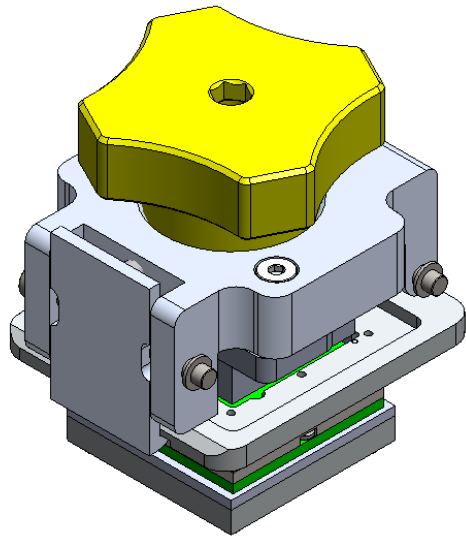
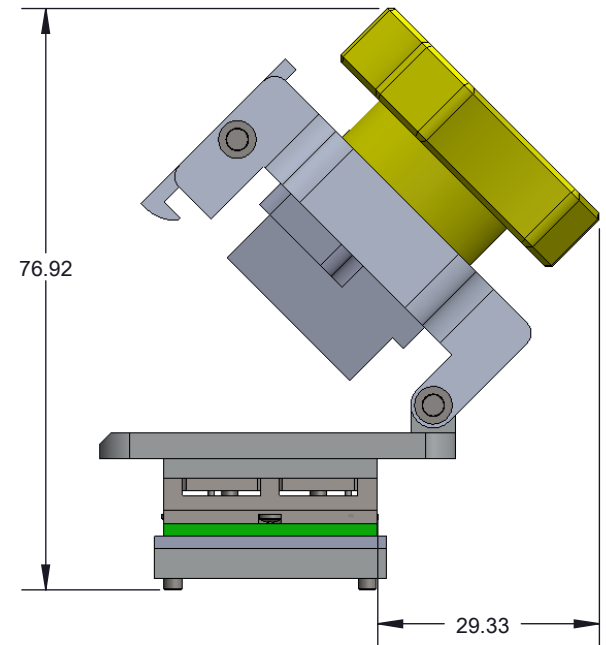
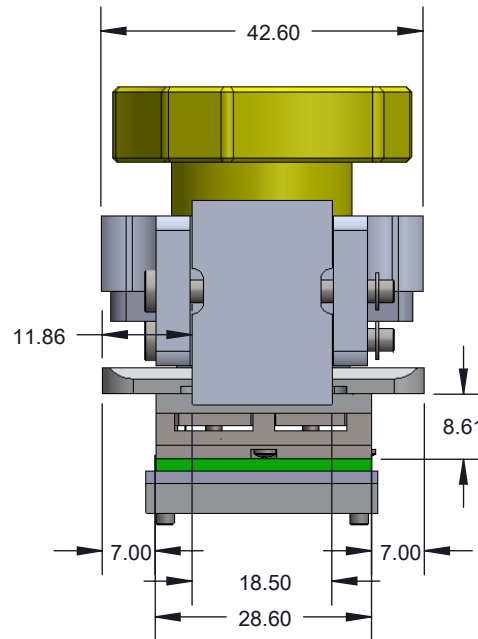
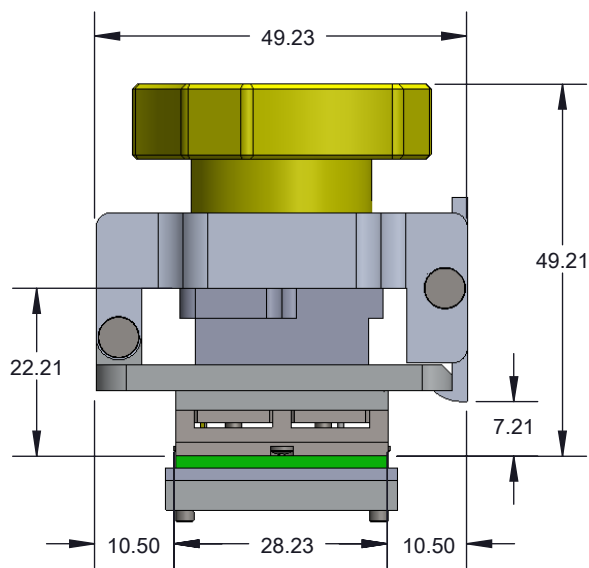


## CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



### FEATURES:

- Wide temperature range (-55C to +180C)
- High current capability (up to 8A)
- 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: Socket Specification

Primary dimension units are millimeters, Secondary dimension units are [inches].  
 Tolerances: diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001''$ ], 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-6001 Drawing

STATUS: Released

SHEET: 1 of 4

REV. A

DRAWN BY: M. Raske

SCALE: 1:1

File: CBT-BGA-6001

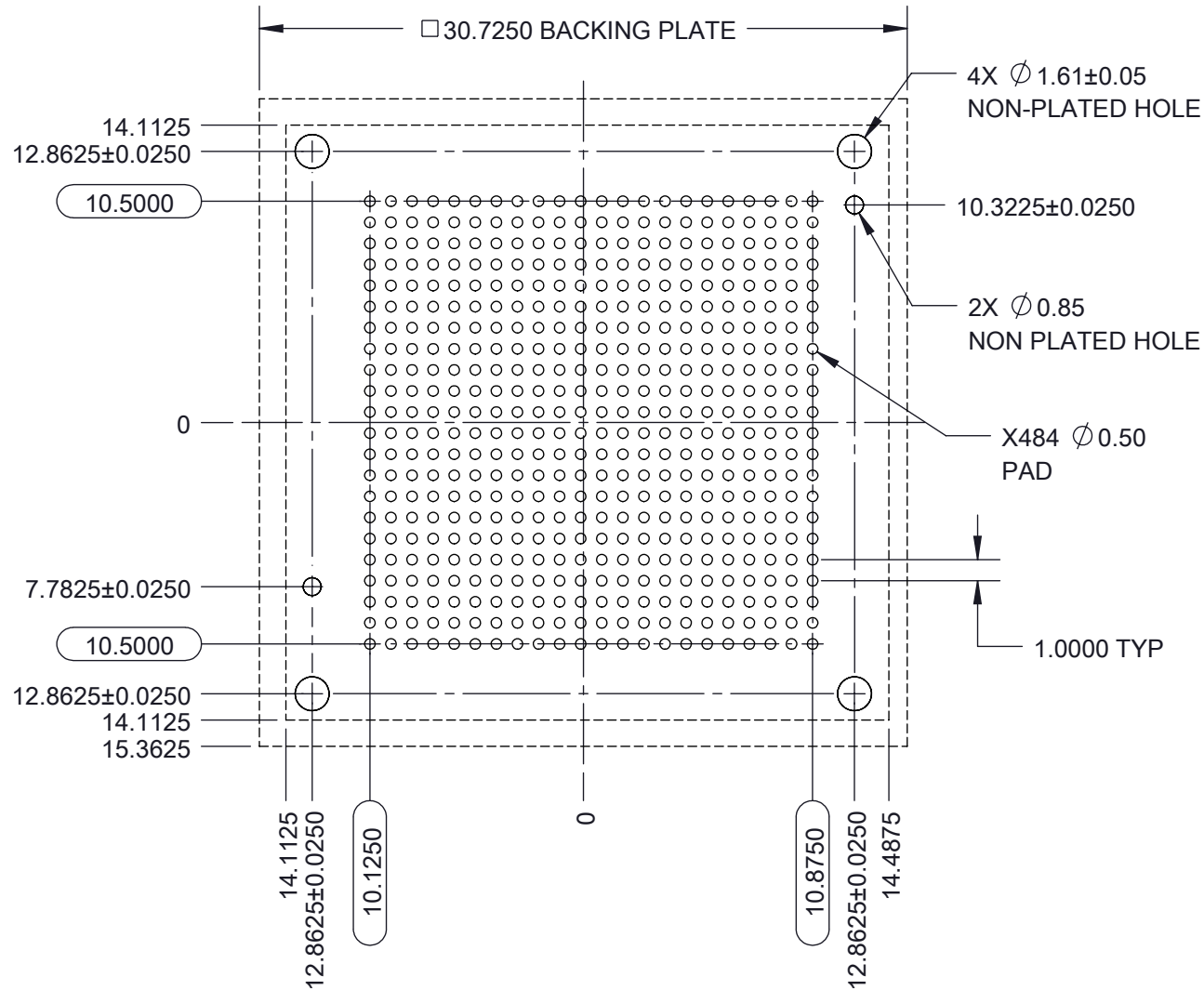
DATE: 10/19/2010



Ironwood Electronics, Inc.  
 Tele: (800) 404-0204  
 www.ironwoodelectronics.com

WEIGHT:  
 MATERIAL:  
 FINISH:

Note: BGA pattern is not symmetrical with respect to the mounting holes



**DESCRIPTION: Recommended PCB Layout**

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

Tolerances: diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001$ "], 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

PCB Pad height: same or higher than solder mask

**CBT-BGA-6001 Drawing**

STATUS: Released

SHEET: 2 of 4

REV. A

DRAWN BY: M. Raske

SCALE: 2:1

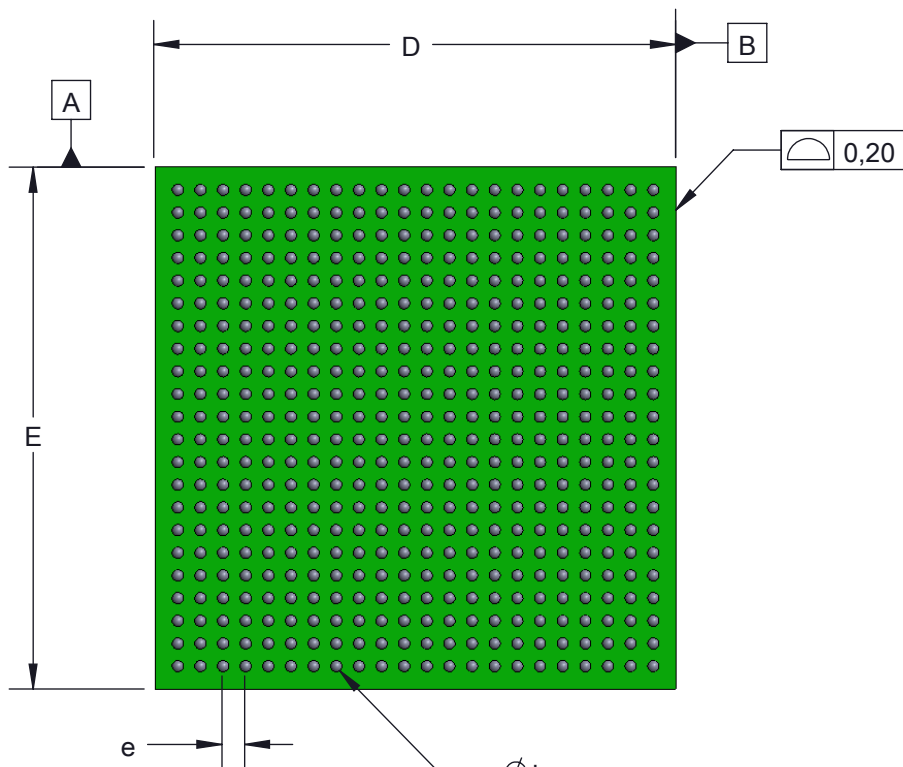
File: CBT-BGA-6001

DATE: 10/19/2010



Ironwood Electronics, Inc.  
Tele: (800) 404-0204  
www.ironwoodelectronics.com

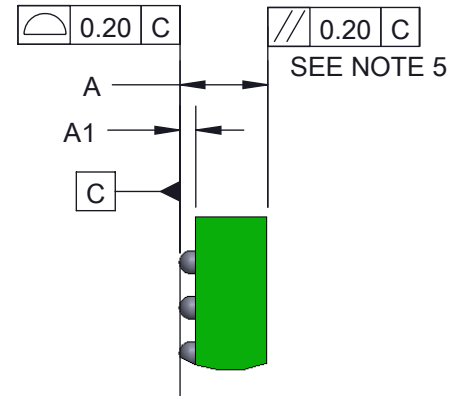
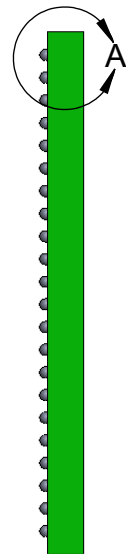
WEIGHT:  
MATERIAL:  
FINISH:



$\phi b$

$\oplus$	0.25	C	A	B
$\oplus$	0.10			

SEE NOTE 3



DETAIL A  
SCALE 6 : 1

DIM	Minimum	Maximum
A		2.5
A1	0.4	0.6
b		0.70
D	23.00 BSC	
E	23.00 BSC	
e	1.0 BSC	
ARRAY	22 X 22	
PIN COUNT	484	

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].

Tolerances: diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001$ "], 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-6001 Drawing**

Ironwood Electronics, Inc.  
Tele: (800) 404-0204  
www.ironwoodelectronics.com

WEIGHT:  
MATERIAL:  
FINISH:

STATUS: Released

DRAWN BY: M. Raske

File: CBT-BGA-6001

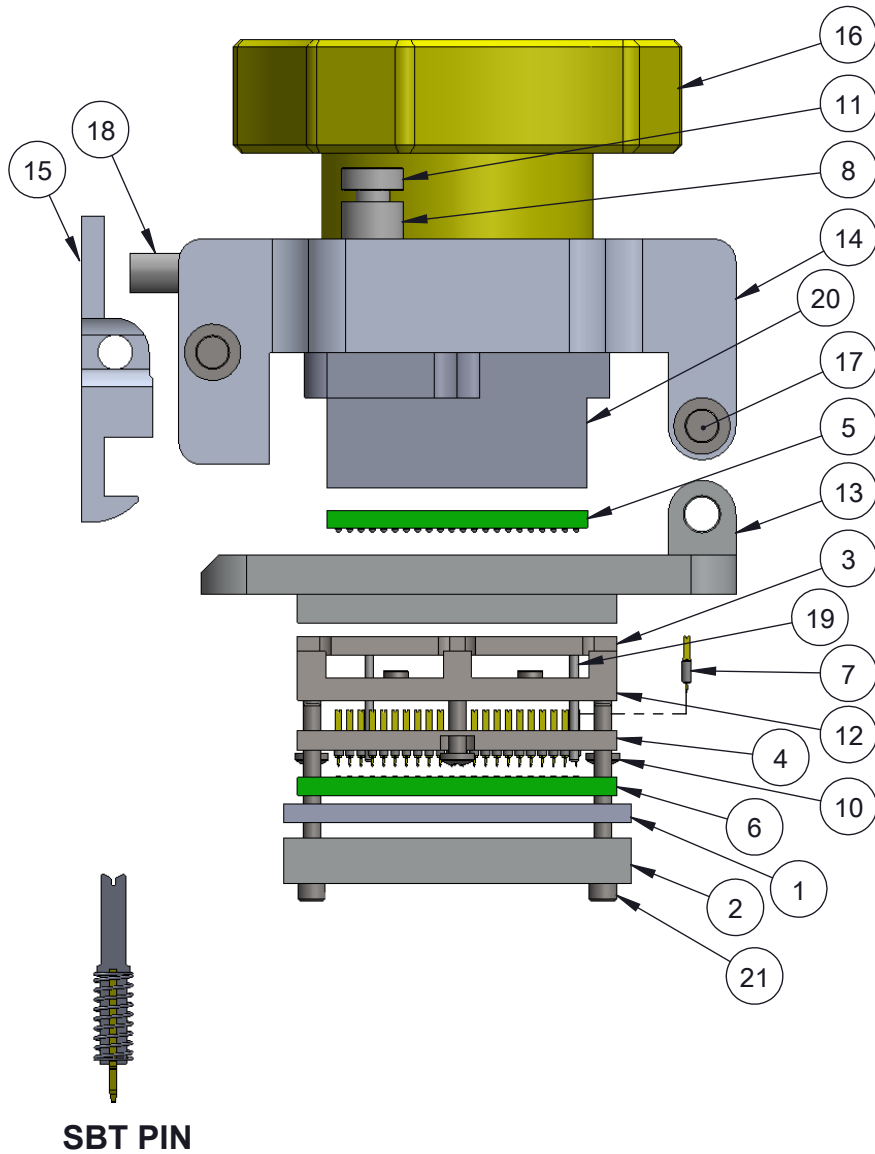
SHEET: 3 of 4

SCALE: 3:1

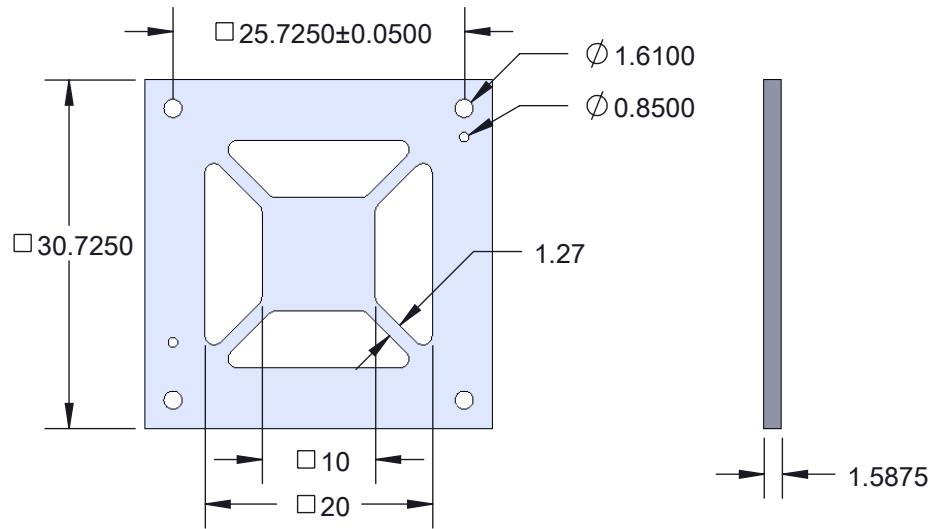
DATE: 10/19/2010

REV. A





ITEM NO.	DESCRIPTION	Material
1	Insulation plate for 23x23mm IC	Material <not specified>
2	SBT/CBT NI PLT BACKING PLT 23MM	7075-T6 Plate (SS)
3	Floating Guide 23X23mm 1mm 22x22 arr	PEEK Ceramic filled
4	Bottom Guide 23X23mm 1mm 22x22 arr	PEEK Ceramic filled
5	BGA chip for 23x23mm 1mm, 22x22array	Material <not specified>
6	Target PCB for 23x23mm; 1mm, 22x22	Material <not specified>
7	Pogo Pin, 1mm Pitch SBT BGA pin	
8	Spring	
9	Floating Guide Spring	Alloy Steel (SS)
10	CR-PHMS 0.06-80x0.25x0.25-N	Material <not specified>
11	18-8 Stainless Steel: Socket Low Head Cap Screw	
12	Middle Guide 23X23mm 1mm 22x22 arr	PEEK Ceramic filled
13	CBT Socket Base clamshell 23mm Ni plit	7075-T6 Plate (SS)
14	Socket Lid	7075-T6 Aluminum Alloy
15	Latch	7075-T6 Aluminum Alloy
16	Fluted Knob Compression Screw	7075-T6 Aluminum Alloy
17	Hinge and Snap Ring, 3mm OD X 30mm LG	Stainless Steel (ferritic)
18	Latch Spring	
19	1/32" DIA, 3/8" In Alignment Pin	Chrome Stainless Steel
20	CBT 23mm Compression plate Ni Plated	7075-T6 Aluminum Alloy
21	#0-80 X .625 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel



**Insulation Plate Specification**

**DESCRIPTION:** Socket Assy, Insulation Plate

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

Tolerances: diameters ±0.03mm [±0.001"], all other tolerances ±0.13mm [±0.005"] unless stated otherwise.

Materials and specifications are subject to change without notice.

**CBT-BGA-6001 Drawing**

Ironwood Electronics, Inc.  
 Tele: (800) 404-0204  
 www.ironwoodelectronics.com

WEIGHT: 0.00  
 MATERIAL:  
 FINISH:

STATUS: Released

DRAWN BY: M. Raske

File: CBT-BGA-6001

SHEET: 4 of 4

SCALE: 2:1

DATE: 10/19/2010

REV. A

