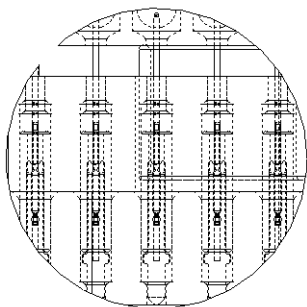
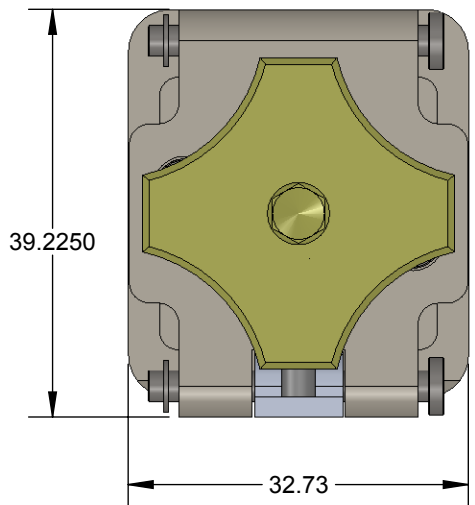


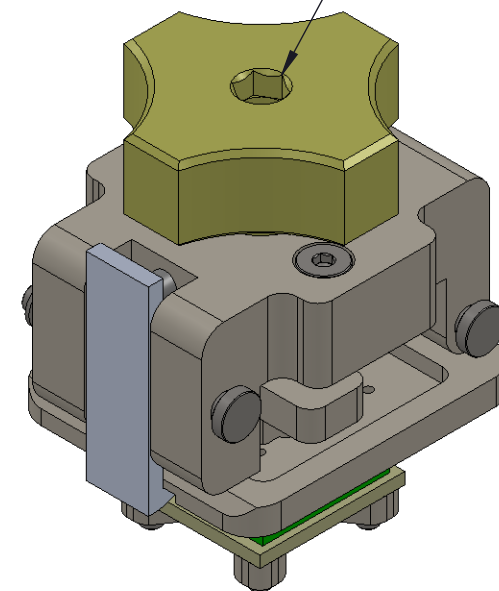
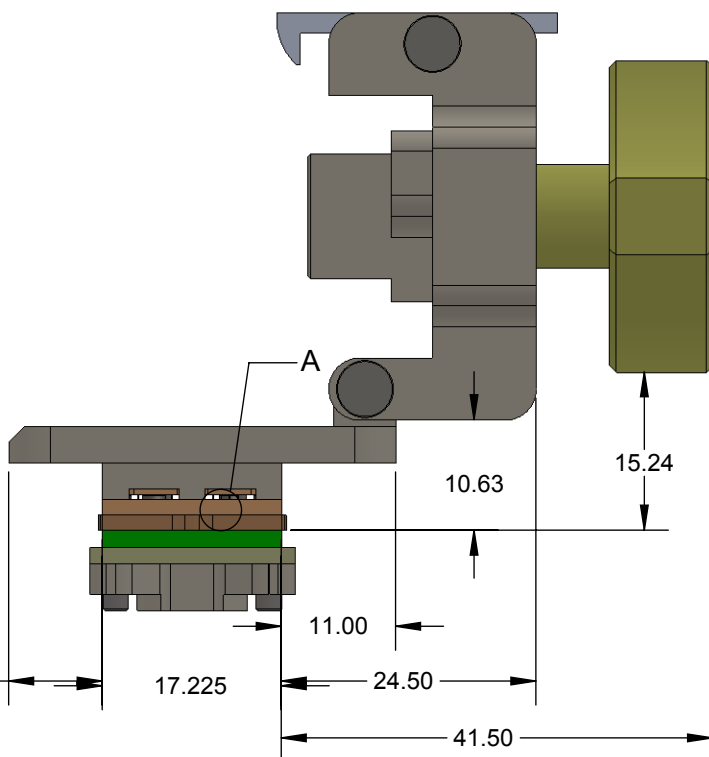
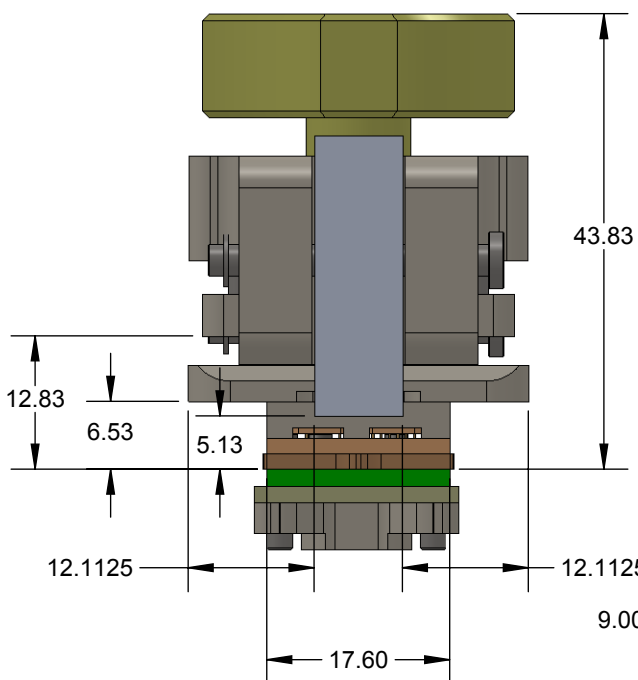
# CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



**DETAIL A  
SCALE 10 : 1**

- 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


Apply torque: 22.6 N-cm [2 lbf-in]

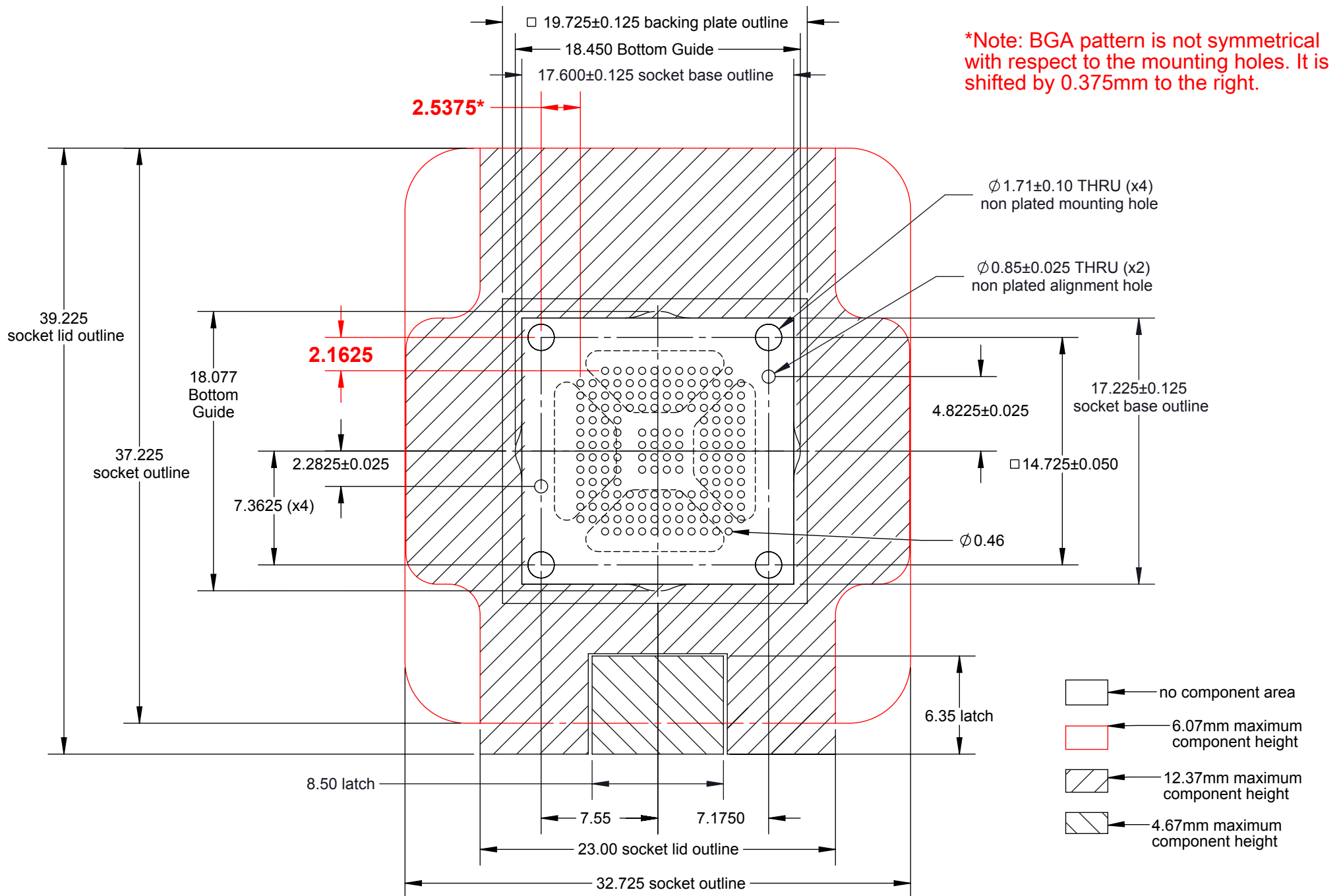


## Description: Socket for 12x12 14x14 0.8mm pitch BGA170

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.

 <b>CBT-BGA-6045 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 77.57	STATUS: Released ENG: E. Smolentseva FILE: CBT-BGA-6045 Dwg	SHEET: 1 OF 4 DRAWN BY: M. Raske DATE: 01/08/2015	REV. A SCALE: 2.75:2




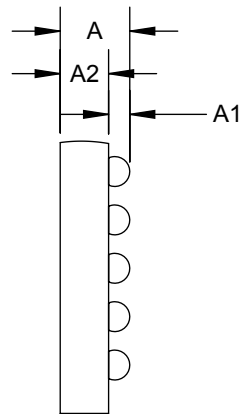
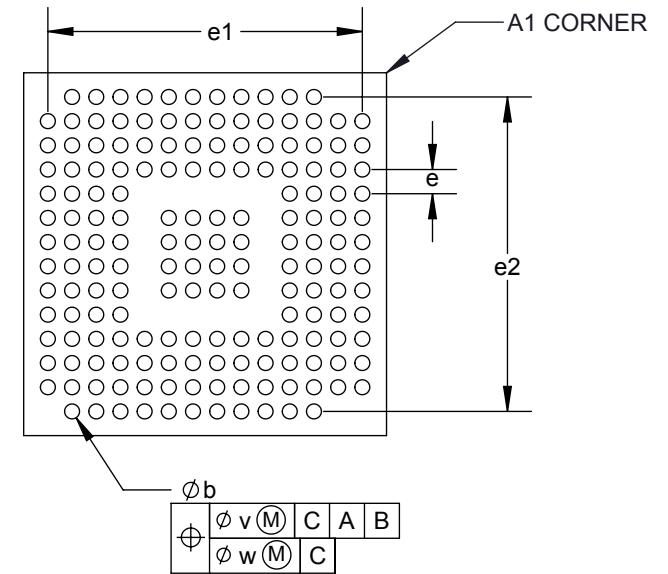
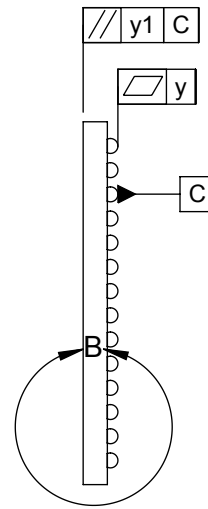
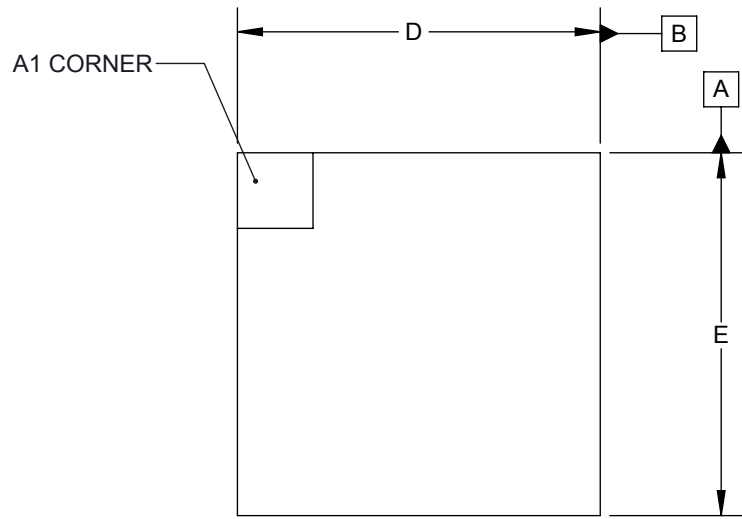
### Description: Recommended PCB Layout

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.

**Target PCB Recommendations**  
**Total thickness: 1.6mm min.**  
**Plating: Gold or Solder finish**

 <b>CBT-BGA-6045 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 77.57	STATUS: Released ENG: E. Smolentseva FILE: CBT-BGA-6045 Dwg	SHEET: 2 OF 4 DRAWN BY: M. Raske DATE: 01/08/2015	REV. A SCALE: 3.1:1




**DETAIL B**  
**SCALE 8 : 1**

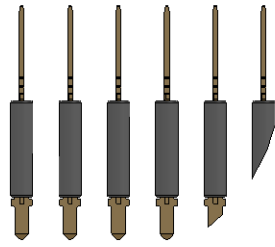
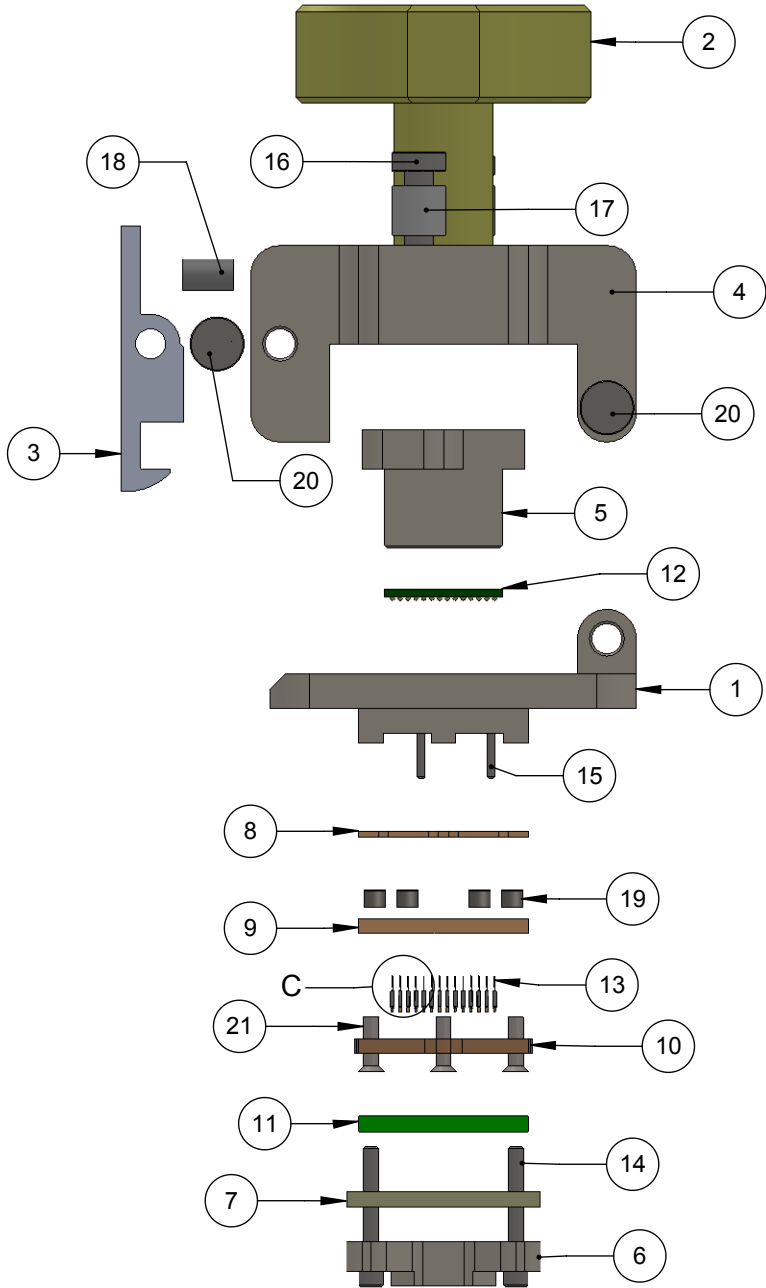
DIM	Minimum	Nominal	Maximum
A	1.25	1.35	1.50
A1	0.30	0.35	0.40
A2	0.95	1.00	1.10
b	0.40	0.45	0.50
D	11.9	12.0	12.1
E	11.9	12.0	12.1
e	0.80 BSC		
e1	10.4		
e2	10.4		
v	0.15		
w	0.08		
y	0.12		
y1	0.10		
PIN COUNT			170

**Description: Compatible BGA**

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

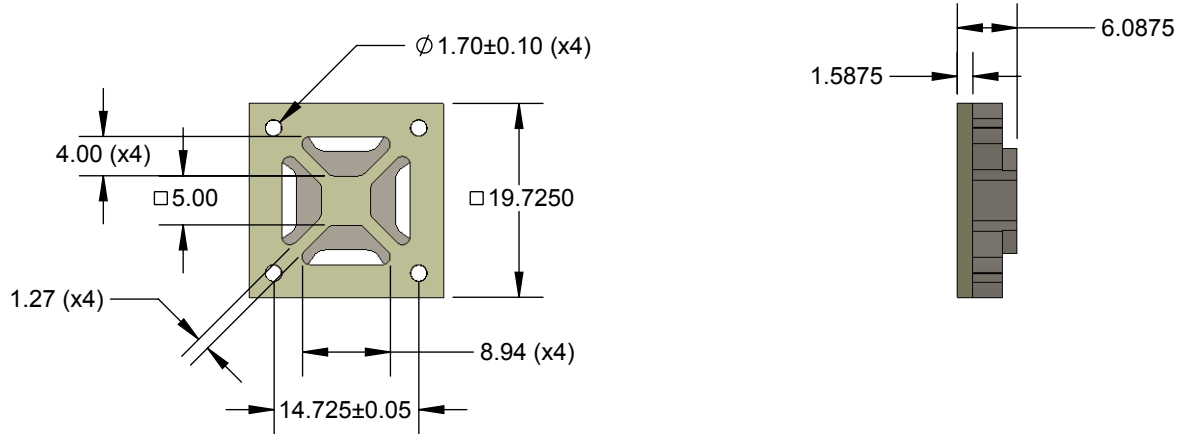
Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject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

 <b>CBT-BGA-6045 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 77.57	STATUS: Released	SHEET: 3 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: CBT-BGA-6045 Dwg	DATE: 01/08/2015	




**DETAIL C  
SCALE 8 : 1**

ITEM NO.	DESCRIPTION	Material
1	Socket Base	7075-T6 Aluminum Alloy
2	COMPRESSION SCREW, 17MM X M10	7075-T6 Aluminum Alloy
3	Latch 10-17mm clamshell	7075-T6 Aluminum Alloy
4	Clam Shell	7075-T6 Aluminum Alloy
5	Compression Plate	7075-T6 Aluminum Alloy
6	Backing Plate	7075-T6 Aluminum Alloy
7	Insulation Plate	FR4 High temp
8	Floating Guide 12mm 0.8mm 14x14array	Semitron MDS 100
9	Middle Pogo Guide 12mm 0.8mm 14x14 arr	Semitron MDS 100
10	Bottom Guide 12mm 0.8mm 14x14 arr	Semitron MDS 100
11	Customer's target PCB	Custom Plastic
12	Customer's device	FR4
13	SBT Pin, SBT-BGA 0.5mm-0.8mm	
14	#0-80 x 0.5, SH Cap Screw	Alloy Steel
15	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
16	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
17	Spring Clamshell lid assembly	Steel Music Wire
18	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
19	Floating Guide Spring	Alloy Steel (SS)
20	Hinge Pin and Snap Ring, 3mm OD, 25mm long, SS	Stainless Steel (ferritic)
21	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled



**Description: Socket Assy. detail**

 <b>CBT-BGA-6045 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 77.57	STATUS: Released	SHEET: 4 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 1.3:1
		FILE: CBT-BGA-6045 Dwg	DATE: 01/08/2015	