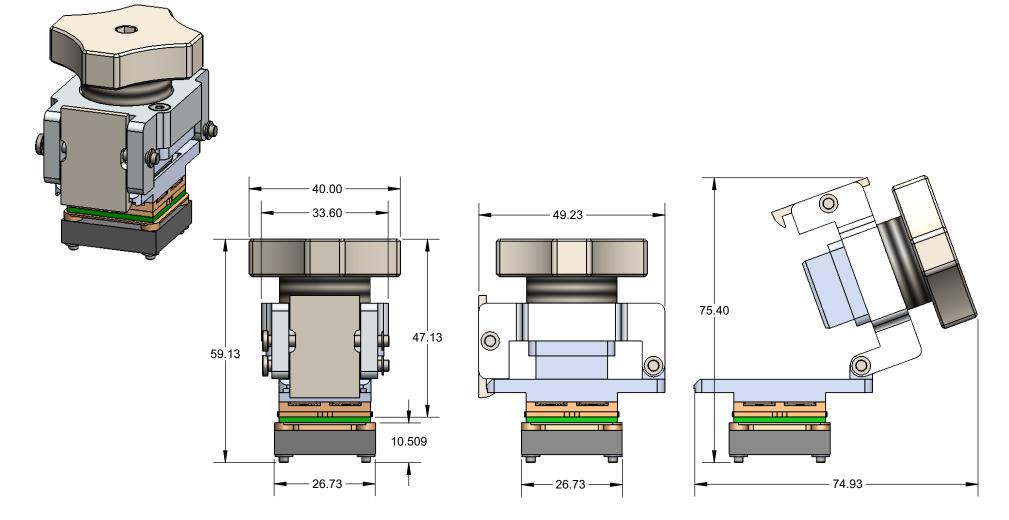
# CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

#### 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

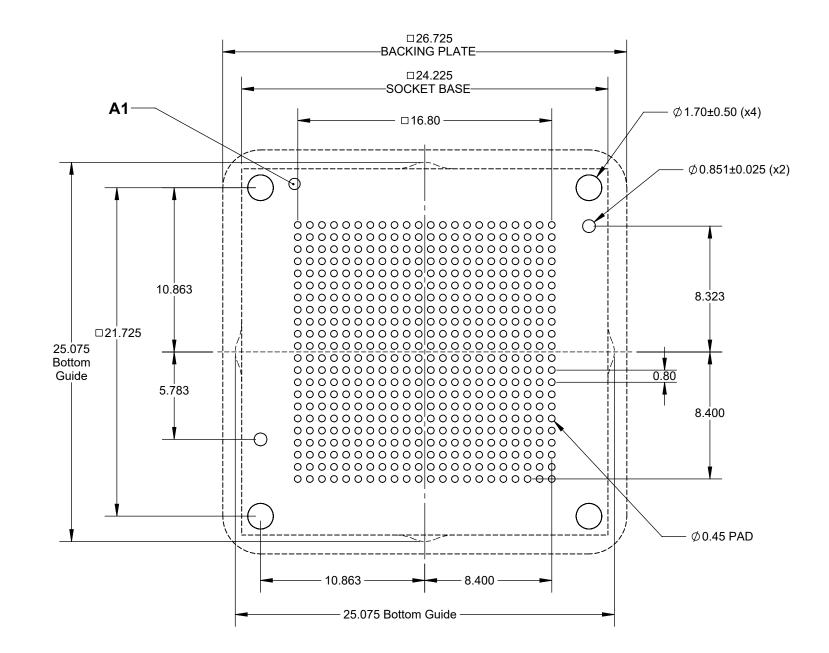


# Description: CBT-19MM, 22X22 ARY, 0.8MM

Primary dimension units are millimeters, Secondary dimension units are [inches].

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.

CBT-BGA-6004 Drawing		Material: N/A	STATUS: Released	SHEET: 1 OF 5	REV. B
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		Finish: N/A	ENG: RP	SCALE: 1:1	
	I ele: (800) 404-0204 www.ironwoodelectronics.com	Weight: 127.35	FILE: CBT-BGA-6004Dwg	DATE: 03/19/2013	

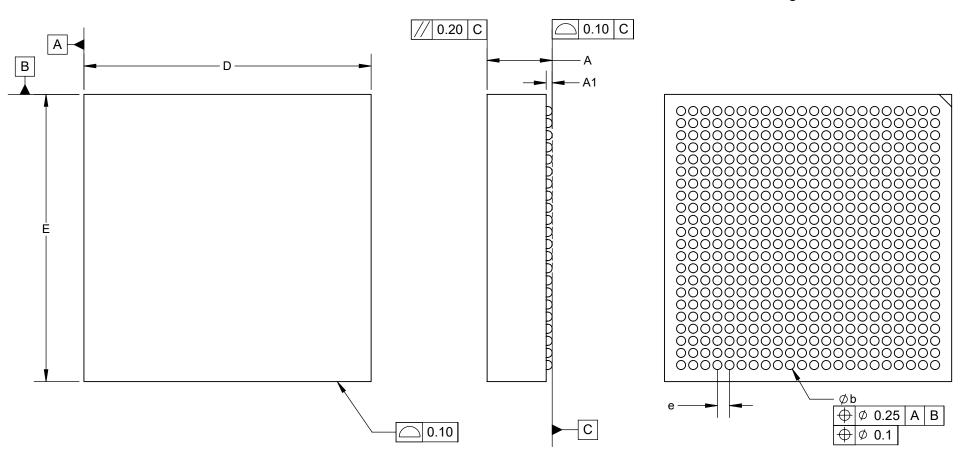


### **Description: Recommended PCB Layout**

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.

CBT-BGA-6004 Drawing	Material: N/A Finish: N/A Weight: 127.35	STATUS: Released	SHEET: 2 OF 5	REV. B
Ironwood Electronics, Inc. Tele: (800) 404-0204		ENG: RP	SCALE: 4:1	
www.ironwoodelectronics.com		FILE: CBT-BGA-6004Dwg	DATE: 03/19/2013	



- 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.

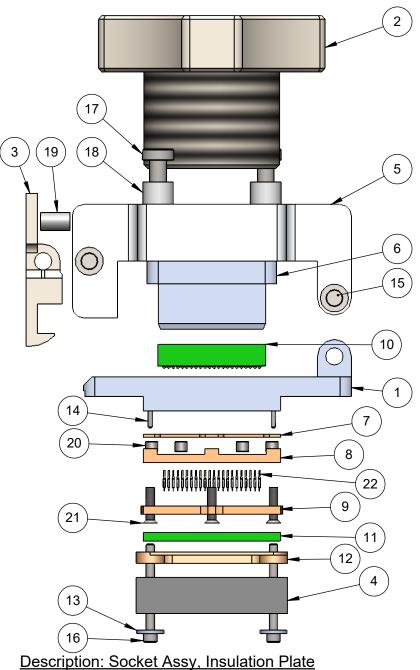
DIM	Minimum	Maximum	
A		4.00	
A1	0.36	0.46	
b	0.60		
D	19.0 BSC		
E	19.0 BSC		
e 0.8 BSC		BSC	
ARRAY	22	x 22	

## **Description: Compatible BGA**

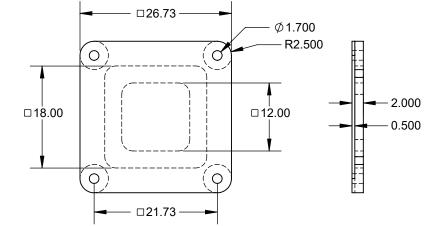
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

CBT-BGA-6004 Drawing	CBT-BGA-6004 Drawing Material: N/A		SHEET: 3 OF 5	REV. B
Ironwood Electronics, Inc. Tele: (800) 404-0204	nish: N/A /eight: 127.35	ENG: RP	SCALE: 1:1	
www.ironwoodelectronics.com		FILE: CBT-BGA-6004Dwg	DATE: 03/19/2013	



ITEM NO.	DESCRIPTION	Material
1	Socket Base 19mm centered pocket	7075-T6 Aluminum Alloy
2	Compression Screw	7075-T6 Aluminum Alloy
3	Latch	7075-T6 Aluminum Alloy
4	SS BGA Backing Plate 19x19 mm IC	7075-T6 Aluminum Alloy
5	CBT socket lid for 19mm chip	7075-T6 Aluminum Alloy
6	Compression plate 19mm	7075-T6 Aluminum Alloy
7	Floating Guide 19mm 0.8mm centered arr	Semitron MDS 100
8	Middle Pogo Guide 19MM, 22X22 ARY, 0.8MM	Semitron MDS 100
9	Bottom Guide 19MM, 22X22 ARY, 0.8MM	Semitron MDS 100
10	Test Chip	Material <not specified=""></not>
11	Test PCB	Material <not specified=""></not>
12	Insulation plate	Ultem
13	Washer, #0 x .025", Nylon	Nylon 6/6
14	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
15	Hinge Pin and Snap Ring, 3mm OD, 30mm long, 1045 Stl, Blk Oxide	AISI 1045 Steel, cold drawn
16	#0-80 X .625 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
17	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
18	Spring Clamshell lid assembly	Steel Music Wire
19	Precision Compression Spring, Źinc- Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
20	Floating Guide Spring	Alloy Steel (SS)
21	#0-80X0.25", 90 deg., head pin guide screw, Peek material	PEEK unfilled
22	SBT Pin, SBT-BGA 0.5mm-0.8mm	
A		



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.

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CBT-BGA-6004 Drawing	Material: N/A	STATUS: Released	SHEET: 4 OF 5	REV. B
Ironwood Electronics, Inc. Tele: (800) 404-0204	Finish: N/A Weight: 127.35	ENG: RP	SCALE: 3:2	
www.ironwoodelectronics.com		FILE: CBT-BGA-6004Dwg	DATE: 03/19/2013	

Rev	Date	Initials	Description
Α	-	-	Original
В	4/9/2015	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: Revisions Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams. <u>Tolerances:</u> 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.

CBT-BGA-6004 Drawing	Material: Finish: Weight:	STATUS: Released	SHEET: 5 OF 5	REV. B
Ironwood Electronics, Inc.		DRAWN BY: -	SCALE: 3:1	
Tele: (800) 404-0204 www.ironwoodelectronics.com	weight.	FILE: CBT-BGA-6004Dwg	DATE: 03/19/2013	