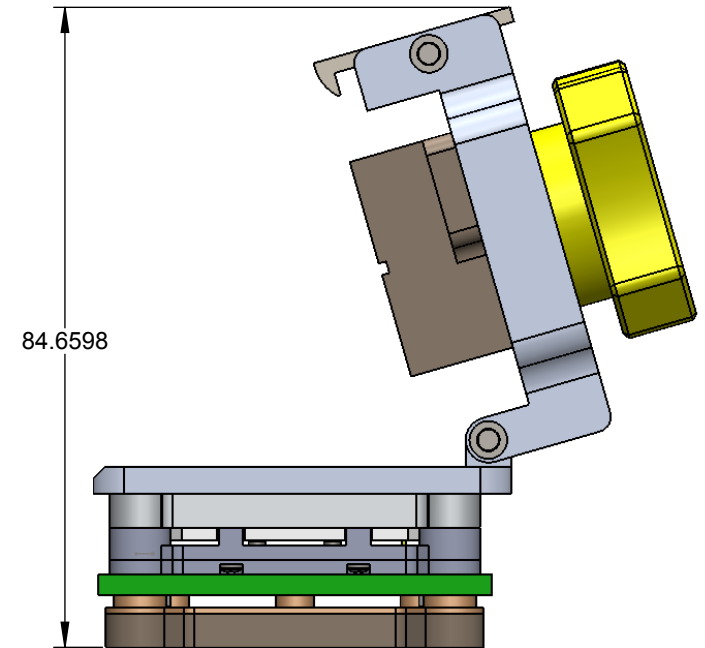
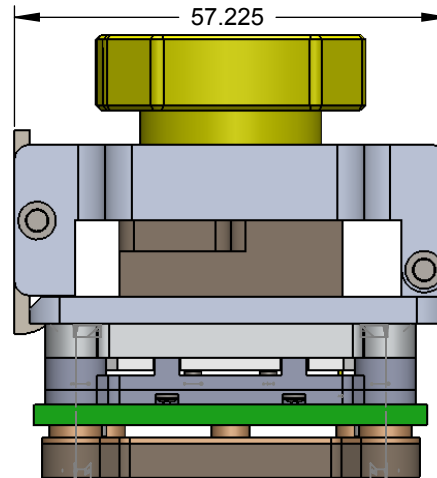
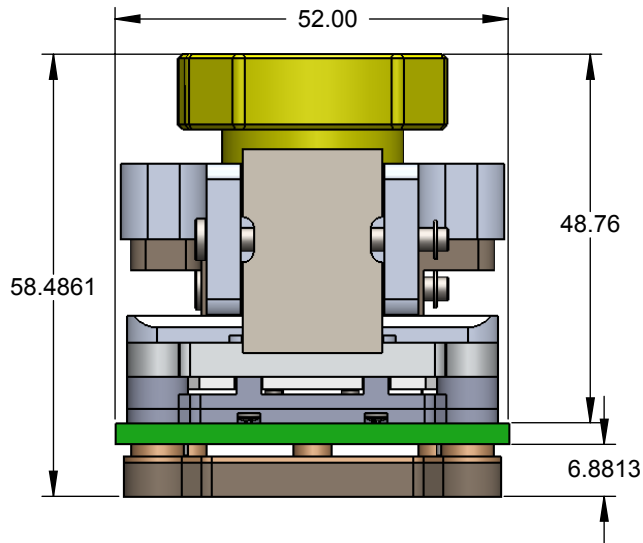
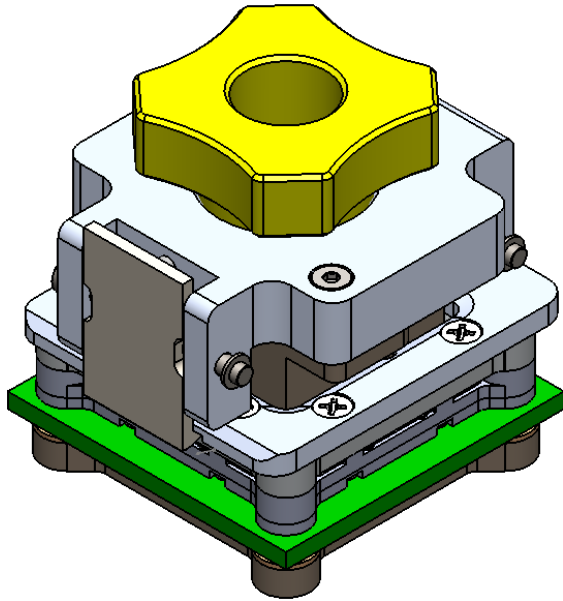


CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

Features


- Wide temperature range (-55C to +180C).
- High current capability (up to 8A).
- 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.



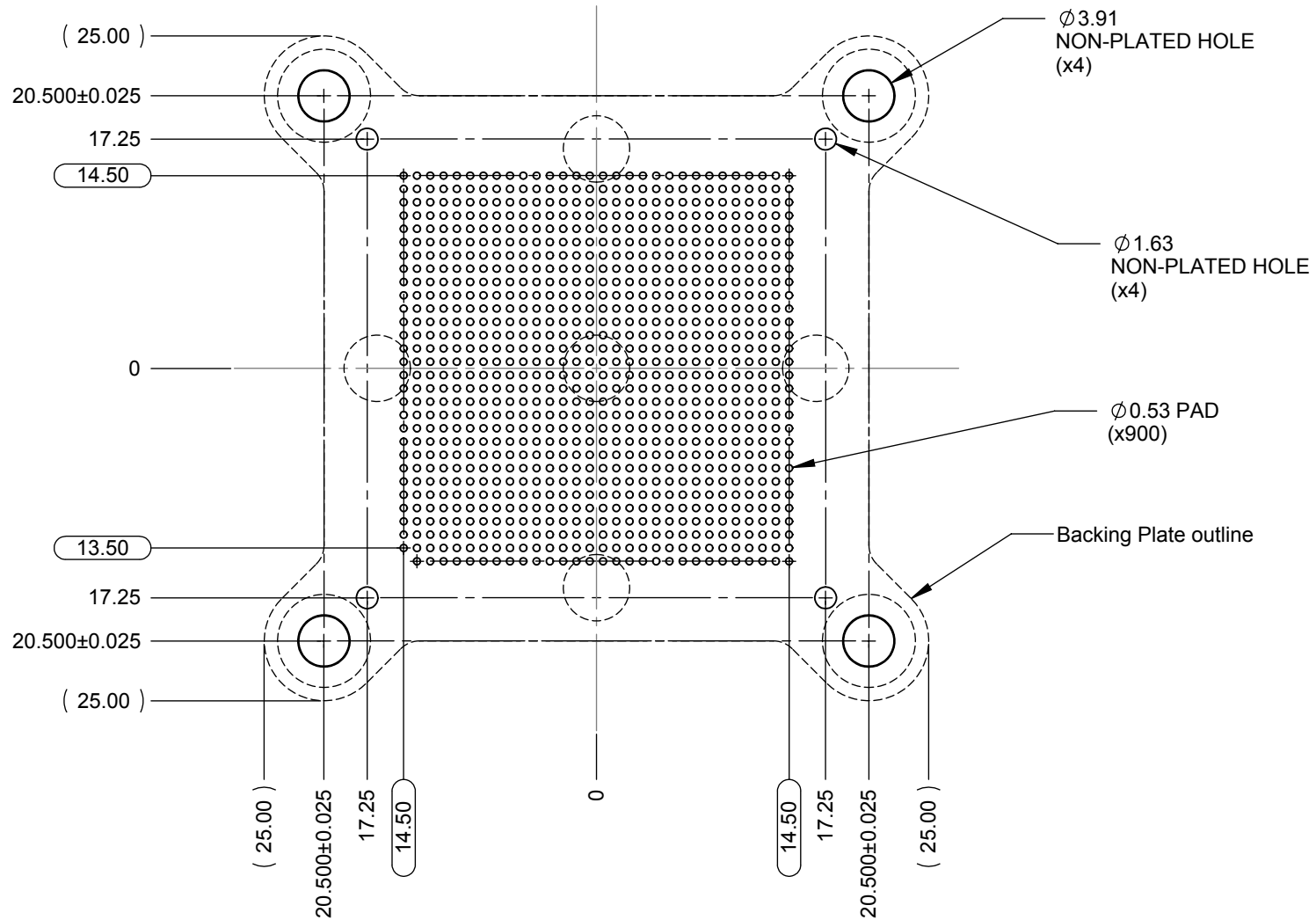
Description: Custom 31mm CBT spring pin socket, 30x30 array

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.

 CBT-BGA-6009 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 209.41	STATUS: Released ENG: E. Smolentseva FILE: CBT-BGA-6009 Dwg	SHEET: 1 OF 5 DRAWN BY: M. Raske DATE: 8/23/2012	REV. B SCALE: 1:1

***Note: BGA pattern centerline is NOT centered with respect to the mounting holes centerline.**




Target PCB Recommendations
 Total thickness: 1.5mm min.
 Plating: Gold or Solder finish

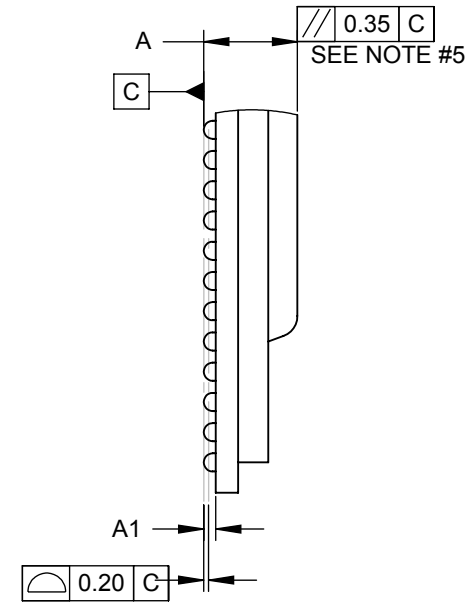
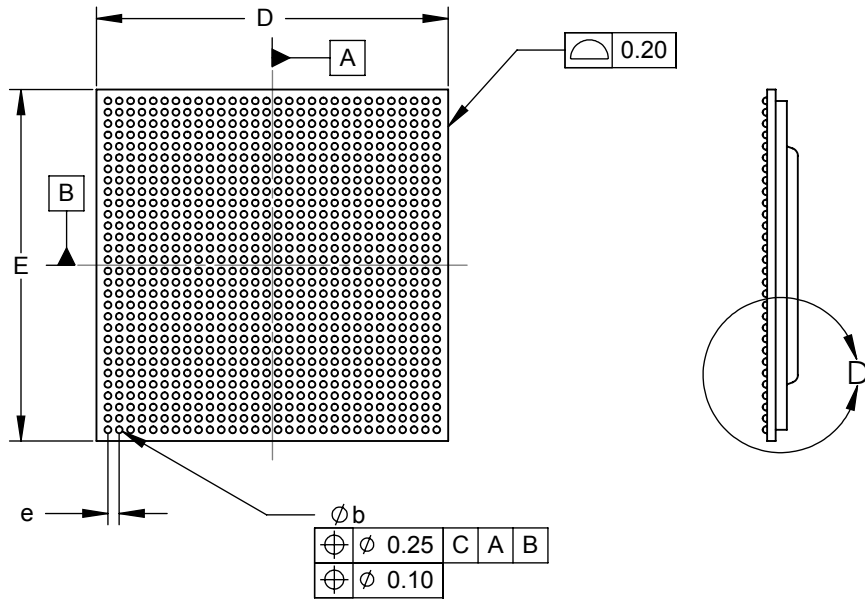
Description: Recommended PCB layout

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.

 CBT-BGA-6009 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 209.41	STATUS: Released	SHEET: 2 OF 5	REV. B
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: CBT-BGA-6009 Dwg	DATE: 8/23/2012	

Ironwood Package Code: BGA900A



DETAIL D
SCALE 4 : 1


DIM	MIN	MAX
A	2.9	3.5
A1	0.4	0.6
b	0.5	0.7
D	30.8	31.2
E	30.8	31.2
e	1.0	

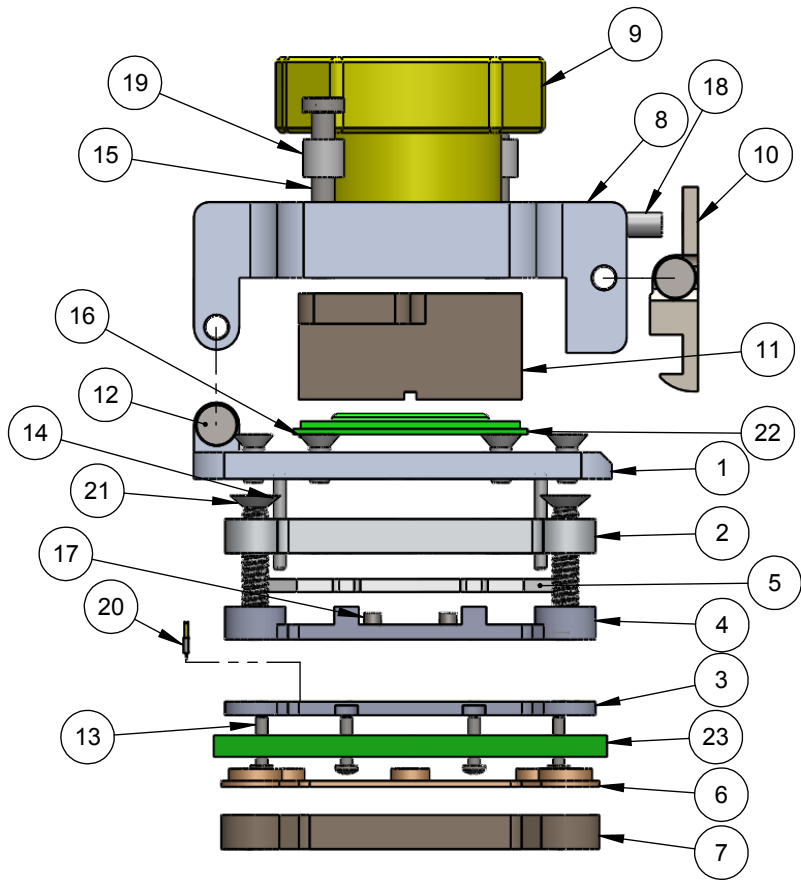
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

Description: BGA

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

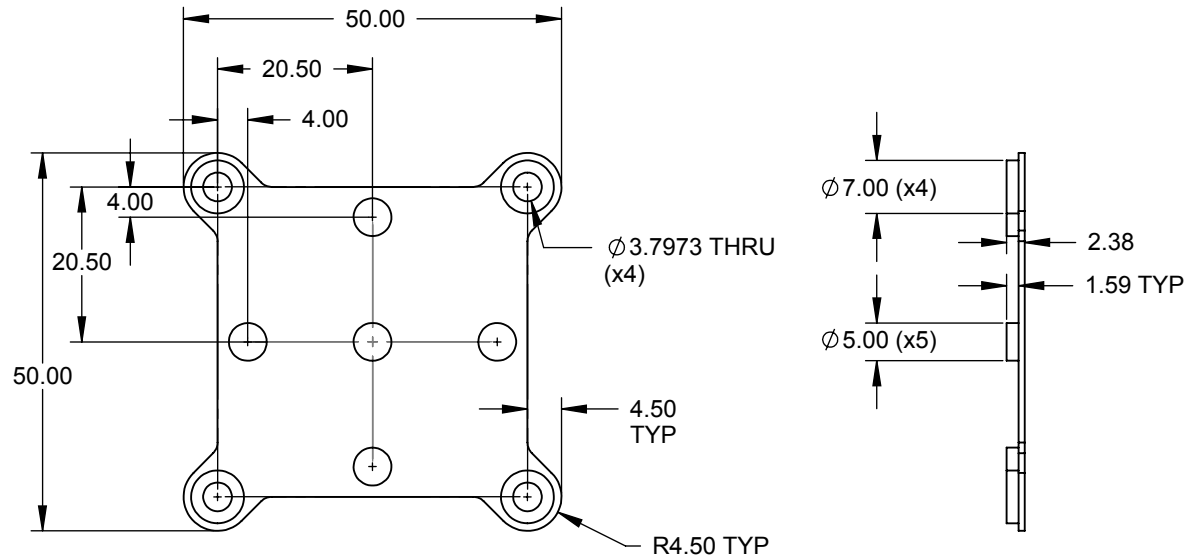
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [± 0.001 "], Pitches (from true position) $\pm 0.025\text{mm}$ [± 0.001 "], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise. Materials and specifications are subject to change without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

 CBT-BGA-6009 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 209.41	STATUS: Released	SHEET: 3 OF 5	REV. B
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 1:1
		FILE: CBT-BGA-6009 Dwg	DATE: 8/23/2012	



PIN DETAIL


ITEM NO.	DESCRIPTION	QTY.
1	Upper base for pogo pin socket, custom	1
2	Custom Socket base, 31mm	1
3	Bottom Guide 31mm 30X30 array 1mm pitch	1
4	Middle Guide 31mm 30X30 array 1mm pitch	1
5	Floating Guide 31mm 30x30 array 1mm pitch	1
6	custom insulation plate	1
7	custom backing plate	1
8	Socket Lid	1
9	Fluted Knob Compression Screw	1
10	Latch	1
11	clamshell compression plate for 31mm custom	1
12	Hinge Pin and Snap Ring, 3mm OD, 30mm long, 1045 Stl, Blk Oxide	2
13	Screw, #0-80 x .25", Pan, SS	8
14	Dowel Pin, 1/6" x 1/2", SS	4
15	Screw, M3 x 12mm, Low Head Cap, SS	2
16	Flat Hd phillips 4-40 x 5/16" long 82deg hd	8
17	Floating Guide Spring	8
18	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	1
19	Spring Clamshell lid assembly	2
20	Pogo Pin, 1mm Pitch SBT BGA pin	899
21	100 Deg Flat Head Phillips Machine Screw 300 Series SS, 6-32 Thrd, 3/4" L	4
22	Customer IC	1
23	Target PCB	1



INSULATION PLATE DETAIL

Description: Skt, Insulation Plate, Pin Det

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-6009 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 209.41	STATUS: Released ENG: E. Smolentseva FILE: CBT-BGA-6009 Dwg	SHEET: 4 OF 5 DRAWN BY: M. Raske DATE: 8/23/2012	REV. B SCALE: 1:1

USER INSTRUCTIONS


1. Place insulating plate, item # 6, and backing plate, item # 7 on the back side of the target PCB.
2. Align the socket base assembly, which consists of items 3, 4, 5, 17, 20, 13 & 2 and comes pre-assembled onto target PCB with dowel pins, item # 14.
3. Install socket base, item #2, onto the target board with flat head 6-32 machine screws, item # 21. Screws are going thru the target PCB, thru the insulating plate into backing plate.
4. Attach socket lid assembly, which consists of items 1,11, 8, 12, 10, 18, 15, 19, 9 (comes pre-assembled) onto socket base with flat head 4-40 machine screws, item # 16. Socket lid assembly is symmetrical and can be attached in any orientation.
5. Place IC into the socket.
6. Close socket lid, item # 8.
7. Turn the compression screw (item #9) until tight hard stops on floating guide (item # 5).

Rev	Date	Initials	Description
A	08/23/12	MR	Original
D	12/06/12	DH	ECO#490; Changed M2816 to M1308.

Description: User Instructions

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-6009 Drawing	Material: Finish: Weight:	STATUS: Released	SHEET: 5 OF 5	REV. B
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 1:1
		FILE: CBT-BGA-6009 Dwg	DATE: 8/23/2012	
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com				