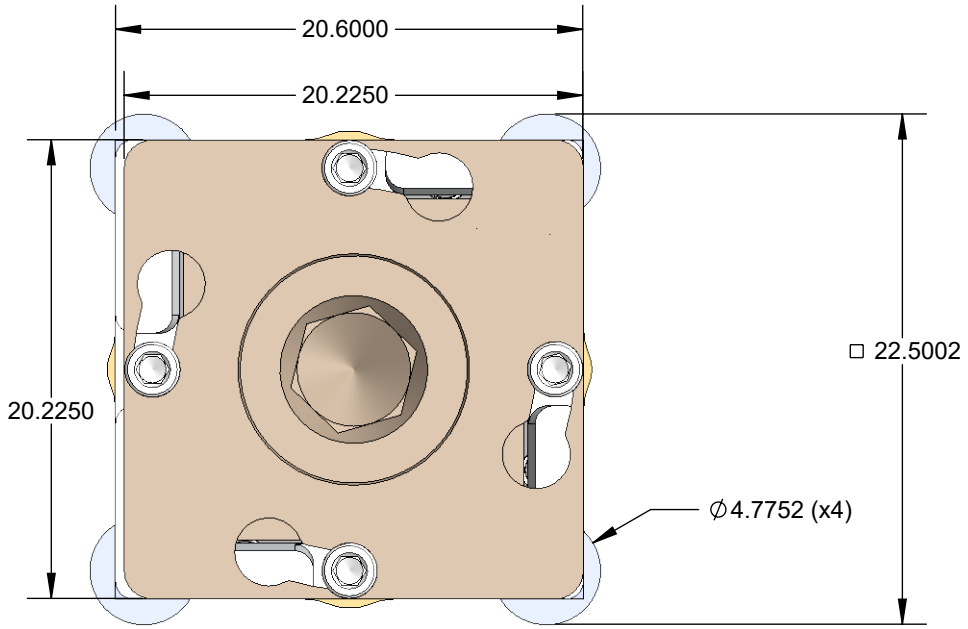
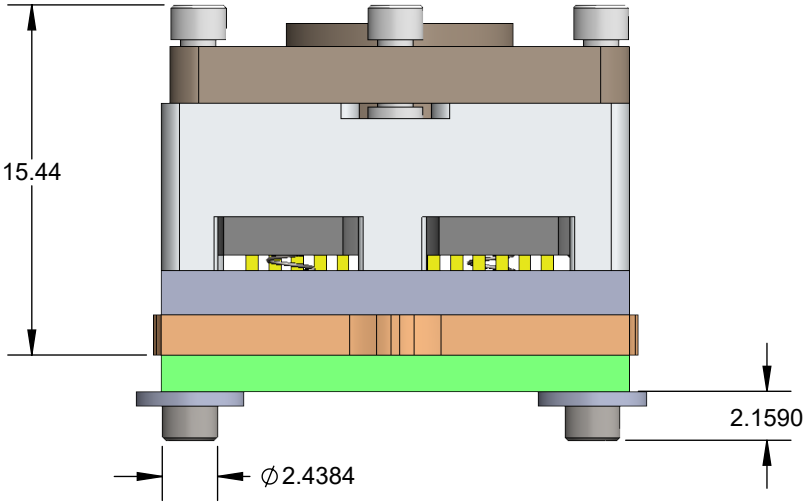
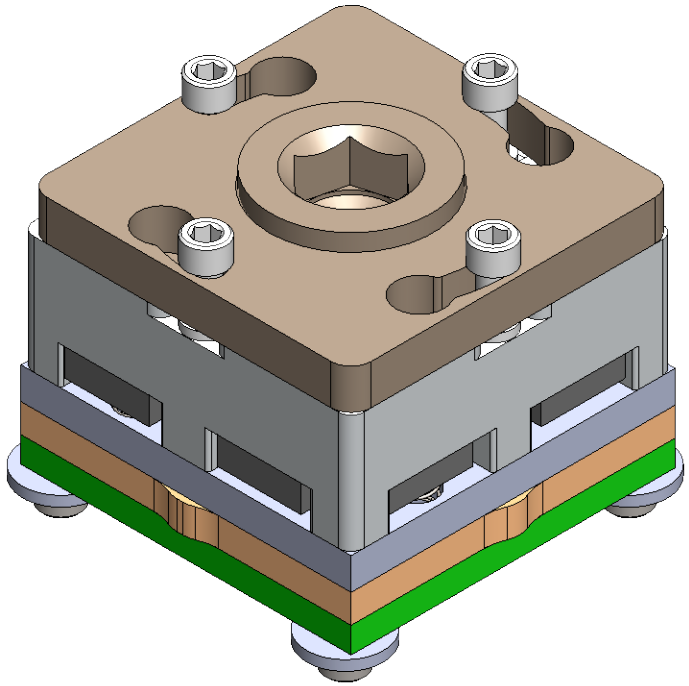
SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS





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-BGA Socket 15x15mm, 1mm, 14x14 array

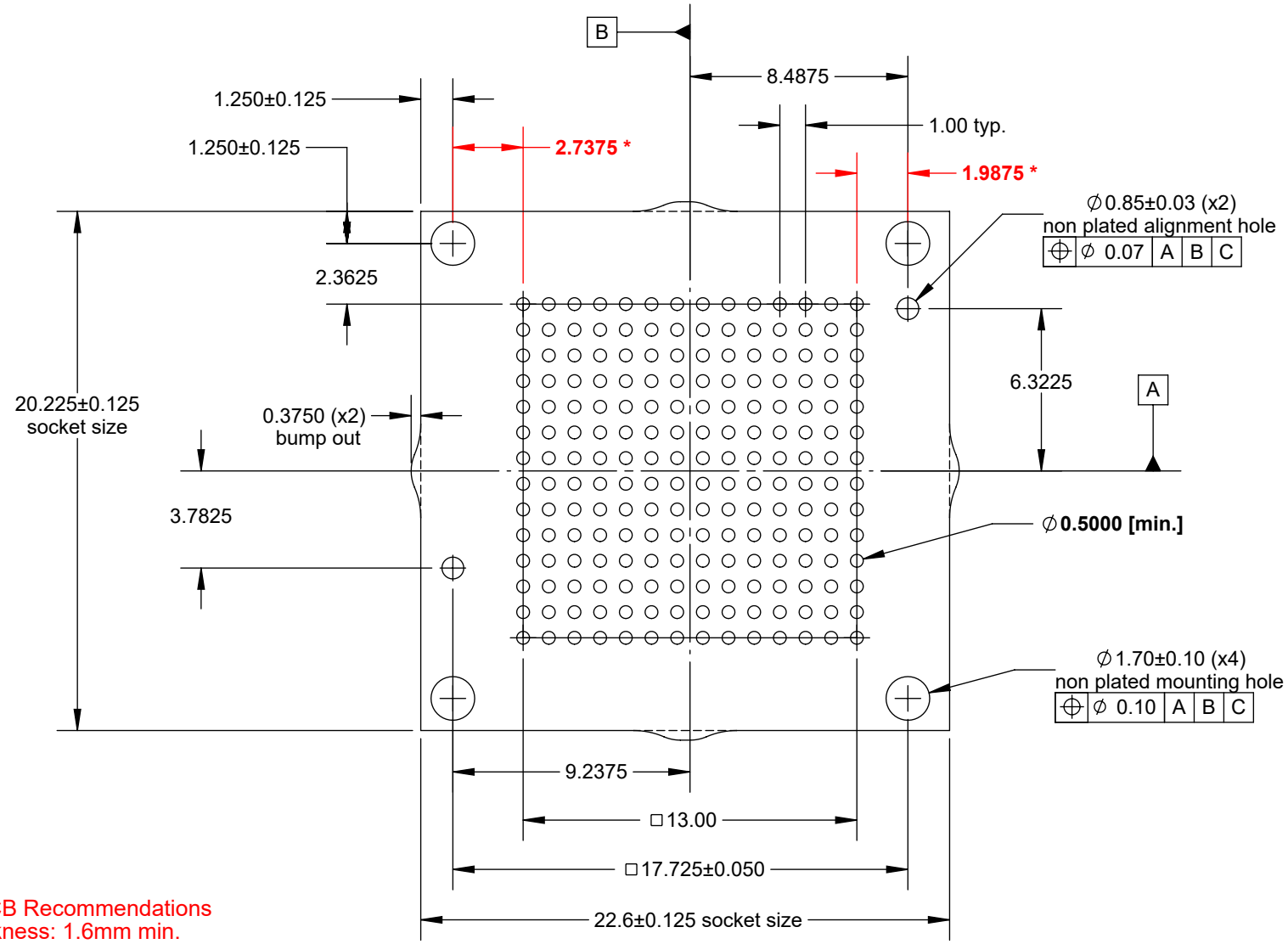
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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-6011 Drawing	Material: Material <not specified>	STATUS: Released	SHEET: 1 OF 4	REV. C
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: Weight: 12.40	ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 3:1
		FILE: SBT-BGA-6011 Dwg	DATE: 10/7/2011	

Recommended PCB Layout

***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-6011 Drawing	Material: Material <not specified>	STATUS: Released	SHEET: 2 OF 4	REV. C
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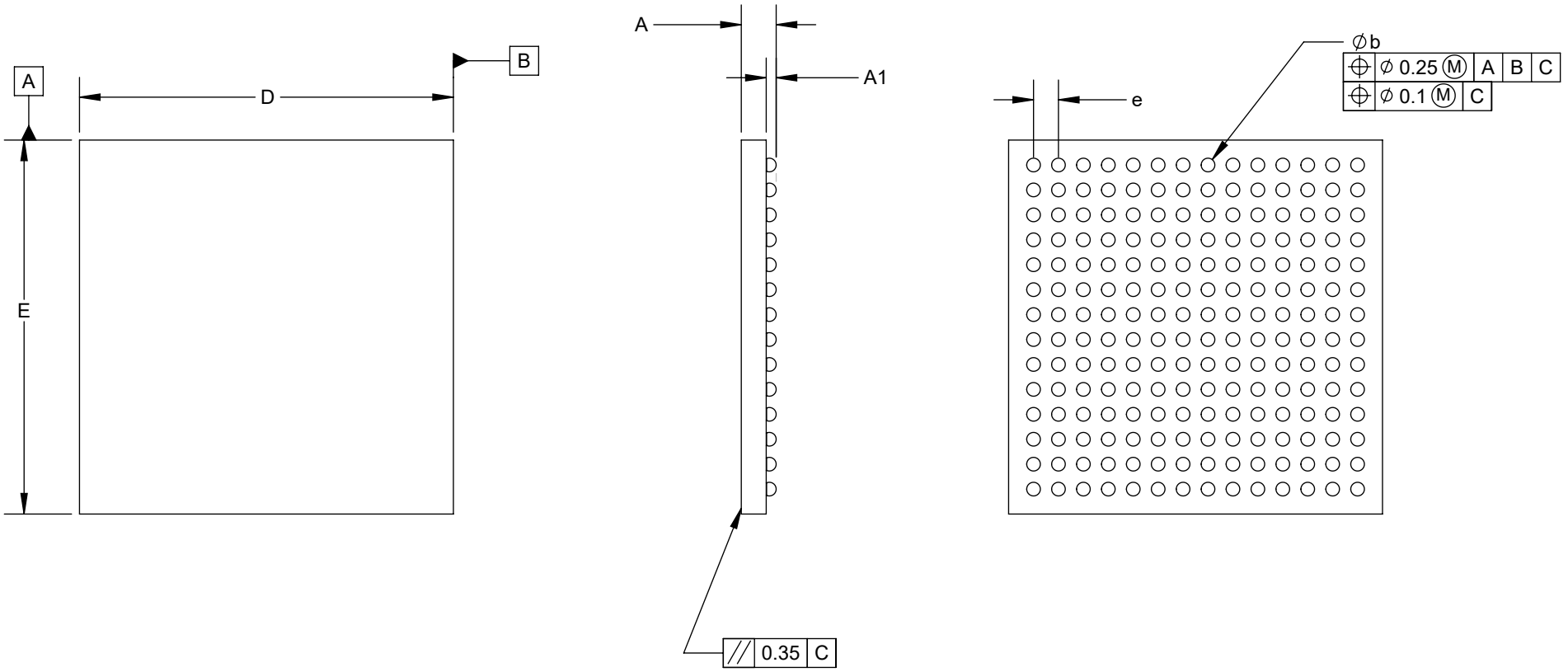
		FILE: SBT-BGA-6011 Dwg	DATE: 10/7/2011	

Compatible BGA IC



Ironwood package code : BGA196C

DIM	Minimum	Maximum
A		2.5
A1	025	0.45
b	0.45	0.55
D	15mm±0.2mm	
E	15mm±0.2mm	
e	1.00 BSC	
ARRAY SIZE	14 X 14	
PIN COUNT	196	

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 IC

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-6011 Drawing	Material: Material <not specified>	STATUS: Released	SHEET: 3 OF 4	REV. C
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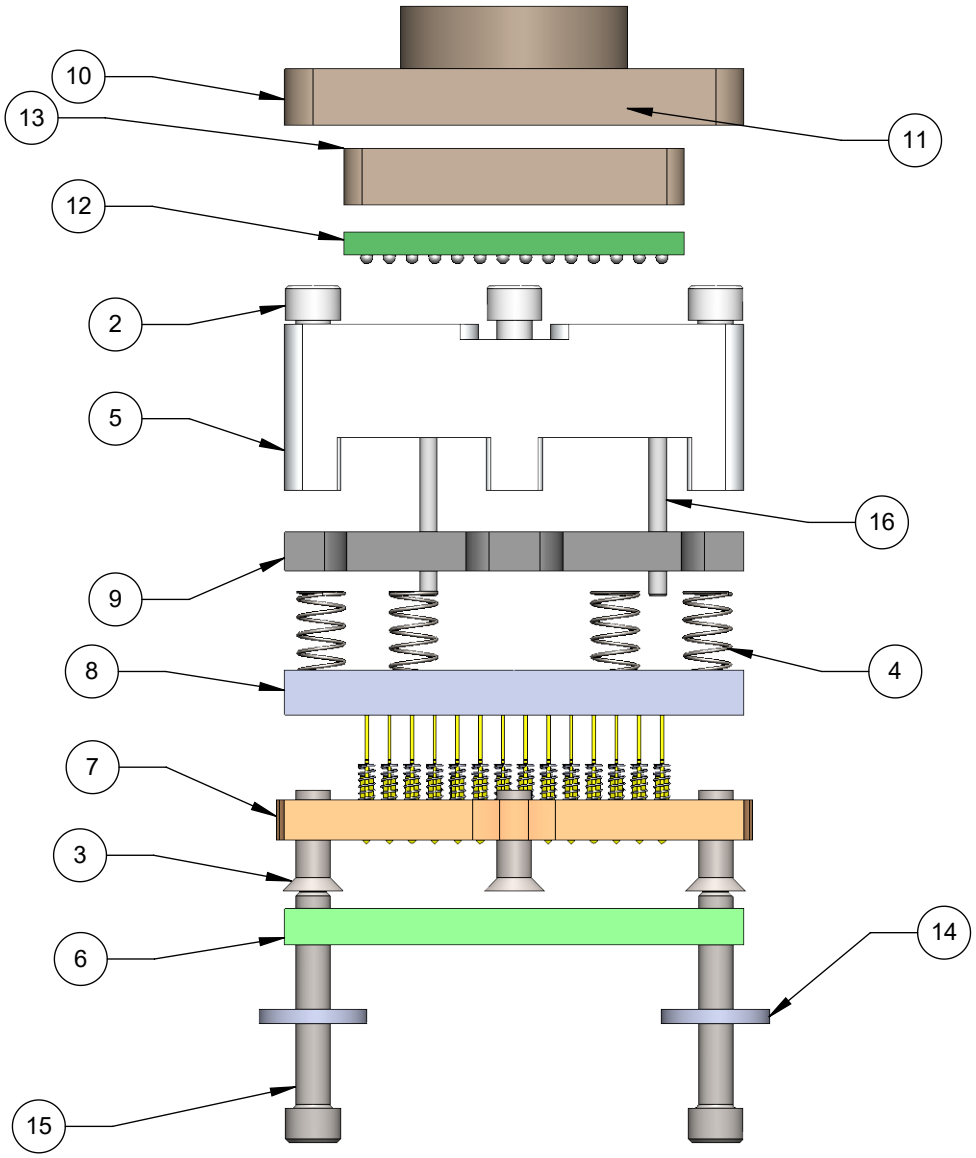
		FILE: SBT-BGA-6011 Dwg	DATE: 10/7/2011	



ITEM NO.	Description	Material
1	Pogo Pin, 1mm Pitch SBT BGA pin	
2	#0-80 Shoulder Screw, 1.59mm thread length	Stainless Steel (303)
3	#0-80, 90 deg., head pin guide screw, Peek material	PEEK unfilled
4	Floating Guide Spring	Alloy Steel (SS)
5	Socket Base, SBT BGA, 15x15mm, 0.375 shift, with posts	7075-T6 Aluminum Alloy
6	PCB BGA196 14x14 array 1mm pitch	High Temp FR4
7	Bottom Pogo Guide BGA196 1mm pitch 14x14 array	Semitron MDS 100
8	Middle Pogo Guide BGA196 1mm pitch 14x14 array	PEEK
9	Floating Guide BGA196 1mm pitch 14x14 array	PEEK Ceramic filled
10	Socket Lid, 15mm	7075-T6 Alumium Alloy
11	Compression Screw M10	7075-T6 Alumium Alloy
12	BGA196 15mm 1mm pitch 14x14 array	High Temp FR4
13	Compression Plate, 15mm x 15mm	7075-T6 Aluminum Alloy
14	Washer, #0 x .025", Nylon	Nylon 6/6
15	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
16	Dowel Pin, 1/32" x 3/8", SS	Chrome Stainless Steel

Rev	Date	Initials	Description
A	10/07/11	VP	Original
B	07/20/15	DH	Updated PCB layout page
C	4/20/18	MR	plastic screw was metal, dowel pin was 7/16" long

Description: ASSEMBLY DETAIL

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

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SBT-BGA-6011 Drawing	Material: Material <not specified>	STATUS: Released	SHEET: 4 OF 4	REV. C
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