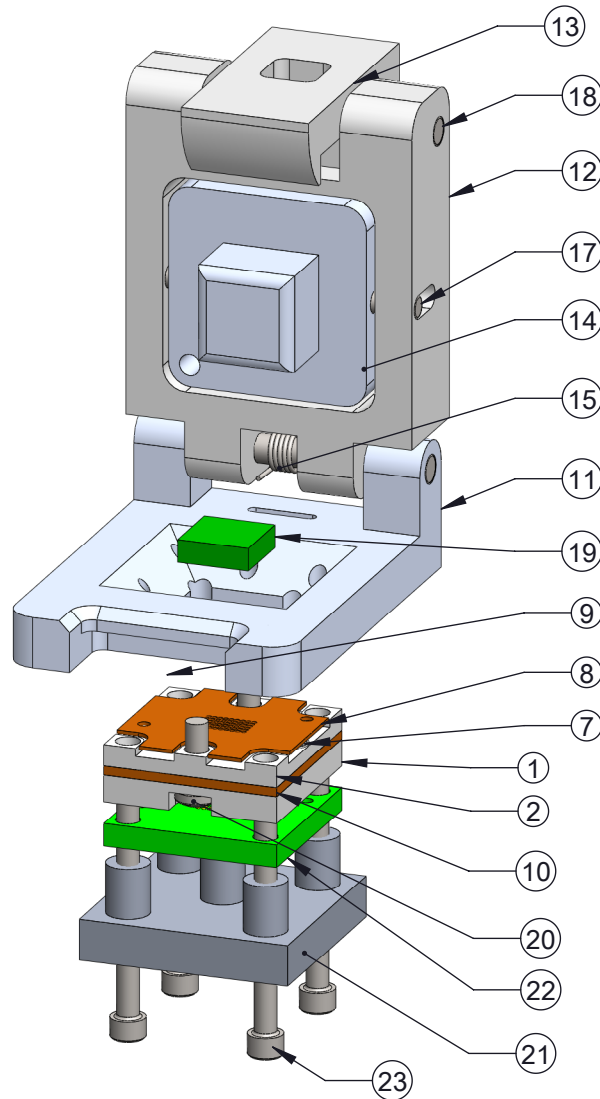


XBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



FEATURES:

- Over 10GHz bandwidth @-1dB for edge pins
- Contact resistance under 50mΩ
- Self inductance under 1nH
- Capacitance under 0.3pF
- Operating temperature range -55C to +150C
- Insertion/Extraction life over 10, 000 cycles
- Current rating at 30C temperature rise is 2 Amps per pin

ITEM NO.	DESCRIPTION	Material
1	Bottom Pogo Guide 0.4mm pitch	Semitron MDS 100
2	Top Pogo Guide 0.4mm pitch	Semitron MDS 100
3	XBT 0.4mm top plunger	Brass
4	Spring for XBT 0.4mm pitch	Material <not specified>
5	XBT 0.4mm bottom plunger	Brass
6	Spring for XBT 0.4mm pitch	Alloy Steel (SS)
7	Floating Guide Spring	Stainless steel
8	Floating Ball guide	Kapton Polyimide
9	QFN20B 5x5mm IC Guide	Ultem 1000
10	Ball Guide Spacer 0.4mm pitch	Kapton Polyimide
11	Socket Base 7x7mm	7075-T6 Aluminum Alloy
12	Socket Lid	Torlon 5530
13	Latch	Torlon 5530
14	Compression Plate 7x7mm	7075-T6 Aluminum Alloy
15	Torsion Spring, 180 0.109" OD, Ccw/Rh	Steel Music Wire
16	Wave Spring, 0.375OD 0.79KG/mm 10mm In	Steel Music Wire
17	Dowel Pin, M1.5 X 20mm LG, 18-8 SS	AISI 347 Annealed Stainless Steel (SS)
18	Dowel Pin, M2 X 20mm LG, 18-8 SS	AISI 347 Annealed Stainless Steel (SS)
19	BGA54A 0.4mm pitch	FR4
20	#0-80 x .188 LG, PAN HD SCREW, Phillips, 18-8 SS	Material <not specified>
21	Backing Plate, 5 post 7mm	7075-T6 Aluminum Alloy
22	Target PCB 0.4mm 9x6 arry 5x5mm	Material <not specified>
23	#0-80 X .625 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel

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.

XBT-BGA54D-01 Drawing

STATUS: Released

SHEET: 1 of 4

REV. A

DRAWN BY: Vinayak R

SCALE: 2:1

File: XBT-BGA54D-01

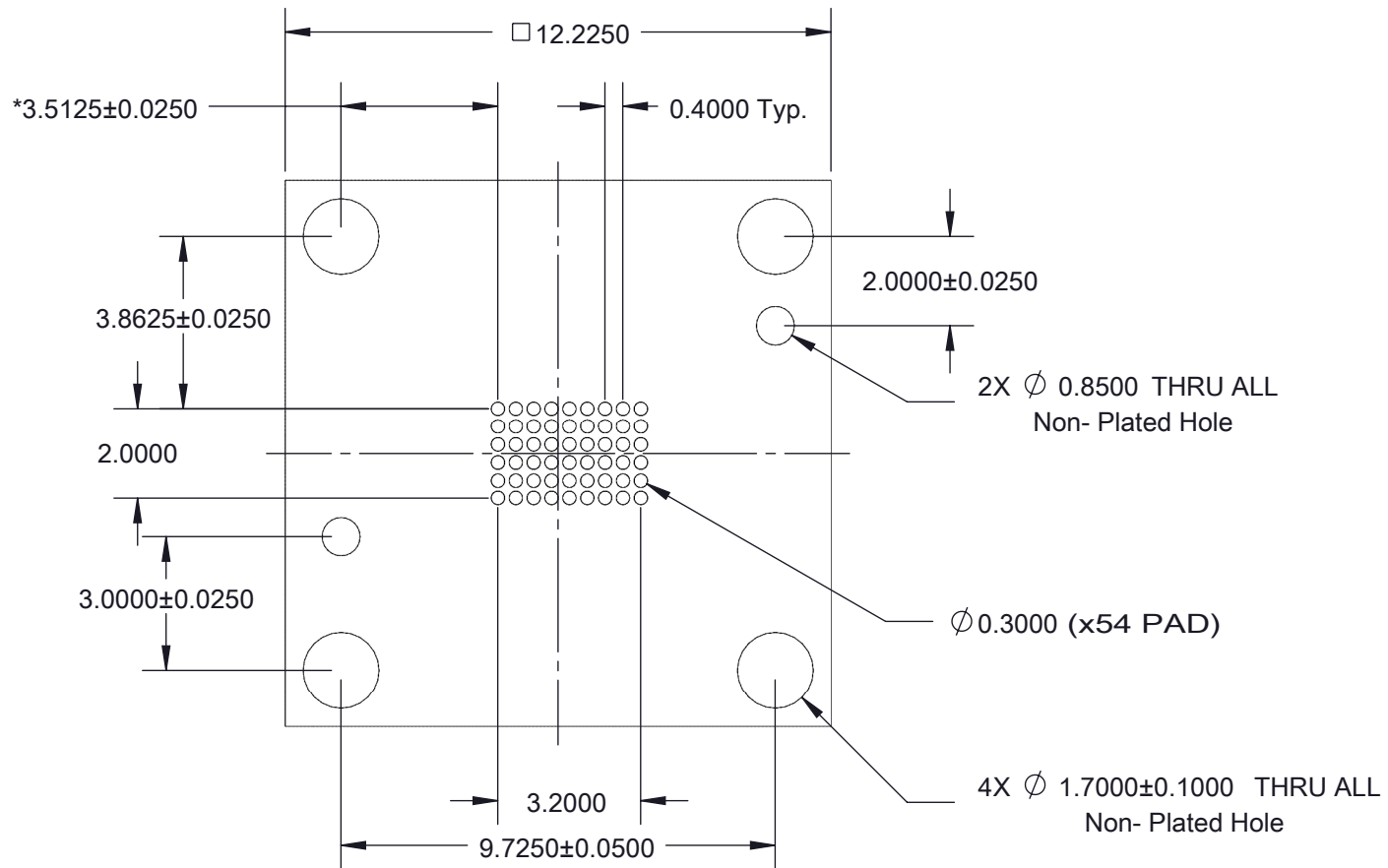
DATE: 5/10/2010



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



Target PCB Recommendations
 Total thickness: 1.6mm min.
 Plating: Gold or Solder finish
 PCB Pad height: same or higher than solder mask

DESCRIPTION: Recommended PCB Layout

Primary dimension units are millimeters, Secondary dimension units are [inches].
 Tolerances: diameters $\pm 0.03\text{mm}$ [± 0.001 "], all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise.
 Materials and specifications are subject to change without notice.

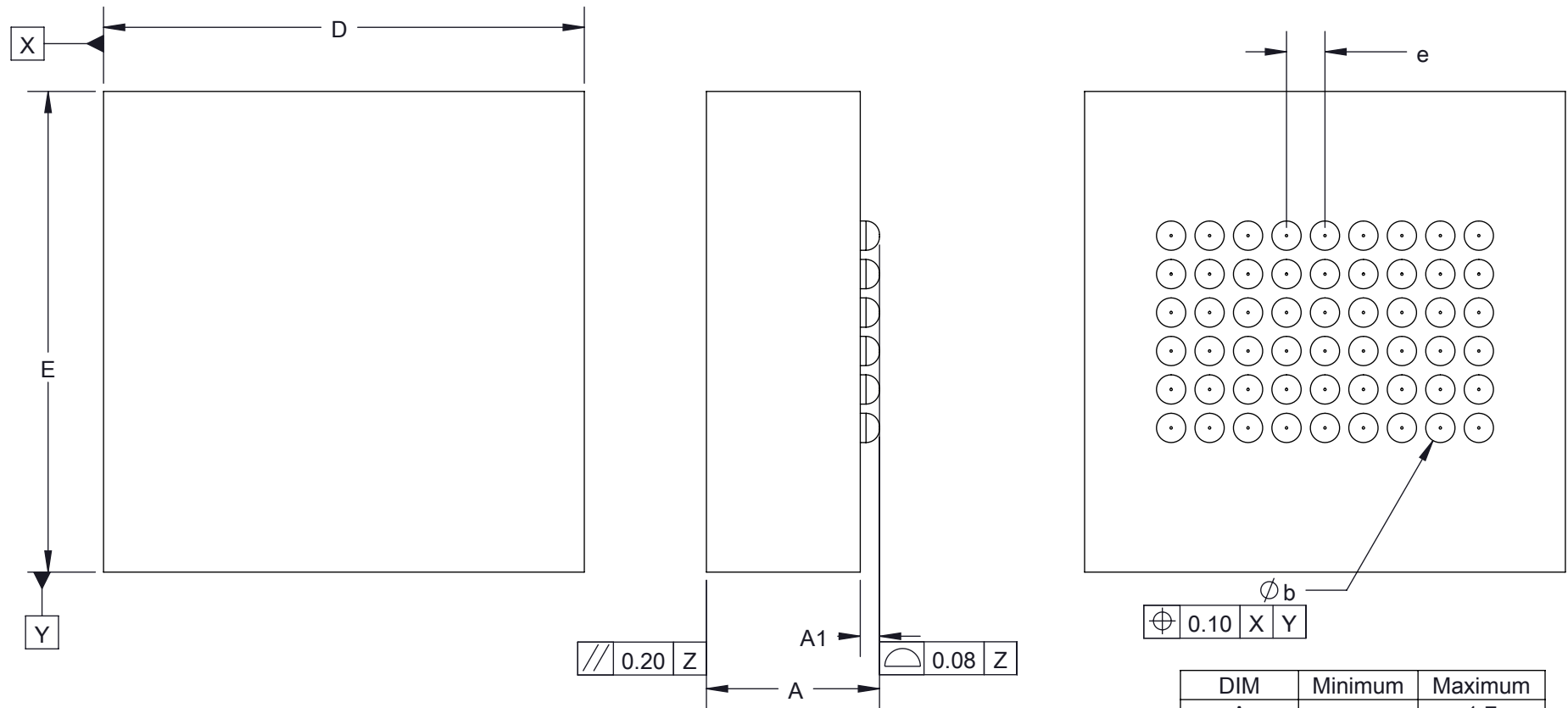
XBT-BGA54D-01 Drawing

STATUS: Released	SHEET: 2 of 4	REV. A
DRAWN BY: Vinayak R	SCALE: 6:1	
File: XBT-BGA54D-01	DATE: 5/10/2010	



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

WEIGHT:
 MATERIAL:
 FINISH:



DIM	Minimum	Maximum
A		1.7
A1	0.16	0.20
b	0.24	0.26
D	5.00 BSC	
E	5.00 BSC	
e	0.40 BSC	
ARRAY	9 X 6	
PIN COUNT	54	

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.

DESCRIPTION: Compatible BGA

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

Tolerances: diameters $\pm 0.03\text{mm}$ [± 0.001 "], all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise.

Materials and specifications are subject to change without notice.

XBT-BGA54D-01 Drawing

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

WEIGHT:
 MATERIAL:
 FINISH:

STATUS: Released

DRAWN BY: Vinayak R

File: XBT-BGA54D-01

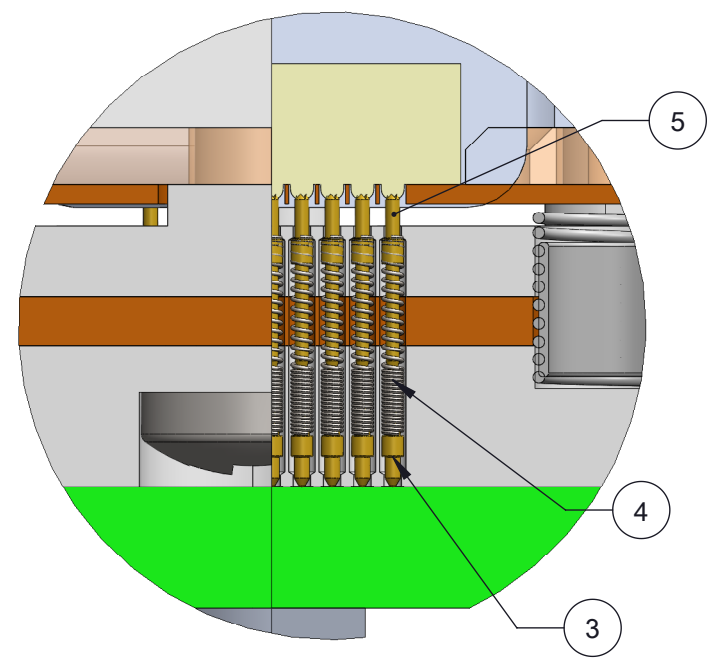
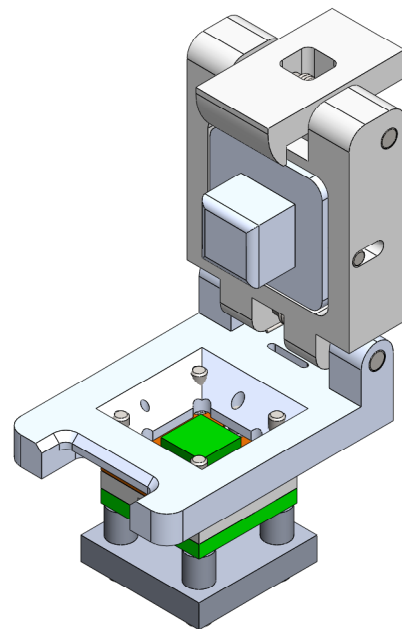
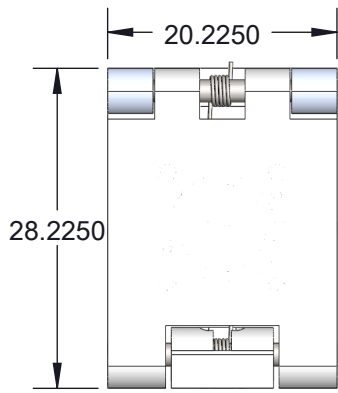
SHEET: 3 of 4

SCALE: 15:1

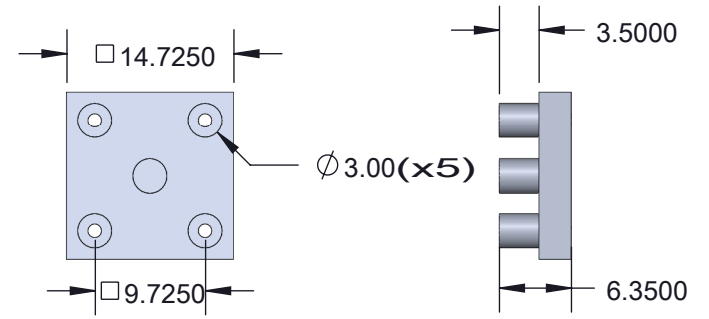
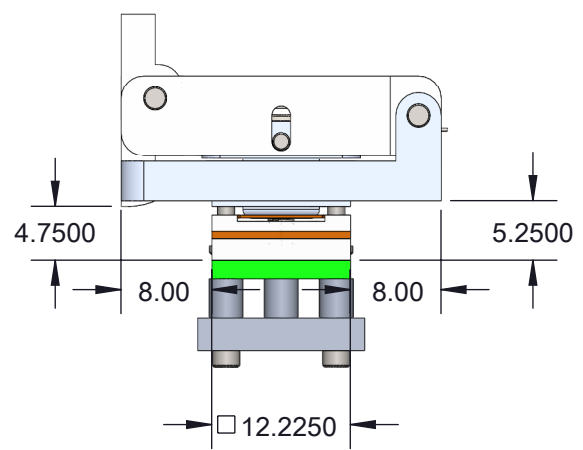
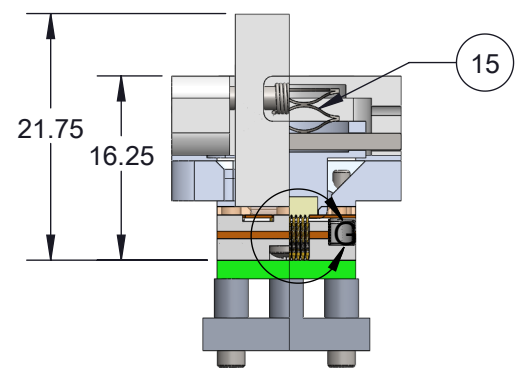
DATE: 5/10/2010

REV. A





DETAIL G
SCALE 10 : 1



DESCRIPTION: Socket Assy, Insulation Plate

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.

Backing Plate Specification

XBT-BGA54D-01 Drawing

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

WEIGHT:
 MATERIAL:
 FINISH:

STATUS: Released
 DRAWN BY: Vinayak R
 File: XBT-BGA54D-01

SHEET: 4 of 4
 SCALE: 3:2
 DATE: 5/10/2010

REV. A

