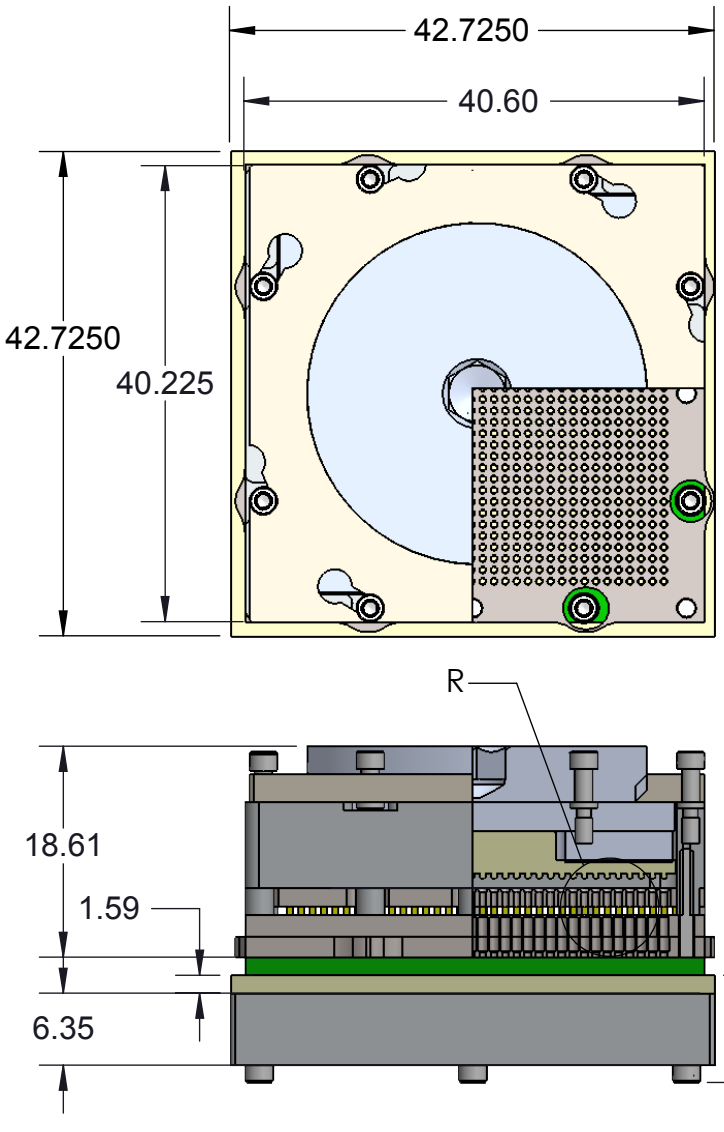
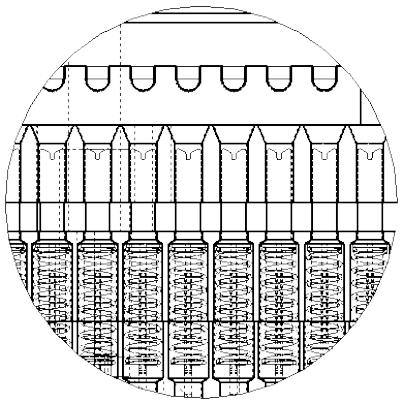
SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

Features

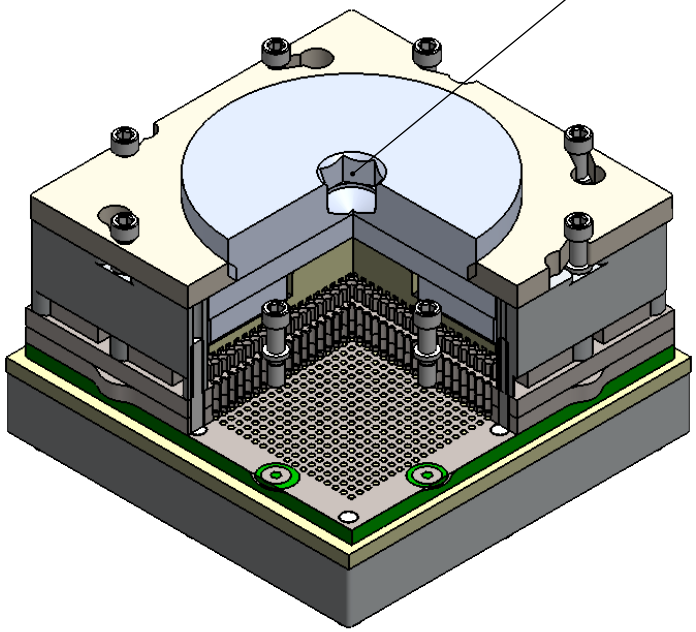
- Wide temperature range (-55C to +180C)
- High current capability (up to 8A)
- Excellent signal integrity at high frequencies
- Low and stable contact resistance for reliable production yield
- Highly compliant to accommodate wide co-planarity variations
- Automated probe manufacturing enables low cost and short lead time





DETAIL R
SCALE 6 : 1

Required Torque: 23 in-lbs
Recommended Tool: TL-Torquedriver-03



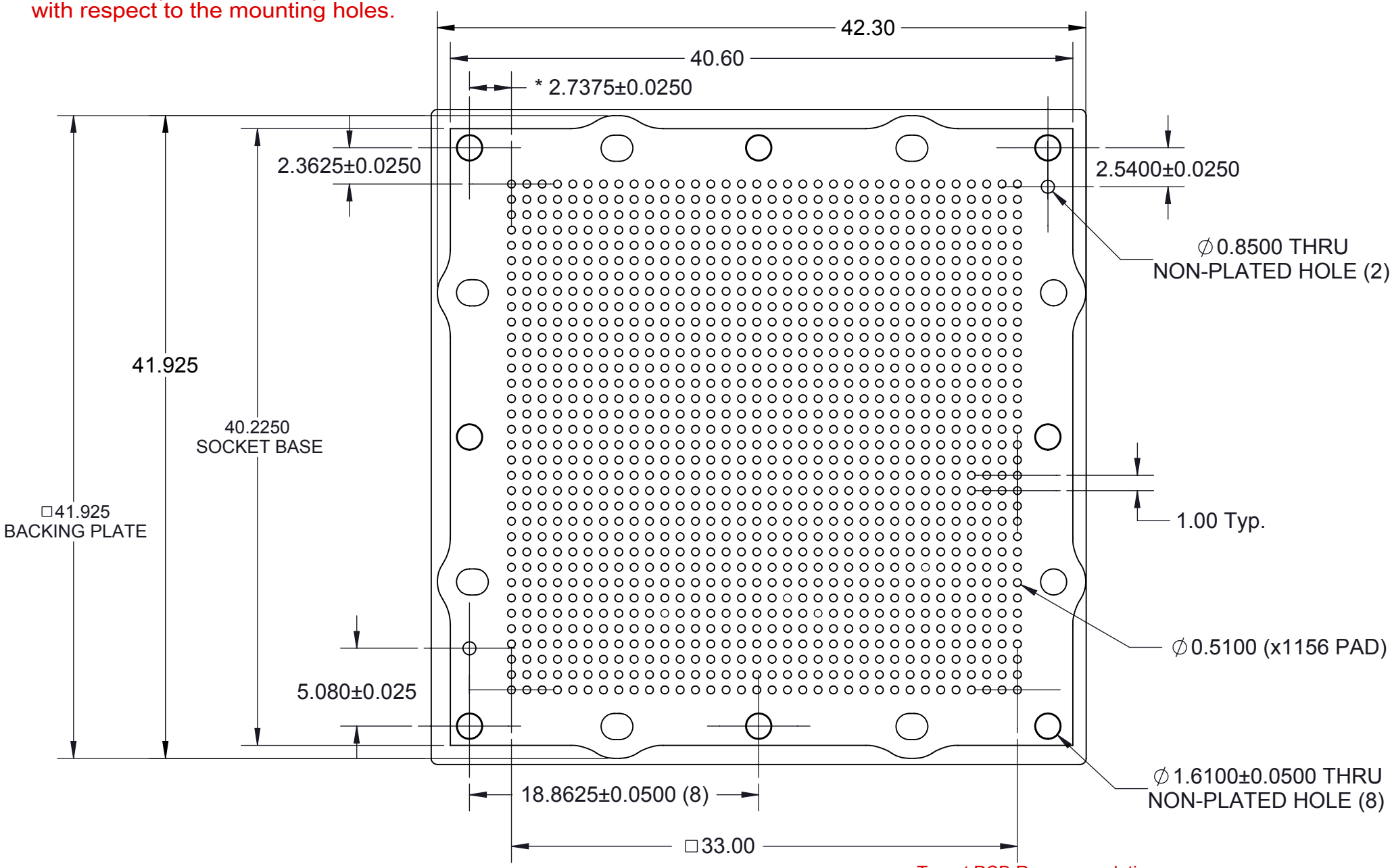
Description: SBT-BGA1156 Socket, 35x35, 1.00mm, 34 x 34 Array

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-6000 Drawing	Material: Material <not specified>	STATUS: Released	SHEET: 1 OF 4	REV. G
Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish:	ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 2:1
	Weight: 94.36	FILE: SBT-BGA-6000	DATE: 4/26/2010	

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



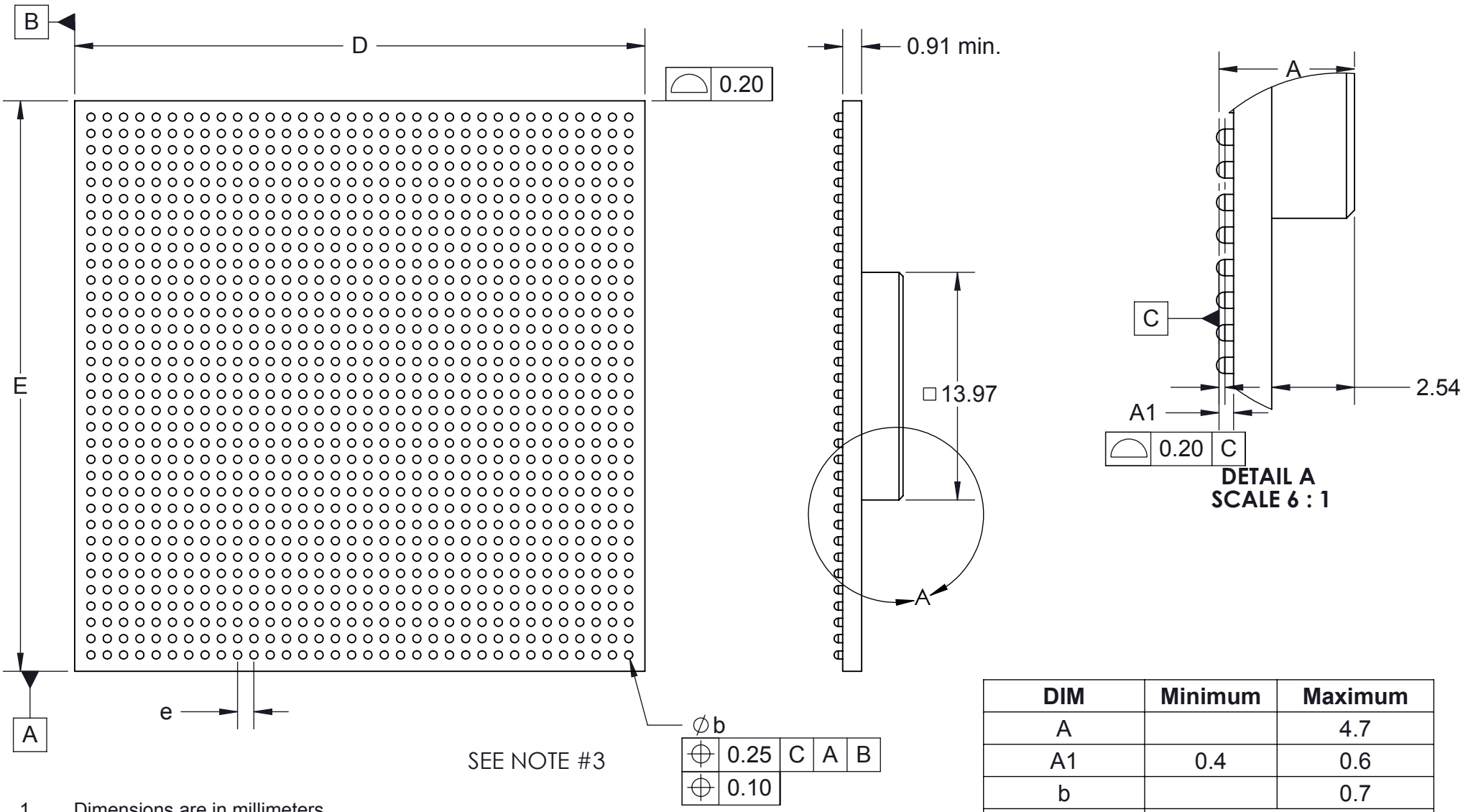
Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish
PCB Pad height: Same or higher than solder mask

Description: Recommended PCB Layout

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

Tolerances: Hole diameters ±0.0254mm [±0.001"], Pitches (from true position) ±0.0762mm [±0.003"], substrate thickness tolerance ±10%, all other tolerances ±0.127mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

SBT-BGA-6000 Drawing	Material: Material <not specified>	STATUS: Released	SHEET: 2 OF 4	REV. G
 Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: Weight: 94.36	ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 3:1
		FILE: SBT-BGA-6000	DATE: 4/26/2010	



DIM	Minimum	Maximum
A		4.7
A1	0.4	0.6
b		0.7
D	35.0 BSC	
E	35.0 BSC	
e	1.00 BSC	
ARRAY SIZE	34 X 34	
PIN COUNT	1156	

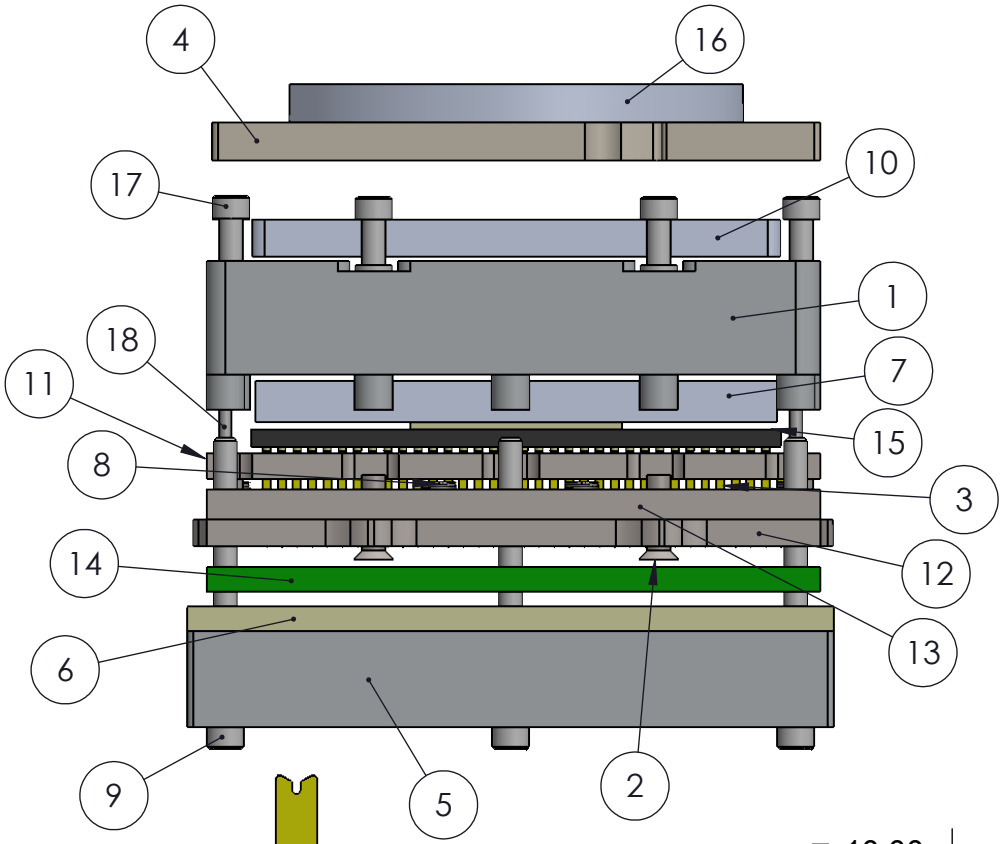
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane C.
4. Datum C (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

Description: Compatible BGA

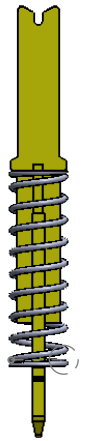
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters ±0.0254mm [±0.001"], Pitches (from true position) ±0.0762mm [±0.003"], substrate thickness tolerance ±10%, all other tolerances ±0.127mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

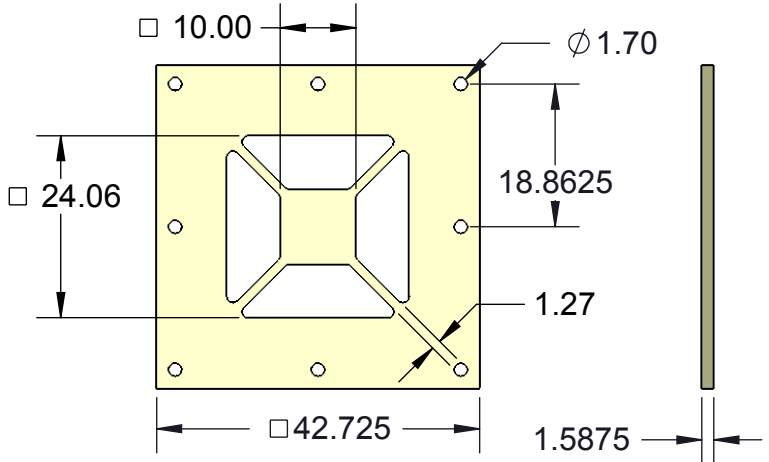
SBT-BGA-6000 Drawing	Material: Material <not specified>	STATUS: Released	SHEET: 3 OF 4	REV. G
Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: Weight: 94.36	ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 2:1
		FILE: SBT-BGA-6000	DATE: 4/26/2010	



ITEM NO.	Description	Material
1	SBT socket base, Ni Plated, 35x35mm, 0.375 shift	7075-T6, Plate (SS)
2	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
3	Pogo Pin, 1mm Pitch SBT BGA pin	
4	Socket Lid 35mm GHz swivel	7075-T6 Aluminum Alloy
5	CBT/SBT Ni plt Backing Plate 35x35mm IC	7075-T6, Plate (SS)
6	Insulation Plate 35x35mm IC	FR4 Standard
7	Compression plate 35mm with cutout	7075-T6 Aluminum Alloy
8	Floating Guide Spring	Alloy Steel (SS)
9	#0-80 X .75 LG, SOC HD CAP SCREW, 18-8 SS	Stainless Steel (18-8)
10	SBT Ni plt Compression Plate, 35x35mm IC	7075-T6 Aluminum Alloy
11	Floating Guide 35mm SBT-BGA1156	PEEK Ceramic filled
12	Bottom Guide SBT-BGA1156	PEEK Ceramic filled
13	Middle Guide SBT-BGA1156	PEEK Ceramic filled
14	Test PCB 34x34 array 1mm pitch	High Temp FR4
15	Test Chip 35mm 34x34 array	High Temp FR4
16	Compression Screw, M30	7075-T6 Aluminum Alloy
17	#0-80 Shoulder Screw, 2.29mm thread length	Stainless Steel (303)
18	Dowel Pin, 1/32" x 3/8", SS	Chrome Stainless Steel



SBT PIN
10:1 scale



INSULATION PLATE DETAIL

Rev	Date	Initials	Description
A	04/26/10	VP	Original
B	5/19/10	VP	Changed socket base screw and added compression plate M1065
C	6/28/10	MR	Replaced anodized components with nickel plated components
D	10/18/11	VP	Update layout page
E	3/16/15	SF	Added recommended torque in page 1
F	2/2/16	MR	Replace flat head screws
G	7/5/16	MR	added dowel pins per redline

Description: Assembly, Insulation Plate

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

Tolerances: Hole diameters ±0.0254mm [±0.001"], Pitches (from true position) ±0.0762mm [±0.003"], substrate thickness tolerance ±10%, all other tolerances ±0.127mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

SBT-BGA-6000 Drawing

Tele: (800) 404-0204
www.ironwoodelectronics.com

Material: Material <not specified>
Finish:
Weight: 94.36

STATUS: Released	SHEET: 4 OF 4	REV. G
ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 3:2
FILE: SBT-BGA-6000	DATE: 4/26/2010	