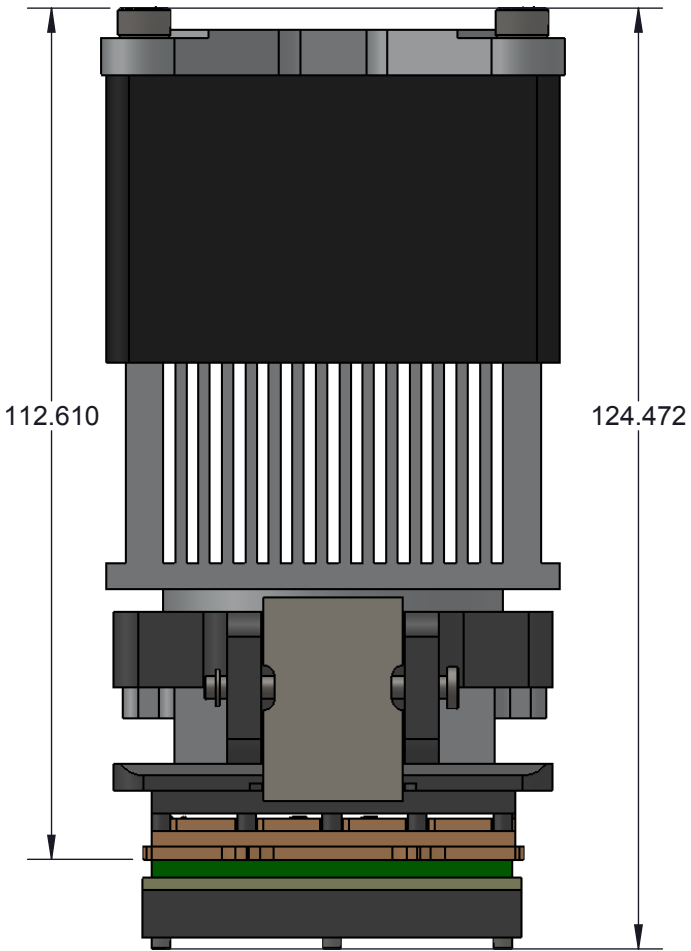


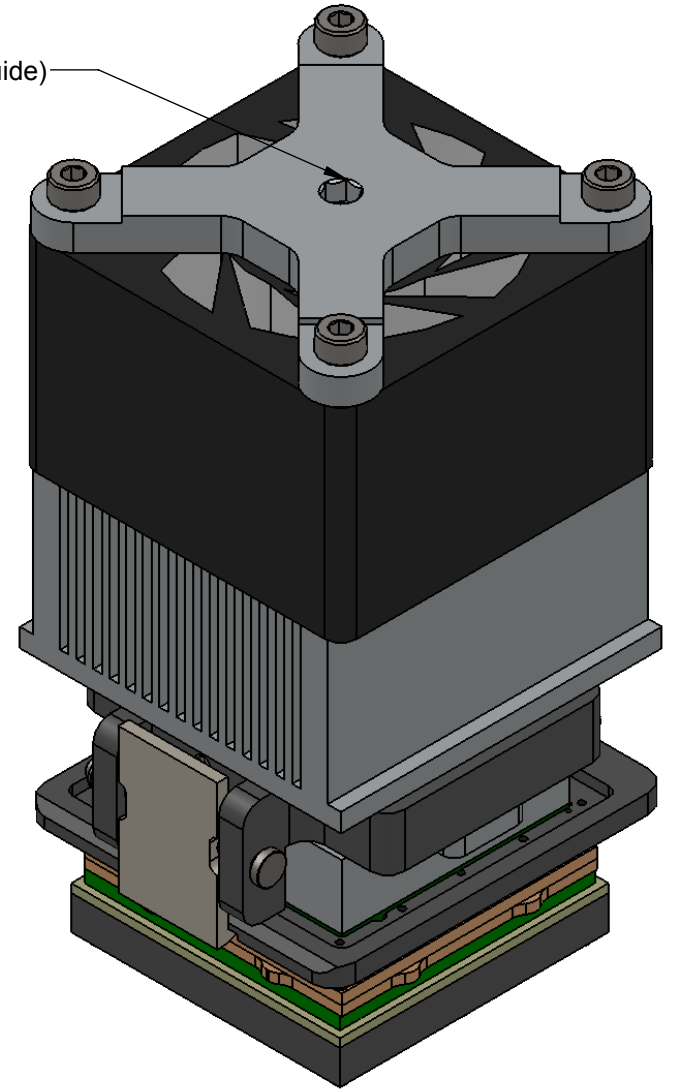
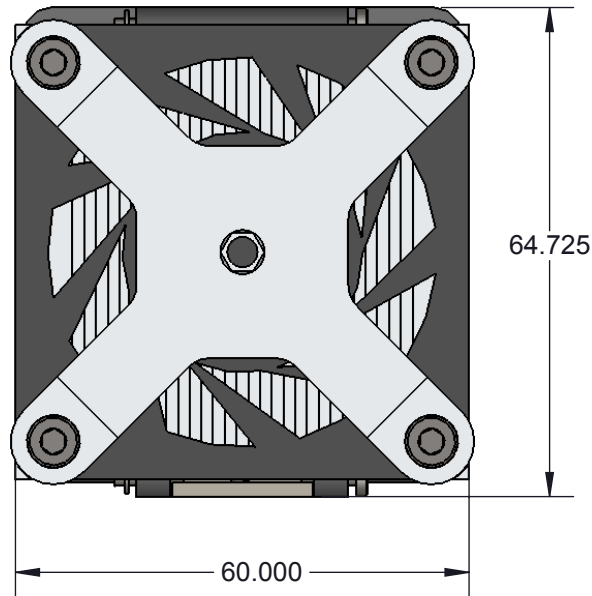
CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

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




Torque until hardstop is reached
(floating guide will bottom out on middle guide)



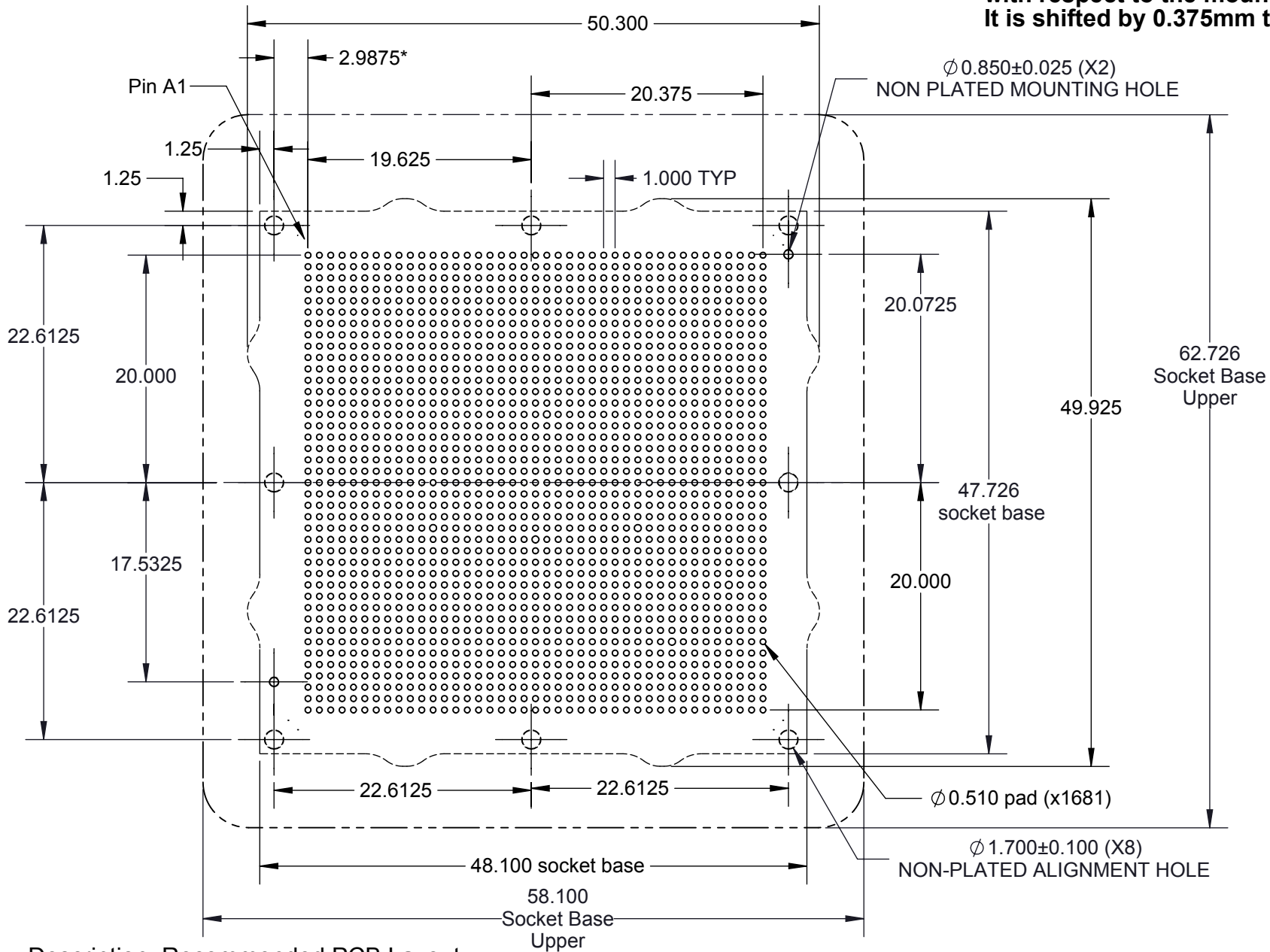
Description: Clamshell 42.5mm Socket, 25W, BGA1681

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-6041 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 603.85	STATUS: Released ENG: M.A. Fedde FILE: CBT-BGA-6041 Dwg	SHEET: 1 OF 5 DRAWN BY: M. Raske DATE: 04/25/2014	REV. B SCALE: 1:1


***Note: BGA pattern is not symmetrical with respect to the mounting holes. It is shifted by 0.375mm to the right of center.**

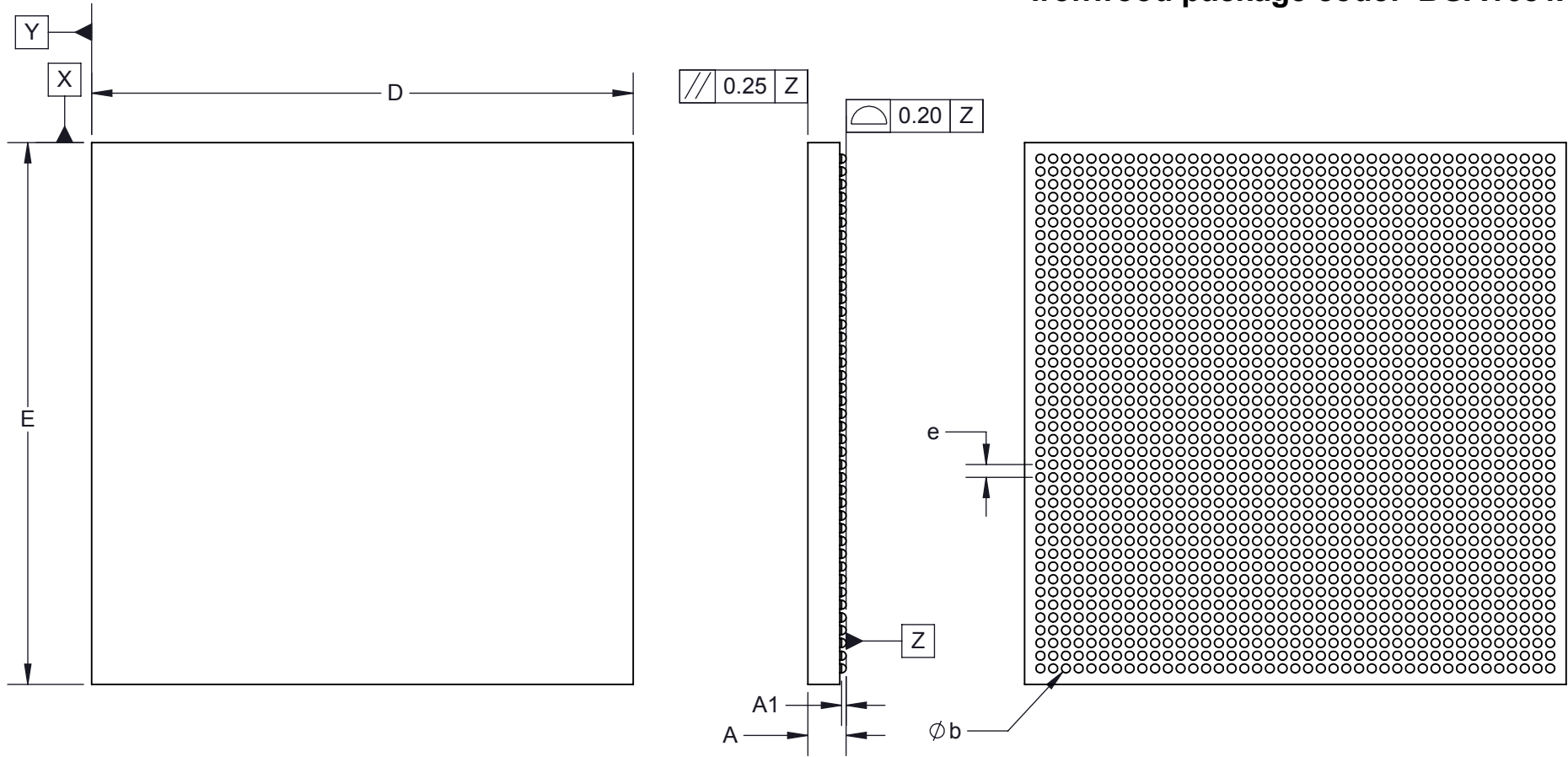


Description: Recommended PCB Layout

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.

 CBT-BGA-6041 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 603.85	STATUS: Released ENG: M.A. Fedde FILE: CBT-BGA-6041 Dwg	SHEET: 2 OF 5 DRAWN BY: M. Raske DATE: 04/25/2014	REV. B SCALE: 2:1




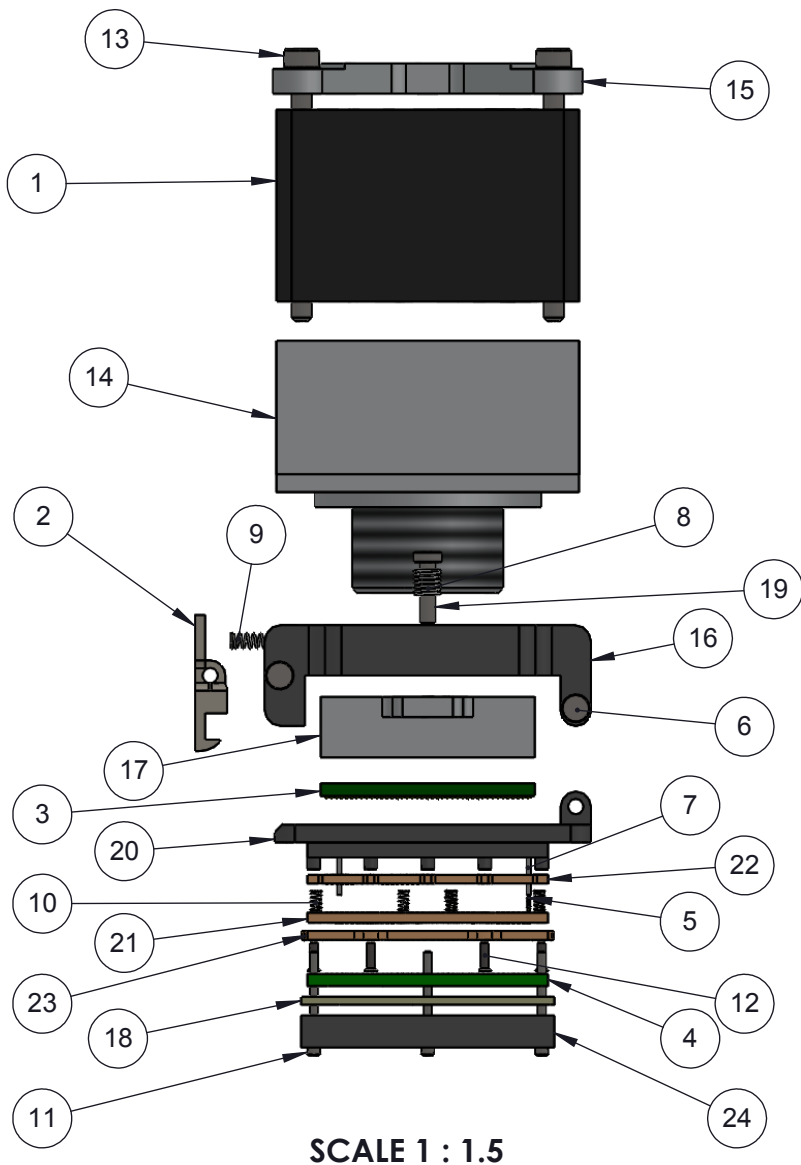
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z .
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

DIM	Minimum	Maximum
A	3.79	4.11
A1	0.40	0.60
b	0.55	0.65
D	42.50 BSC	
E	42.50 BSC	
e	1.00 BSC	
ARRAY	41x41	
PIN COUNT	1681	

Description: Compatible BGA

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-6041 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 603.85	STATUS: Released ENG: M.A. Fedde FILE: CBT-BGA-6041 Dwg	SHEET: 3 OF 5 DRAWN BY: M. Raske DATE: 04/25/2014	REV. B SCALE: 2:1



SCALE 1 : 1.5


SCALE 6 : 1
PIN DETAIL

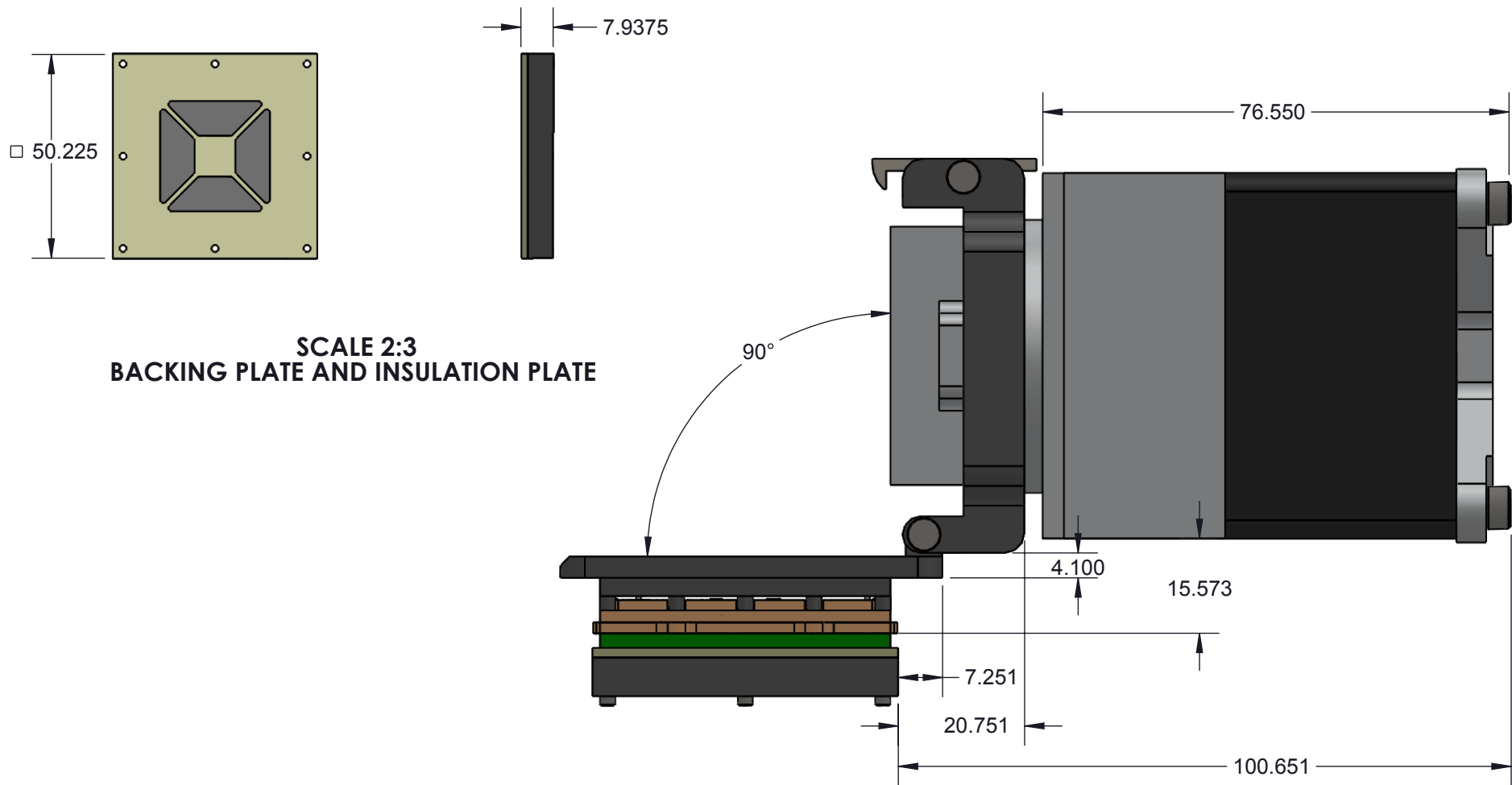
ITEM NO.	DESCRIPTION	Material
1	Fan 60mmx60mmx38mm, 12V, 2.157 m3/min	Plastic (UL 94V-0)
2	Latch	7075-T6 Aluminum Alloy
3	BGA1681 ,1mm Pitch	FR4
4	Target PCB	FR4
5	Pogo Pin, 1mm Pitch SBT BGA pin	
6	Hinge Pin and Snap Ring, 3mm OD, 30mm long, 1045 Stl, Blk Oxide	AISI 1045 Steel, cold drawn
7	Dowel Pin, 1/32" x 3/8", SS	Chrome Stainless Steel
8	Spring Clamshell lid assembly	Steel Music Wire
9	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
10	Floating Guide Spring	Alloy Steel (SS)
11	#0-80 X .75 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
12	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
13	Socket Head Cap Screw, M4 x 50mm	Stainless Steel (18-8)
14	Heatsink compression Screw	7075-T6 Alumium Alloy
15	Torquing bracket	7075-T6 Alumium Alloy
16	Clam Shell	7075-T6 Aluminum Alloy
17	Compression Plate	7075-T6 Aluminum Alloy
18	Insulation Plate, 50.225 X 50.225	FR4
19	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
20	Socket Base	7075-T6 Aluminum Alloy
21	Middle Guide BGA1681	Semitron MDS 100
22	Floating Guide 42.5mm, BGA1681	Semitron MDS 100
23	Bottom Guide BGA1681	Semitron MDS 100
24	Backing Plate	7075-T6 Aluminum Alloy

Description: Socket Assy

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-6041 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 603.85	STATUS: Released ENG: M.A. Fedde FILE: CBT-BGA-6041 Dwg	SHEET: 4 OF 5 DRAWN BY: M. Raske DATE: 04/25/2014	REV. B SCALE: 1:1.5




Description: Insulation Plate, Clearances

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.

Rev	Date	Initials	Description
A	04/25/14	MR	Original
B	04/02/15	DH	Updated layout page to show added material bump out to pin nest assembly screw holes.

 CBT-BGA-6041 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 603.85	STATUS: Released ENG: M.A. Fedde FILE: CBT-BGA-6041 Dwg	SHEET: 5 OF 5 DRAWN BY: M. Raske DATE: 04/25/2014	REV. B SCALE: 1:1