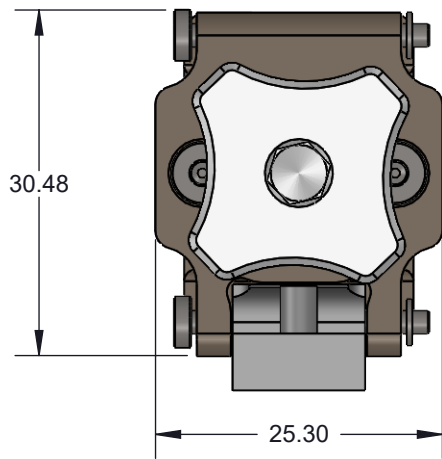


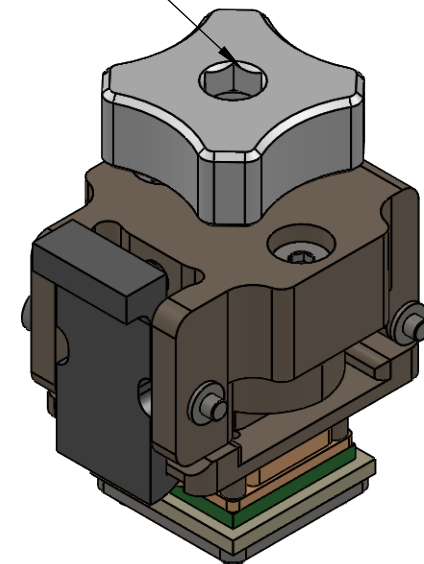
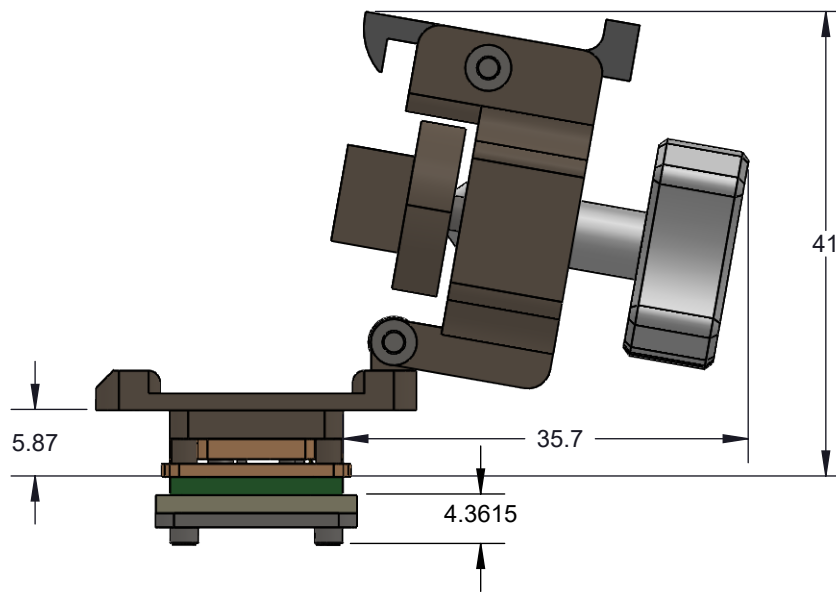
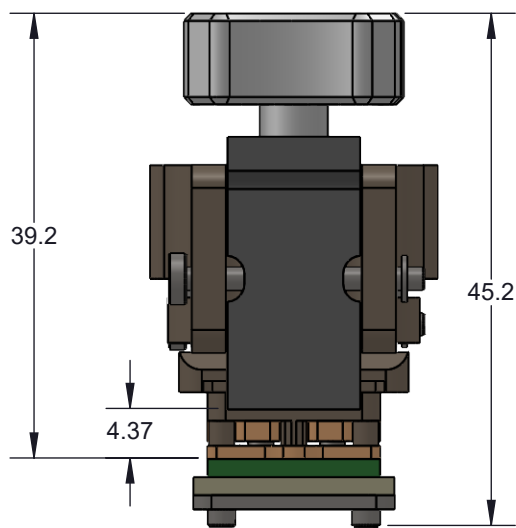
# CBT-QFN DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



- 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


Required torque : 0.5 in-lbs

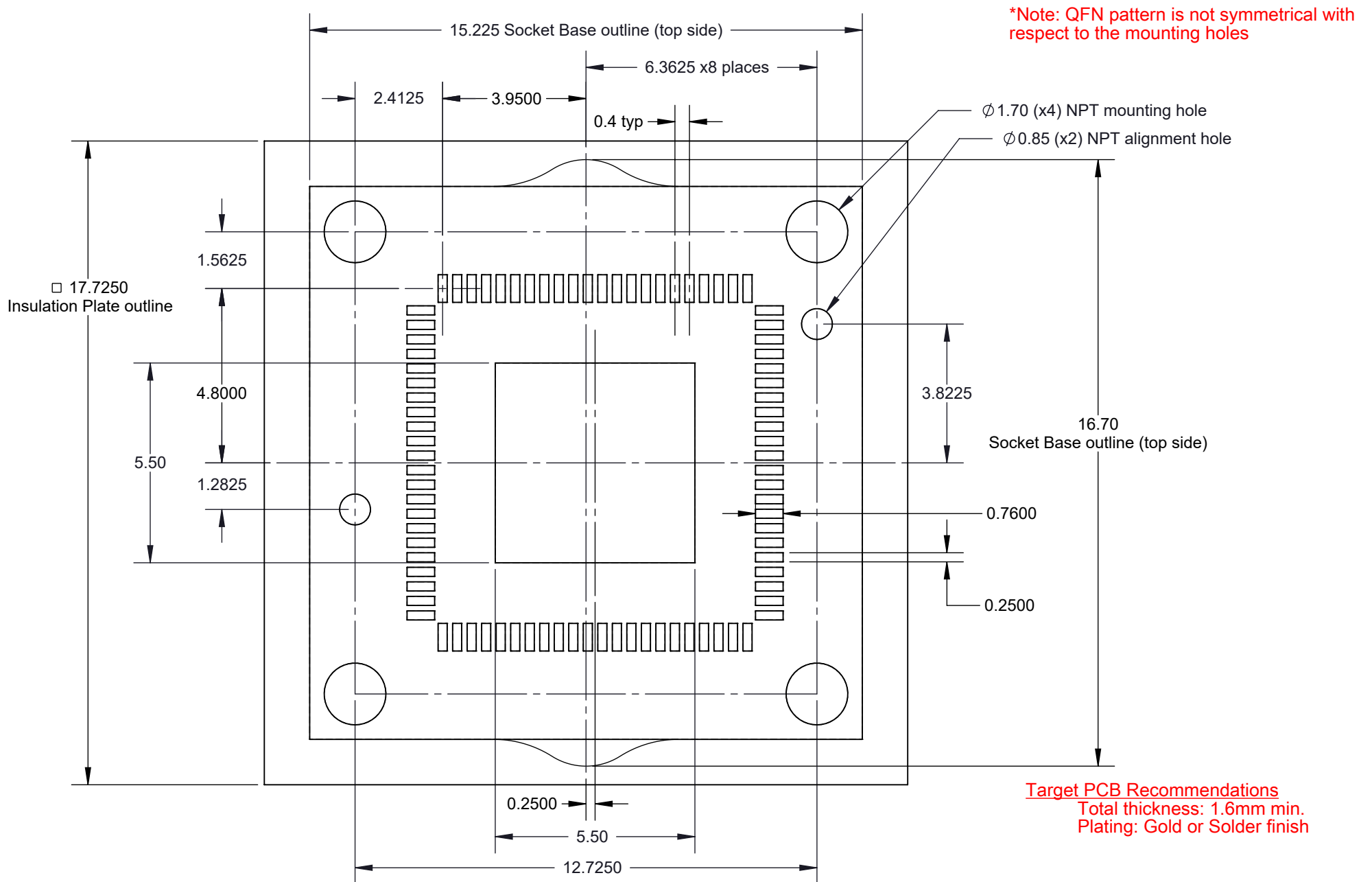
[TL-TORQUEDRIVER-09](#)



## Description: CBT-QFN88 10mm 0.4mm pitch 10 x 10 x 0.9mm

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)  $\pm 0.0254\text{mm}$  [ $\pm 0.001"$ ],  
 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><b>CBT-QFN-7012 Drawing</b>                  Ironwood Electronics, Inc.                  Tele: (800) 404-0204                  www.ironwoodelectronics.com</p>	<p>Material: N/A                  Finish: N/A                  Weight: 43.48</p>	STATUS: Released	SHEET: 1 OF 6	REV. D
		ENG:	DRAWN BY: S. Huang	SCALE: 3:2
		FILE: CBT-QFN-7012 Dwg	DATE: 11/10/10	

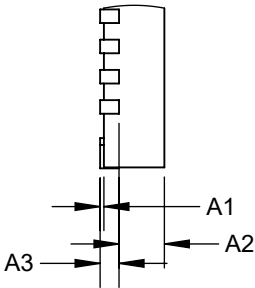
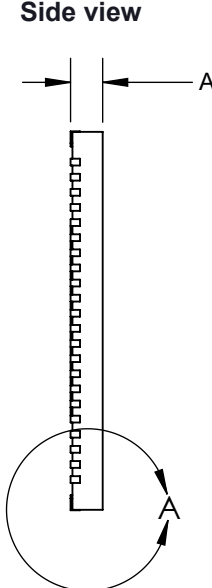
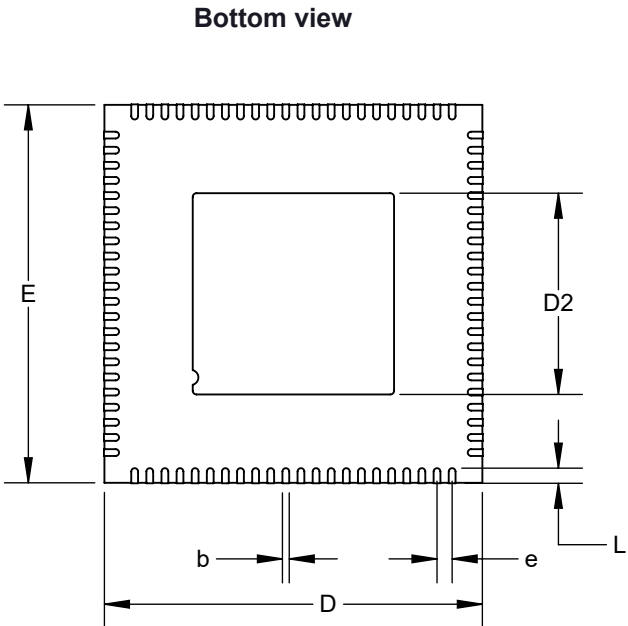


### Description: Recommended PCB Layout

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-QFN-7012 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 43.48</p>	<p>STATUS: Released</p>	<p>SHEET: 2 OF 6</p>	<p>REV. D</p>
		<p>ENG:</p>	<p>DRAWN BY: S. Huang</p>	<p>SCALE: 7:1</p>
		<p>FILE: CBT-QFN-7012 Dwg</p>	<p>DATE: 11/10/10</p>	




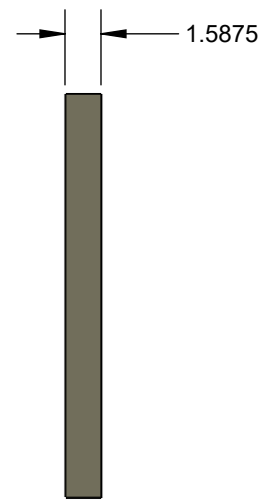
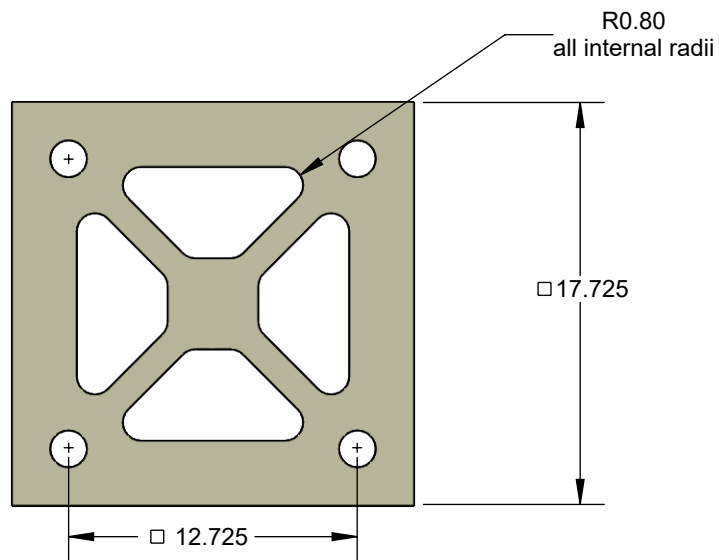
DETAIL A  
SCALE 10 : 1

DIM	Minimum	Maximum
A		0.90
A1		0.05
A2		0.70
A3	0.20 REF	
b	0.13	0.23
D	10.0 BSC	
D2	5.10	5.50
E	10.0 BSC	
E2	5.10	5.50
L	0.30	0.50
e	0.4 BSC	
PIN COUNT		88 + center pad

**Description: Compatible QFN**

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-QFN-7012 Drawing</b>                  Ironwood Electronics, Inc.                  Tele: (800) 404-0204                  www.ironwoodelectronics.com</p>	<p>Material: N/A                  Finish: N/A                  Weight: 43.48</p>	STATUS: Released	SHEET: 3 OF 6	REV. D
		ENG:	DRAWN BY: S. Huang	SCALE: 5:1
		FILE: CBT-QFN-7012 Dwg	DATE: 11/10/10	




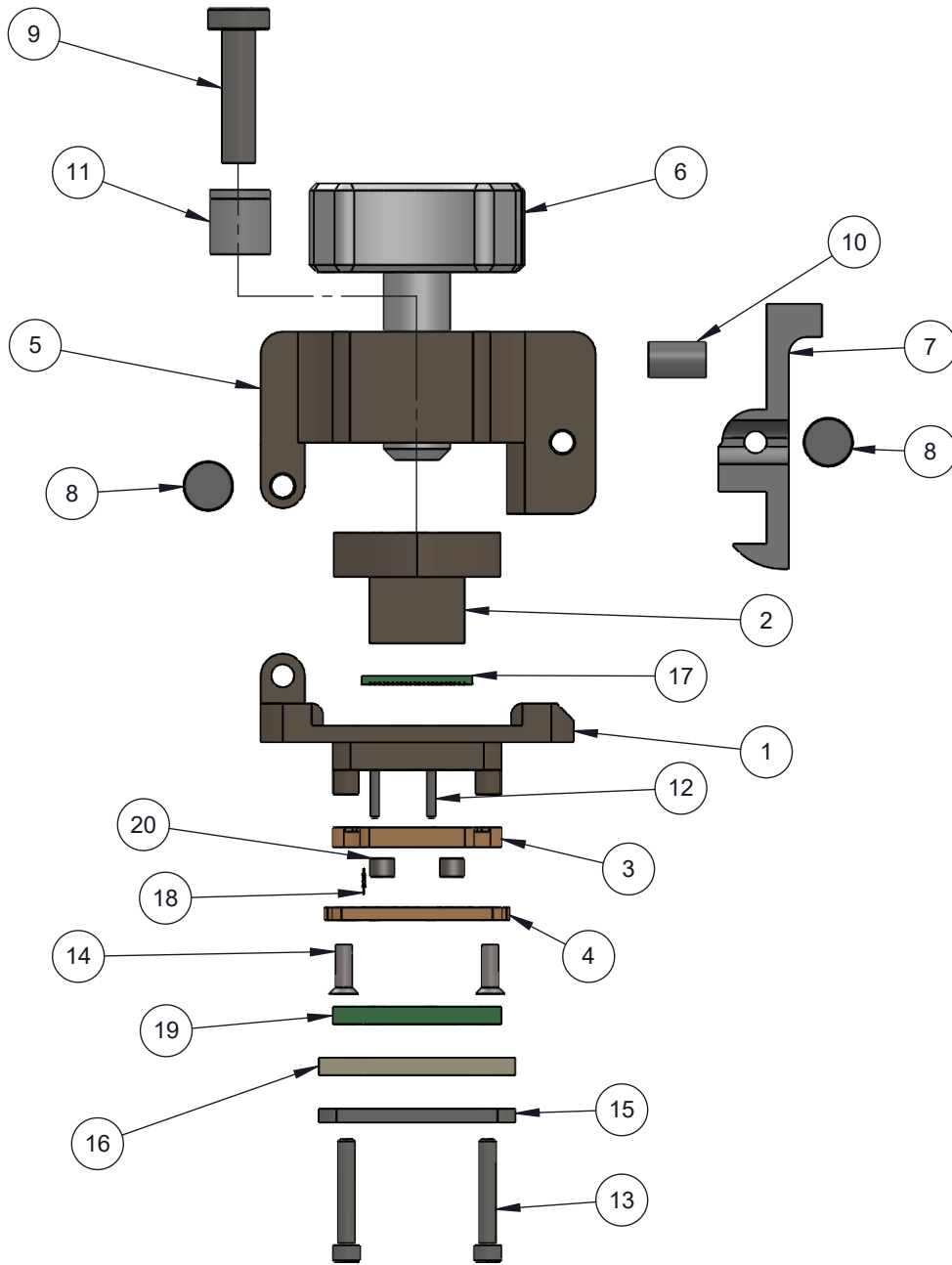
**SBT PIN(scale 20:1)**

**Description: Insulation Plate, Pin 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-QFN-7012 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 43.48</p>	STATUS: Released	SHEET: 4 OF 6	REV. D
		ENG:	DRAWN BY: S. Huang	SCALE: 3:1
		FILE: CBT-QFN-7012 Dwg	DATE: 11/10/10	




ITEM NO.	DESCRIPTION	Material
1	CBT Socket Base 10mm	7075-T6 Aluminum Alloy
2	CBT Compression Plate 10mm IC	7075-T6 Aluminum Alloy
3	QFN88A SBT Top spring pin guide 10mm 0.4mm pitch	Semitron MDS 100
4	QFN88A SBT Bottom spring pin guide 10mm 0.4mm pitch	Semitron MDS 100
5	Clam Shell Socket Lid 10mm IC	7075-T6 Aluminum Alloy
6	M6x1 fluted knob compression screw, Ni plated	7075-T6 Aluminum Alloy
7	Z latch; 2mm, 11.70x24.00x9.35; 3.35x9.20	7075-T6 Aluminum Alloy
8	Hinge Pin and Snap Ring, 2mm OD, 19mm long, SS	Stainless Steel (ferritic)
9	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
10	Precision Compression Spring, Zinc- Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
11	Spring Clamshell lid assembly	Steel Music Wire
12	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
13	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
14	#0-80, 90 deg., head pin guide screw, Peek material	PEEK unfilled
15	Backing Plate 10mm IC 1.25mm thick, Stainless Steel	Stainless Steel
16	Insulation Plate	FR5 / G11 natural color
17	IC, QFN88A 10 x 10 x 0.9mm	High Temp FR4
18	Stamped Pin, 0.4mm SBT-LGA/QFN	N/A
19	Target PCB	High Temp FR4
20	Floating Guide Spring	Alloy Steel (SS)

### Description: Socket Assy, 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.


 <b>CBT-QFN-7012 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 43.48	STATUS: Released	SHEET: 5 OF 6	REV. D
		ENG:	DRAWN BY: S. Huang	SCALE: 3:2
		FILE: CBT-QFN-7012 Dwg	DATE: 11/10/10	

Rev	Date	Initials	Description
A	11/10/10	SD	Original
B	02/18/14	DH	Changed current rating of pin
C	05/27/15	DH	Updated PCB layout page
D	4/26/19	JV/SH	Replaced SS flat head screws w/ peek (updated for P-P184A) / Update to P-P184AA pin design

## Description: Revision History

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-QFN-7012 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	<b>Material:</b> <b>Finish:</b> <b>Weight:</b>	STATUS: Released	SHEET: 6 OF 6	REV. D
		ENG:	DRAWN BY: S. Huang	SCALE: 3:2
		FILE: CBT-QFN-7012 Dwg	DATE: 11/10/10	