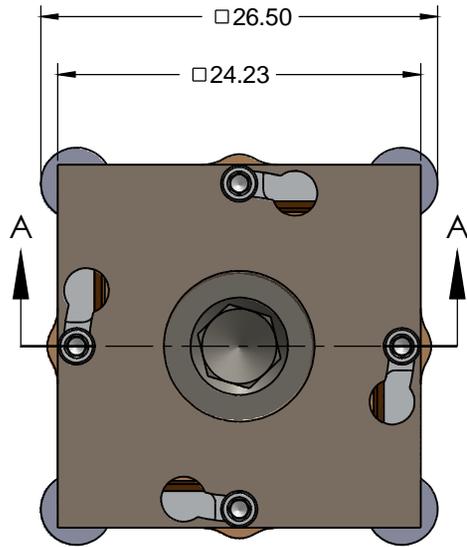
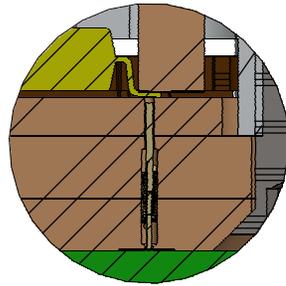


# SBT-QFP DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



## Features

- Wide temperature range (-55C to +180C).
- High current capability (up to 2.9A).
- 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.



DETAIL A  
SCALE 6 : 1

TORQUE UNTIL FLOATING GUIDE 3

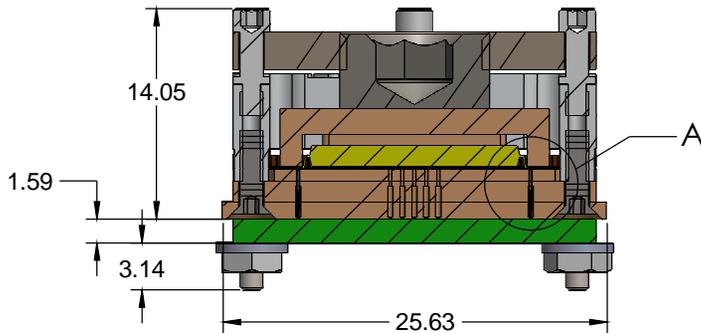
CONTACTS MIDDLE GUIDE 4

### ESTIMATED TORQUE:

0.45 IN-LBF, 7.20 IN-OZF, 5.00 N-CM

### RECOMMENDED TORQUE DRIVER:

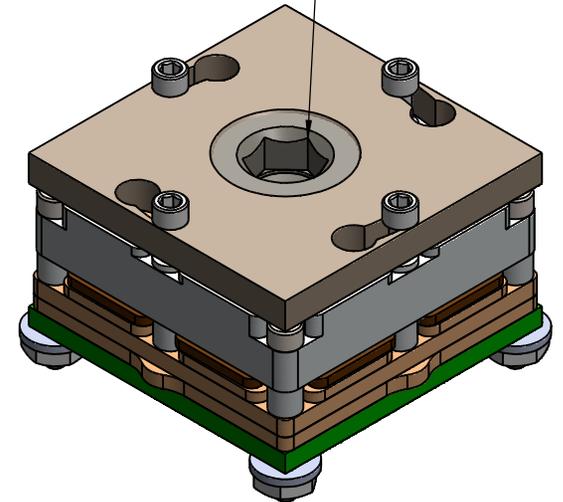
TL-TORQUEDRIVER-09



SECTION A-A



PIN DETAIL  
SCALE 16:1



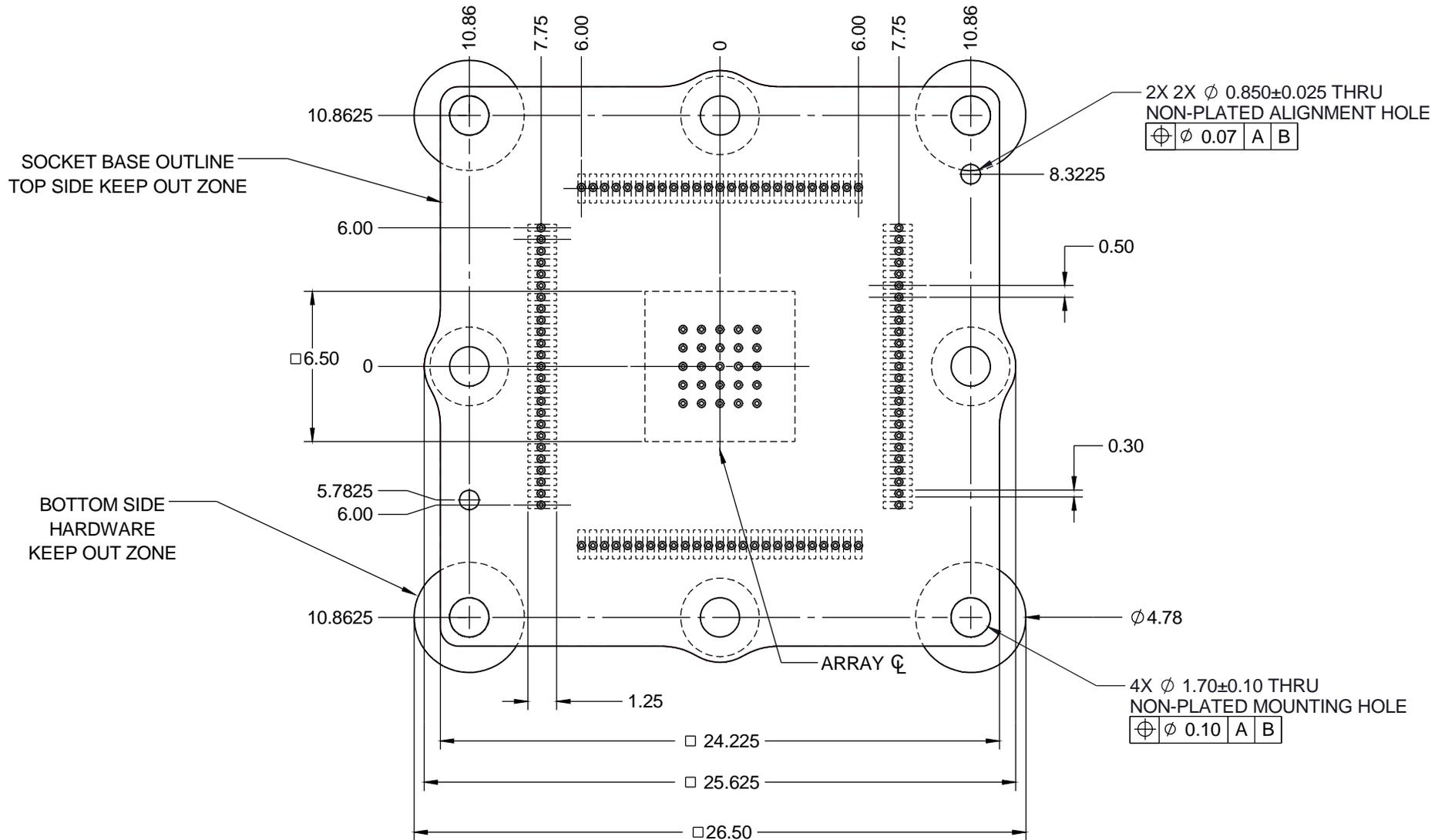
## Description: SBT-QFE100, 16mm T2T, 0.50mm Pitch

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.

 <b>SBT-QFE-3024 Drawing</b> ©2018 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Finish: Weight:	STATUS: Released	SHEET: 1 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 2:1
		FILE: SBT-QFE-3024 Dwg	DATE: 9/17/2018	

# Description: Recommended PCB Layout



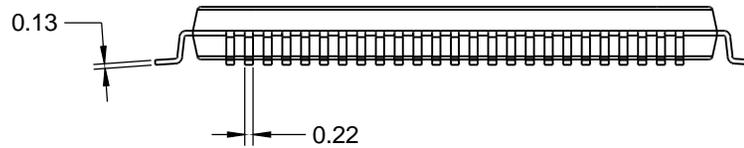
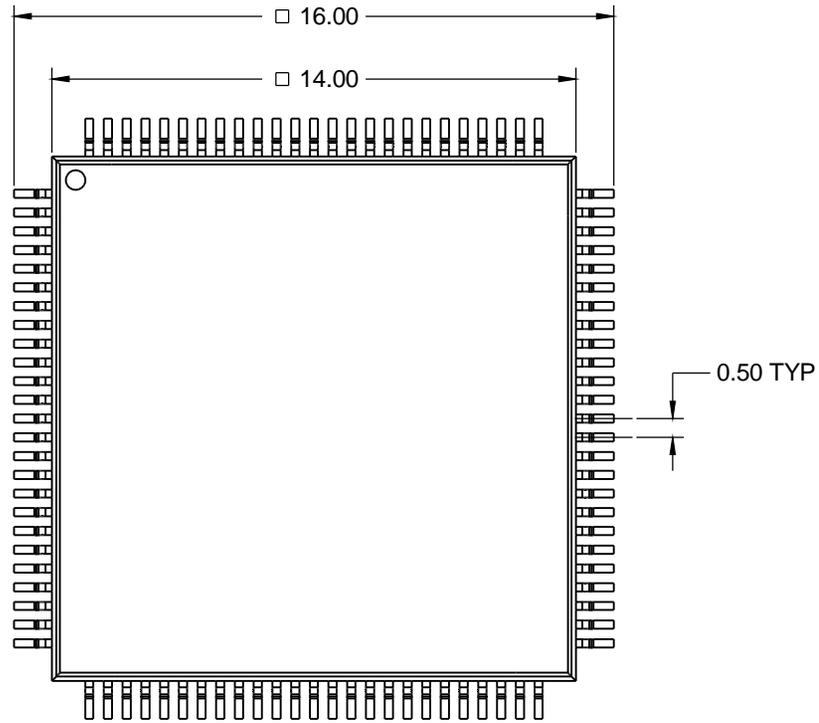
**TARGET PCB RECOMMENDATIONS**  
**TOTAL THICKNESS: 1.60MM MIN**  
**PLATING: GOLD OR SOLDER FINISH**  
**RECOMMENDATION LINK: [CLICK HERE](#)**

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.

 <b>SBT-QFE-3024 Drawing</b> ©2018 Ironwood Electronics, Inc. Tele: (800) 404-0204 <a href="http://www.ironwoodelectronics.com">www.ironwoodelectronics.com</a>	Material: Finish: Weight:	STATUS: Released	SHEET: 2 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 4:1
		FILE: SBT-QFE-3024 Dwg	DATE: 9/17/2018	

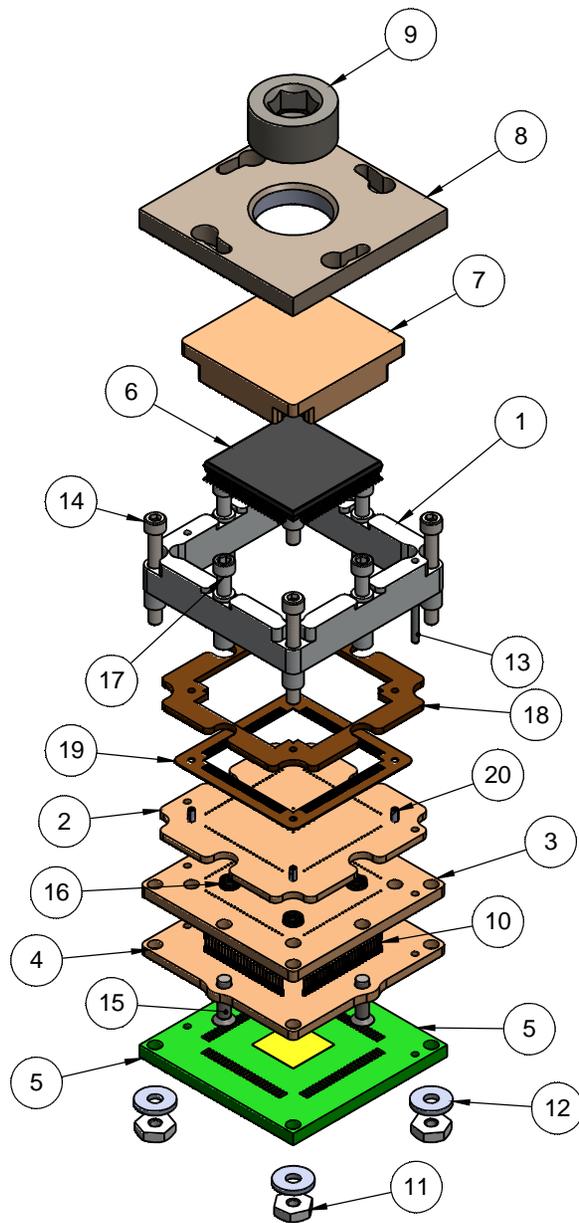
**Ironwood Package Code : QFE100SE**



**Description: Compatible Device**

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.

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		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 5:1
		FILE: SBT-QFE-3024 Dwg	DATE: 9/17/2018	



ITEM NO.	DESCRIPTION	Material
1	Socket base	7075-T6 Aluminum Alloy
2	Floating Guide, 16x16mm T2T, 14x14mm Body, 0.5mm Pitch, QFP100	Semitron MDS 100
3	Middle Guide, 16x16mm T2T, 14x14mm Body, 0.5mm Pitch, QFP100	Semitron MDS 100
4	Bottom Guide, 16x16mm T2T, 14x14mm Body, 0.5mm Pitch, QFP100	Semitron MDS 100
5	QFE100 test PCB	Material <not specified>
6	CFE, Test Chip, 16x16mm T2T, 14x14mm Body, 0.5mm Pitch, QFP100	
7	Compression Plate, 16x16mm T2T, QFE100	Torlon 5530
8	Socket Lid 19MM, M10 THD	7075-T6 Alumium Alloy
9	Compression Screw M10	7075-T6 Alumium Alloy
10	Stamped Pin, 0.4mm SBT-BGA	N/A
11	Nut, #0-80, SS	Stainless Steel (18-8)
12	Washer, #0 x .025", Nylon	Nylon 6/6
13	Dowel pin, 1/32" x 5/16", SS	Chrome Stainless Steel
14	#0-80 x 0.5, SH Cap Screw	Alloy Steel
15	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
16	Floating Guide Spring	Alloy Steel (SS)
17	#0-80 Shoulder Screw, 1.59mm thread length	Stainless Steel (303)
18	Body guide QFP176 24mm body 26mm T2T	Kapton Polyimide/Cirlex
19	Lead guide QFP176 26mm T2T 0.5mm pitch	Kapton Polyimide/Cirlex
20	Coiled spring pin, 1/32" diameter, 1/8" length	Stainless Steel

### Description: Socket Assembly, Misc Detail

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.

 <b>SBT-QFE-3024 Drawing</b> ©2018 Ironwood Electronics, Inc. Tele: (800) 404-0204 <a href="http://www.ironwoodelectronics.com">www.ironwoodelectronics.com</a>	Material: Finish: Weight:	STATUS: Released	SHEET: 4 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 1.2:1
		FILE: SBT-QFE-3024 Dwg	DATE: 9/17/2018	