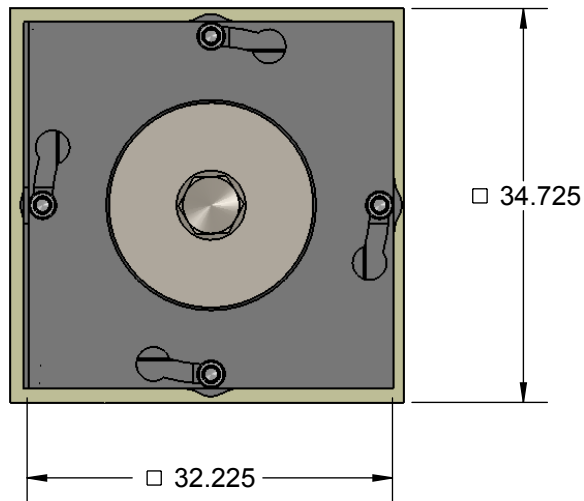


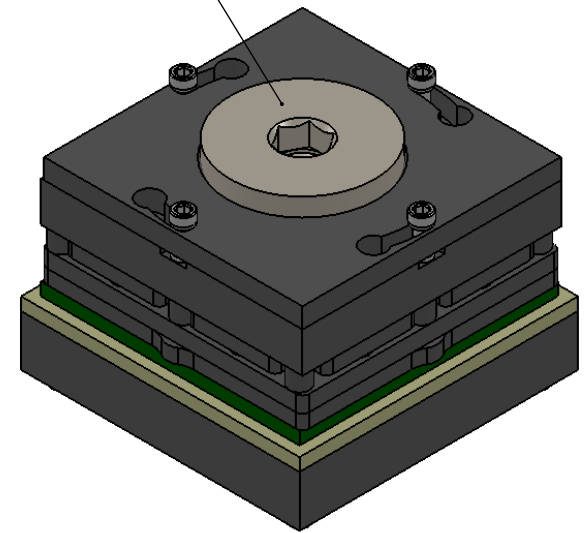
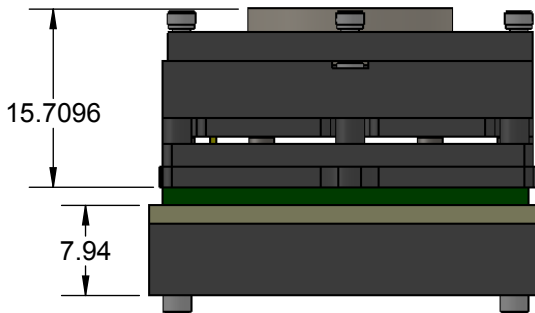
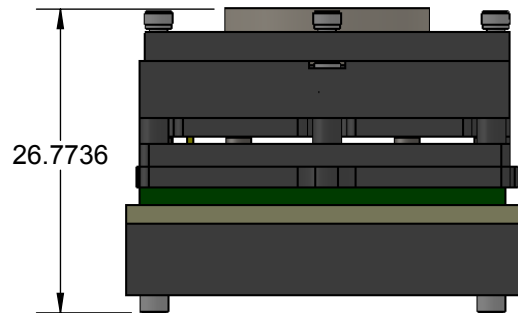
SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

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



Recommended Torque: 6in-lbs



Description: SBT-BGA Socket 27 X 27, 1.27mm, 20 X 20 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.

SBT-BGA-6003 Drawing



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

Material: Material <not specified>
Finish:
Weight: 53.19

STATUS: Released

ENG: B. Fedde

FILE: SBT-BGA-6003 Dwg

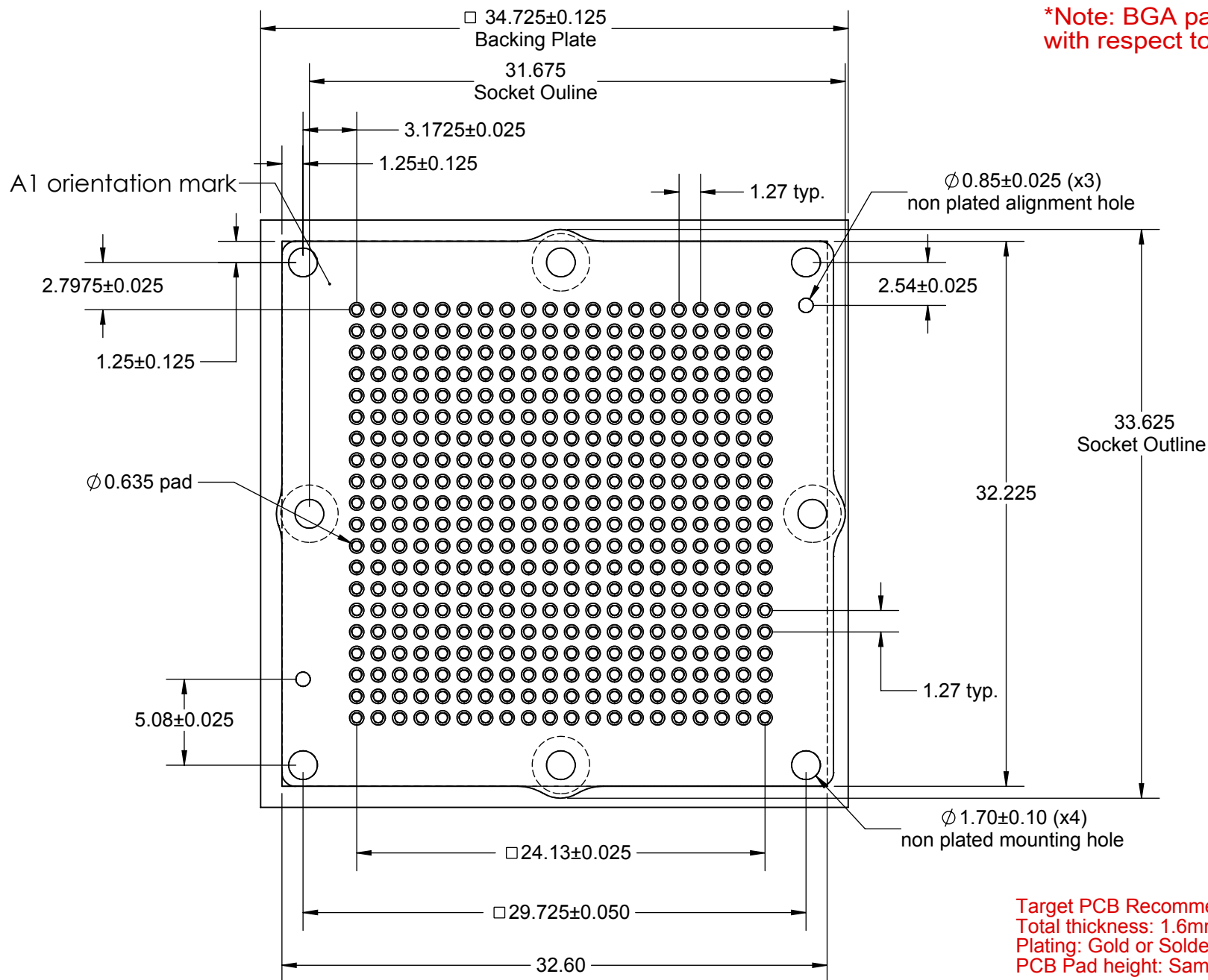
SHEET: 1 OF 5

DRAWN BY: D. Hauer

DATE: 12/15/2009

REV. C

SCALE: 3:2



***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

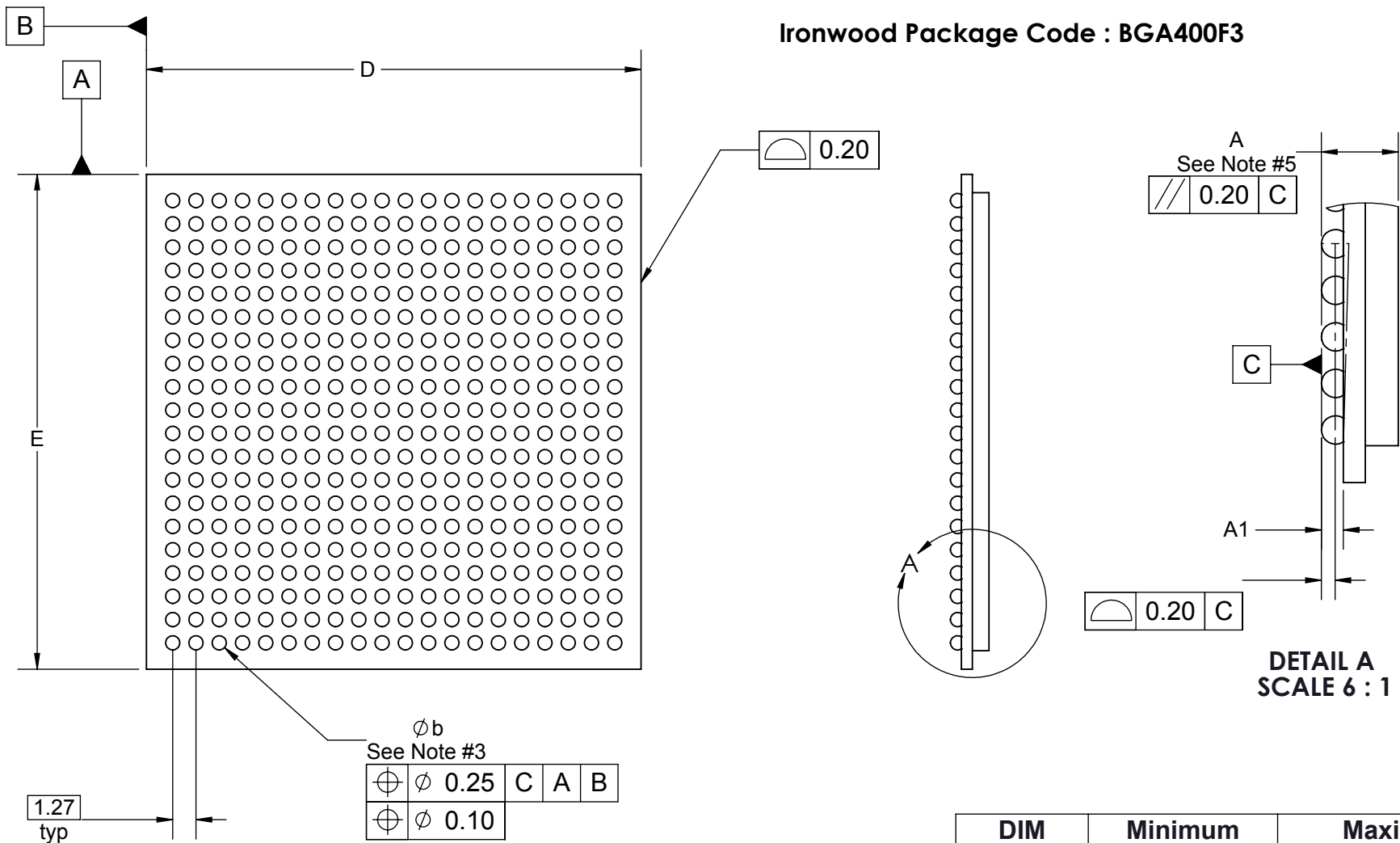
Description: Recommended Layout

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.

SBT-BGA-6003 Drawing		STATUS: Released	SHEET: 2 OF 5	REV. C
	Ironwood Electronics, Inc.	ENG: B. Fedde	DRAWN BY: D. Hauer	SCALE: 3:1
	Tele: (800) 404-0204 www.ironwoodelectronics.com	FILE: SBT-BGA-6003 Dwg	DATE: 12/15/2009	
Material: Material <not specified> Finish: Weight: 53.19				

Ironwood Package Code : BGA400F3



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.

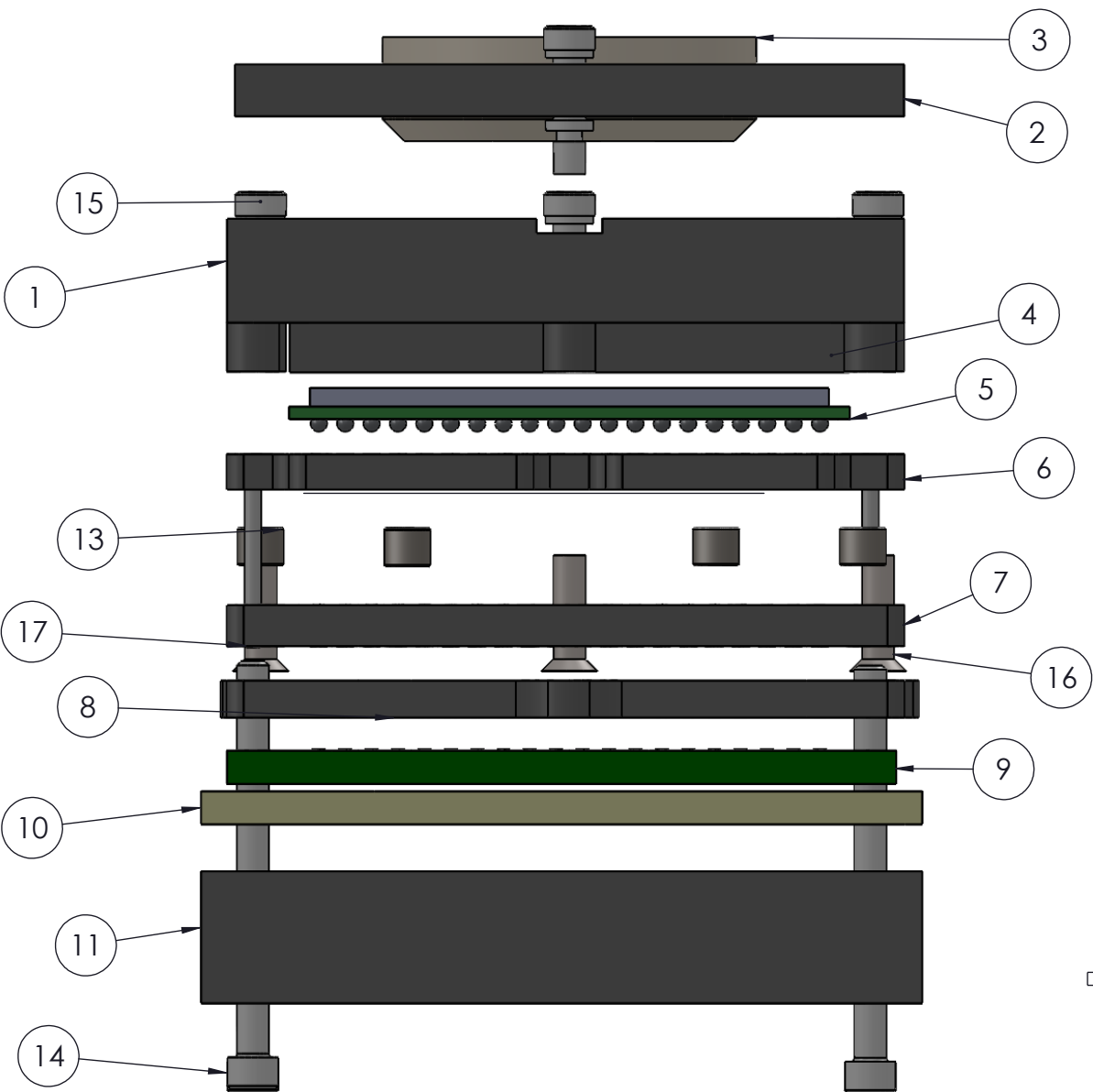
Description: BGA Spec

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

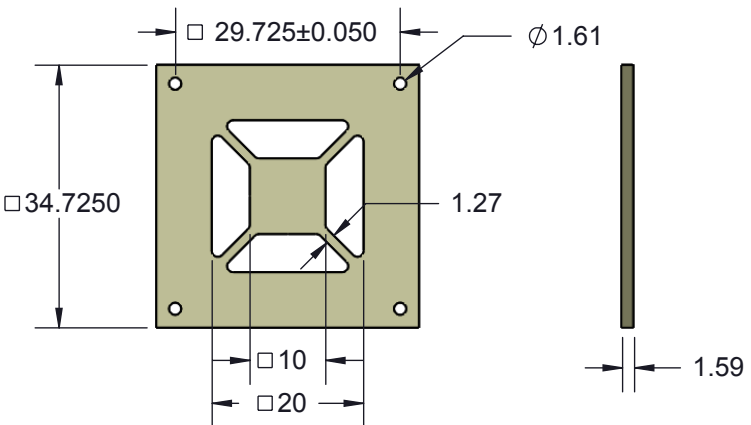
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [$\pm 0.001"$], Pitches (from true position) $\pm 0.025\text{mm}$ [$\pm 0.001"$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$ [$\pm 0.005"$] unless stated otherwise. Materials and specifications are subject to change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

 SBT-BGA-6003 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 53.19	STATUS: Released	SHEET: 3 OF 5	REV. C
		ENG: B. Fedde	DRAWN BY: D. Hauer	SCALE: 2:1
		FILE: SBT-BGA-6003 Dwg	DATE: 12/15/2009	

20 x 20 Array



ITEM NO.	DESCRIPTION	Material
1	Socket Base SBT 27x27mm Ni plated 0.375mm shift 1mm and 1.27 mm pitch IC	7075-T6 Aluminum Alloy
2	Socket Lid, 32.225 X 32.225	7075-T6 Aluminum Alloy
3	Compression Screw, M18	7075-T6 Aluminum Alloy
4	Compression Plate, 26.95 X 26.95	7075-T6 Aluminum Alloy
5	400 pin BGA package, 1.27mm Pitch	Material <not specified>
6	Floating Guide BGA 400 1.27mm Pitch	Semitron MDS 100
7	Middle Guide BGA 400 1.27mm pitch	Semitron MDS 100
8	Bottom Guide BGA 400 1.27mm Pitch	Semitron MDS 100
9	Test PCB BGA400, 1.27mm pitch 20x20 array	FR4
10	Insulation Plate 27mm IC	FR4
11	SBT Ni plit backing plit 27mm IC	7075-T6 Aluminum Alloy
12	Pogo Pin, 1mm Pitch SBT BGA pin	
13	Floating Guide Spring	Alloy Steel (SS)
14	#0-80 X .75 LG, SOC HD CAP SCREW, 18-8 SS	Stainless Steel (18-8)
15	#0-80 Shoulder Screw, 0.062" thread length	Stainless Steel (303)
16	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
17	Dowel pin, 1/32" x 5/16", SS	Chrome Stainless Steel



Insulation Plate Specification

Description: Skt Assem, Insulation Plate

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.

SBT-BGA-6003 Drawing  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		Material: Material <not specified> Finish: Weight: 53.19	STATUS: Released ENG: B. Fedde FILE: SBT-BGA-6003 Dwg	SHEET: 4 OF 5 DRAWN BY: D. Hauer DATE: 12/15/2009	REV. C SCALE: 3:1
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Rev	Date	Initials	Description
A	12/15/09	DH	Original
B	11/21/2013	BMF	BOM, and document update
C	01/27/15	DH	Updated layout page; bump-outs added to hardware holes

Description: Sheet1

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.

 SBT-BGA-6003 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Finish: Weight:	STATUS: Released	SHEET: 5 OF 5	REV. C
		ENG: B. Fedde	DRAWN BY: D. Hauer	SCALE: 3:1
		FILE: SBT-BGA-6003 Dwg	DATE: 12/15/2009	