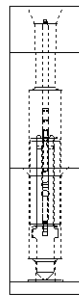
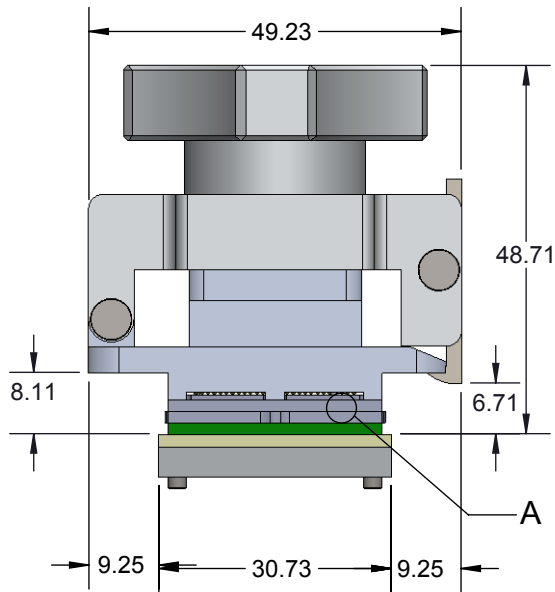
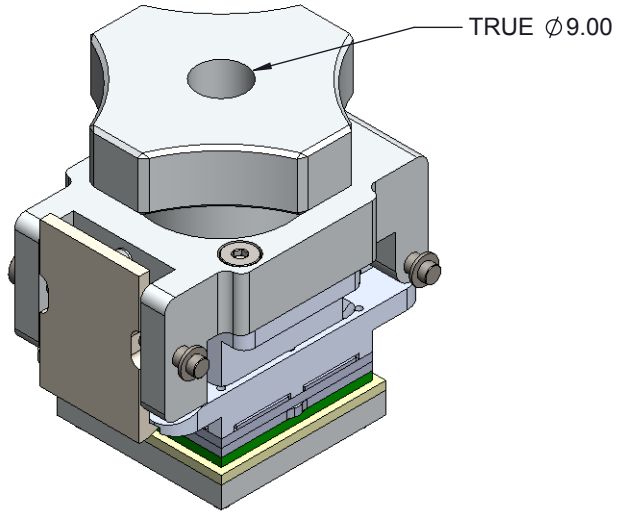


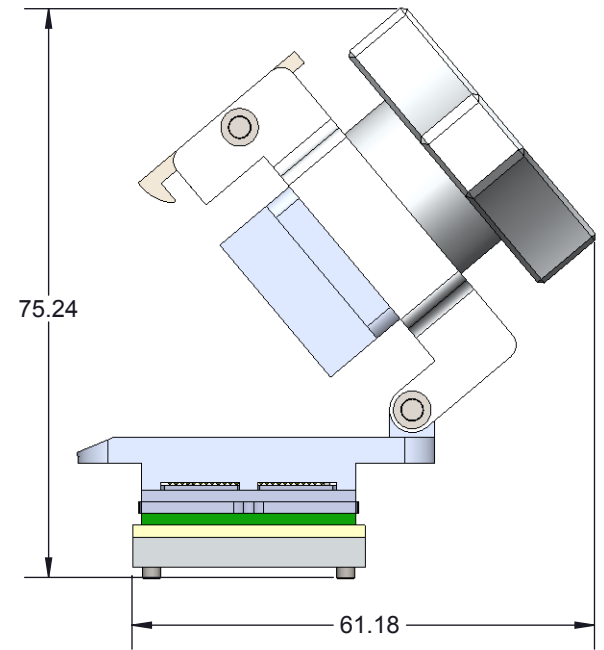
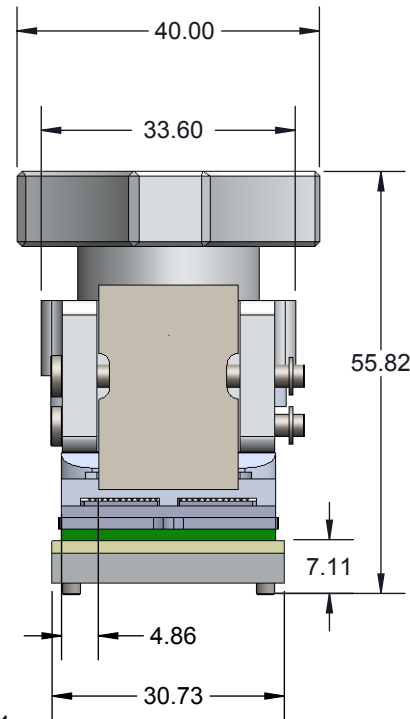
CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

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



DETAIL A
SCALE 10 : 1




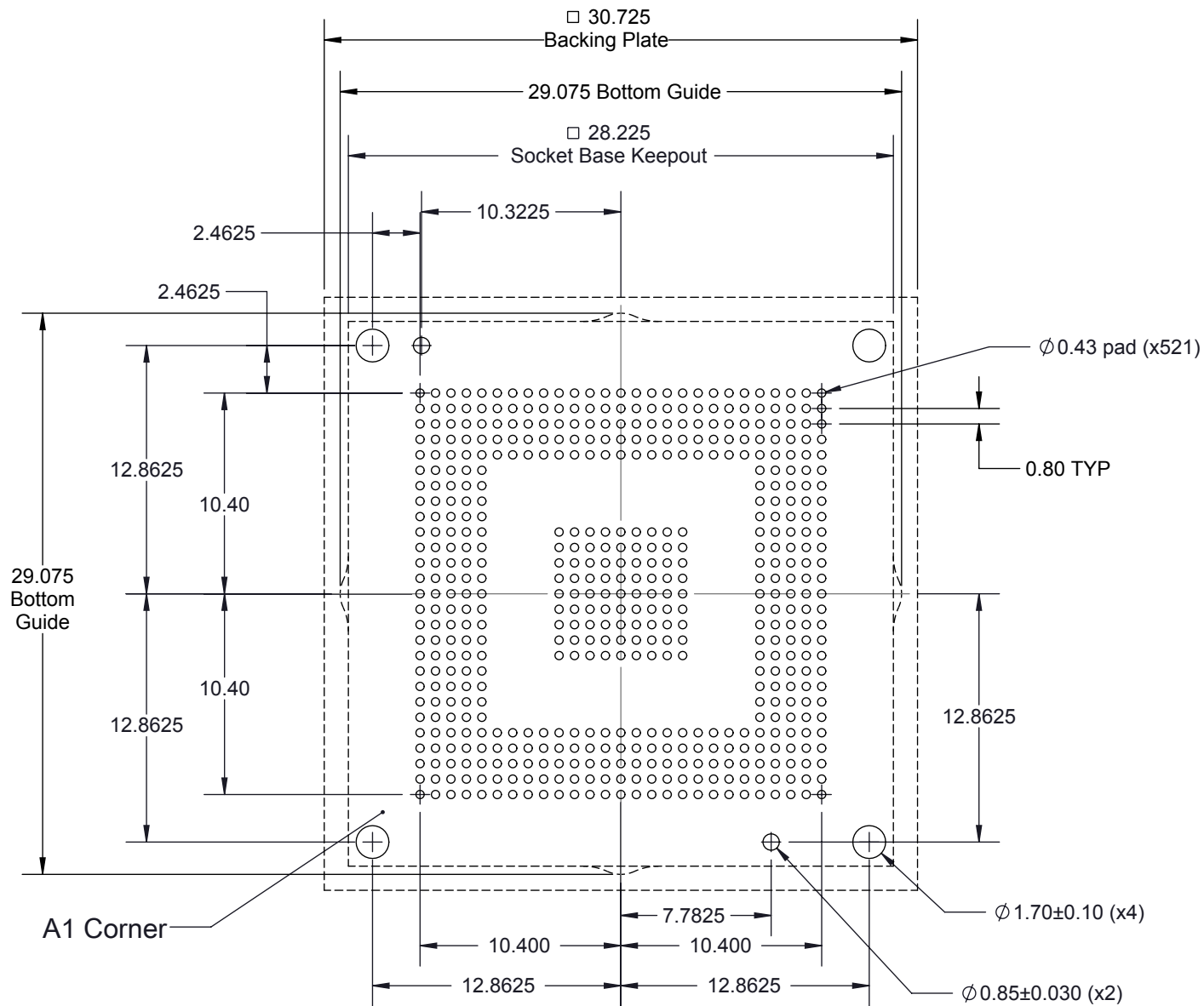
Description: CBT-BGA521 23 x 23 x 0.8mm 27 x 27 array

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.



 CBT-BGA-6019 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 126.11	STATUS: Released	SHEET: 1 OF 5	REV. C
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 1:1
		FILE: CBT-BGA-6019 Dwg	DATE: 1/20/12	




Target PCB Recommendations

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

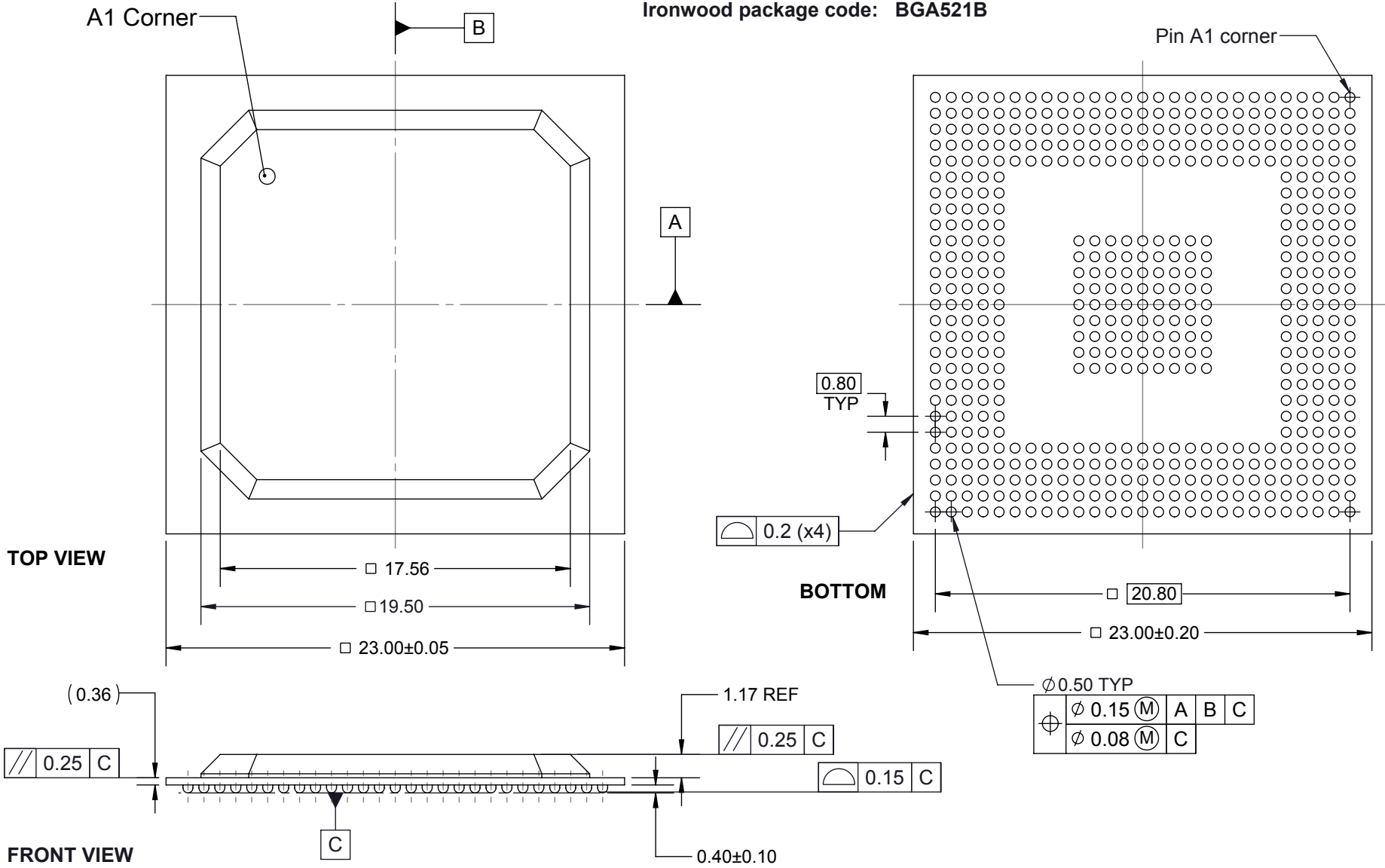
Description: Recommended PCB Layout

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

 CBT-BGA-6019 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 126.11	STATUS: Released	SHEET: 2 OF 5	REV. C
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 3:1
		FILE: CBT-BGA-6019 Dwg	DATE: 1/20/12	


Ironwood package code: BGA521B

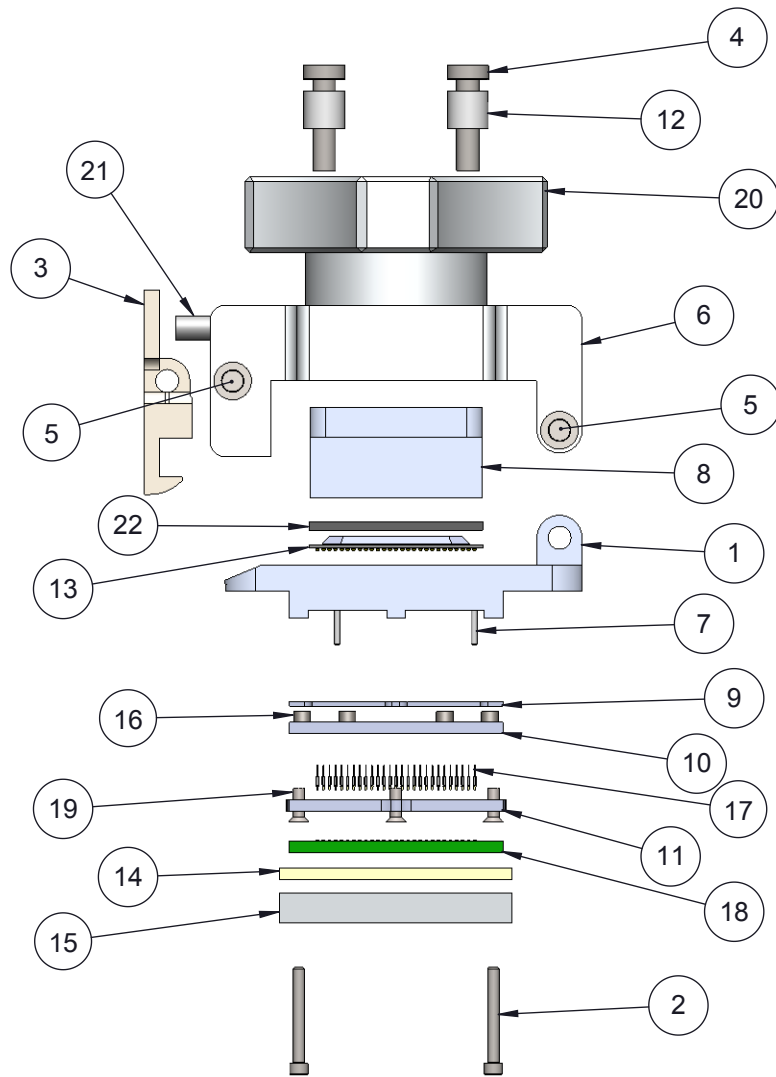


1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane C.
4. Datum C (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall exclude any effect of mark on top surface of package.

Description: Compatible BGA

Primary dimension units are millimeters, Secondary dimension units are [inches], 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-6019 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 126.11	STATUS: Released	SHEET: 3 OF 5	REV. C
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 3.5:1
		FILE: CBT-BGA-6019 Dwg	DATE: 1/20/12	




ITEM NO.	DESCRIPTION	Material
1	CBT Socket Base 23mm 0.8mm pitch with posts	7075-T6 Aluminum Alloy
2	#0-80 x 0.5, SH Cap Screw	18-8 Stainless Steel
3	Latch	7075-T6 Aluminum Alloy
4	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
5	Hinge Pin and Snap Ring, 3mm OD, 30mm long, 1045 Stl, Blk Oxide	AISI 1045 Steel, cold drawn
6	CBT socket lid for 19mm chip	7075-T6 Aluminum Alloy
7	Dowel Pin, 1/32" x 3/8", SS	Chrome Stainless Steel
8	Compression Plate 23mm CBT	7075-T6 Aluminum Alloy
9	Floating guide for 23x23mm, 27x27 0.8mm pitch BGA	PEEK Ceramic filled
10	Middle guide for 23x23mm, 27x27 0.8mm pitch BGA	PEEK Ceramic filled
11	Bottom guide for 23x23mm, 27x27 0.8mm pitch BGA	PEEK Ceramic filled
12	Spring Clamshell lid assembly	Steel Music Wire
13	BGA521 23mm 27x 27 0.8mm Pitch	Material <not specified>
14	Insulation plate for 23x23mm IC	FR4 High temp
15	SBT/GBT NI PLT BACKING PLT 23MM	7075-T6, Plate (SS)
16	Floating Guide Spring	Alloy Steel (SS)
17	SBT Pin, SBT-BGA 0.5mm-0.8mm	
18	Customer's target PCB for 23x23mm, 27x27 0.8mm pitch BGA	FR4 Standard
19	#0-80, 90 deg., head pin guide screw, Peek material	PEEK unfilled
20	Fluted Knob Compression Screw	7075-T6 Aluminum Alloy
21	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
22	IC frame for 23mmx23mm BGA Package	Ultem 1000

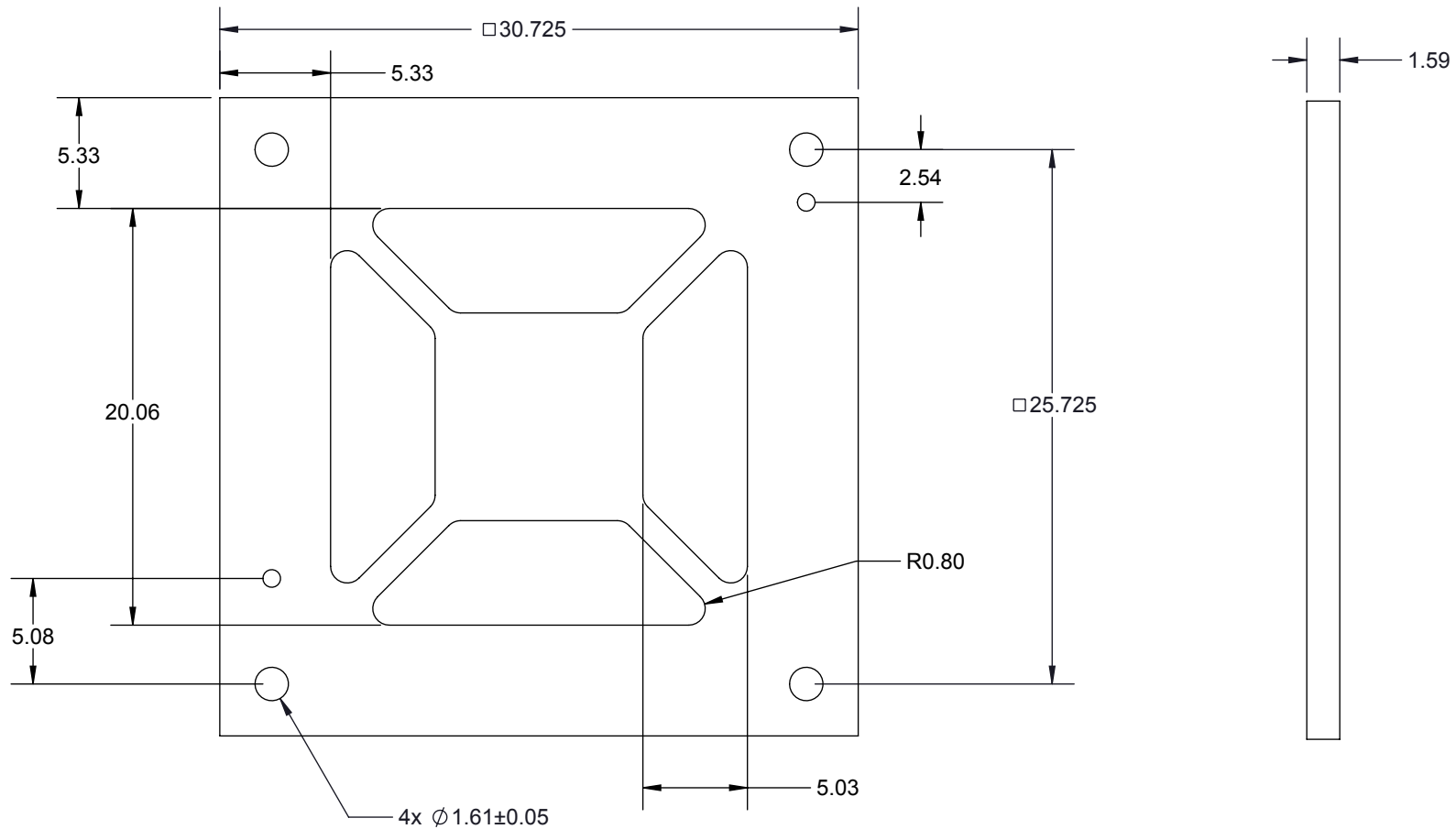
Description: Socket Assy exploded view

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.

 CBT-BGA-6019 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 126.11	STATUS: Released	SHEET: 4 OF 5	REV. C
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 1:1
		FILE: CBT-BGA-6019 Dwg	DATE: 1/20/12	

INSULATION PLATE




PIN DETAIL

Description: Modifications

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.

Rev	Date	Initials	Description
A	01/20/12	ELS	Original
B	02/18/14	DH	Changed current rating of pin
C	3/31/15	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.

CBT-BGA-6019 Specification  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 126.11	STATUS: Released	SHEET: 5 OF 5	REV. C
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 3:1
		FILE: CBT-BGA-6019 Dwg	DATE: 1/20/12	