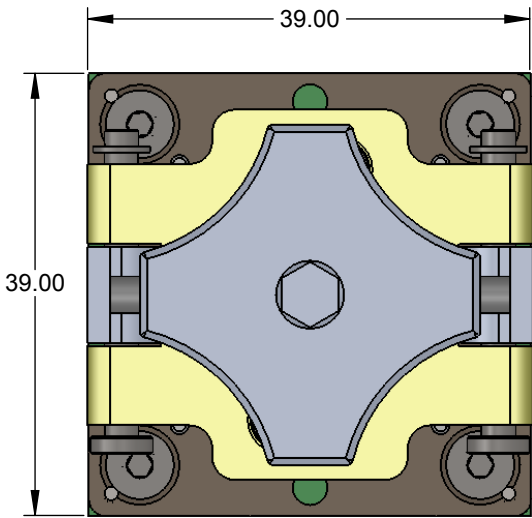
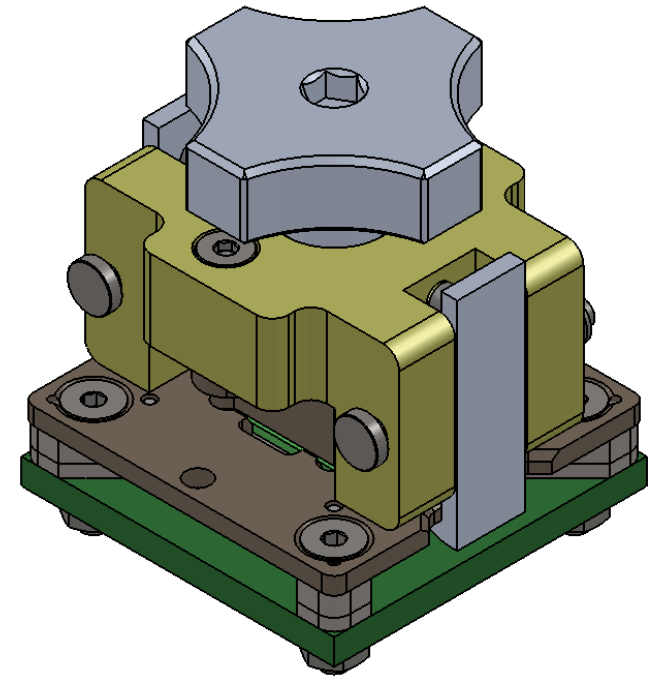
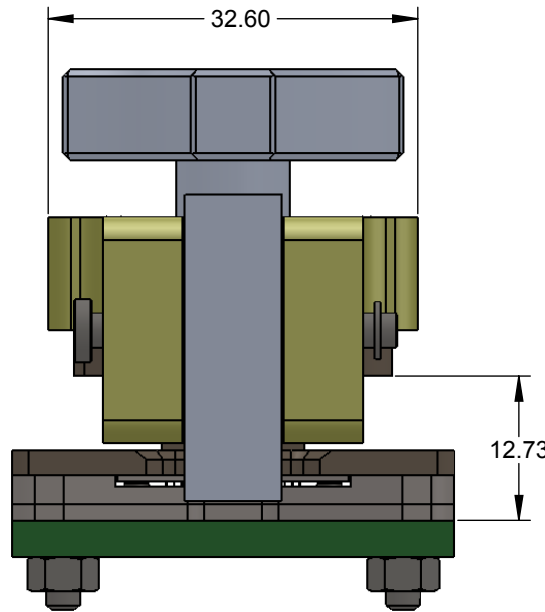
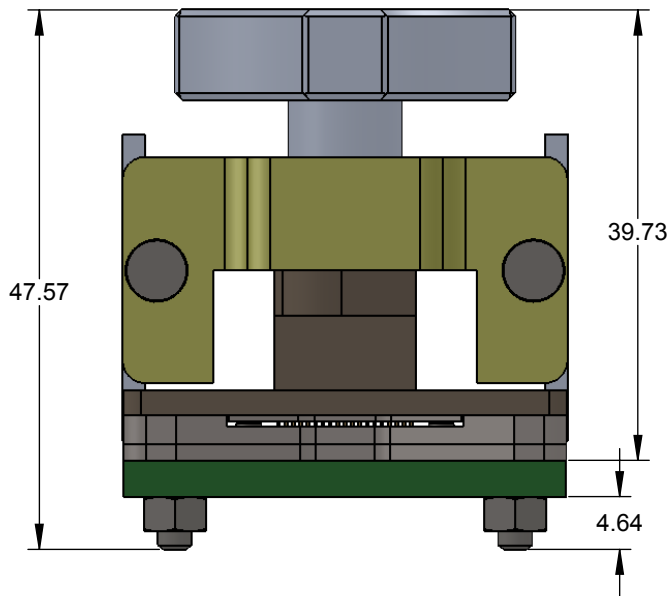


CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR PRODUCTION APPLICATIONS



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.

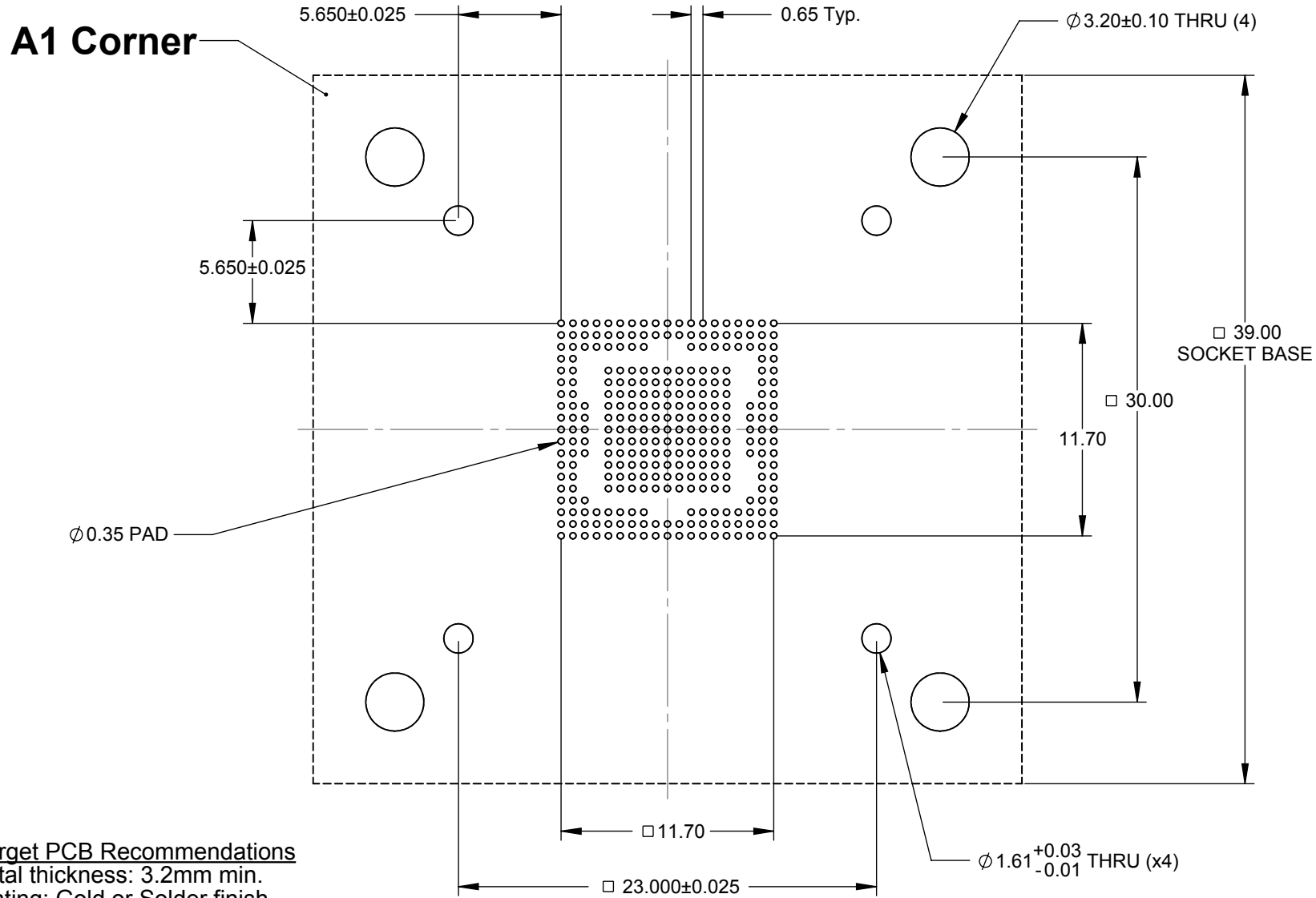


Description: CBT-BGA

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-7005 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 82.83	STATUS: Released ENG: M. Tully FILE: CBT-BGA-7005 Dwg	SHEET: 1 OF 5 DRAWN BY: M. Raske DATE: 5/23/2014	REV. B SCALE: 3:2




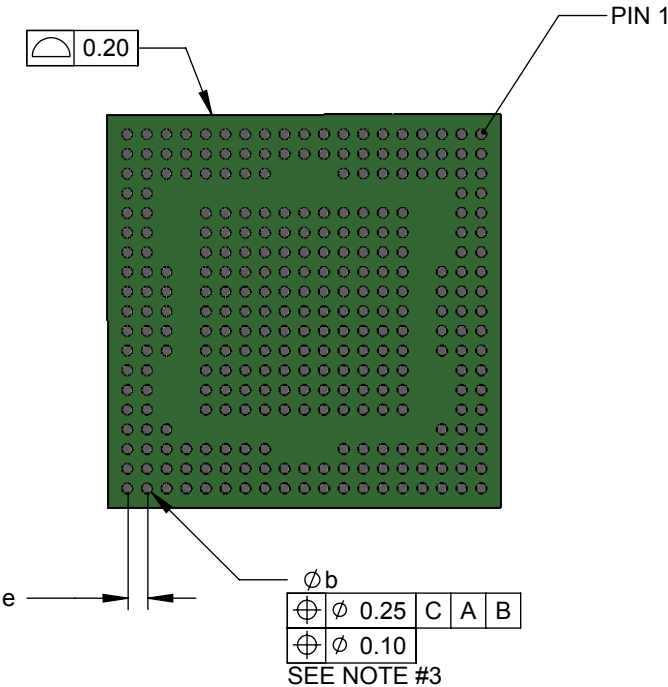
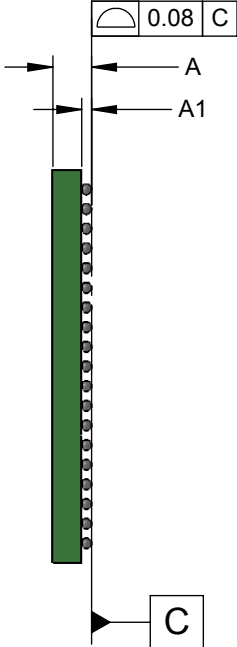
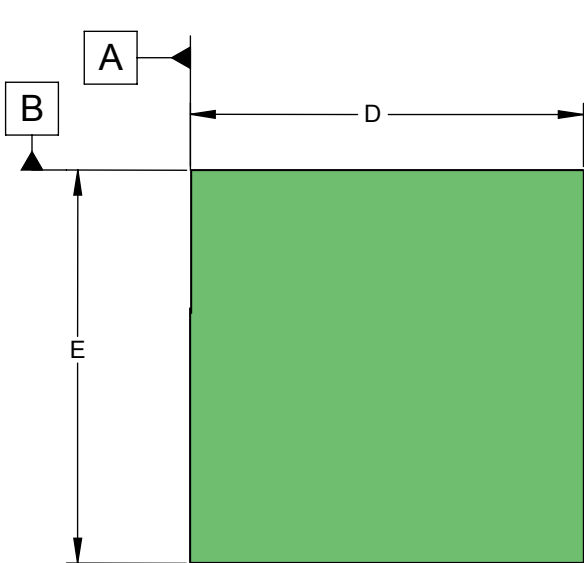
Target PCB Recommendations
 Total thickness: 3.2mm min.
 Plating: Gold or Solder finish

Description: CBT-BGA

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

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

 <p>CBT-BGA-7005 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 82.83</p>	STATUS: Released	SHEET: 2 OF 5	REV. B
		ENG: M. Tully	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: CBT-BGA-7005 Dwg	DATE: 5/23/2014	




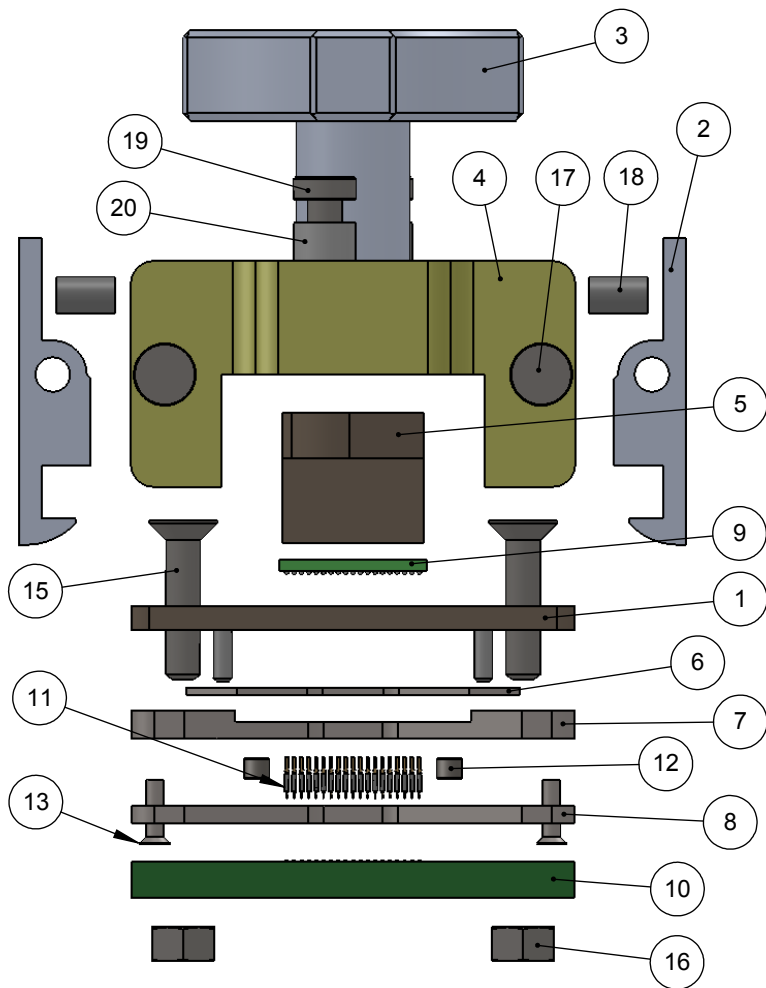
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

DIM	MIN	MAX
A		1.25
A1	0.16	0.26
b	0.27	0.37
D	12.95	13.05
E	12.95	13.05
e	.65	
Array Size		19 X 19
Pin Count		293

Description: CBT-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.

 <p>CBT-BGA-7005 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	Material: N/A Finish: N/A Weight: 82.83	STATUS: Released ENG: M. Tully FILE: CBT-BGA-7005 Dwg	SHEET: 3 OF 5 DRAWN BY: M. Raske DATE: 5/23/2014	REV. B SCALE: 1:1




PIN DETAIL

ITEM NO.	Description	Material
1	CBT Socket Base 13mm custom foot print	7075-T6 Aluminum Alloy
2	Latch 10-17mm clamshell	7075-T6 Aluminum Alloy
3	M10 Compression Screw	7075-T6 Aluminum Alloy
4	Socket Lid clamshell double latch 17mm	7075-T6 Aluminum Alloy
5	Compression Plate for 13mm IC	7075-T6 Aluminum Alloy
6	CBT-BGA floating guide, 0.65mm Pitch	PEEK Ceramic filled
7	CBT-BGA top guide, 0.65mm Pitch	PEEK Ceramic filled
8	CBT-BGA Bottom guide, 0.65mm Pitch	PEEK Ceramic filled
9	293L LFBGA 13x13mm x 125 thick 0.65mm pitch	Material <not specified>
10	PCB recomended layout	High Temp FR4
11	SBT Pin, SBT-BGA 0.5mm-0.8mm	
12	Floating Guide Spring	Alloy Steel (SS)
13	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
14	Dowel Pin, 1/16" x 1/4", SS	Chrome Stainless Steel
15	Flat Head Socket Head Screw M3x0.5, 14mm long	
16	Hex Nut M3 x 0.5mm pitch	Alloy Steel
17	Hinge Pin and Snap Ring, 3mm OD, 25mm long, SS	Stainless Steel (ferritic)
18	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
19	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
20	Spring Clamshell lid assembly	Steel Music Wire

Description: CBT-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-7005 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 82.83	STATUS: Released	SHEET: 4 OF 5	REV. B
		ENG: M. Tully	DRAWN BY: M. Raske	SCALE: 3:2
		FILE: CBT-BGA-7005 Dwg	DATE: 5/23/2014	

Rev	Date	Initials	Description
B	2/11/15	MR	Created new BOM, disolved C9797 and C9798, replaced P-P149A with P-P196A, replaced R2885 with R3200

Description: Revision history

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-7005 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Finish: Weight:	STATUS: Released	SHEET: 5 OF 5	REV. B
		ENG: M. Tully	DRAWN BY: M. Raske	SCALE: 3:2
		FILE: CBT-BGA-7005 Dwg	DATE: 5/23/2014	