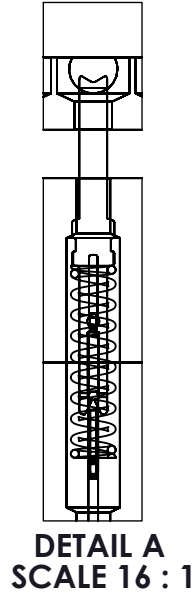
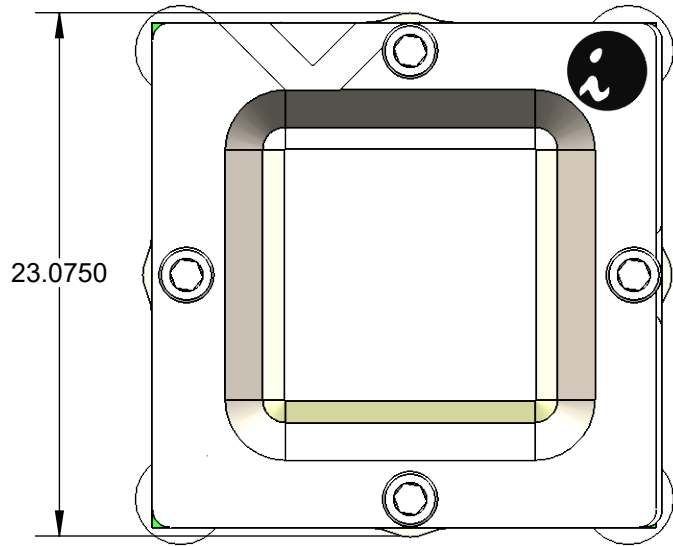
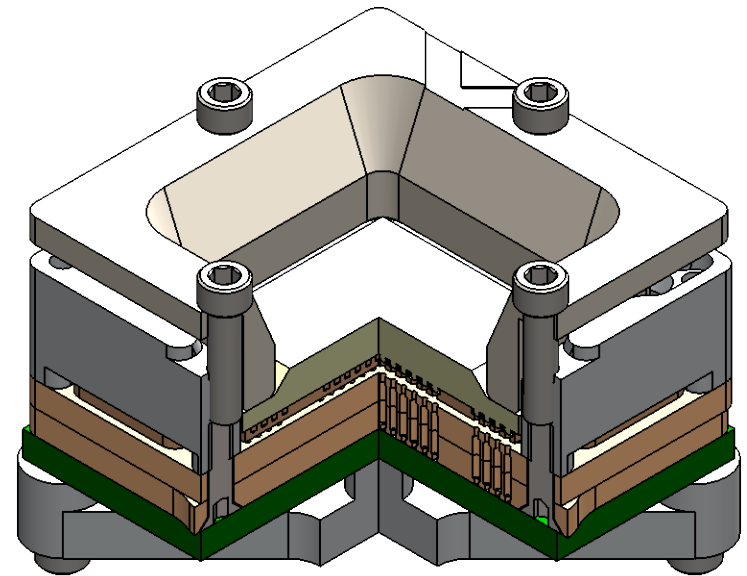
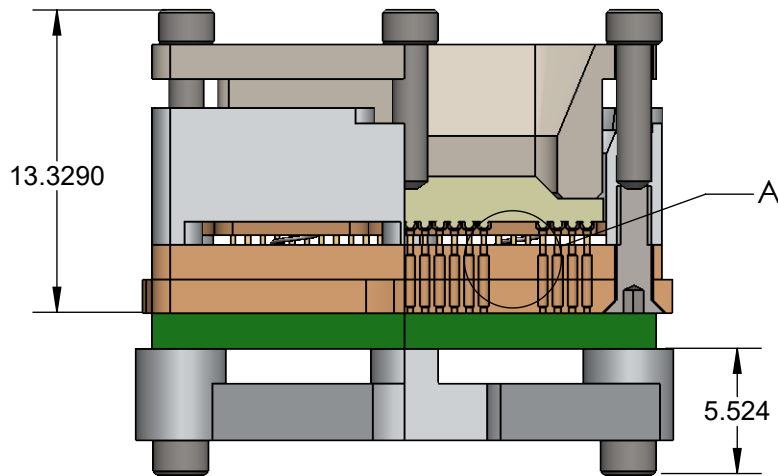


# SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



### 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



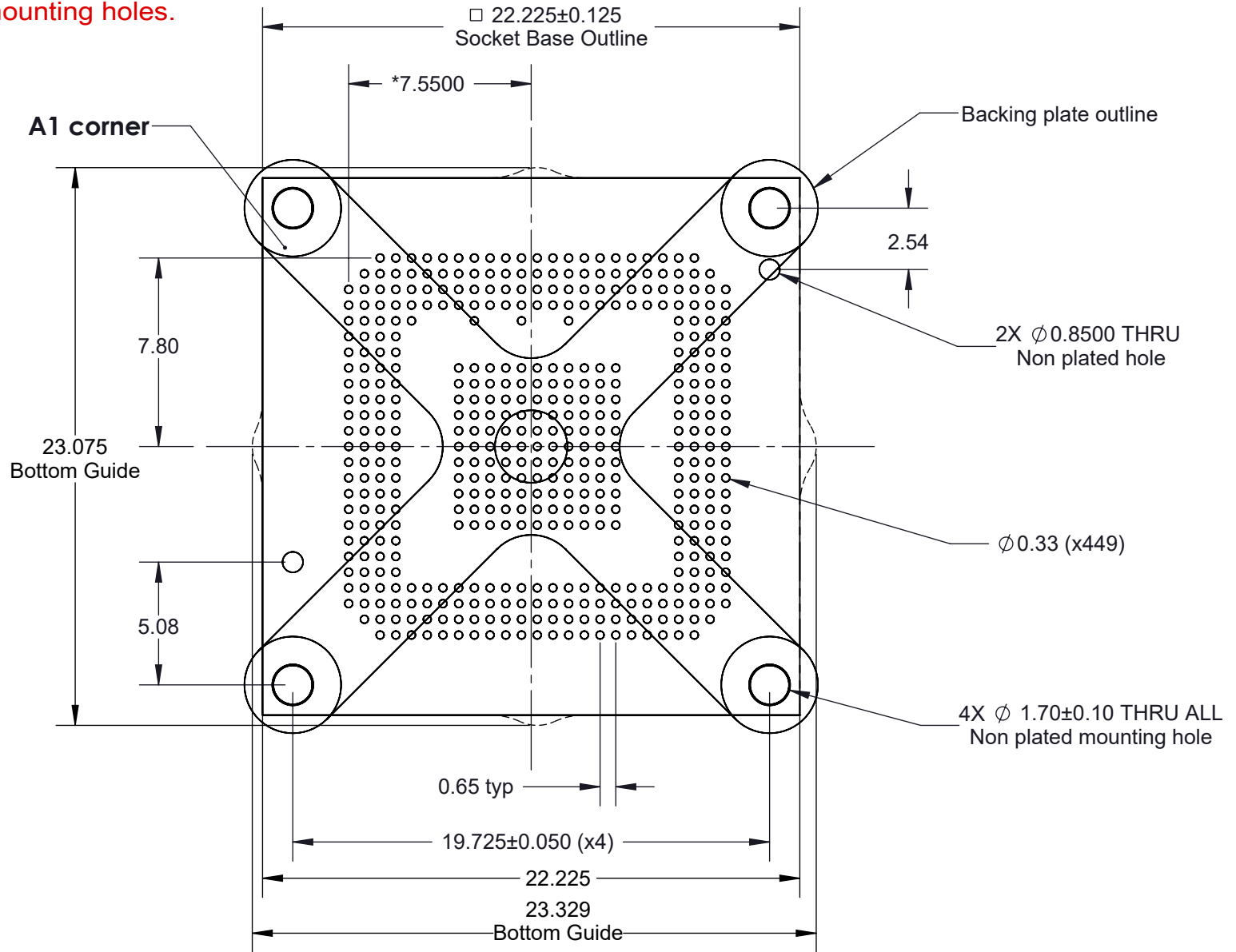
**Description:** SBT-BGA449 17x17mm 25x25 0.65mm; to match SBT-BGA-7146, Open top socket

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-BGA-7035 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified>	STATUS: Released	SHEET: 1 OF 4	REV. A
	Finish: 12.16	ENG: J. Vavra	DRAWN BY: M. Raske	SCALE: 3:1
	Weight: 12.16	FILE: SBT-BGA-7035 Dwg	DATE: 12/27/2016	

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




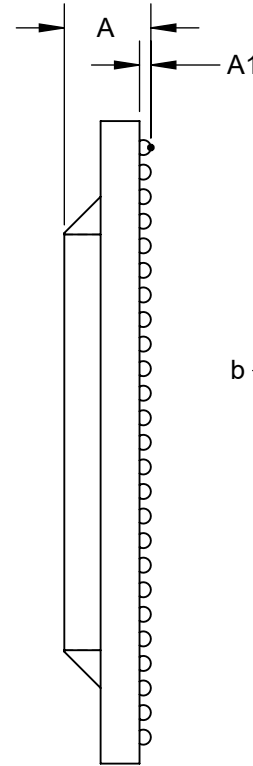
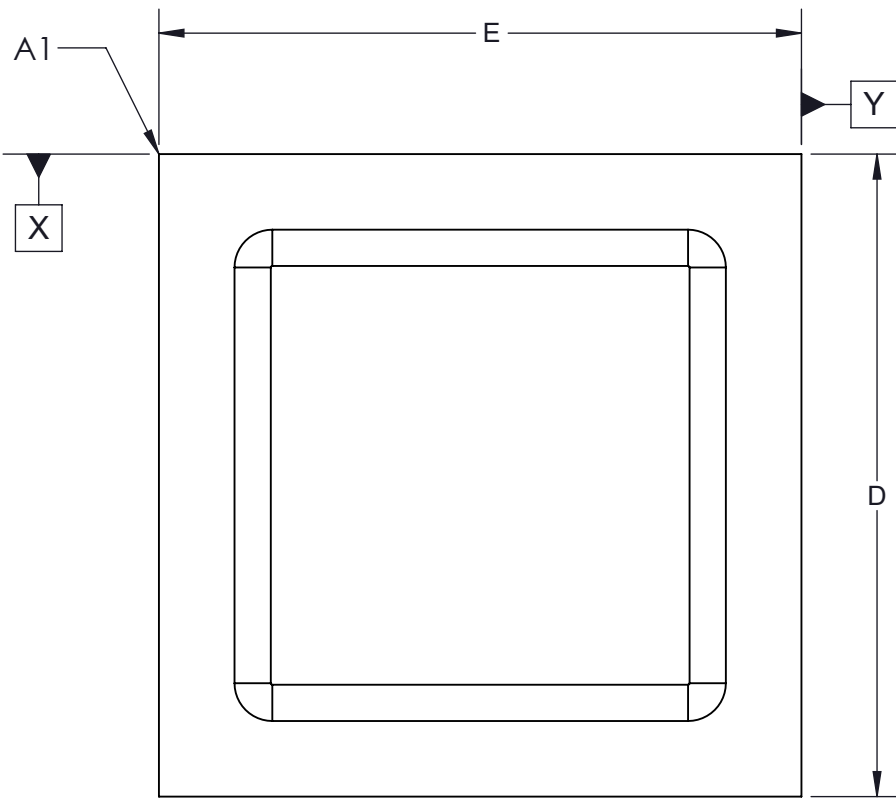
**Target PCB Recommendations**  
**Total thickness: 1.6mm min.**  
**Plating: Gold or Solder finish**  
**PCB Pad height: Same or higher than solder mask**

### Description: Recommended PCB Layout

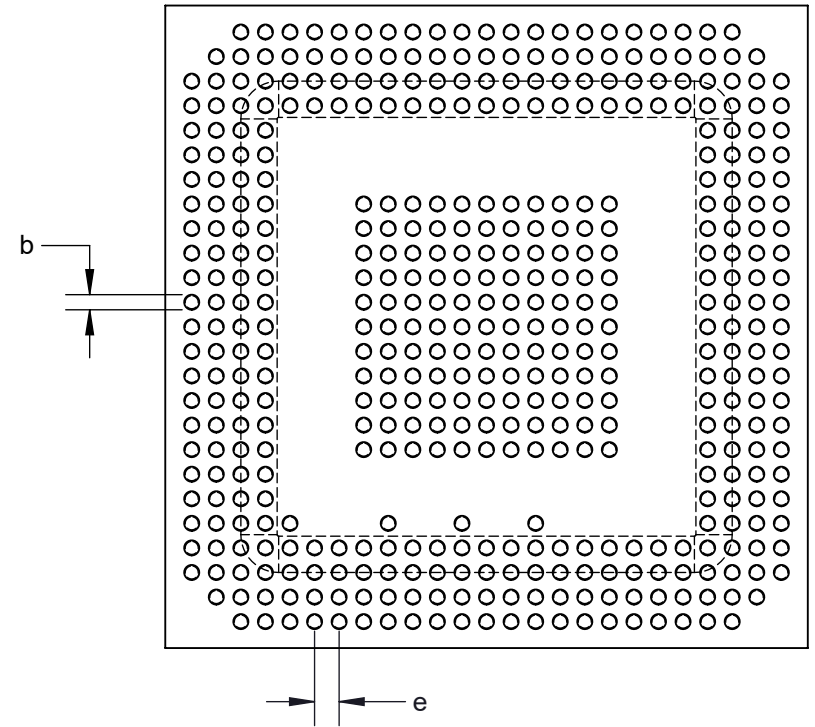
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters  $\pm 0.0254\text{mm}$  [ $\pm 0.001"$ ], 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-BGA-7035 Drawing</b> ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 12.16	STATUS: Released	SHEET: 2 OF 4	REV. A
		ENG: J. Vavra	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: SBT-BGA-7035 Dwg	DATE: 12/27/2016	



Ironwood Package Code: BGA449B



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.


DIM	Minimum	Maximum
A		2.32
A1	0.24	0.32
b	0.3	0.4
D	17.0 BSC	
E	17.0 BSC	
e	0.65 BSC	

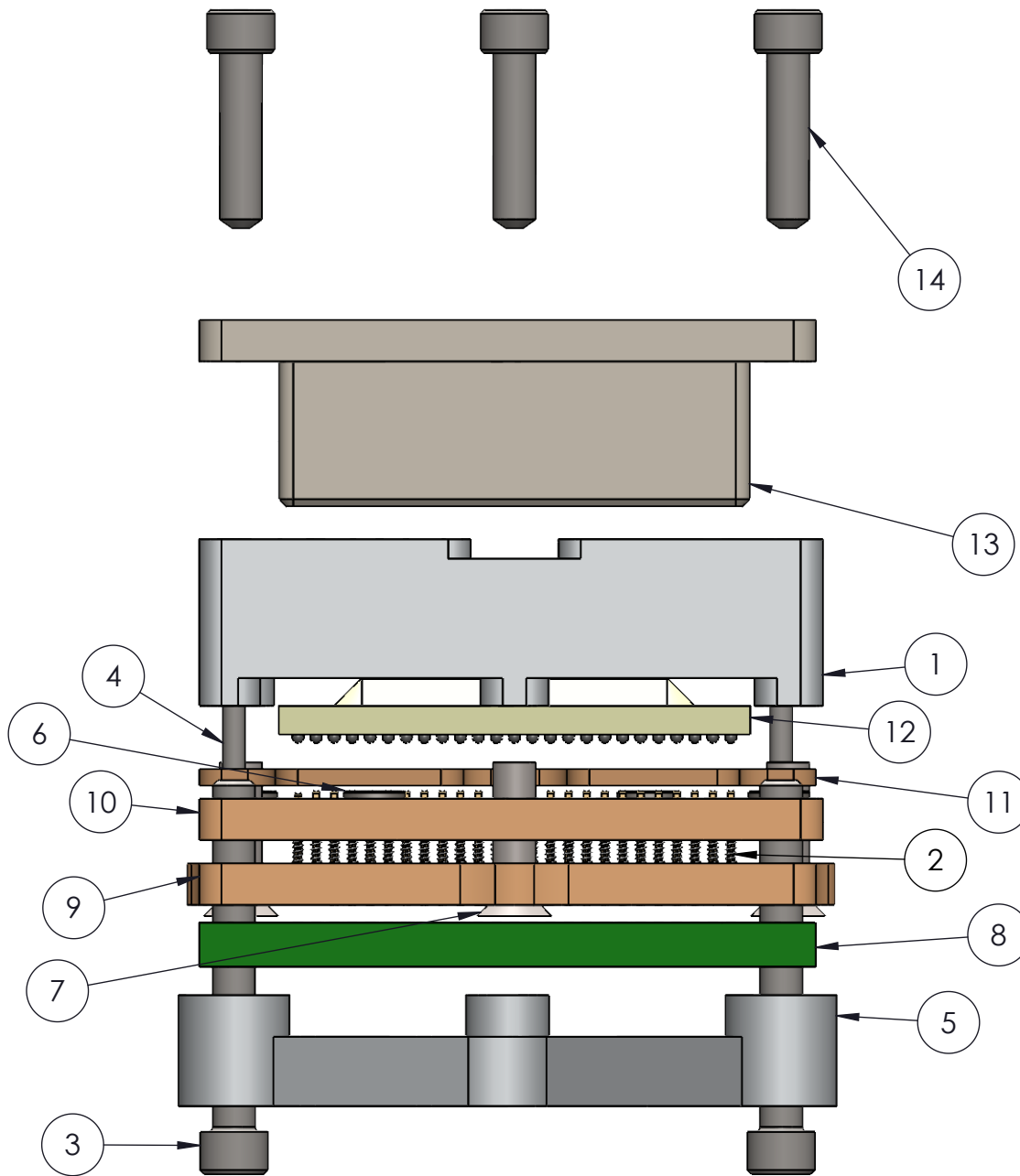
25x25 array

## Description: Compatible BGA

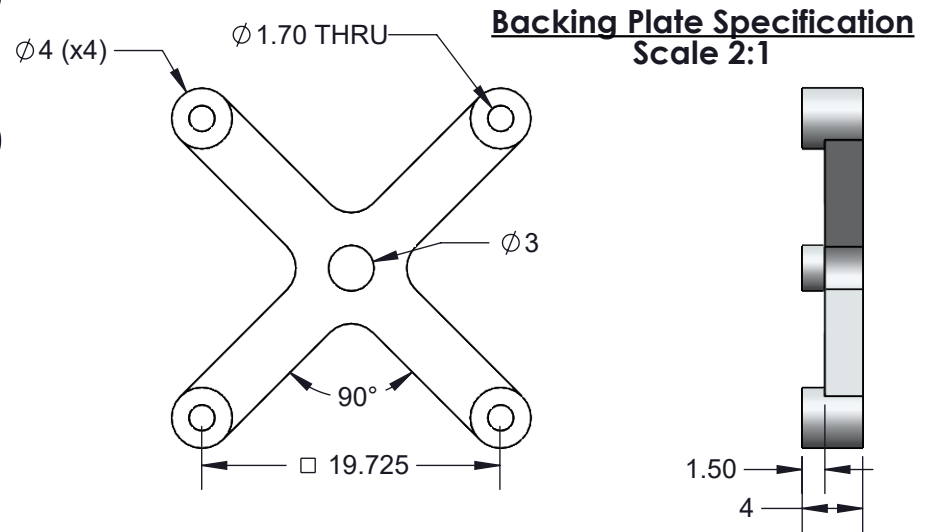
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

**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-BGA-7035 Drawing</b> ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 12.16	STATUS: Released	SHEET: 3 OF 4	REV. A
		ENG: J. Vavra	DRAWN BY: M. Raske	SCALE: 5:1
		FILE: SBT-BGA-7035 Dwg	DATE: 12/27/2016	




ITEM NO.	DESCRIPTION	Material
1	Socket Base, SBT BGA, 17x17mm 0.25mm shift	7075-T6 Aluminum Alloy
2	SBT Pin, SBT-BGA 0.5mm-0.8mm	
3	#0-80 x 0.5, SH Cap Screw	Alloy Steel
4	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
5	Backing Plate 17mm SBT	7075-T6 Aluminum Alloy
6	Floating Guide Spring	Alloy Steel (SS)
7	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
8	TPCB BGA449 17x17mm 0.65mm pitch 25x25 array	High Temp FR4
9	Bottom Guide BGA449 17x17mm 0.65mm pitch 25x25 array	Semitron MDS 100
10	Middle Guide BGA449 17x17mm 0.65mm pitch 25x25 array	Semitron MDS 100
11	Floating Guide BGA449 17x17mm 0.65mm pitch 25x25 array	Semitron MDS 100
12	TCHIP BGA449 17x17mm 0.65mm pitch 25x25 array	High Temp FR4
13	Open Top Lid for 17x17mm IC	7075-T6 Aluminum Alloy
14	#0-80 Socket Head Cap 0.25" Length 18-8 SS	Stainless Steel (18-8)



### Description: Socket Assy, Insulation Plate

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-BGA-7035 Drawing</b> ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified>	STATUS: Released	SHEET: 4 OF 4	REV. A
	Finish: 12.16	ENG: J. Vavra	DRAWN BY: M. Raske	SCALE: 4:1
	Weight: 12.16	FILE: SBT-BGA-7035 Dwg	DATE: 12/27/2016	