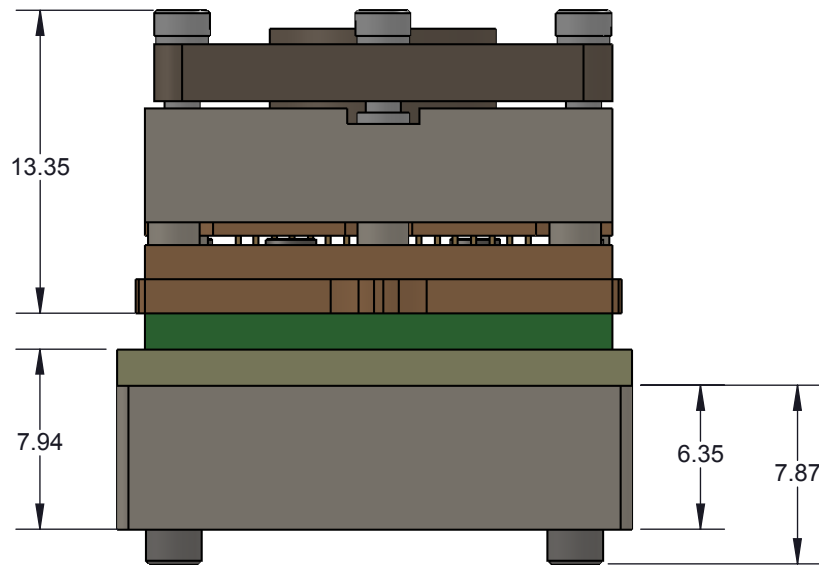
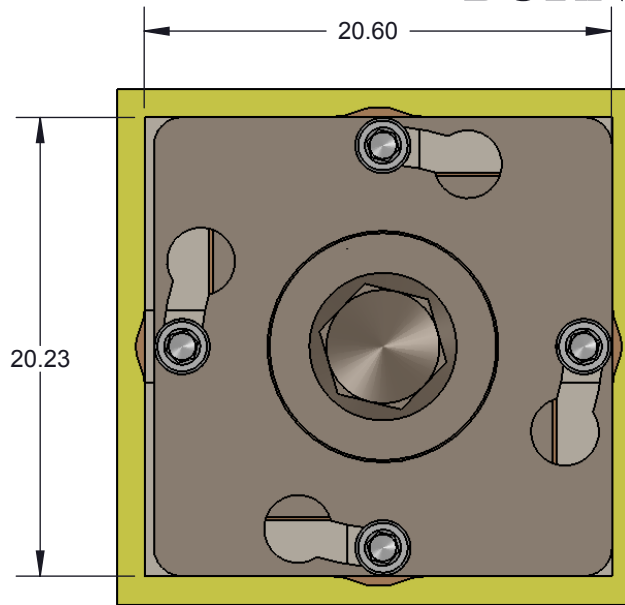


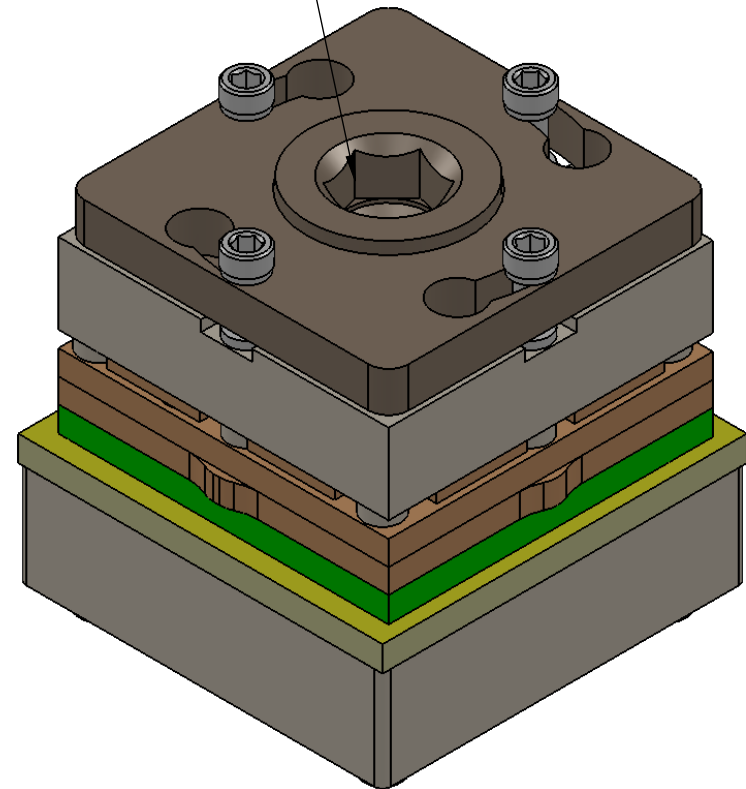
SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



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


Tighten until compression screw hits hard stop



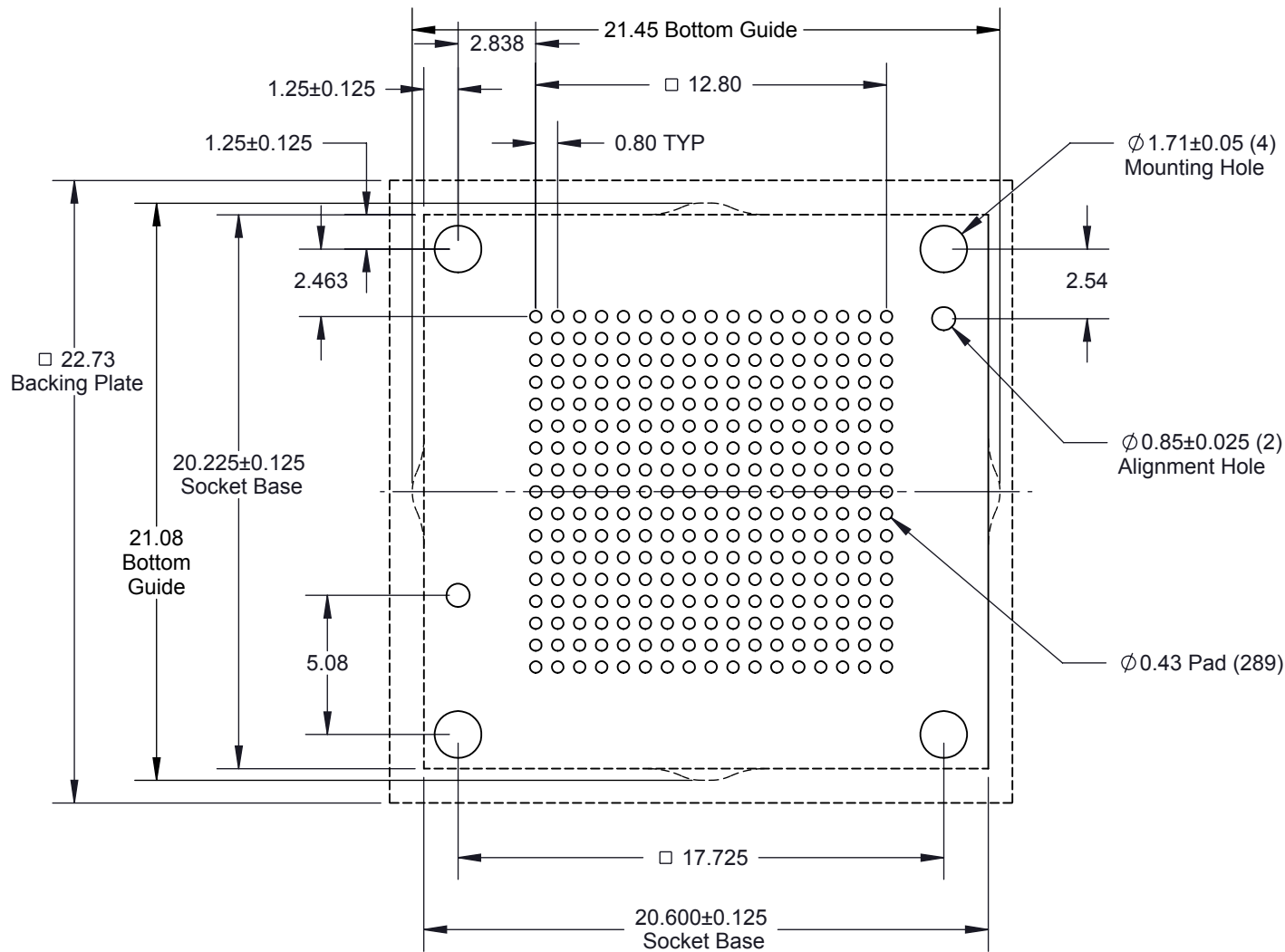
Description: SBT-BGA Socket, 15 X 15, 0.8mm, 17 X 17 Array

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-6502 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: ERROR!Material Finish: ERROR!Finish Weight: 21.18	STATUS: Released	SHEET: 1 OF 5	REV. E
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: SBT-BGA-6502 Dwg	DATE: 03/29/2011	

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



Description: SBT-BGA Socket, 15 X 15, 0.8mm, 17 X 17 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.

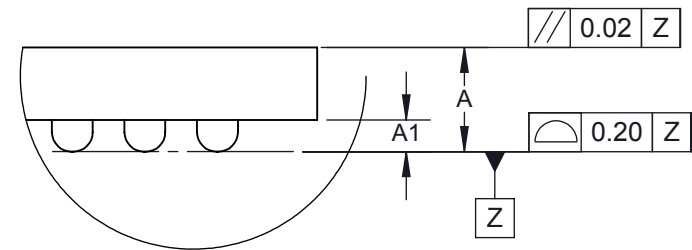
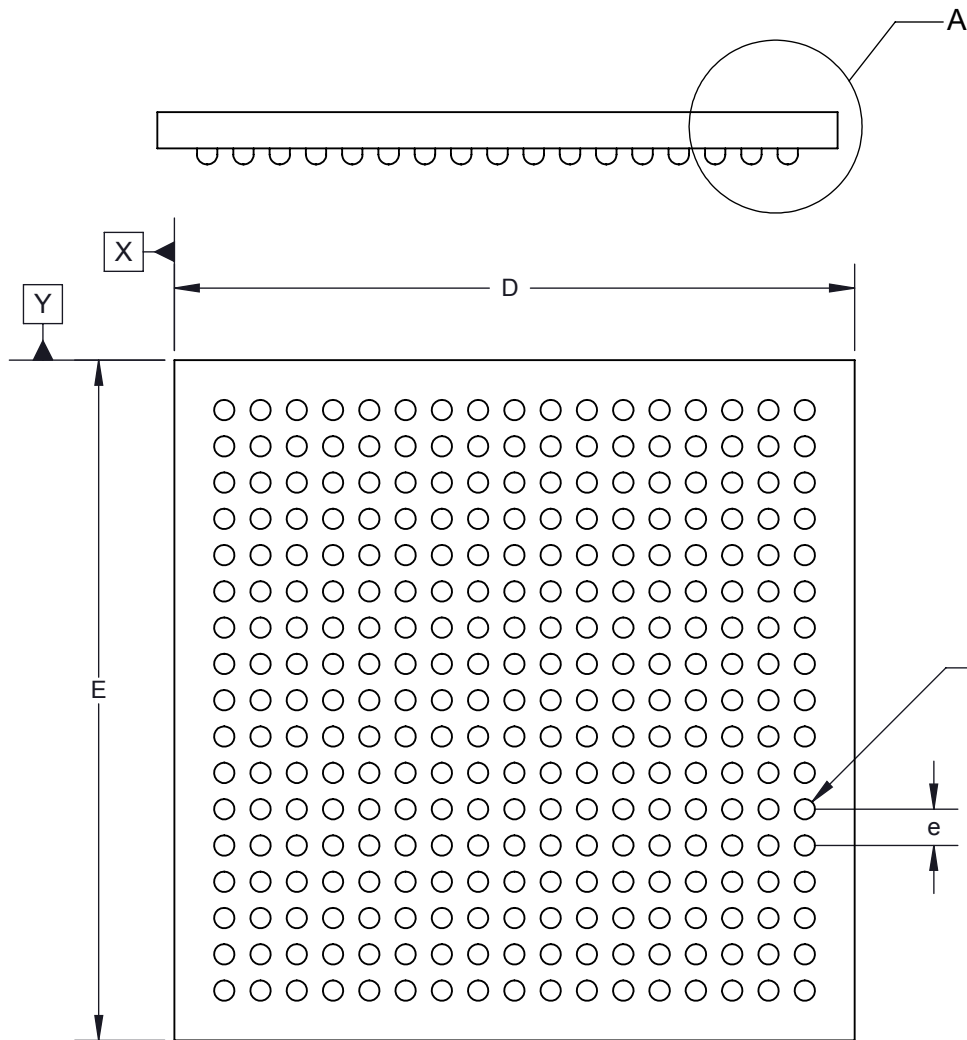
Target PCB Recommendations

Total thickness: 1.6mm min.

Plating: Gold or Solder finish

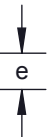
PCB Pad height: Same or higher than solder mask

 SBT-BGA-6502 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: ERROR!Material Finish: ERROR!Finish Weight: 21.18	STATUS: Released	SHEET: 2 OF 5	REV. E
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: SBT-BGA-6502 Dwg	DATE: 03/29/2011	



**DETAIL A
SCALE 12 : 1**

ϕb	$\phi 0.15$ (M)	Z	X	Y
	$\phi 0.08$ (M)	Z		



Ironwood Package Code: BGA289D

17 X 17 array


DIM	Minimum	Maximum
A		2.5
A1	0.2	0.34
b		0.45
D	15.0 BSC	
E	15.0 BSC	
e	0.80 BSC	

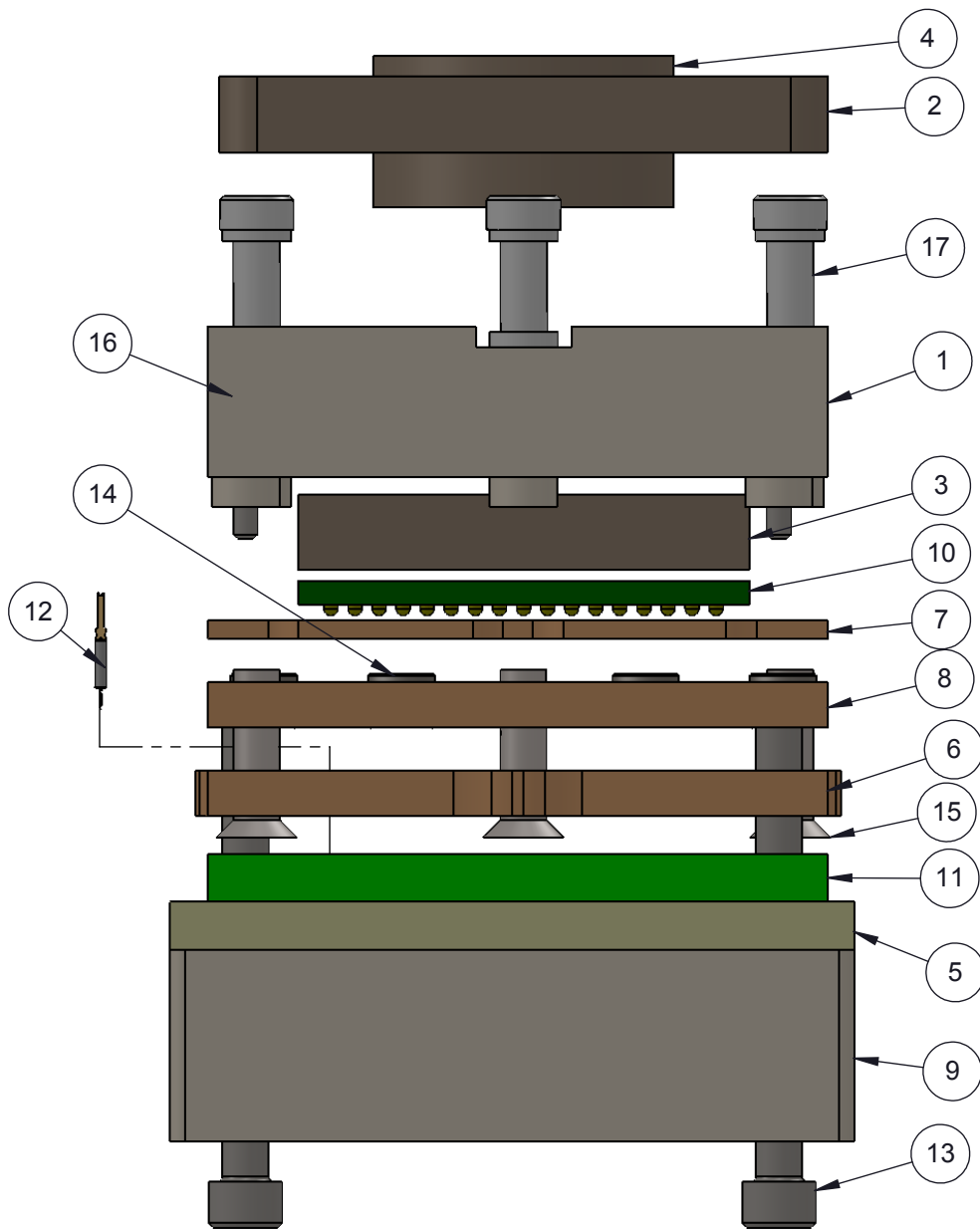
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

Description: SBT-BGA Socket, 15 X 15, 0.8mm, 17 X 17 Array

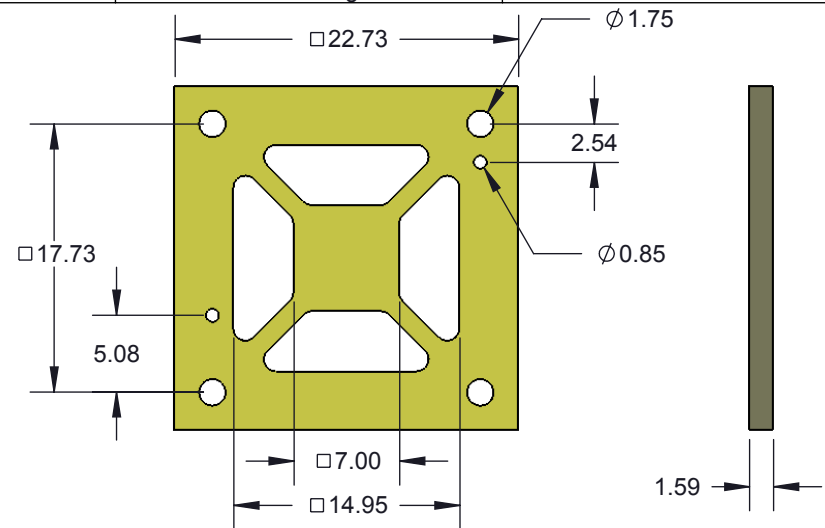
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

 SBT-BGA-6502 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: ERROR!Material Finish: ERROR!Finish Weight: 21.18	STATUS: Released ENG: S. Faiz FILE: SBT-BGA-6502 Dwg	SHEET: 3 OF 5 DRAWN BY: M. Raske DATE: 03/29/2011	REV. E SCALE: 2:1



ITEM NO.	DESCRIPTION	Material
1	Socket Base SBT BGA 15x15mm 0.375 SFT	7075-T6 Aluminum Alloy
2	Socket Lid, 15mm	7075-T6 Alumium Alloy
3	Compression Plate, 15mm x 15mm	7075-T6 Aluminum Alloy
4	Compression Screw M10	7075-T6 Alumium Alloy
5	Insulation Plate	FR4
6	Bottom Guide BGA289, 15mm, 0.8mm pitch, 17x17 array	Semitron MDS 100
7	Floating Guide 15mmsq. 0.8mm 17x17array	Semitron MDS 100
8	Middle Pogo Guide 15mm 0.8mm 17x17 array	Semitron MDS 100
9	SBT/CBT Ni Plated 15mm Backing Plate	7075-T6 Alumium Alloy
10	BGA196 ,0.8mm Pitch	FR4
11	Target PCB BGA289 17x17array 15mmx15mm 0.8mm pitch	FR4 High temp
12	SBT Pin, SBT-BGA 0.5mm-0.8mm	
13	#0-80 X .625 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
14	Floating Guide Spring	Alloy Steel (SS)
15	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
16	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
17	#0-80 Shoulder Screw, 0.062" thread length	Stainless Steel (303)




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INSULATION PLATE DETAIL


 SBT-BGA-6502 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: ERROR!Material	STATUS: Released	SHEET: 4 OF 5	REV. E
	Finish: ERROR!Finish	ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 3:1
	Weight: 21.18	FILE: SBT-BGA-6502 Dwg	DATE: 03/29/2011	

Rev	Date	Initials	Description
A	3/29/11	MR	Original
B	4/19/13	SF	Revised Compression screw.
C	9/24/13	GL	Added feet (1mm bosses) to Socket Base
D	02/19/14	DH	Changed current rating of pin
E	03/04/15	RP/MR	P-P196A was P-P149A, R3200 was R1391

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.

 <p>SBT-BGA-6502 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: Finish: Weight:</p>	STATUS: Released	SHEET: 5 OF 5	REV. E
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: SBT-BGA-6502 Dwg	DATE: 03/29/2011	