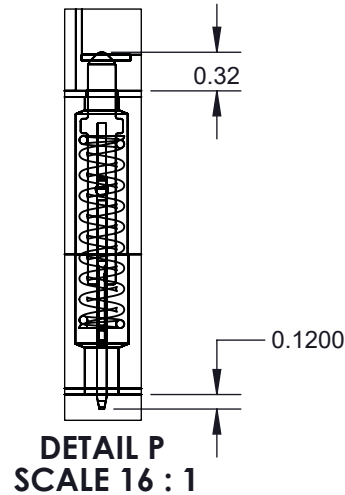
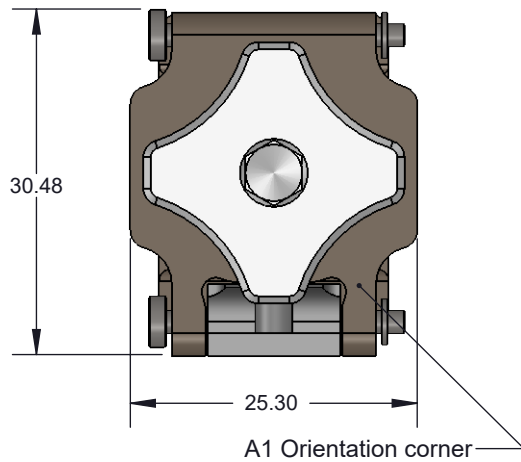
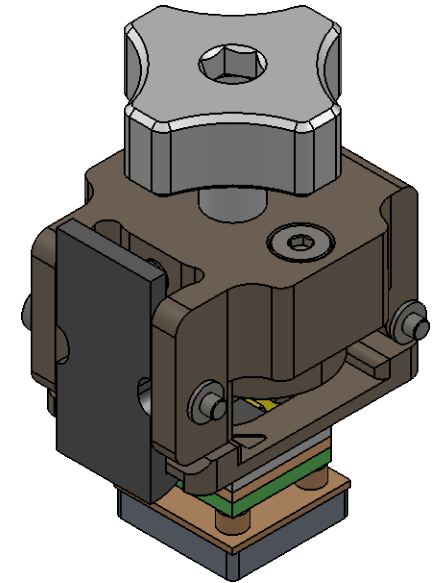
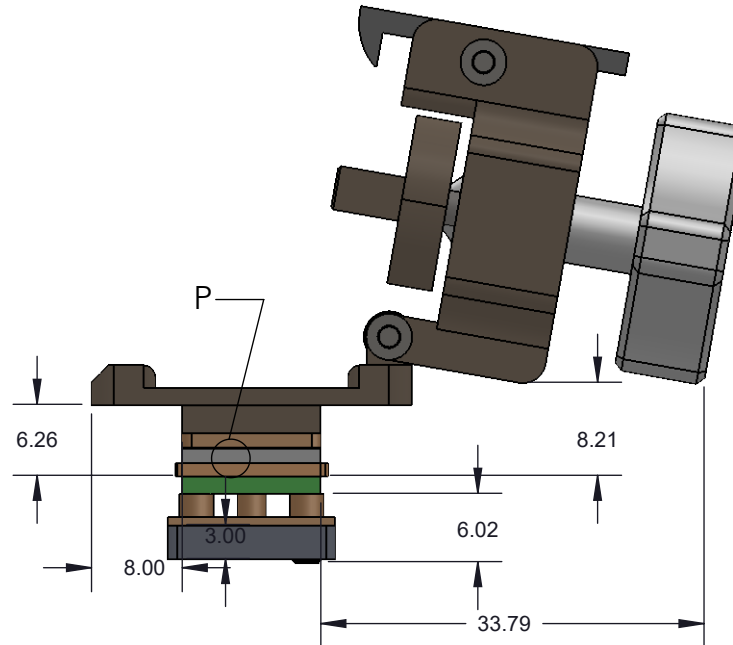
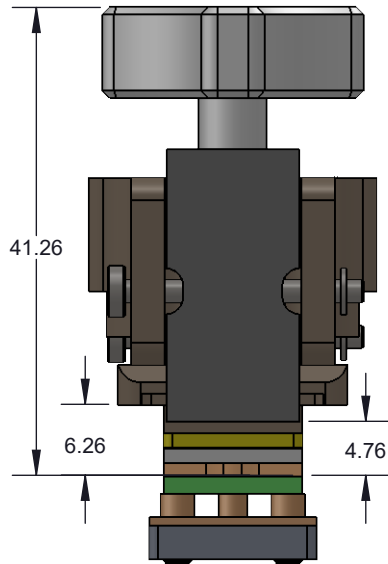


# CBT-QFN DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



## 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



## Description: CBT-QFN24 4x4mm 0.5mm pitch

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.

### CBT-QFN-7021 Drawing



Ironwood Electronics, Inc.  
Tele: (800) 404-0204  
www.ironwoodelectronics.com

Material: N/A  
Finish: N/A  
Weight: 39.41

STATUS: Released

ENG:

FILE: CBT-QFN-7021 Dwg

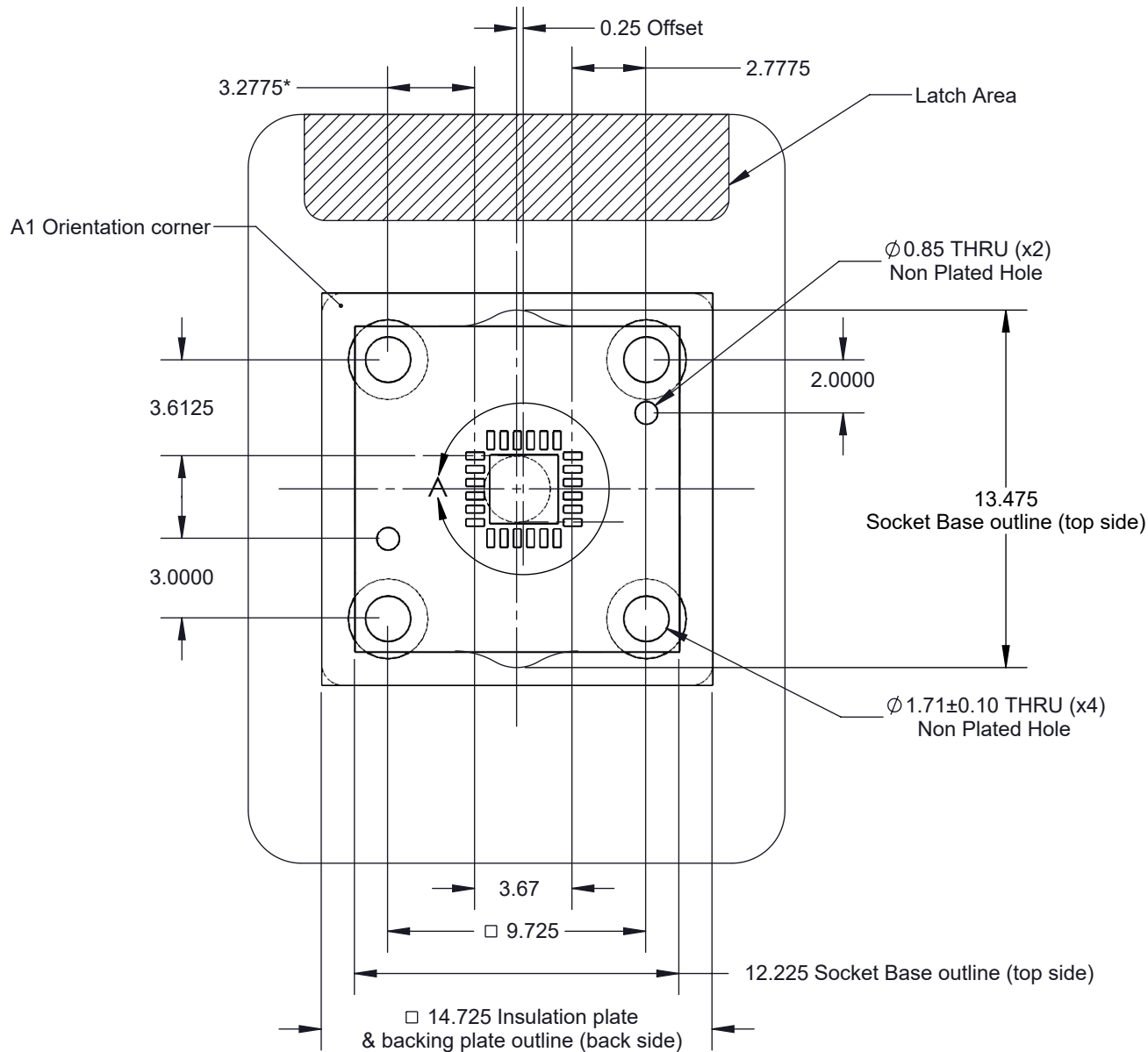
SHEET: 1 OF 5

DRAWN BY: V. Panavala

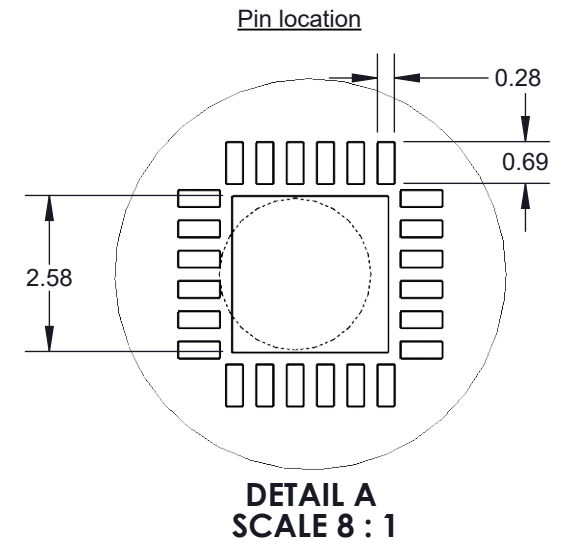
DATE: 11/10/10

REV. E

SCALE: 3:2



\*Note: QFN pattern is not symmetrical with respect to the mounting holes




Target PCB Recommendations  
Total thickness: 1.6mm min.  
Plating: Gold or Solder finish

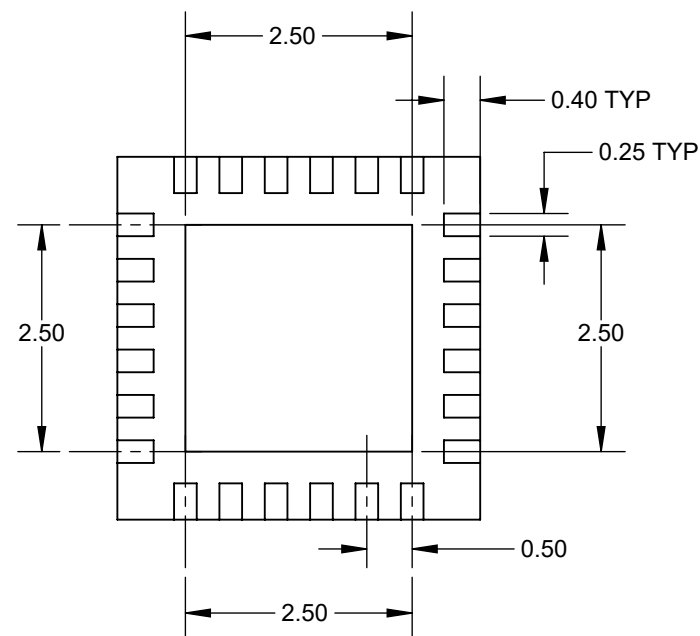
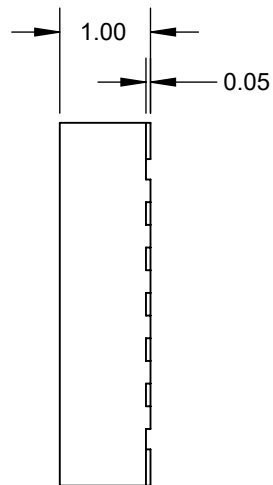
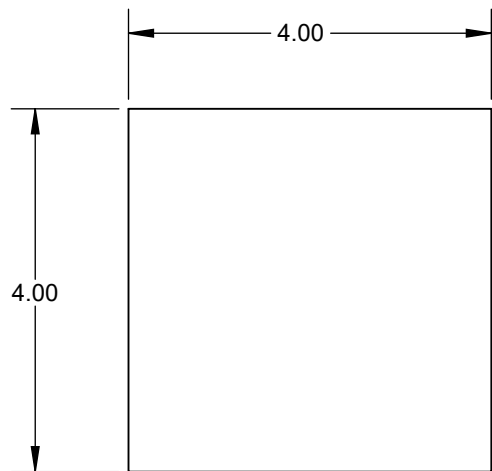
## Description: Recommended PCB Layout

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

Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], 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-7021 Drawing</b>		Material: N/A Finish: N/A Weight: 39.41	STATUS: Released	SHEET: 2 OF 5	REV. E
	Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG:	DRAWN BY: V. Panavala	SCALE: 4:1
			FILE: CBT-QFN-7021 Dwg	DATE: 11/10/10	


Ironwood package code : QFN24G

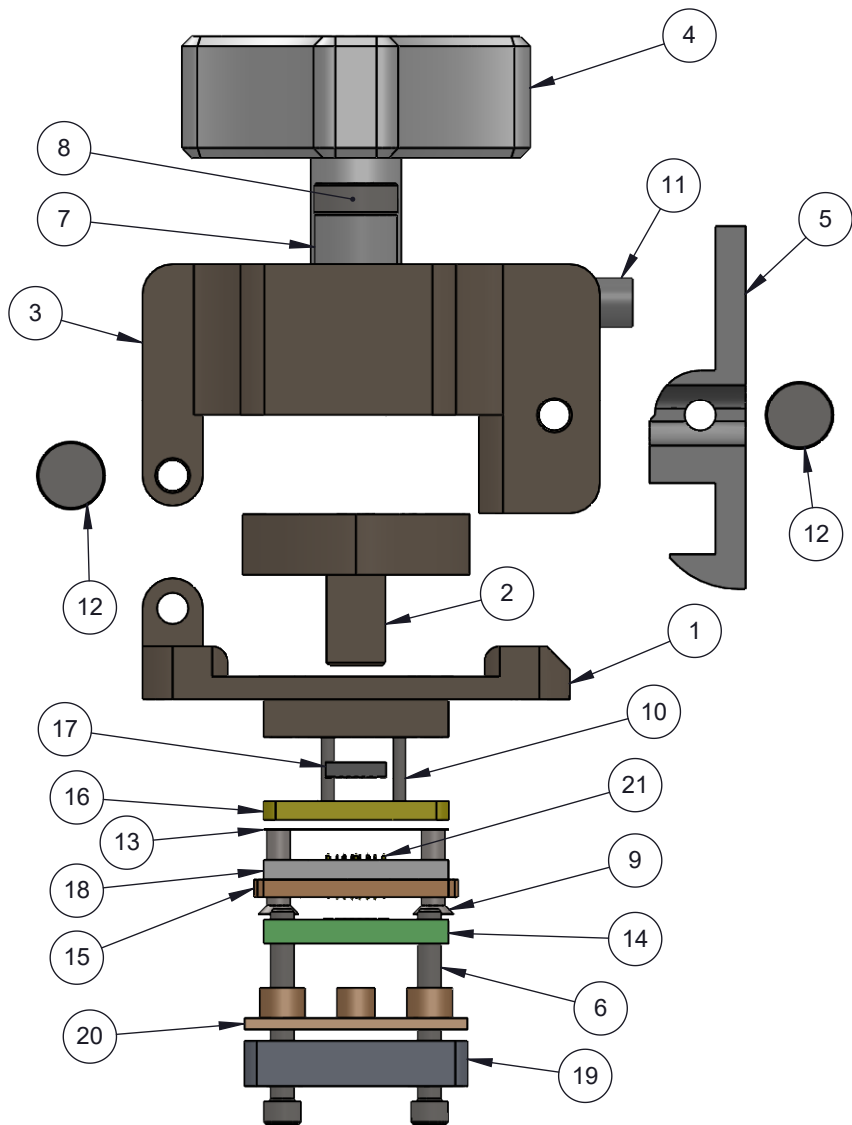


Description: Compatible QFN

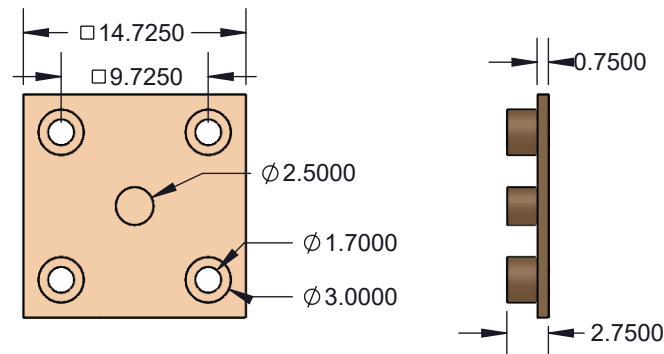
Primary dimension units are millimeters, Secondary dimension units are [inches].

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-7021 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 39.41	STATUS: Released	SHEET: 3 OF 5	REV. E
		DRAWN BY: V. Panavala	SCALE: 12:1	
		FILE: CBT-QFN-7021 Dwg	DATE: 11/10/10	



ITEM NO.	Description	Material
1	CBT Socket base 7mm	7075-T6 Aluminum Alloy
2	CBT Compression Plate 4mm IC	7075-T6 Aluminum Alloy
3	Clam Shell Socket Lid 10mm IC	7075-T6 Aluminum Alloy
4	M6x1 fluted knob compression screw, Ni plated	7075-T6 Aluminum Alloy
5	Latch 6- 10mm Ni plated	7075-T6 Aluminum Alloy
6	#0-80 x 0.5, SH Cap Screw	Alloy Steel
7	Spring Clamshell lid assembly	Steel Music Wire
8	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
9	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
10	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
11	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
12	Hinge Pin and Snap Ring, 2mm OD, 19mm long, SS	Stainless Steel (ferritic)
13	Pin Orientation Guide QFN24	Kapton Polyimide
14	PCB QFN24	Material <not specified>
15	QFN24 SBT Bottom Guide	Semitron MDS 100
16	IC guide QFN24 4mm sq.	Torlon 4203
17	QFN24 IC	Material <not specified>
18	QFN24 SBT Top Guide	PEEK Ceramic filled
19	Clamshell Backing Plate, 7mm IC 3mm Thick	7075-T6 Aluminum Alloy
20	Insulation Plate 7mm	Ultem 1000
21	SBT-LGA/QFN Pogo Pin, 0.5mm-0.8mm	Contact Mtrl: BeCu, Au Plated over Ni




## 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.

## Insulation plate Specification


<b>CBT-QFN-7021 Drawing</b>		STATUS: Released	SHEET: 4 OF 5	REV. E
 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A	ENG:	DRAWN BY: V. Panavala	SCALE: 3:2
	Finish: N/A	FILE: CBT-QFN-7021 Dwg	DATE: 11/10/10	
	Weight: 39.41			

Rev	Date	Initials	Description
A	04/20/12	VP	Original
B	02/19/14	DH	Changed current rating of pin.
C	02/04/15	DH	1) Changed IC guide material from Ultem to Torlon,2) Added material around bottom guide
D	3/16/15	GL	Removed (2) #0-80 x 0.188 Stl. St. screws replaced with (2) #0-80 x 0.188 Peek mat'l screws
E	4/20/17	MR	added missing page 3 per MAF

## 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-7021 Drawing</b>		Material: Finish: Weight:	STATUS: Released	SHEET: 5 OF 5	REV. E	
	Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG:	DRAWN BY: V. Panavala	SCALE: 3:2	
			FILE: CBT-QFN-7021 Dwg	DATE: 11/10/10		