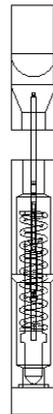
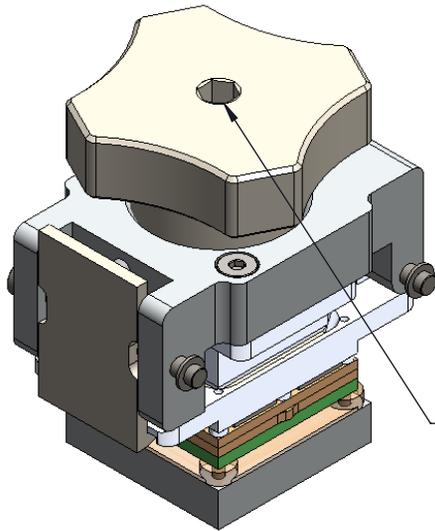


CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

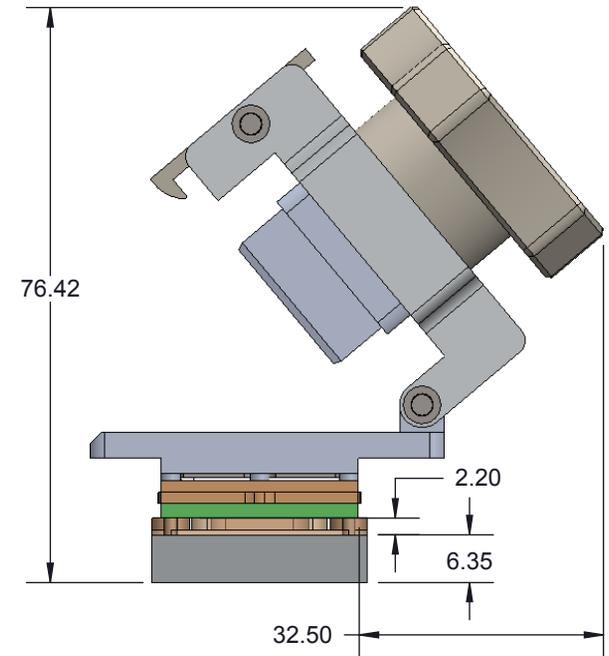
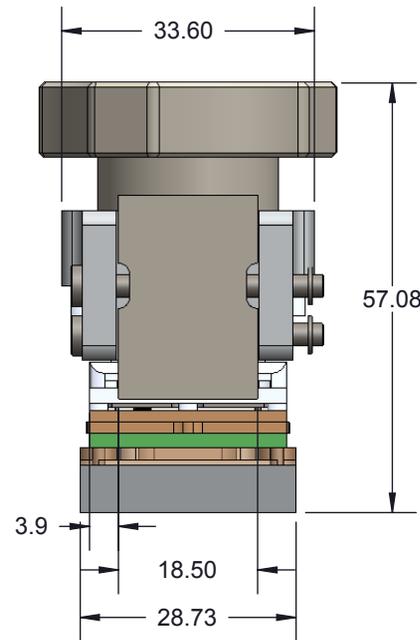
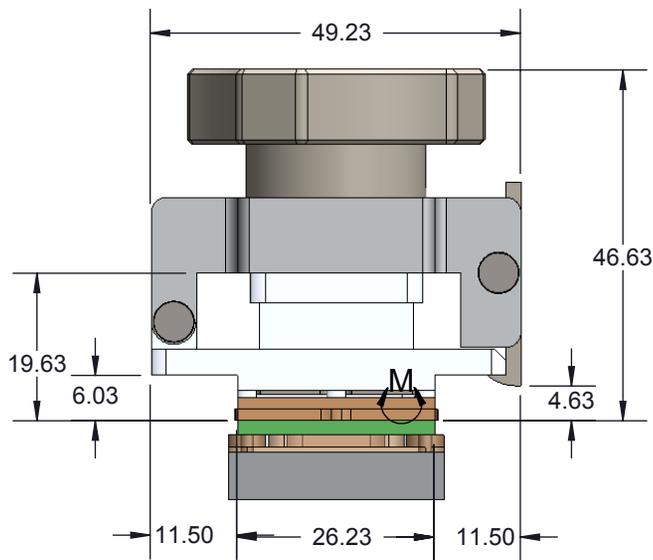
FEATURES:

- 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 M
SCALE 10 : 1

Recommended Torque: 7 in lbs
Or Hand tighten Compression screw ~1/3 turn
after it touches the BGA top surface.



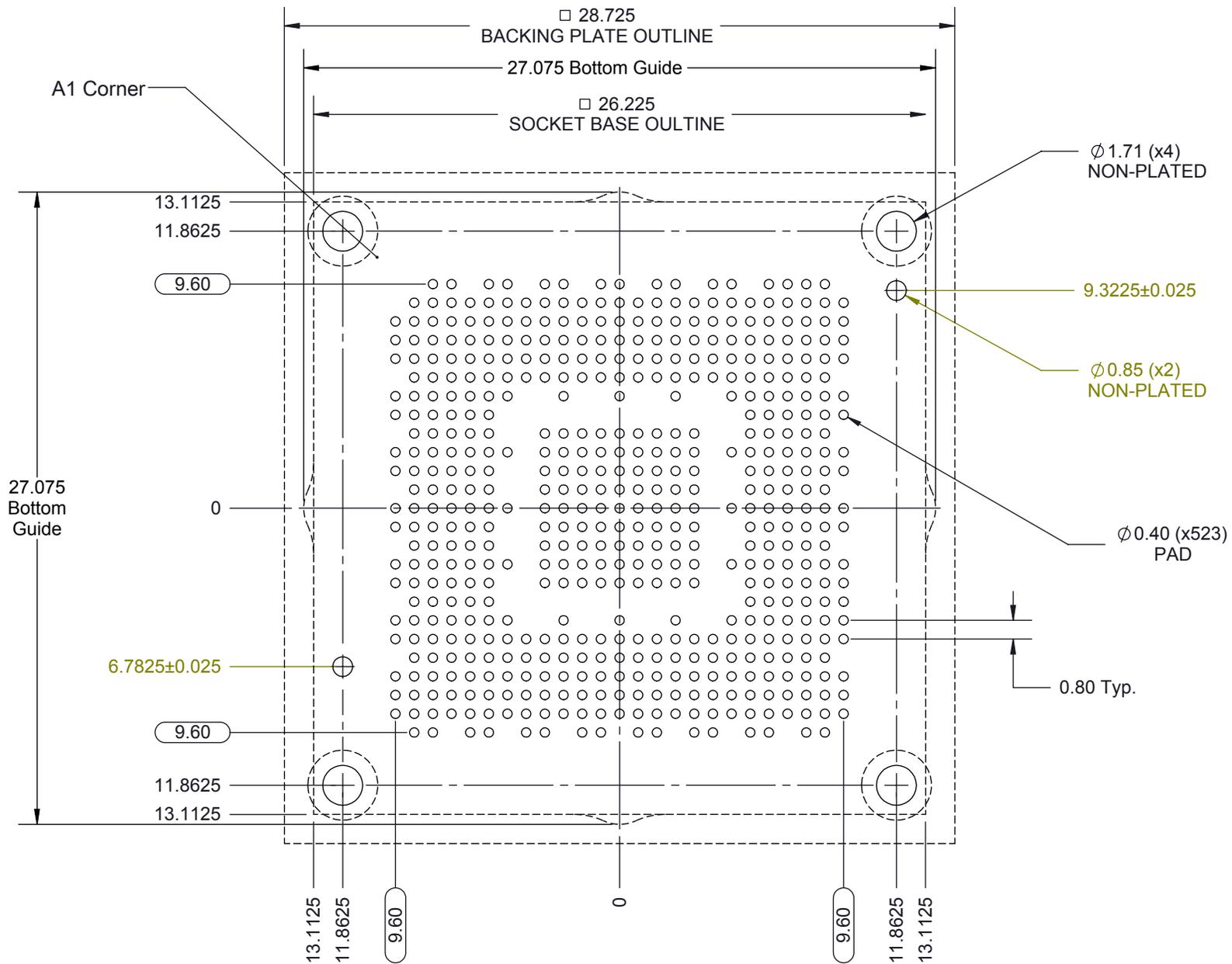
Description: CBT-BGA523 21mm 0.8mm 25x25 array

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

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



 CBT-BGA-6013 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 131.02	STATUS: Released	SHEET: 1 OF 5	REV. C
		ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 1:1
		FILE: CBT-BGA-6013	DATE: 9/6/2012	



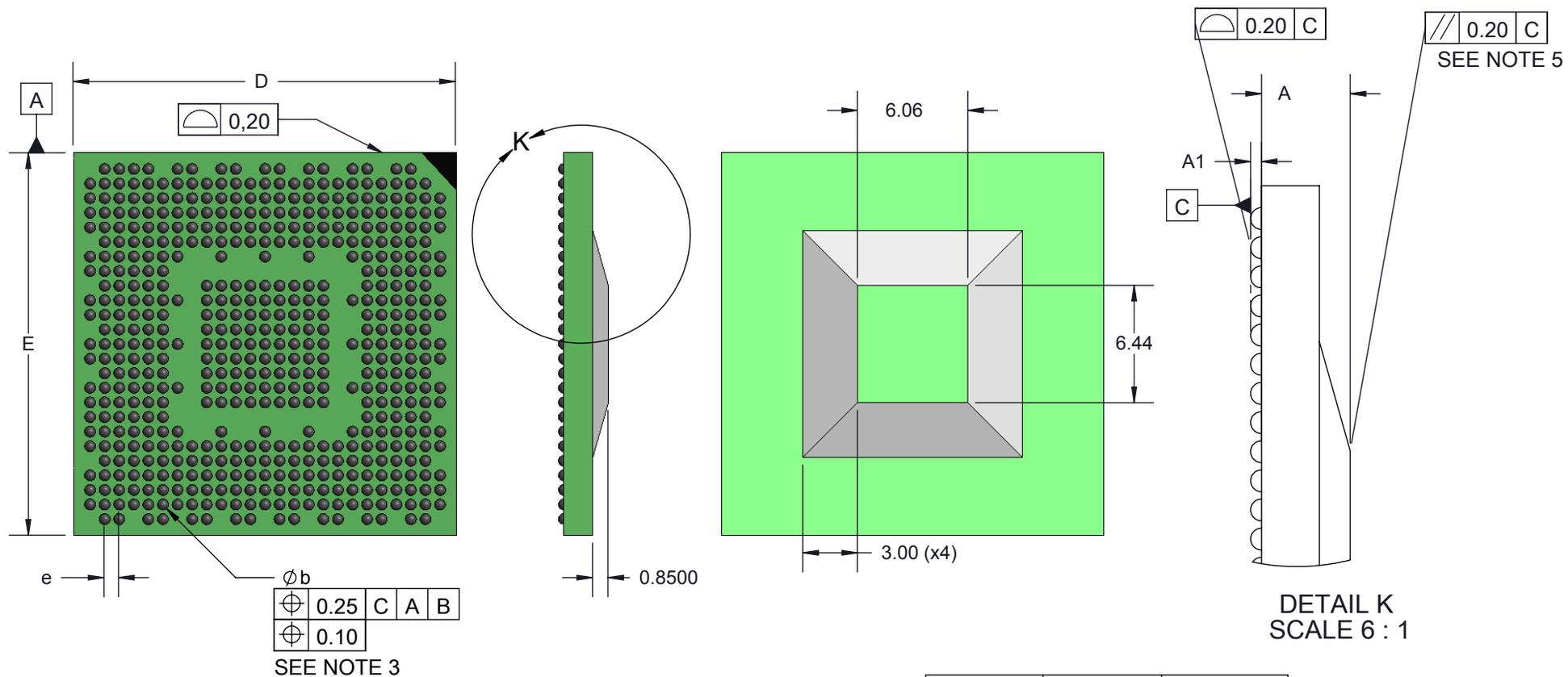
Target PCB Recommendations
 Total thickness: 1.6mm min.
 Plating: Gold or Solder finish
 PCB Pad height: same or higher than solder mask

Description: Recommended PCB Layout

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

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

 CBT-BGA-6013 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 131.02	STATUS: Released ENG: V. Panavala FILE: CBT-BGA-6013	SHEET: 2 OF 5 DRAWN BY: V. Panavala DATE: 9/6/2012	REV. C SCALE: 4:1



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.

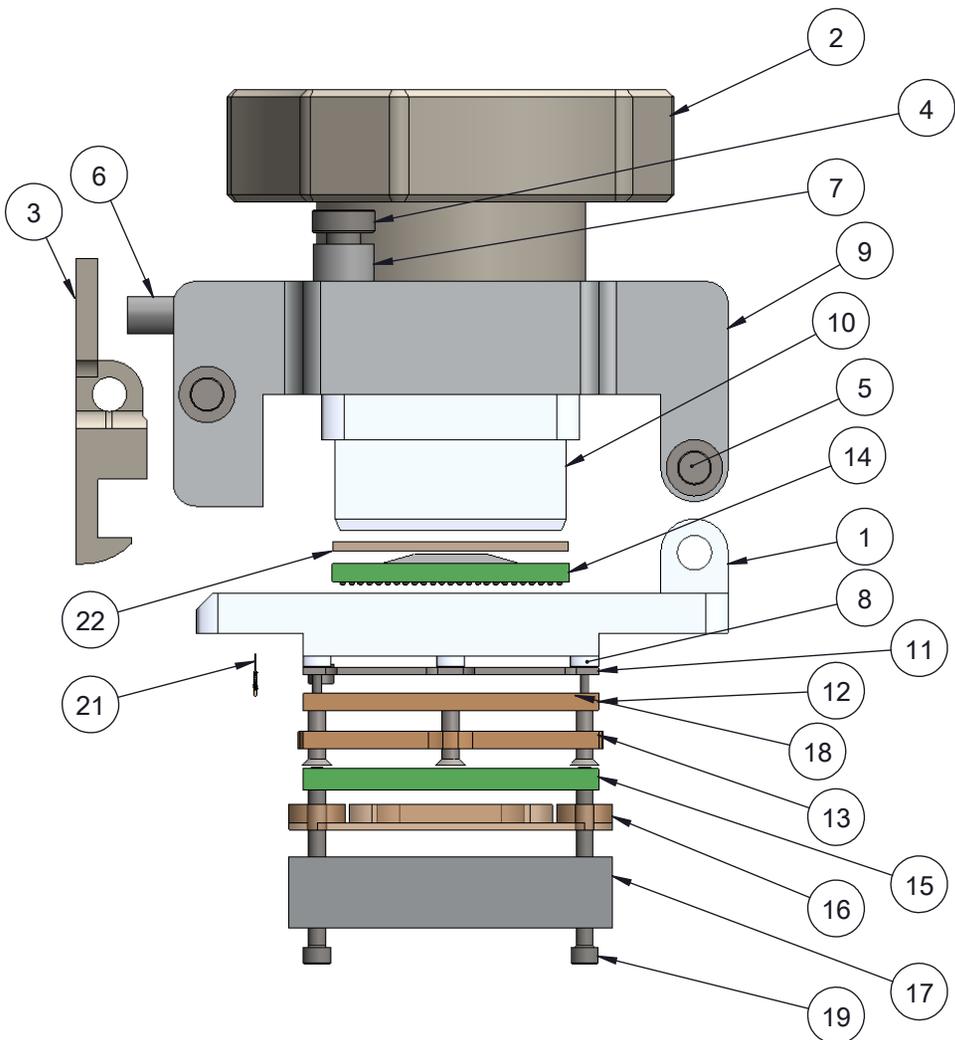
DIM	Minimum	Maximum
A		2.5
A1	0.36	0.46
b		0.6
D	21.00 BSC	
E	21.00 BSC	
e	0.8 BSC	
ARRAY	25 X 25	
PIN COUNT	523	

Description: Compatible BGA

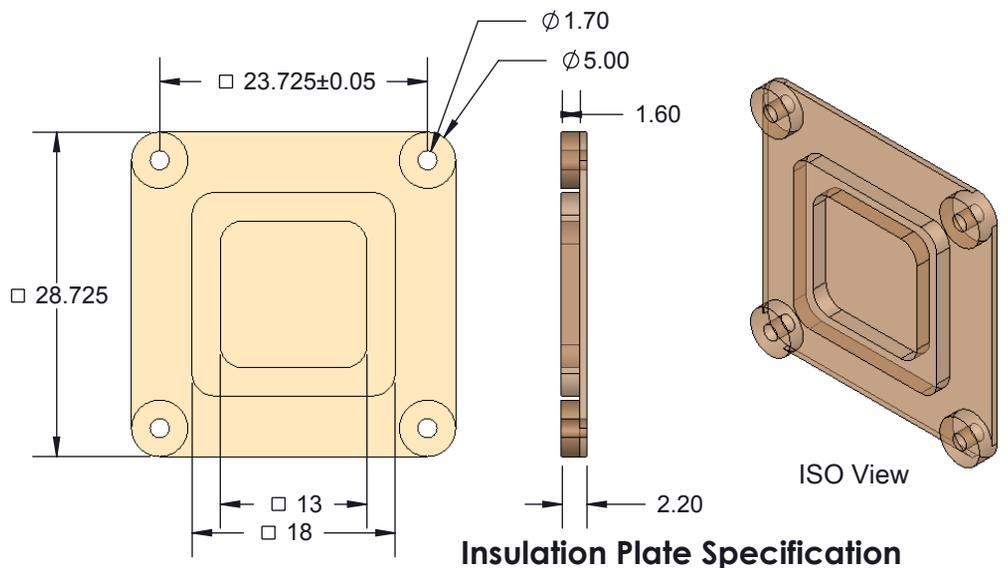
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

 CBT-BGA-6013 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 131.02	STATUS: Released ENG: V. Panavala FILE: CBT-BGA-6013	SHEET: 3 OF 5 DRAWN BY: V. Panavala DATE: 9/6/2012	REV. C SCALE: 3:1



ITEM NO.	Description	Material
1	CBT Socket Base 21mm centered pocket Ni Plated	7075-T6 Aluminum Alloy
2	Compression Screw	7075-T6 Aluminum Alloy
3	Latch	7075-T6 Aluminum Alloy
4	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
5	Hinge Pin and Snap Ring, 3mm OD, 30mm long, 1045 Stl, Blk Oxide	AISI 1045 Steel, cold drawn
6	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
7	Spring Clamshell lid assembly	Steel Music Wire
8	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
9	CBT socket lid for 19mm chip Ni Plated	7075-T6 Aluminum Alloy
10	CBT Compression plate 21mm Ni plated Centered	7075-T6 Aluminum Alloy
11	Floating Guide 21mm 0.8mm 25X25 array centered	PEEK Ceramic filled
12	Middle Guide 21mm 0.8mm 25X25 array centered	Semitron MDS 100
13	Bottom Guide 21MM, 25X25 ARY, 0.8MM	Semitron MDS 100
14	BGA Chip, 21MM 25X25ARRAY 0.8MM PITCH	Material <not specified>
15	PCB, 21MM 25x25 ARRAY 0.8MM PITCH	Material <not specified>
16	Insulation plate	Ultem
17	CBT/SBT Backing plate 21mm Ni plated	7075-T6, Plate (SS)
18	#0-80X0.25", 90 deg., head pin guide screw, Peek material	PEEK unfilled
19	#0-80 X .625 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
20	Floating Guide Spring	Alloy Steel (SS)
21	SBT Pin, SBT-BGA 0.5mm-0.8mm	
22	IC frame 21mm IC 12.44mm pocket	Ultem/cirlex



Description: Socket Assy, 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.

 CBT-BGA-6013 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 131.02	STATUS: Released ENG: V. Panavala FILE: CBT-BGA-6013	SHEET: 4 OF 5 DRAWN BY: V. Panavala DATE: 9/6/2012	REV. C SCALE: 2:1
---	---	--	--	----------------------

Rev	Date	Initials	Description
A	09/06/12	VP	Original
B	02/18/14	DH	Changed current rating of pin
C	4/2/15	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: 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.

 CBT-BGA-6013 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Finish: Weight:	STATUS: Released	SHEET: 5 OF 5	REV. C
		ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 2:1
		FILE: CBT-BGA-6013	DATE: 9/6/2012	