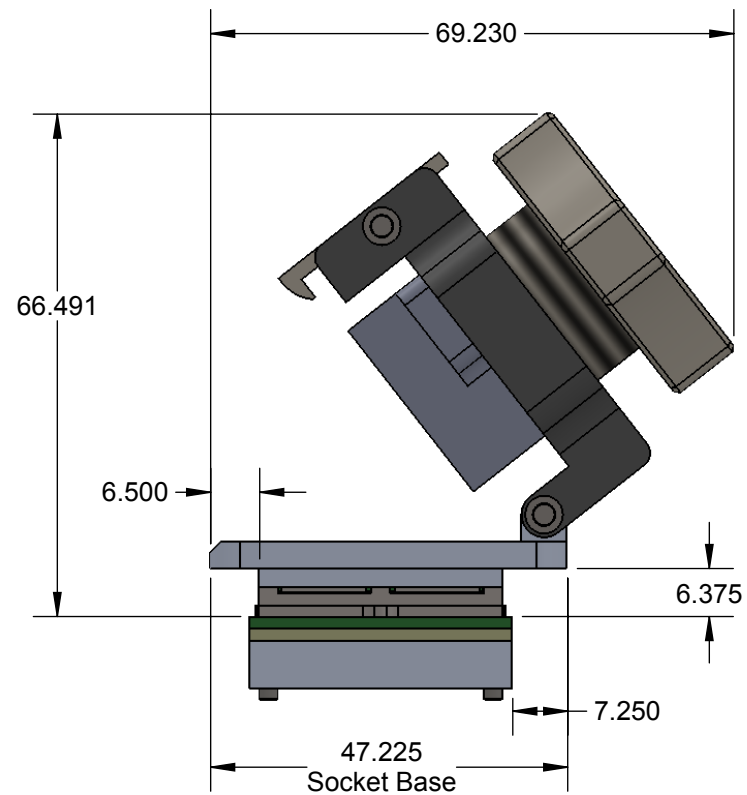
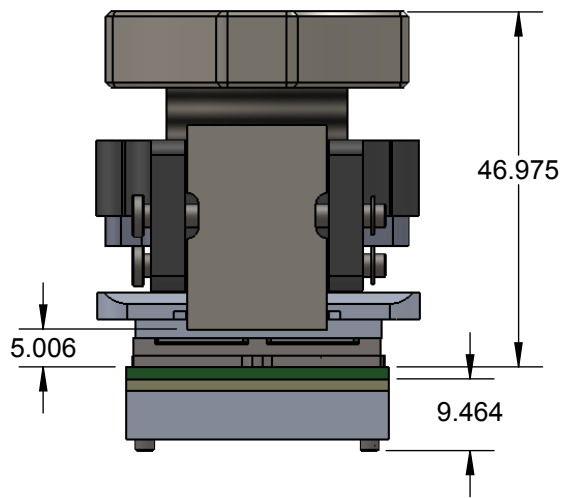
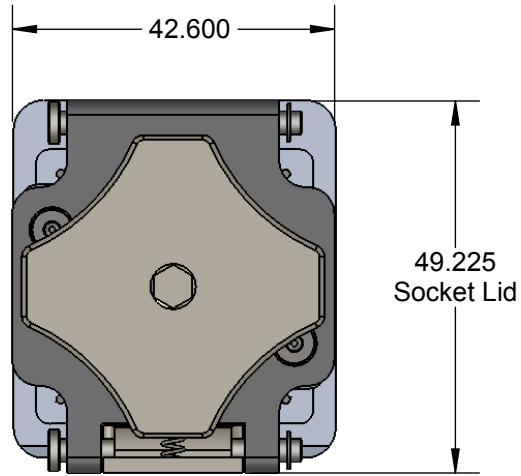


CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS


- 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



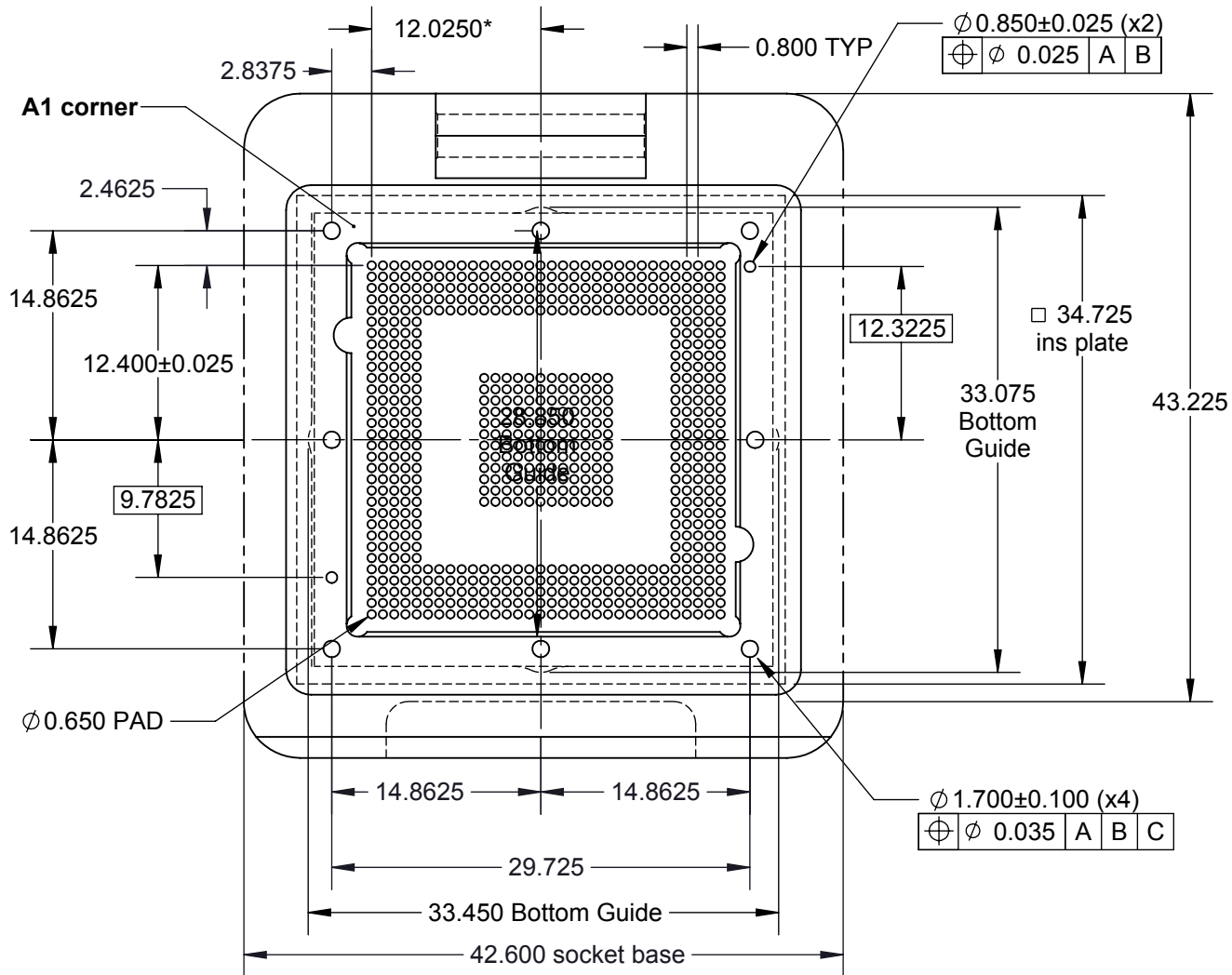
Description: CBT-BGA 27x27mm, 0.8mm 32x32 array - 7 Watts

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.

 <p>CBT-BGA-6005 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 160.16</p>	STATUS: Released	SHEET: 1 OF 5	REV. B
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 1:1
		FILE: CBT-BGA-6005 Dwg	DATE: 04/08/2015	

***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

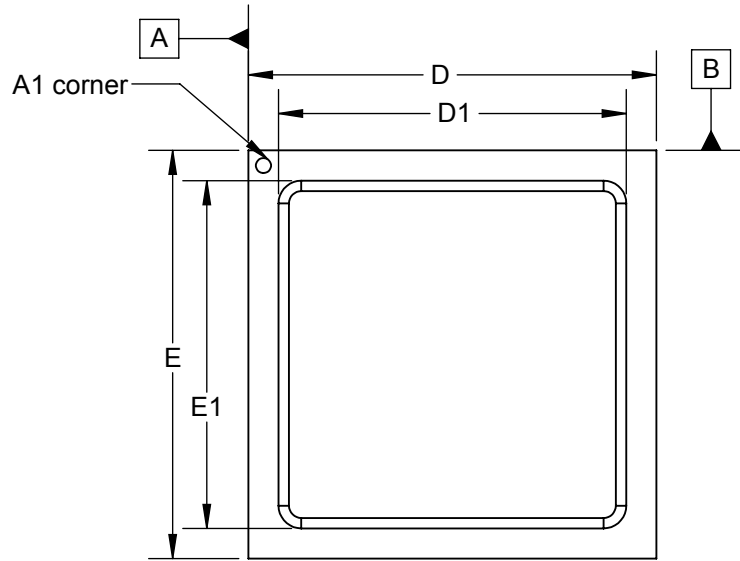
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

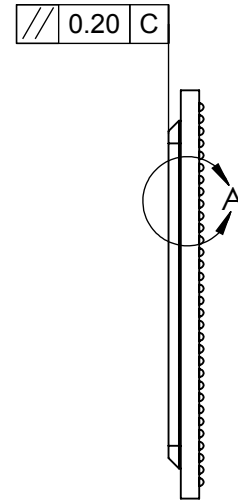
Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish
PCB Pad height: same or higher than solder mask

 CBT-BGA-6005 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 160.16	STATUS: Released ENG: S. Faiz FILE: CBT-BGA-6005 Dwg	SHEET: 2 OF 5 DRAWN BY: M. Raske DATE: 04/08/2015	REV. B SCALE: 2:1

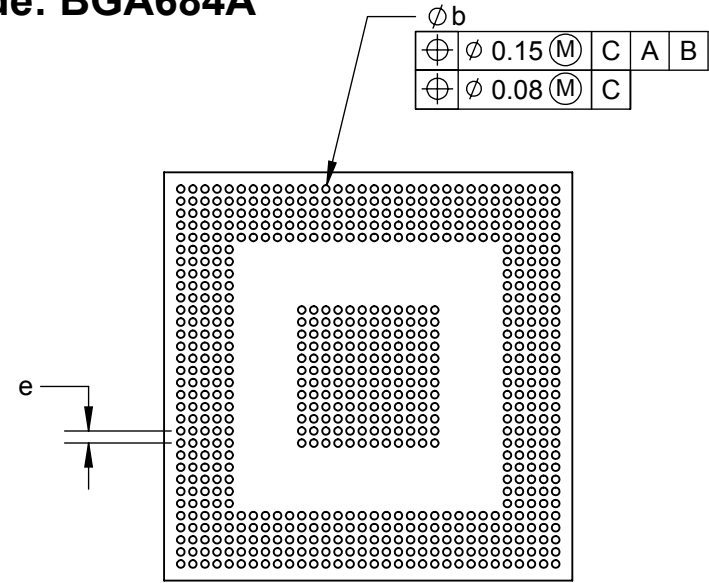
Ironwood Package Code: BGA684A



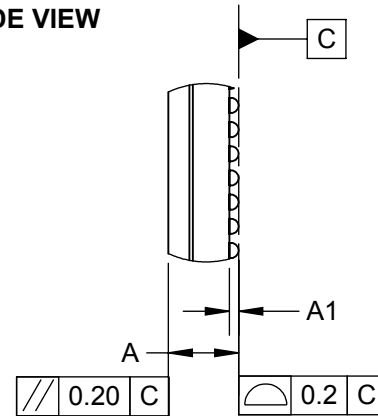
TOP VIEW



SIDE VIEW



BOTTOM VIEW



DETAIL A
SCALE 4 : 1


DIM	Minimum	Nominal	Maximum
A			2.3
A1	0.37		0.47
b			0.55
D	27.00 BSC		
E	27.00 BSC		
e	0.80 BSC		
ARRAY	32 x 32		
PIN COUNT			684

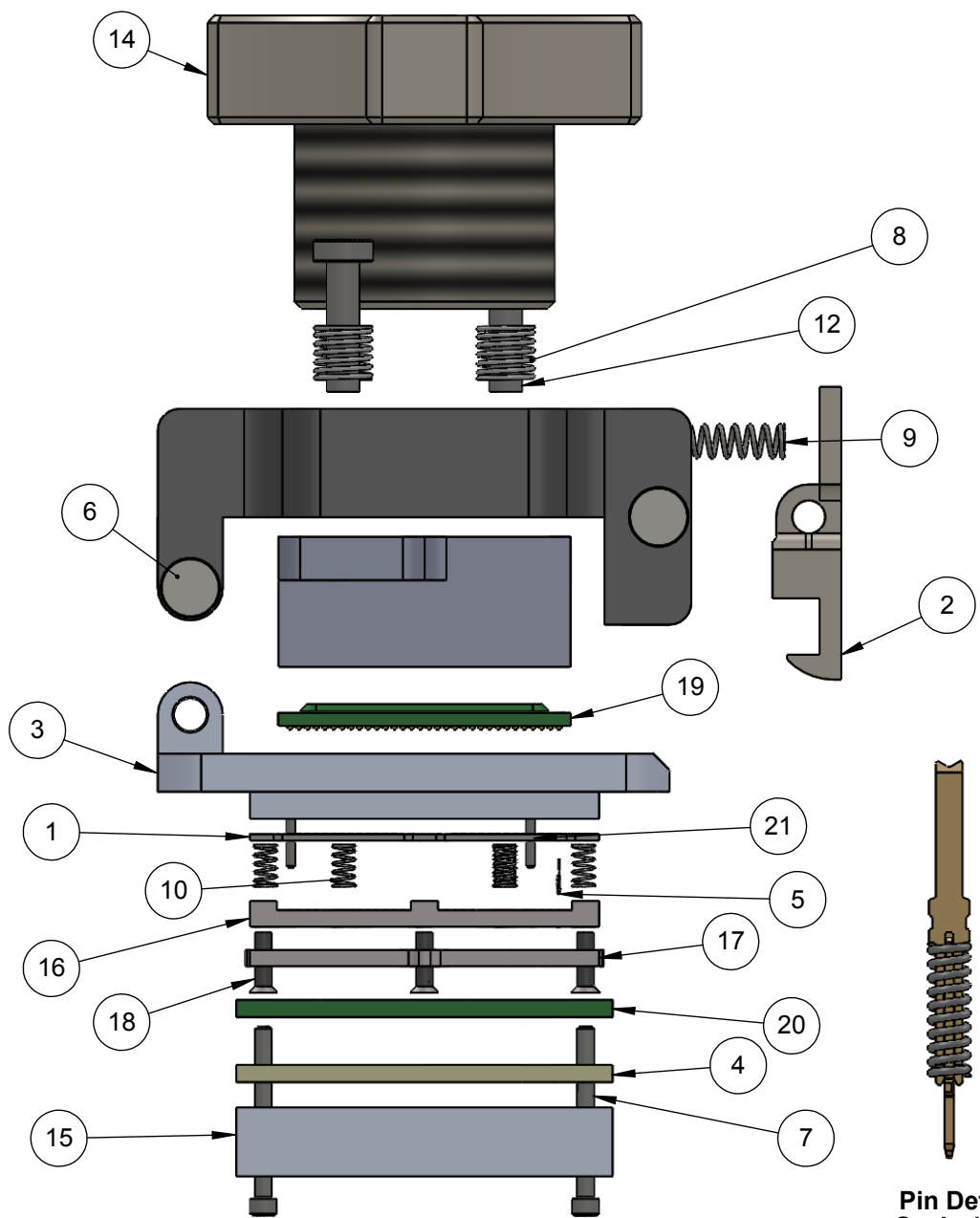
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane C.
4. Datum C (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

Description: Compatible BGA

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

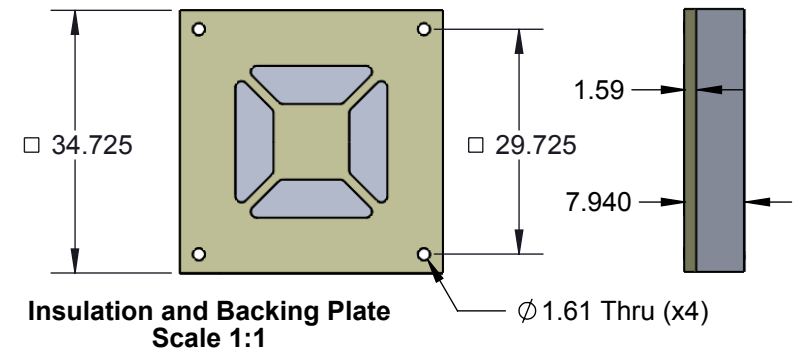
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [$\pm 0.001''$], Pitches (from true position) $\pm 0.025\text{mm}$ [$\pm 0.001''$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$ [$\pm 0.005''$] unless stated otherwise. Materials and specifications are subject to change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

 CBT-BGA-6005 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 160.16	STATUS: Released ENG: S. Faiz FILE: CBT-BGA-6005 Dwg	SHEET: 3 OF 5 DRAWN BY: M. Raske DATE: 04/08/2015	REV. B SCALE: 2:1



ITEM NO.	DESCRIPTION	Material
1	Floating Guide BGA684 32x32 arr 0.8mm pitch	PEEK Ceramic filled
2	Latch	7075-T6 Aluminum Alloy
3	Socket Base	7075-T6 Aluminum Alloy
4	Insulation Plate 27mm IC	FR4
5	SBT Pin, SBT-BGA 0.5mm-0.8mm	
6	Hinge Pin and Snap Ring, 3mm OD, 30mm long, 1045 Stl, Blk Oxide	AISI 1045 Steel, cold drawn
7	#0-80 X .625 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy 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	Compression plate	7075-T6 Aluminum Alloy
12	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
13	Socket Lid	7075-T6 Aluminum Alloy
14	Compression Screw	7075-T6 Aluminum Alloy
15	Backing Plate 27x27mm	7075-T6 Aluminum Alloy
16	Top Guide BGA684 32x32 arr 0.8mm pitch	PEEK Ceramic filled
17	Bottom Guide BGA684 32x32 arr 0.8mm pitch	PEEK Ceramic filled
18	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
19	Test Chip 32x32 8mm	Material <not specified>
20	Test PCB 32x32 8mm	Material <not specified>
21	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)


Pin Detail
Scale 16:1



Description: Socket Assy, Insulation Plate

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-6005 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 160.16	STATUS: Released ENG: S. Faiz FILE: CBT-BGA-6005 Dwg	SHEET: 4 OF 5 DRAWN BY: M. Raske DATE: 04/08/2015	REV. B SCALE: 3:2

Rev	Date	Initials	Description
A	11/6/10	SF	original
B	4/8/15	RP/MR	P-P196A was P-P149A, adjusted dowel pin height, VW to SW

Description: Sheet1

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-6005 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Finish: Weight:	STATUS: Released	SHEET: 5 OF 5	REV. B
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 3:2
		FILE: CBT-BGA-6005 Dwg	DATE: 04/08/2015	