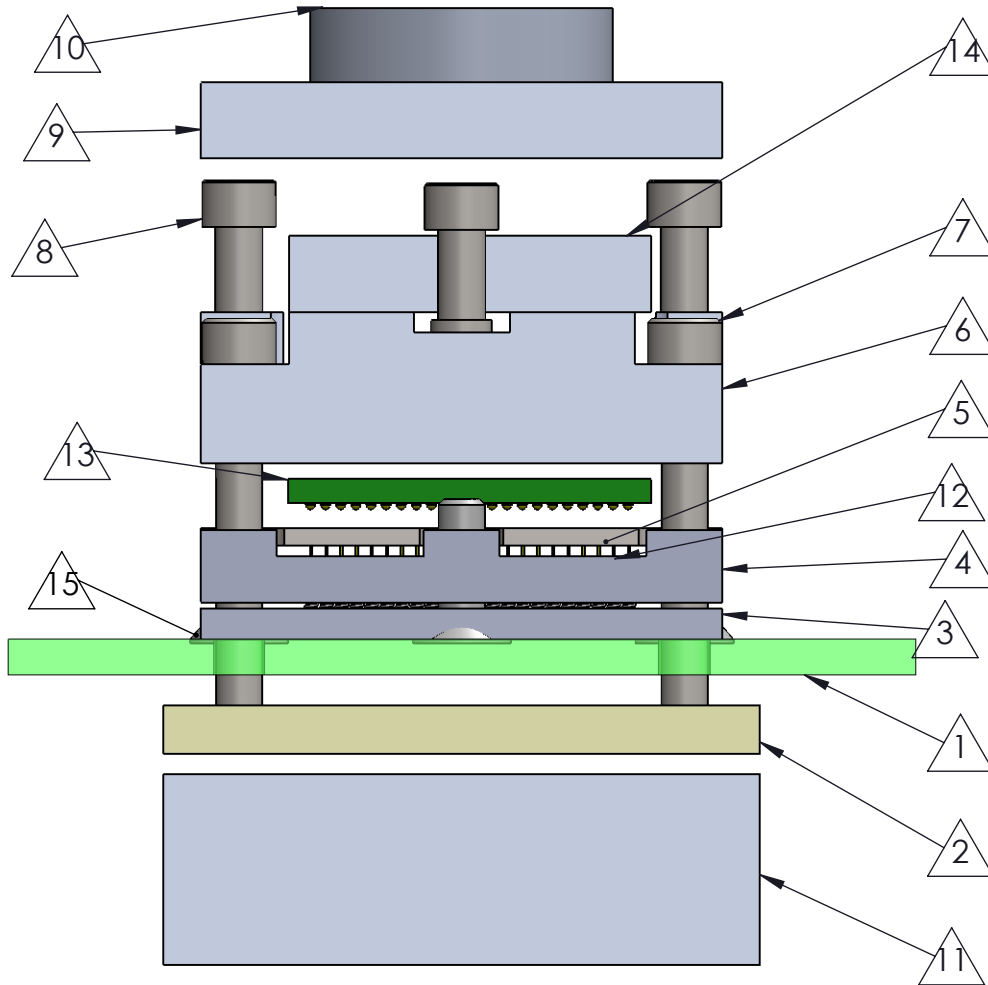


SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



Description: SBT-BGA-7000 Exploded View
(12x12mm, 0.5mm pitch, 22x22 array BGA)

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

Tolerances: diameters $\pm 0.03\text{mm}$ [± 0.001 "], PCB perimeters $\pm 0.13\text{mm}$ [± 0.005 "], PCB thicknesses $\pm 0.18\text{mm}$ [± 0.007 "], pitches (from true position) $\pm 0.08\text{mm}$ [± 0.003 "], all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise. Materials and specifications are subject to change without notice.

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

ITEM NO.	Description	Material	Full View /QTY
1	Target PCB	FR4	1
2	Insulation Plate	FR4	1
3	Bottom Guide	PEEK Ceramic filled	1
4	Middle Pogo Guide	PEEK Ceramic filled	1
5	Floating Guide	PEEK Ceramic filled	1
6	Socket Base	7075-T6 Aluminum	1
7	Socket Base Cap Screw	Alloy Steel	4
8	0-80 Shoulder screw	AISI 321 Annealed Stainless Steel (SS)	4
9	Socket Lid	7075-T6 Aluminum Alloy	1
10	Compression Screw	7075-T6 Aluminum Alloy	1
11	Backing Plate	7075-T6 Aluminum Alloy	1
12	SBT-BGA 0.5mm pin		484
13	BGA with 484 pin with 0.5mm Pitch		1
14	Compression Plate	7075-T6 Aluminum Alloy	1
15	Pogo Guide Screw	18-8 stainless steel	4

SBT-BGA-7000 Drawing

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

WEIGHT:
MATERIAL:
FINISH:

STATUS: Released

DRAWN BY: Vinayak R

File: SBT-BGA-7000 Dwg

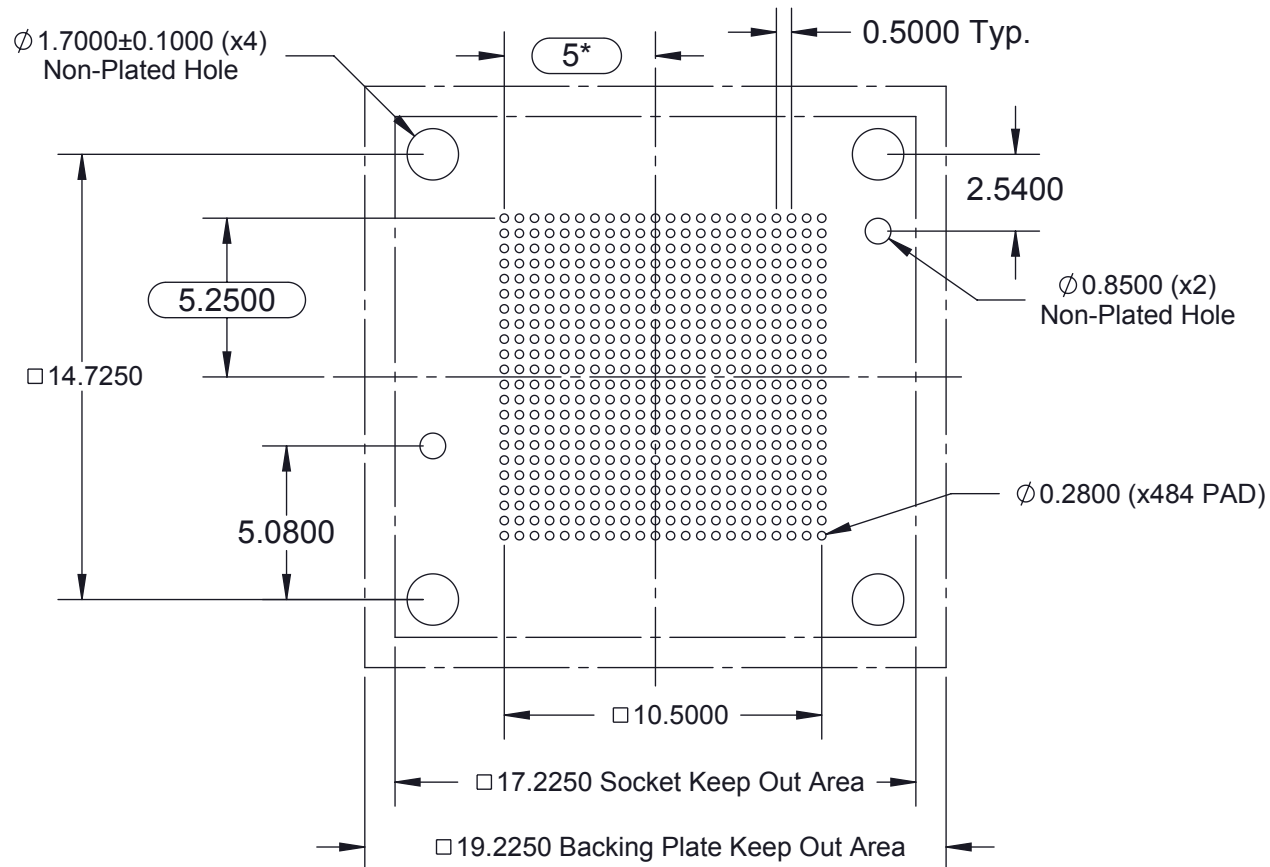
SHEET 1 OF 4

SCALE: 1:1

DATE: 5/13/2009

REV. A

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



Description: SBT-BGA-7000 Recommended PCB layout

Primary dimension units are millimeters, Secondary dimension units are [inches].
 Tolerances: diameters $\pm 0.03\text{mm}$ [± 0.001 "], PCB perimeters $\pm 0.13\text{mm}$ [± 0.005 "], PCB thicknesses $\pm 0.18\text{mm}$ [± 0.007 "], pitches (from true position) $\pm 0.08\text{mm}$ [± 0.003 "], all other tolerances $\pm 0.13\text{mm}$ [± 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

SBT-BGA-7000 Drawing

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

WEIGHT:
 MATERIAL:
 FINISH:

STATUS:Released

DRAWN BY: Vinayak R

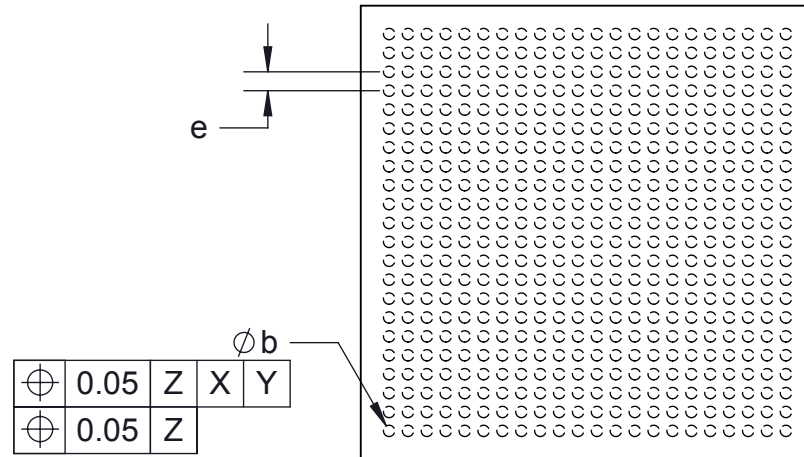
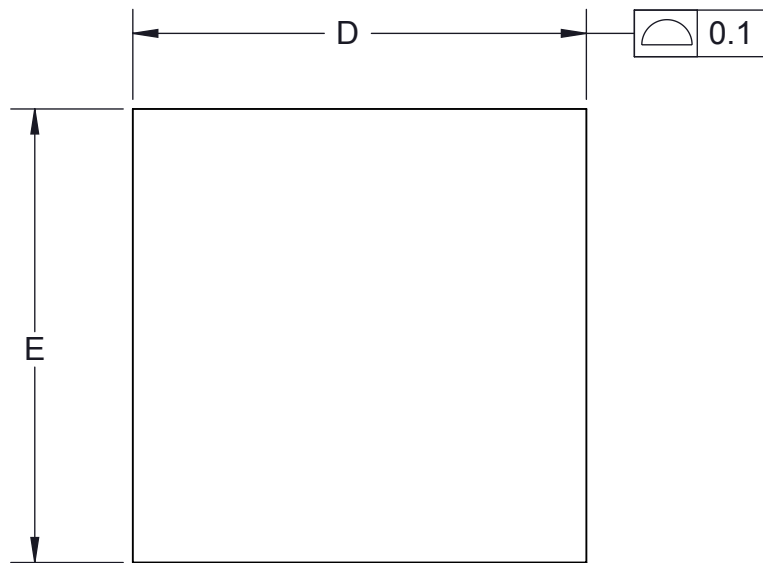
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SHEET 2 OF 4

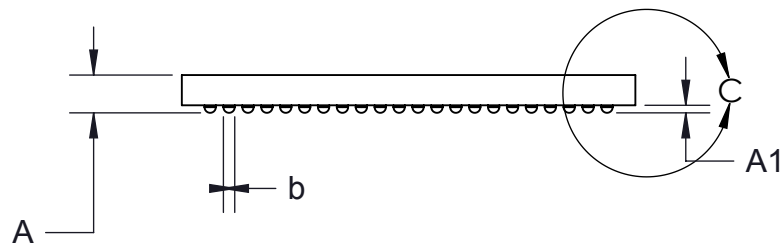
SCALE: 4:1

DATE: 5/13/2009

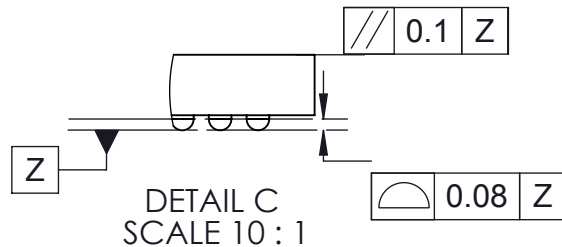
REV. A



22x22 Full Array



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		2.5
A1	0.2	0.4
b	0.25	0.4
D	12.0 BSC	
E	12.0 BSC	
e	0.5 BSC	

Description: BGA with 484 pin with 0.5mm Pitch

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

Tolerances: diameters $\pm 0.03\text{mm}$ [± 0.001 "], PCB perimeters $\pm 0.13\text{mm}$ [± 0.005 "], PCB thicknesses $\pm 0.18\text{mm}$ [± 0.007 "], pitches (from true position) $\pm 0.08\text{mm}$ [± 0.003 "], all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise. Materials and specifications are subject to change without notice.

SBT-BGA-7000 Drawing

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WEIGHT:
 MATERIAL:
 FINISH:

STATUS: Released

DRAWN BY: Vinayak R

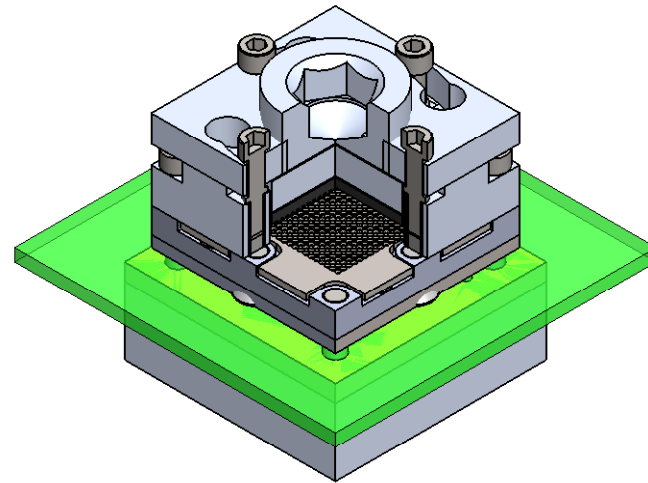
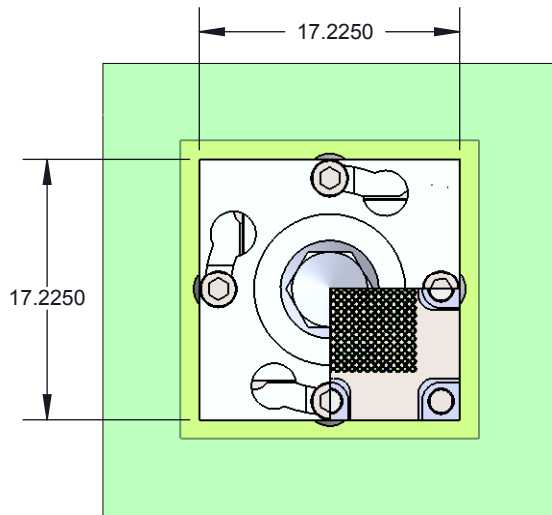
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SHEET 3 OF 4

SCALE: 5:1

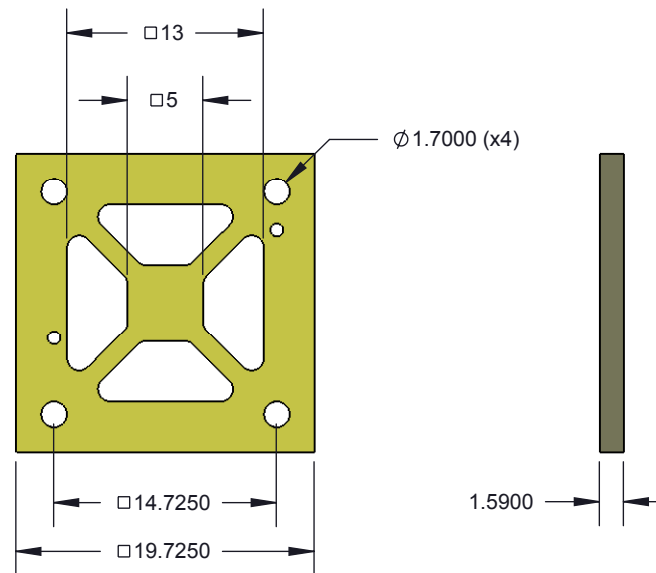
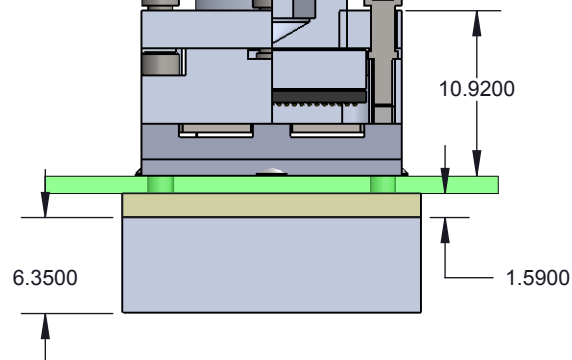
DATE: 5/13/2009

REV. A



SBT Pin
Scale 25:1

**Recommended
Torque 3 in.lbs.**



Description: Socket Assembly

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

Tolerances: diameters $\pm 0.03\text{mm}$ [± 0.001 "], PCB perimeters $\pm 0.13\text{mm}$ [± 0.005 "], PCB thicknesses $\pm 0.18\text{mm}$ [± 0.007 "], pitches (from true position) $\pm 0.08\text{mm}$ [± 0.003 "], all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise. Materials and specifications are subject to change without notice.

Insulation Plate Specification

SBT-BGA-7000 Drawing

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

WEIGHT:
MATERIAL:
FINISH:

STATUS: Released

DRAWN BY: Vinayak R

File: SBT-BGA-7000 Dwg

SHEET 4 OF 4

SCALE: 2:1

DATE: 5/13/2009

REV. A