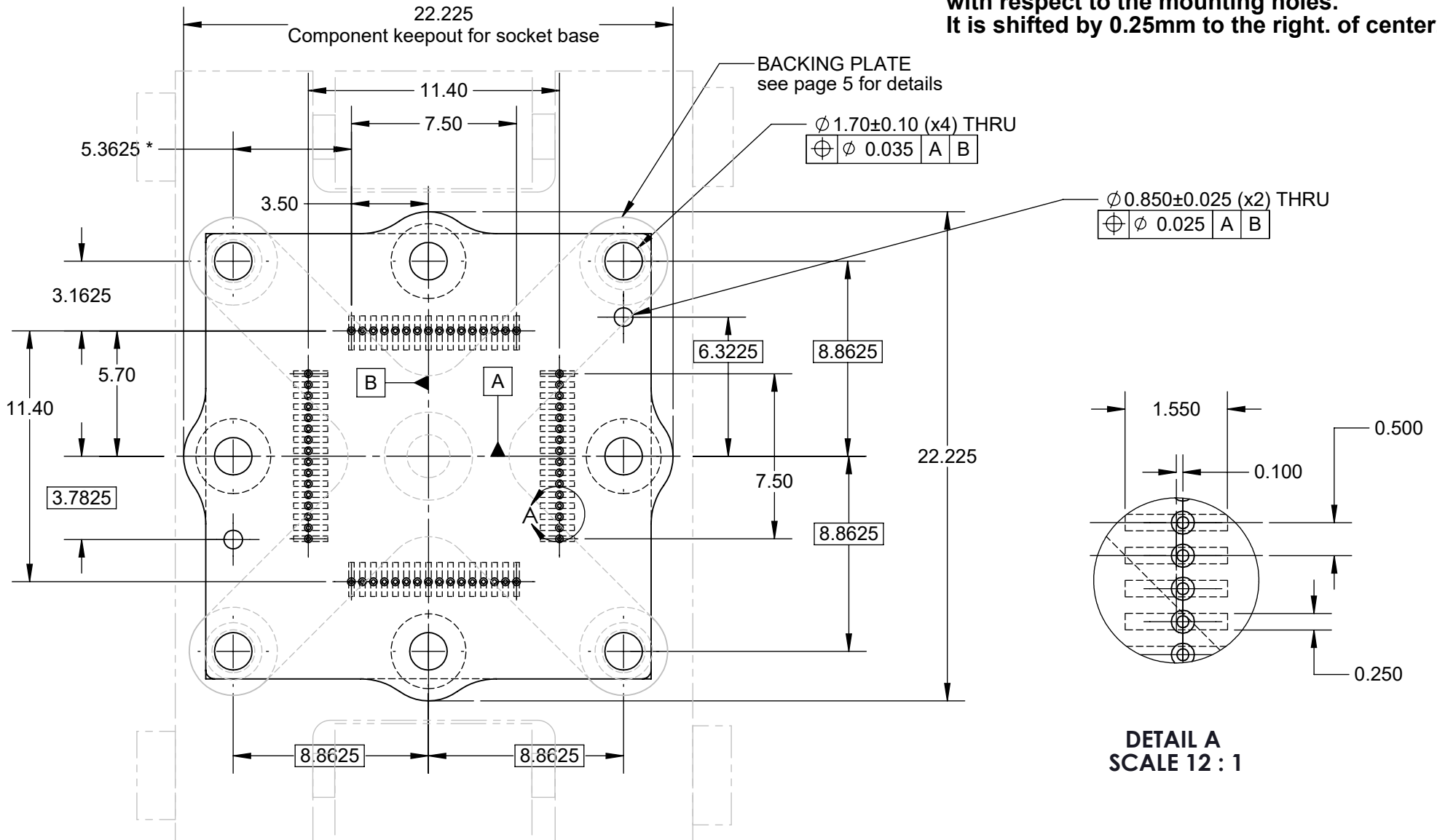
**Description:** Open Top CBT socket for 0.5mm pitch 10mm sq 12mm tip-tip 64 pin QFP package

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

**Tolerances:** Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], 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-3007 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 21.17	STATUS: Released ENG: S, Faiz FILE: CBT-QFE-3007 Dwg	SHEET: 1 OF 5 DRAWN BY: M. Raske DATE: 12/15/2015	REV. A SCALE: 2:1

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




### Description: Recommended PCB Layout

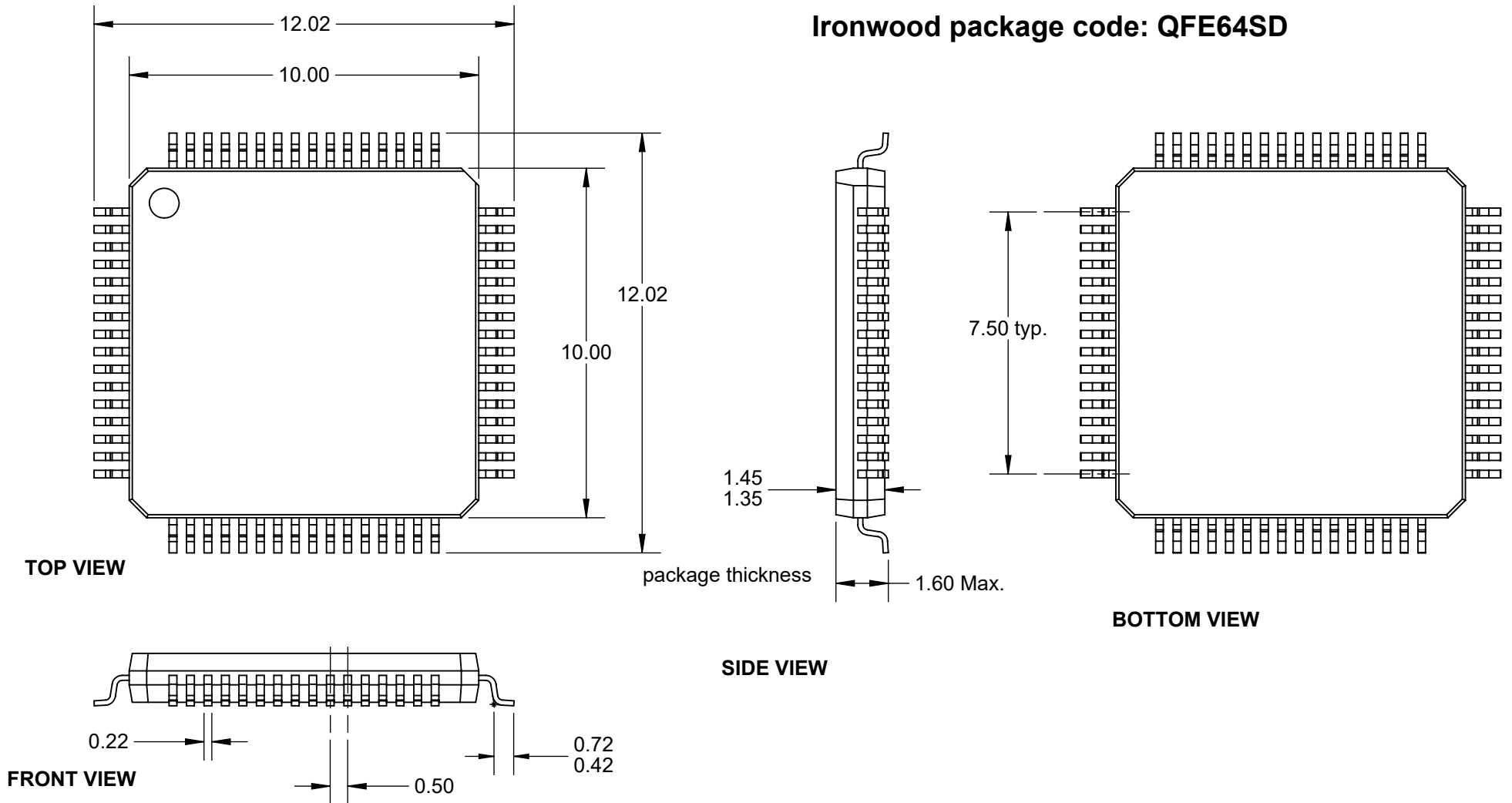
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

**Target PCB Design Recommendations:**  
Total thickness: 1.59mm min.  
Plating: Gold or Solder finish

 <b>CBT-QFE-3007 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 21.17	STATUS: Released ENG: S, Faiz FILE: CBT-QFE-3007 Dwg	SHEET: 2 OF 5 DRAWN BY: M. Raske DATE: 12/15/2015	REV. A SCALE: 4:1

## Ironwood package code: QFE64SD




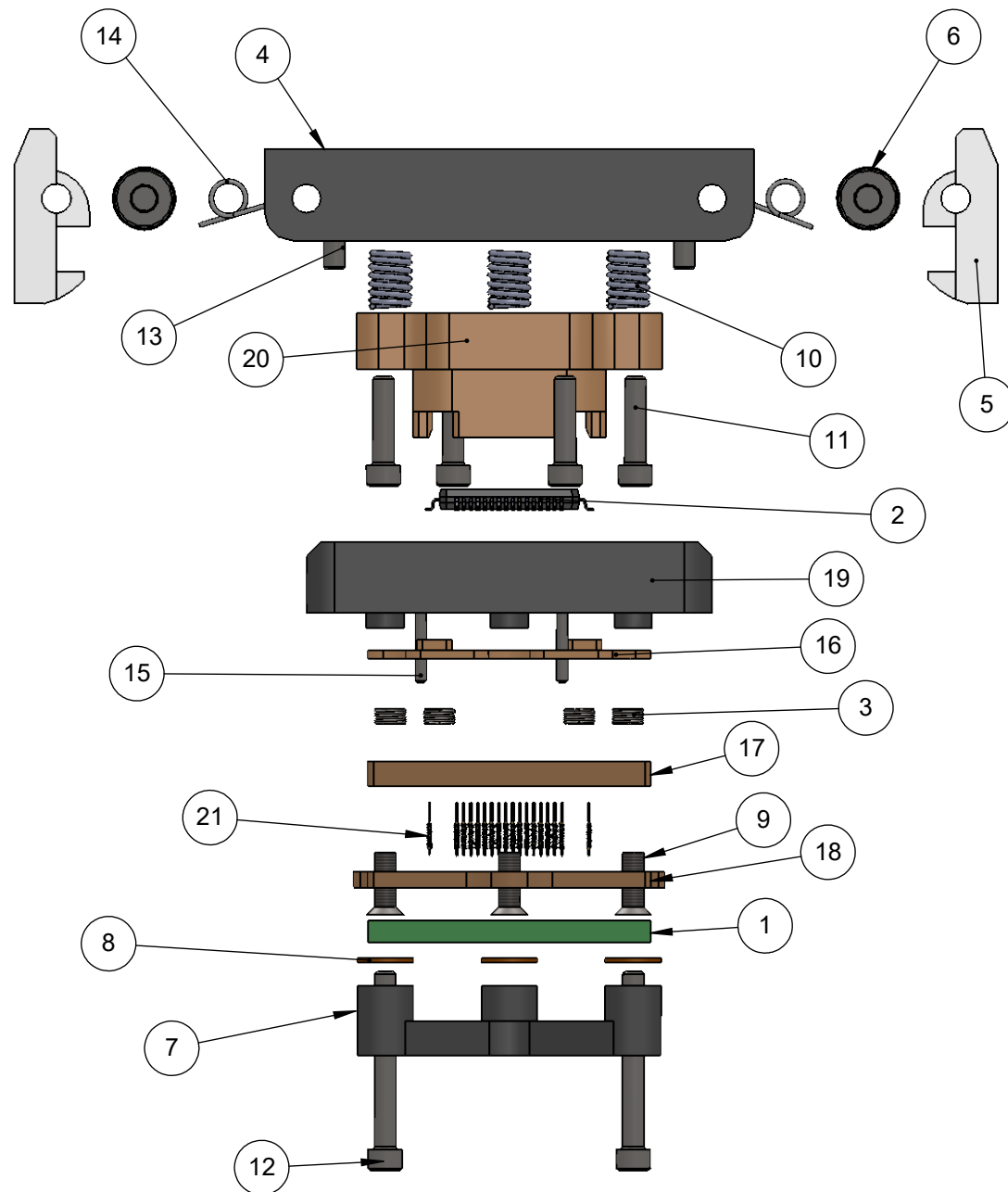
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

 <b>CBT-QFE-3007 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 21.17	STATUS: Released	SHEET: 3 OF 5	REV. A
		ENG: S, Faiz	DRAWN BY: M. Raske	SCALE: 6:1
		FILE: CBT-QFE-3007 Dwg	DATE: 12/15/2015	




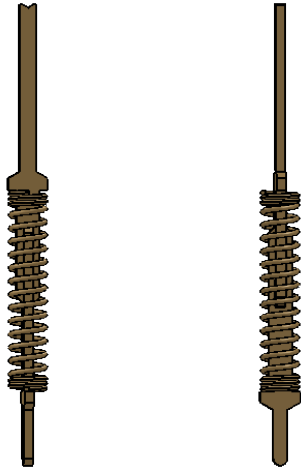
ITEM NO.	DESCRIPTION	Default/QTY.	Material
1	Target PCB QFE64SD 0.5mm pitch 10mm sq body 12mm tip to tip	1	FR4 High temp
2	CFE LQFP64_0.5mm pitch 10mm sq body 12mm T-T	1	Material <not specified>
3	Floating Guide Spring	4	Alloy Steel (SS)
4	Lid, double latch socket	1	7075-T6 Alumium Alloy
5	Clamshell Latch Snap Lid Socket	2	PPS/Ultem
6	Hinge Pin and Snap Ring, 2mm OD, 24mm long, SS	2	Stainless Steel (ferritic)
7	15x15mm Clamshell Backing Plate	1	7075-T6 Aluminum Alloy
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	Material <not specified>
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 Alumium Alloy
20	Compression plate QFE64 0.5mm pitch	1	Torlon 5530
21	Stamped Pin, 0.4mm SBT-BGA	64	N/A

### Description: Socket Assy

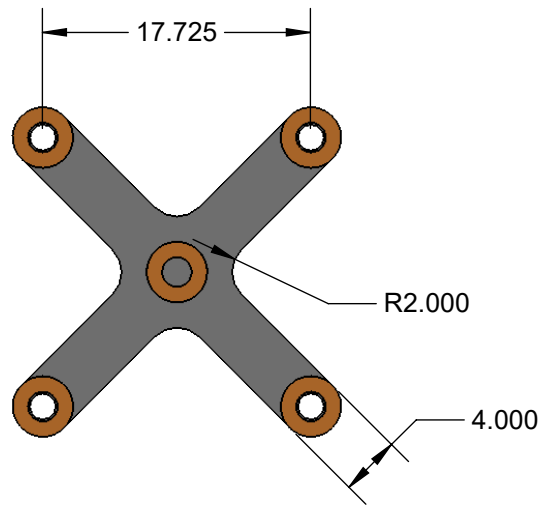
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

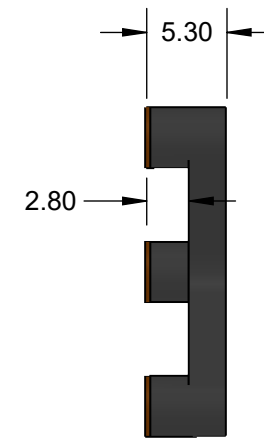
 <b>CBT-QFE-3007 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 21.17	STATUS: Released	SHEET: 4 OF 5	REV. A
		ENG: S, Faiz	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-QFE-3007 Dwg	DATE: 12/15/2015	



**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  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], 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><b>CBT-QFE-3007 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 21.17</p>	STATUS: Released	SHEET: 5 OF 5	REV. A
		ENG: S, Faiz	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-QFE-3007 Dwg	DATE: 12/15/2015	