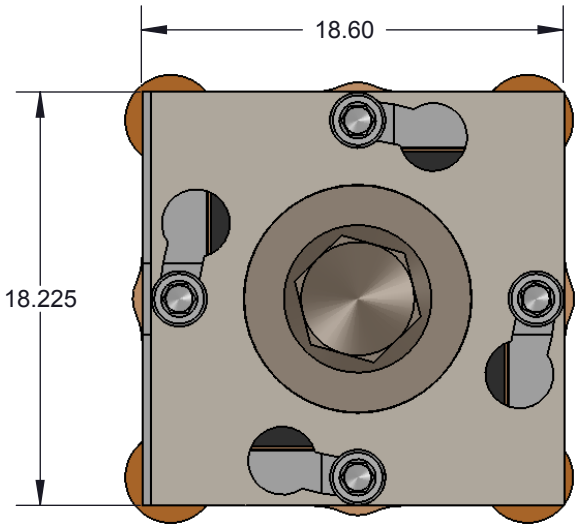
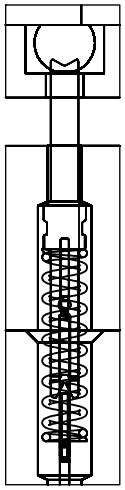
SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

Features

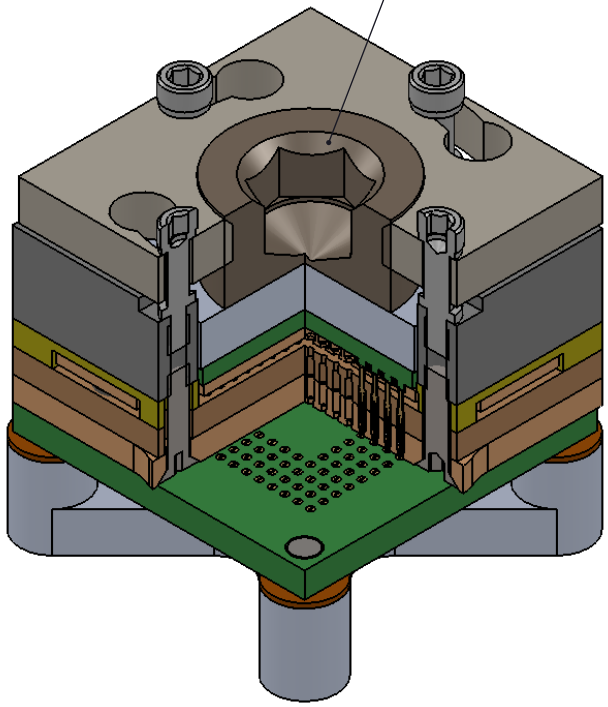
- Wide temperature range (-55C to +180C)
- High current capability (up to 4A)
- Excellent signal integrity at high frequencies
- Low and stable contact resistance for reliable production yield
- Highly compliant to accommodate wide co-planarity variations
- Automated probe manufacturing enables low cost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

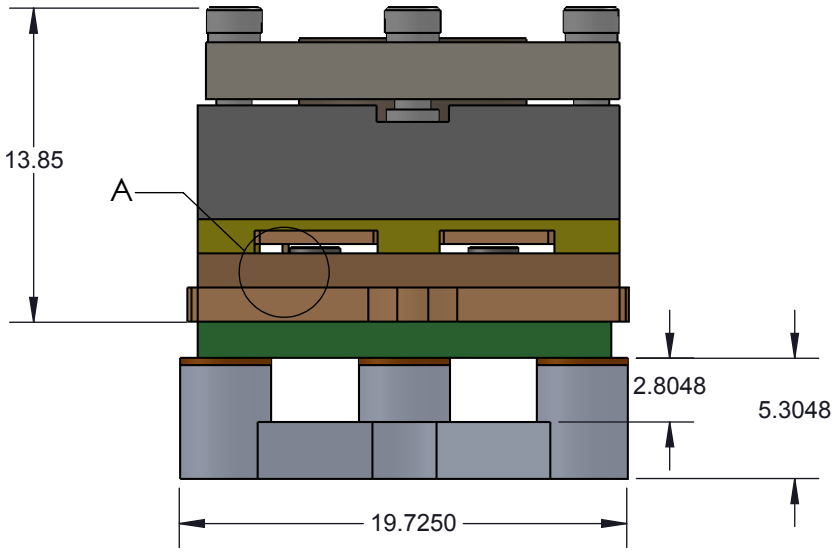




DETAIL A
SCALE 16 : 1

Recommended Torque 2 in.lbs.





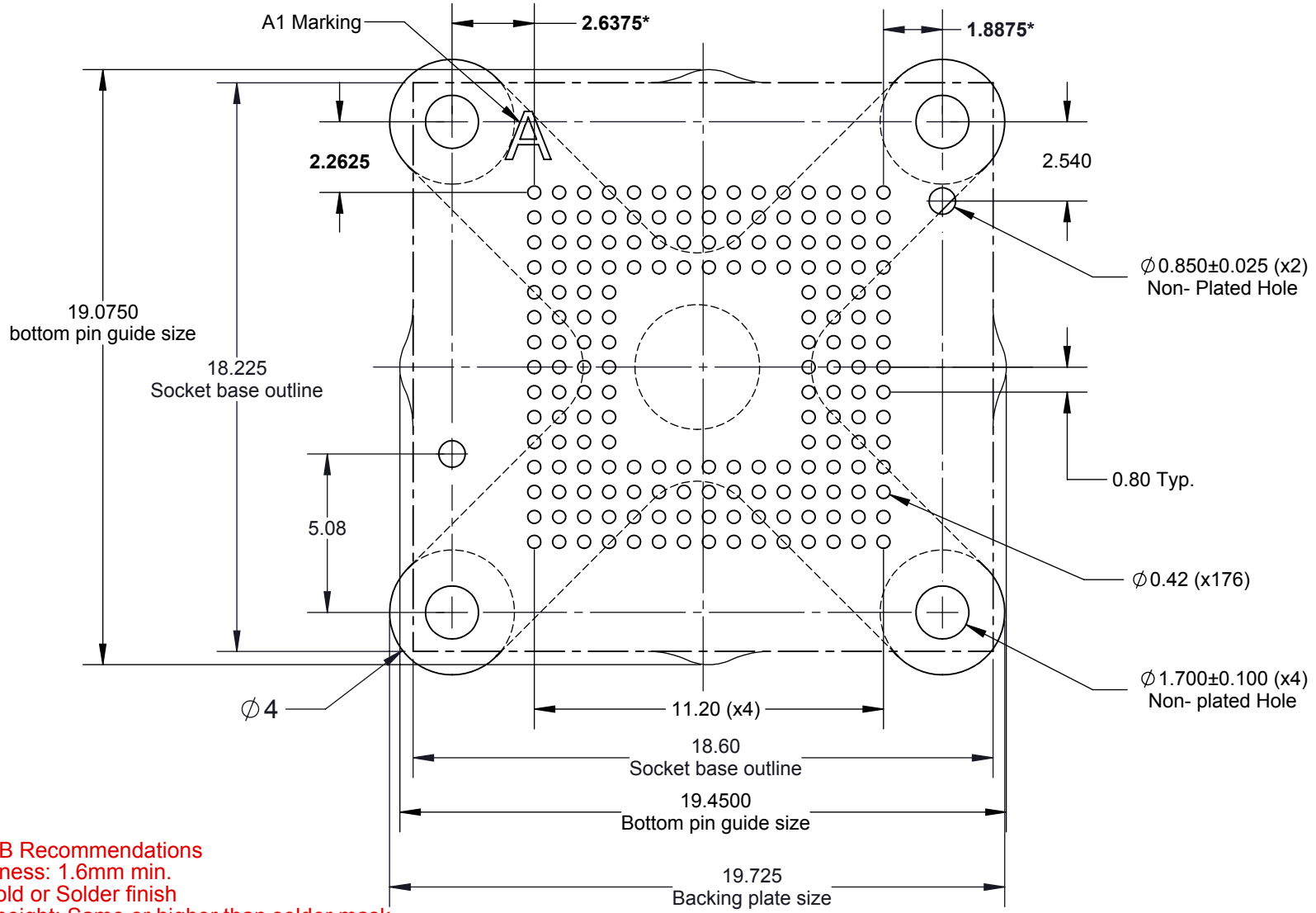
SBT-BGA176 Socket, 13x13mm 0.8mm pitch 15x15 array

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.

SBT-BGA-6525 Drawing	Material: N/A Finish: N/A Weight: 10.36	STATUS: Released	SHEET: 1 OF 5	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: SBT-BGA-6525 Dwg	DATE: 03/18/2015	

***Note: BGA pattern is not symmetrical with respect to the mounting holes.**



Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish
PCB Pad height: Same or higher than solder mask

Description: Recommended PCB Layout

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

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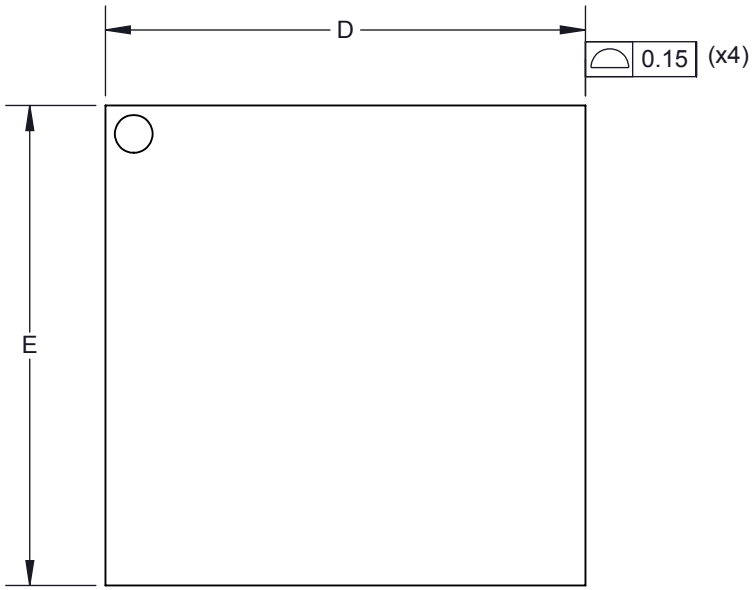
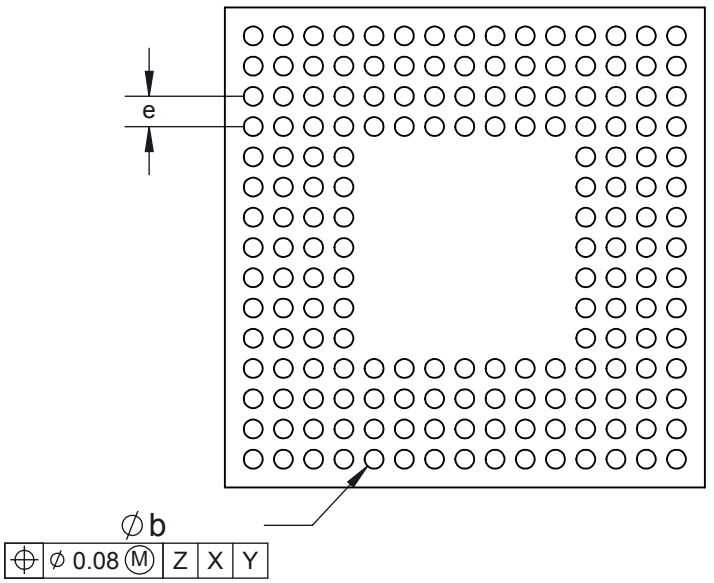
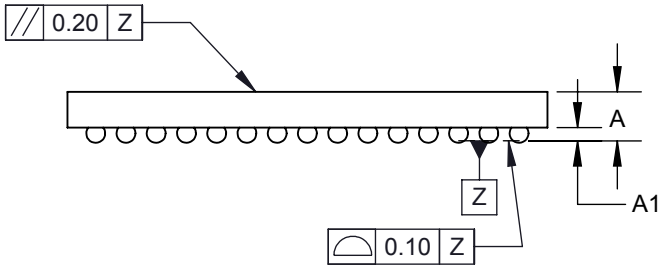
SBT-BGA-6525 Drawing	Material: N/A Finish: N/A Weight: 10.36	STATUS: Released	SHEET: 2 OF 5	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 5:1
		FILE: SBT-BGA-6525 Dwg	DATE: 03/18/2015	

Ironwood Package Code: BGA176K







DIM	MIN	NOM	MAX
A			1.40
A1	0.35	0.40	0.45
b	0.45	0.50	0.55
D		13.0 BSC	
E		13.0 BSC	
e		0.8 BSC	

Array: 15 x 15

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: BGA

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

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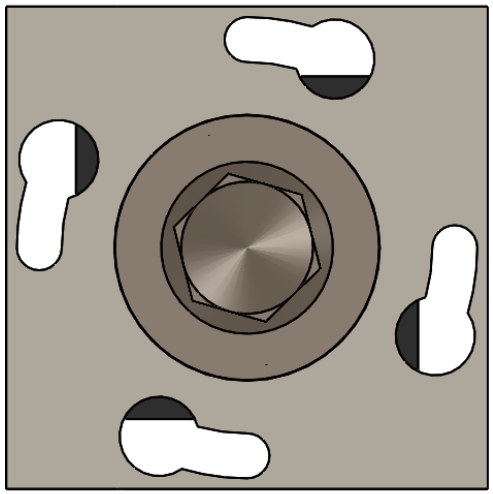
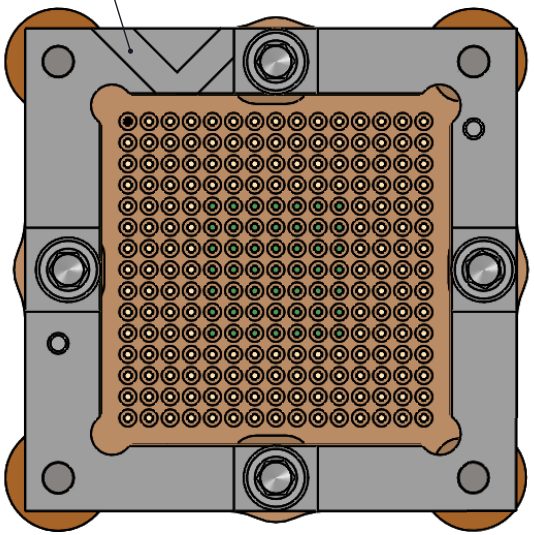
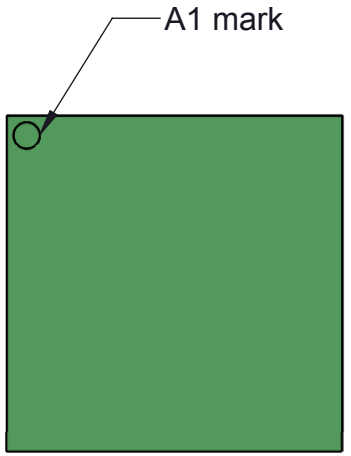
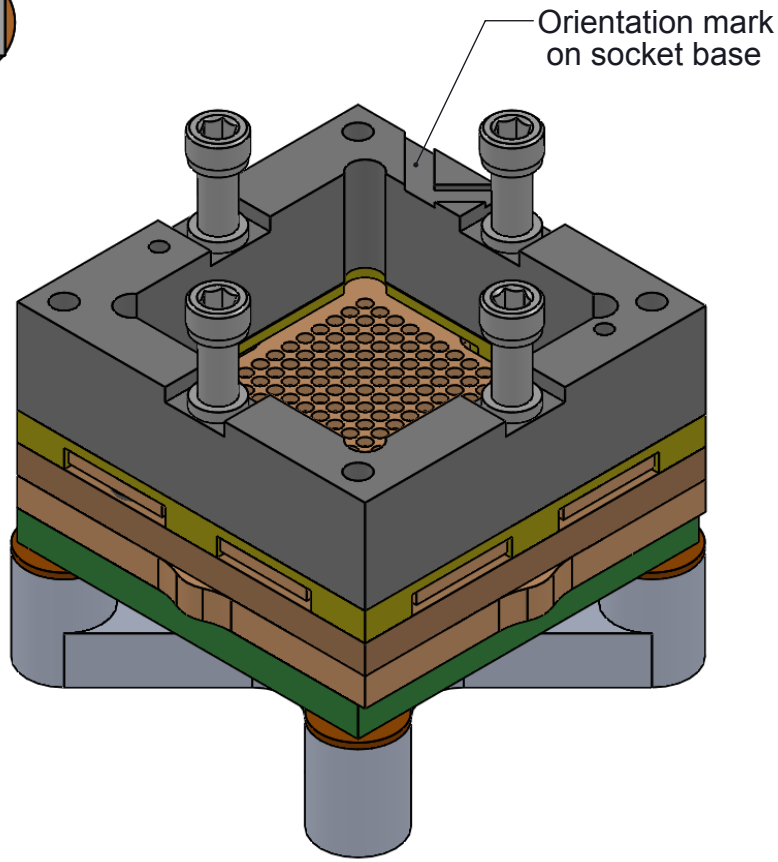
		FILE: SBT-BGA-6525 Dwg	DATE: 03/18/2015	







TOP view
Socket IC pocket



Description: socet 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.

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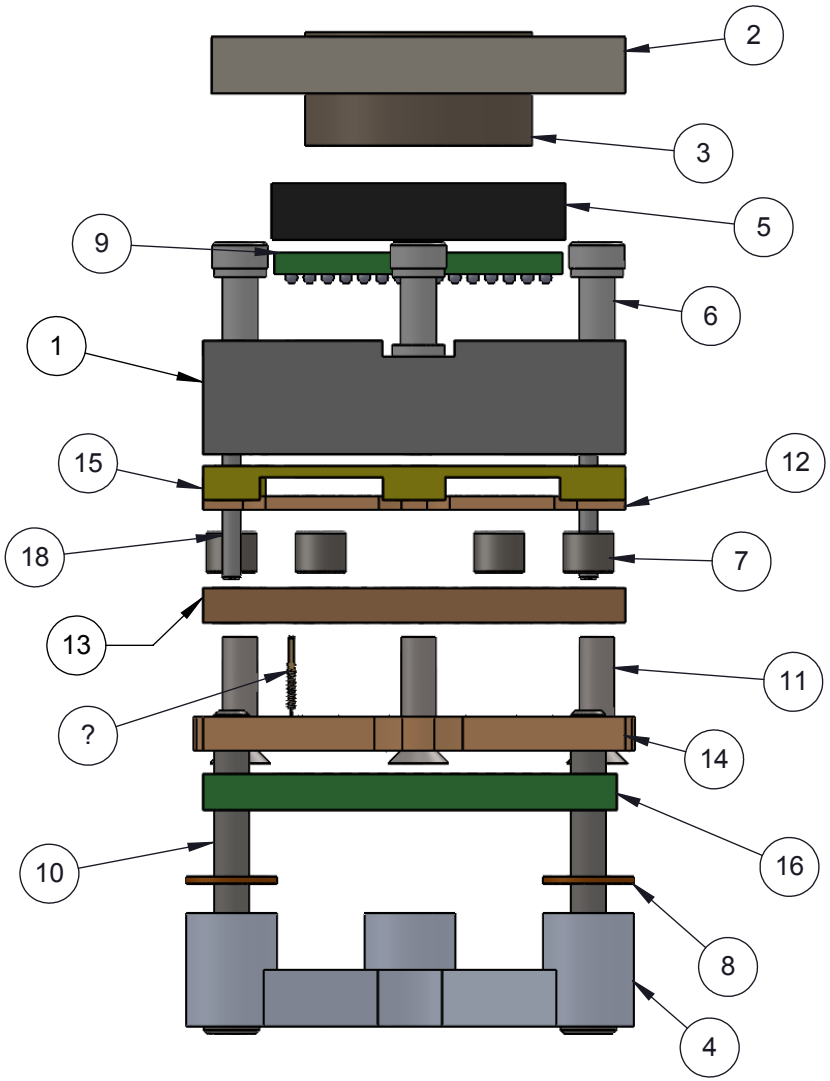
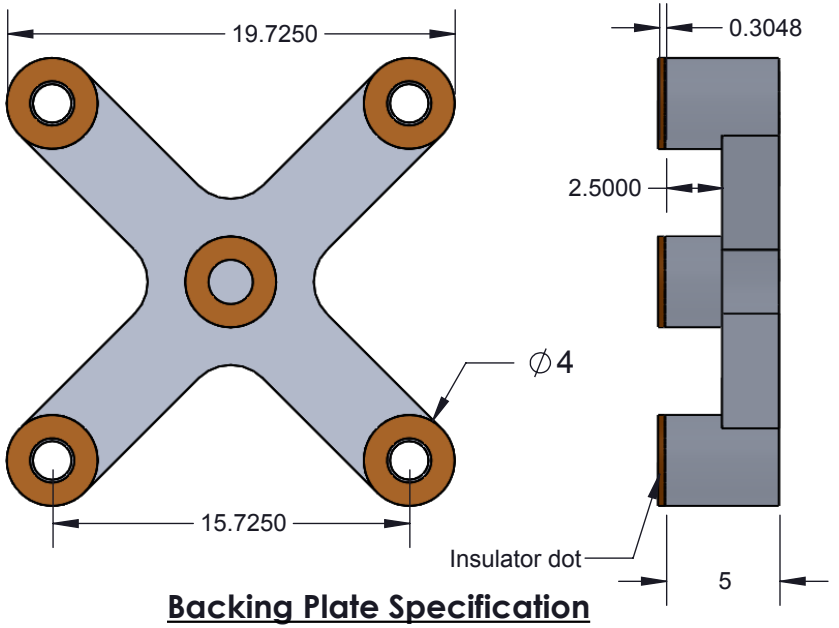
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3.5:1
		FILE: SBT-BGA-6525 Dwg	DATE: 03/18/2015	



ITEM NO.	DESCRIPTION	Material
1	Socket Base, SBT-BGA 13 X 13; 0.375 shift	7075-T6 Aluminum Alloy
2	SBT Ni plt socket lid 13mm	7075-T6 Aluminum Alloy
3	Compression Screw M10	7075-T6 Alumium Alloy
4	13x13mm Clamshell Backing Plate	7075-T6 Aluminum Alloy
5	Compression Plate, 12.95 X 12.95	7075-T6 Aluminum Alloy
6	#0-80 Shoulder Screw, 0.062" thread length	Stainless Steel (303)
7	Floating Guide Spring	Alloy Steel (SS)
8	Insulating washer, 4mm OD.	Kapton Polyimide/Cirlex
9	Test CHIP 15x15 array, 0.8mm pitch 13x13mm IC BGA176	FR4 High temp
10	#0-80 x 0.5, SH Cap Screw	18-8 Stainless Steel
11	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
12	Floating Guide - 15x15 array, 0.8mm pitch, 0.375 shift	Semitron MDS 100
13	Middle Pogo Guide - 15x15 , 0.8mm pitch, 0.375 shift	Semitron MDS 100
14	Bottom Pogo Guide - 15x15 array, 0.8mm pitch, 0.375 shift	Semitron MDS 100
15	SBT-BGA IC guide 13x13mm	Torlon 4203
16	Target PCB 15x15 array, 0.8mm pitch 13x13mm IC	FR4 High temp
17	SBT Pin, SBT-BGA 0.5mm-0.8mm	
18	Dowel pin, 1/32" x 5/16", SS	Chrome Stainless Steel

Pin Detail
Scale 16:1



Backing Plate Specification

Description: Socket Material Info

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

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Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: SBT-BGA-6525 Dwg	DATE: 03/18/2015	