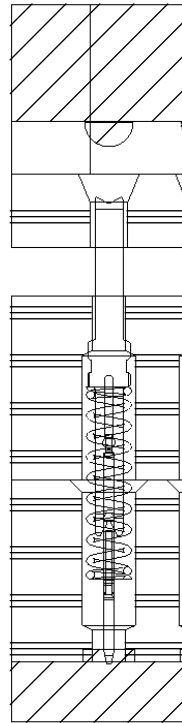
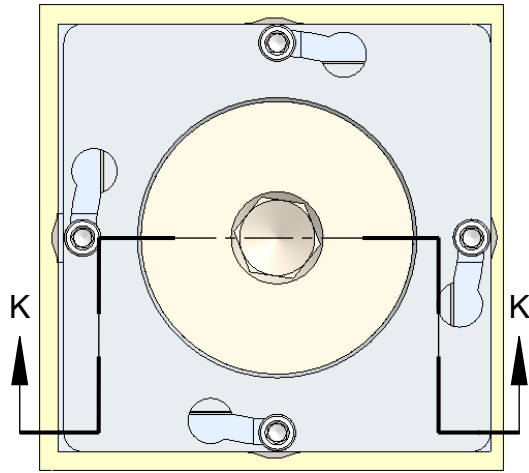


SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

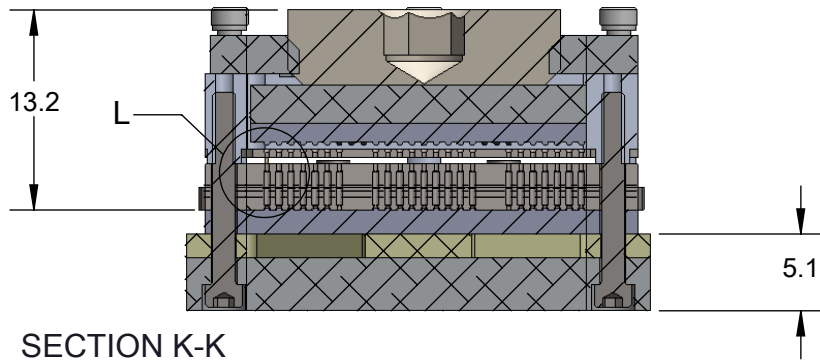
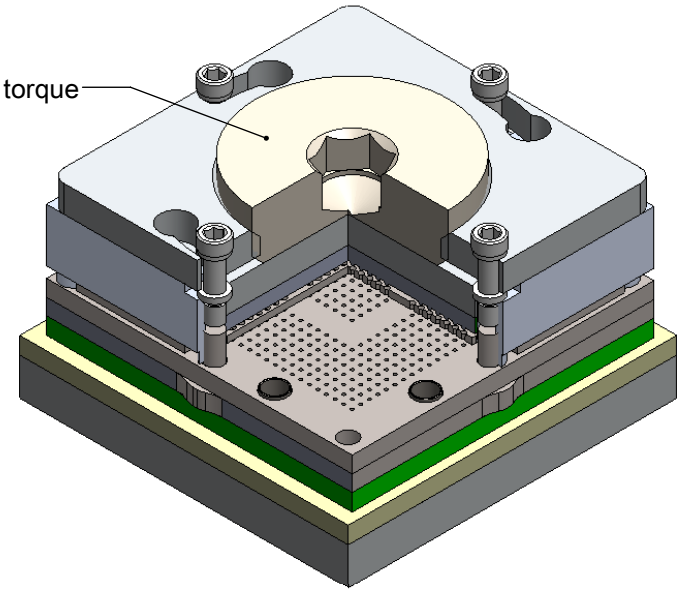
FEATURES:

- 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

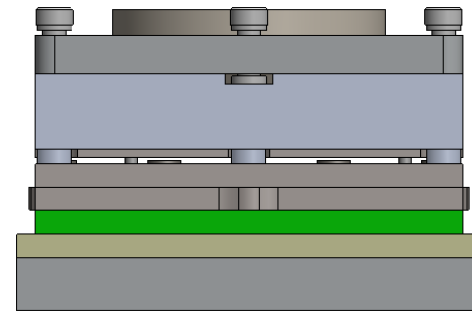


DETAIL L
SCALE 16 : 1

10 in. lb. recommended torque




SECTION K-K



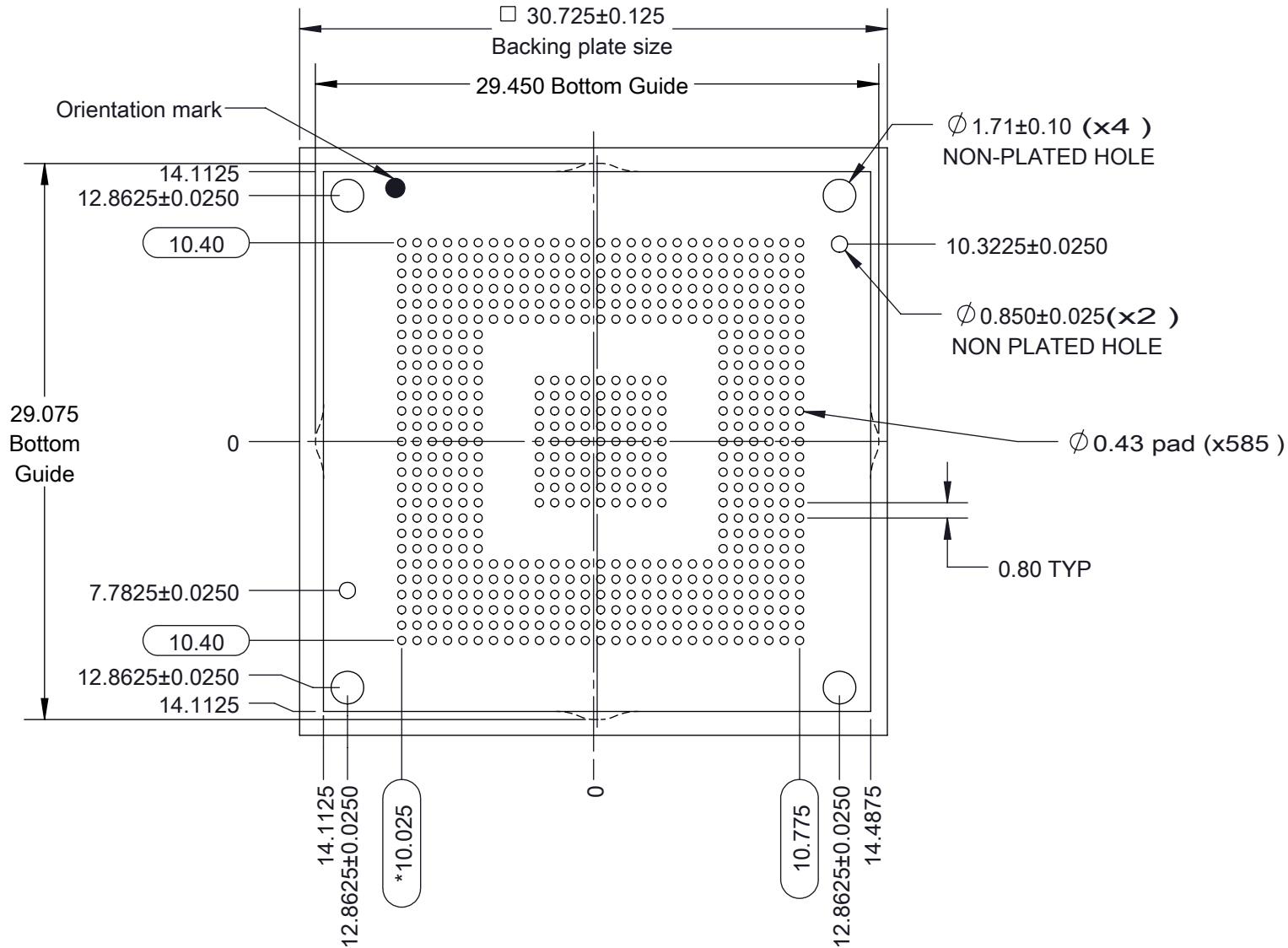
Description: SBT-BGA585 for 23x23mm 0.8mm pitch 27x27 array

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.

 SBT-BGA-6515 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 31.51	STATUS: Released ENG: V. Panavala FILE: SBT-BGA-6515	SHEET: 1 OF 5 DRAWN BY: V. Panavala DATE: 6/6/13	REV. B SCALE: 2:1

***Note: BGA pattern is not symmetrical with respect to the mounting holes. It is offset 0.375mm to the right of center.**




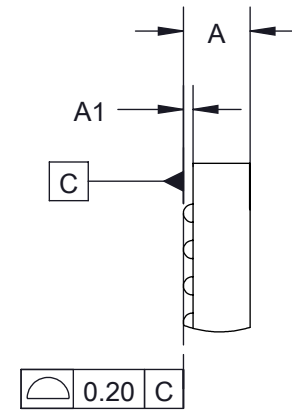
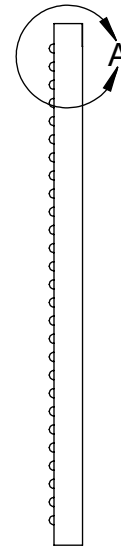
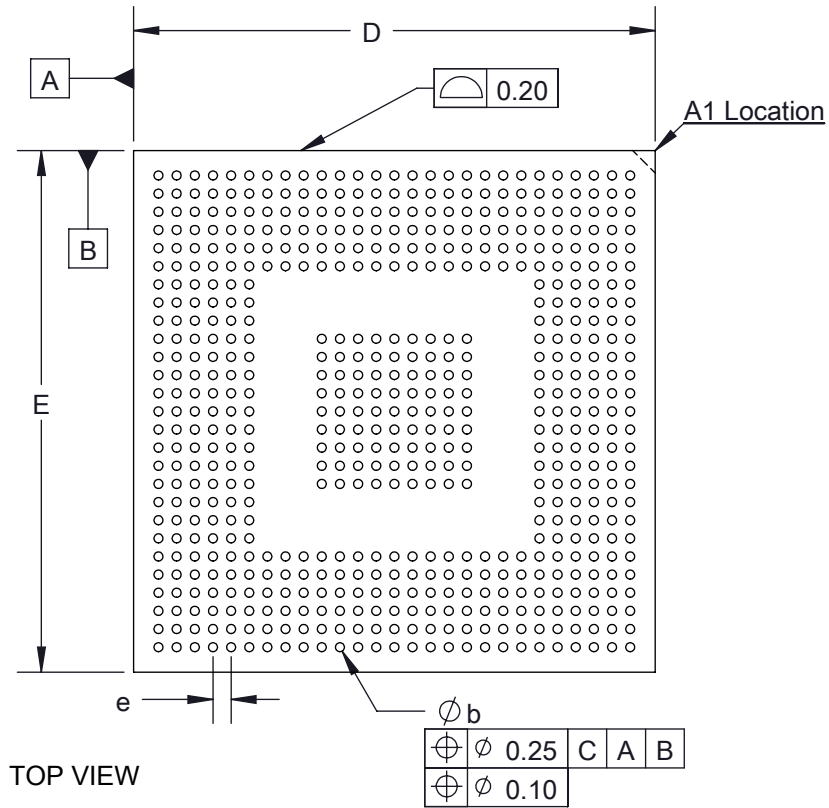
Description: Recommended PCB Layout

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.

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

 SBT-BGA-6515 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 31.51	STATUS: Released	SHEET: 2 OF 5	REV. B
		ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 3:1
		FILE: SBT-BGA-6515	DATE: 6/6/13	



DIM	Minimum	Maximum
A		2.7
A1	0.20	
b		0.45
D	23.00 BSC	
E	23.00 BSC	
e	0.80 BSC	
ARRAY	27 X 27	
PIN COUNT	585	


Ironwood Package code: BGA585B

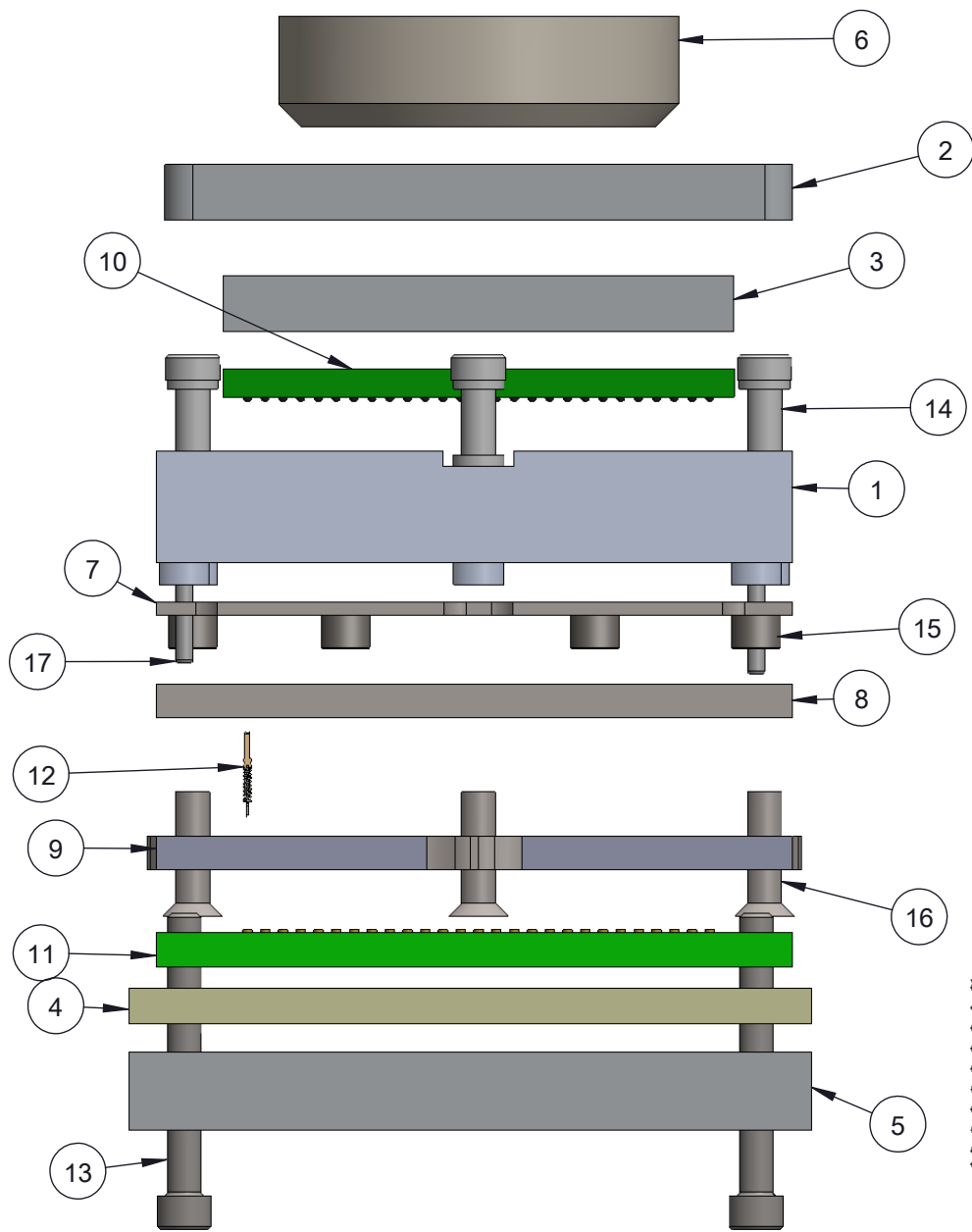
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane C.
4. Datum C (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

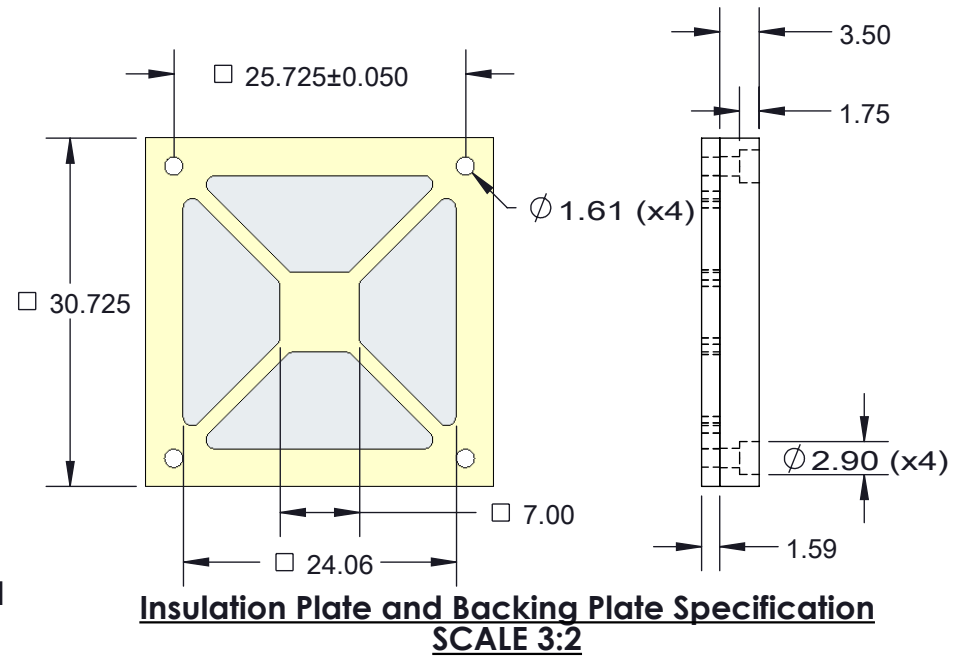
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [$\pm 0.001"$], Pitches (from true position) $\pm 0.025\text{mm}$ [$\pm 0.001"$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$ [$\pm 0.005"$] unless stated otherwise. Materials and specifications are subject to change without notice.

 SBT-BGA-6515 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 31.51	STATUS: Released	SHEET: 3 OF 5	REV. B
		ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 3:1
		FILE: SBT-BGA-6515	DATE: 6/6/13	



ITEM NO.	DESCRIPTION	Material
1	Socket Base SBT BGA 23x23mm 0.375 SFT	7075-T6 Aluminum Alloy
2	SBT Ni plt skt lid 23mm	7075-T6, Plate (SS)
3	SBT COMP PLT NI PLT 23MM CSTM	7075-T6, Plate (SS)
4	Insulation Plate 23mm IC	FR4 Standard
5	SBT/CBT NI PLT BACKING PLT 23MM	7075-T6, Plate (SS)
6	Compression Screw, M18	7075-T6 Aluminum Alloy
7	Floating Guide 23x23mm 0.8mm 27x27 array	PEEK Ceramic filled
8	Middle Pogo Guide 23x23mm 0.8mm 27x27 array	PEEK Ceramic filled
9	Bottom Pogo pin Guide 23x23mm 0.8mm 27x27 array	PEEK Ceramic filled
10	Test Chip BGA585 23mm 0.8mm pitch	Material <not specified>
11	Target PCB for 23x23mm 0.8mm 27x27 array	Material <not specified>
12	SBT Pin, SBT-BGA 0.5mm-0.8mm	
13	#0-80 x 0.5, SH Cap Screw	Alloy Steel
14	#0-80 Shoulder Screw, 0.062" thread length	Stainless Steel (303)
15	Floating Guide Spring	Alloy Steel (SS)
16	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
17	Dowel pin, 1/32" x 5/16", SS	Chrome Stainless Steel

SBT PIN
Scale: 16:1




Insulation Plate and Backing Plate Specification
SCALE 3:2

Description: Socket Assy, Insulation Plate

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.


 SBT-BGA-6515 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 31.51	STATUS: Released	SHEET: 4 OF 5	REV. B
		ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 3:1
		FILE: SBT-BGA-6515	DATE: 6/6/13	

Rev	Date	Initials	Description
B	2/25/15	RP/MR	Changed spring pin and guides to new design, dowel pin protrusion adjusted, if needed, metal screws replaced with plastic screws, if needed. Contact Ironwood for details.

Description: Revisions

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.

 SBT-BGA-6515 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Finish: Weight:	STATUS: Released	SHEET: 5 OF 5	REV. B
		ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 3:1
		FILE: SBT-BGA-6515	DATE: 6/6/13	