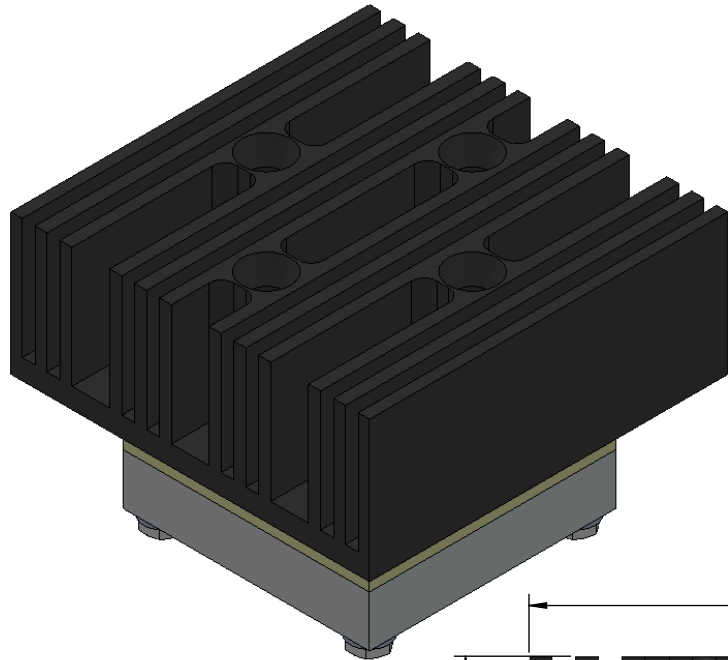
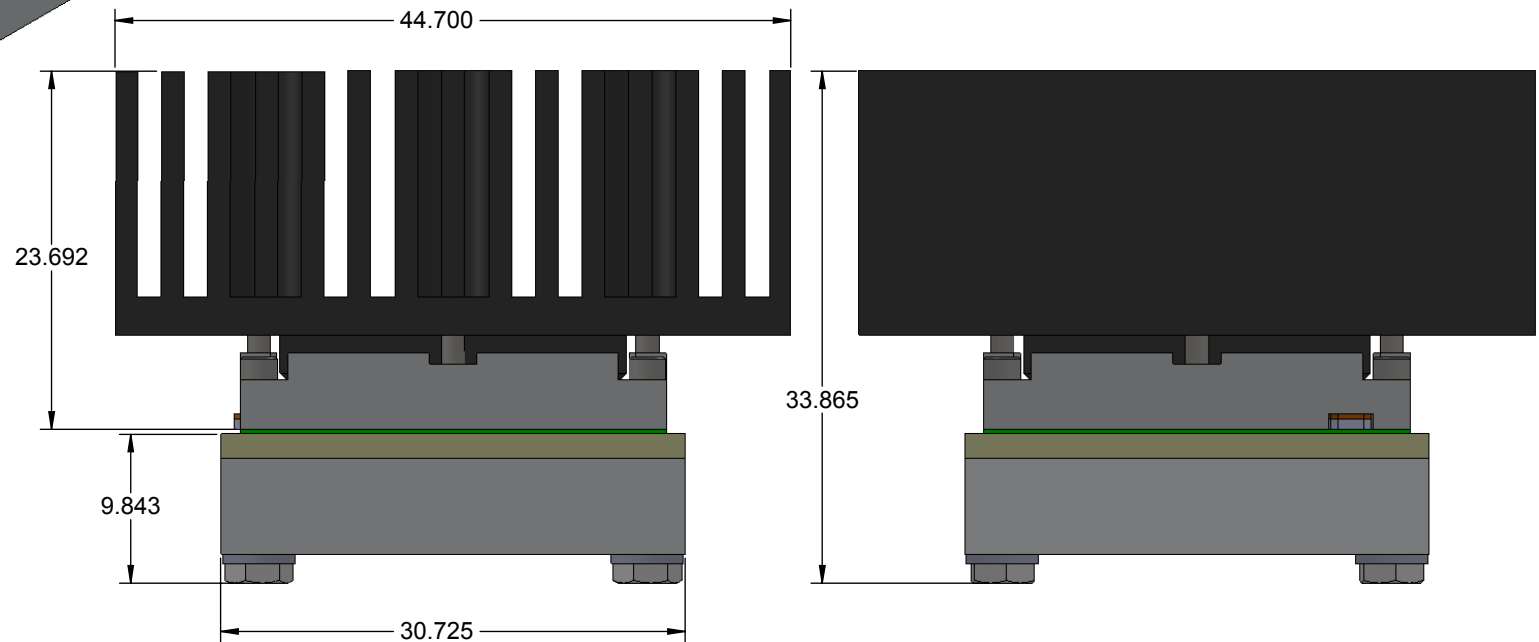


SM-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



Features

- Wide temperature range (-55C to +150C).
- 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.



Description: Socket

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

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

SM-BGA-9011 Drawing

STATUS: Released

SHEET 1 OF 5

REV. A

DRAWN BY: M. Raske

SCALE: 2:1

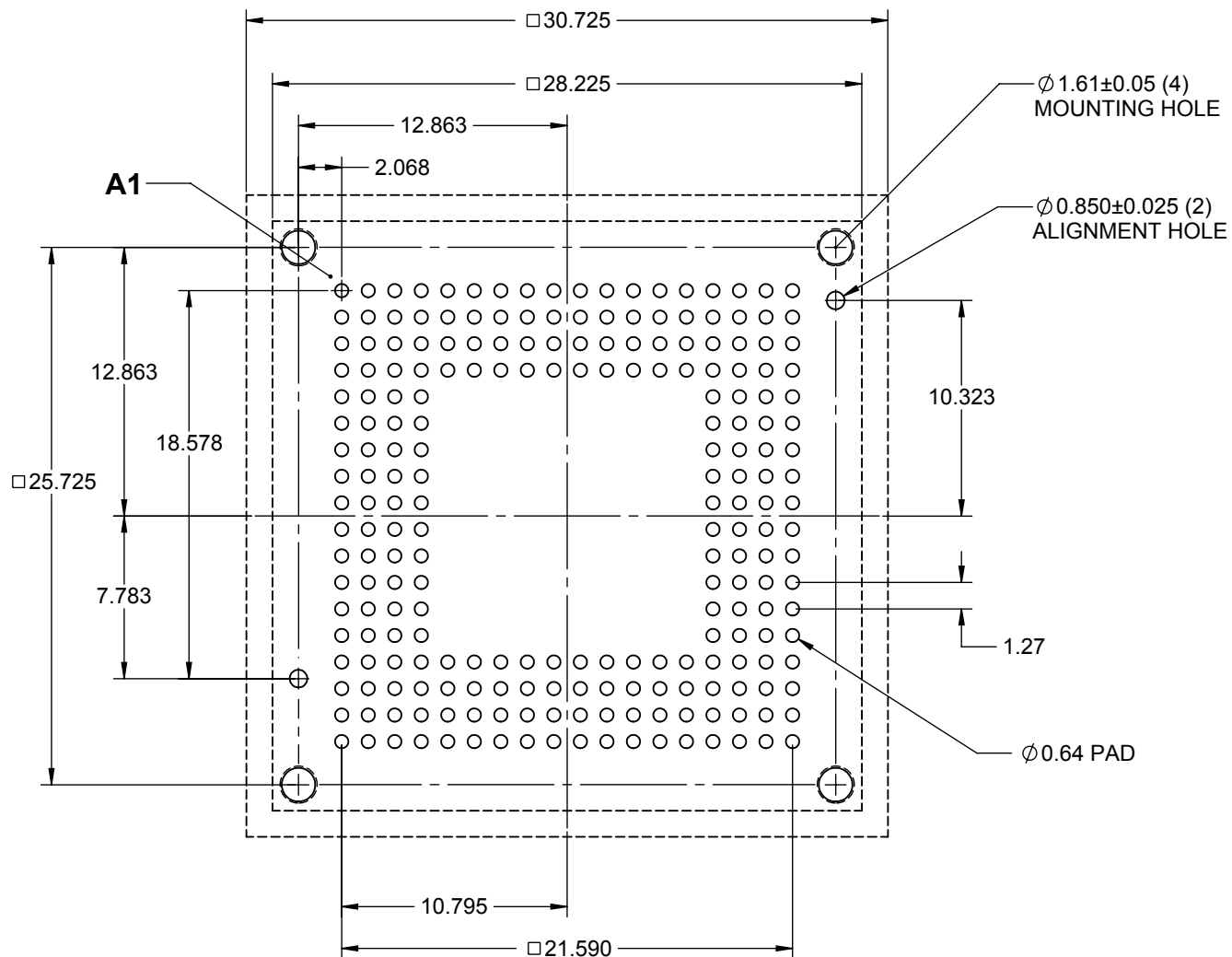
File: SM-BGA-9011

DATE: 6/13/2012



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

WEIGHT: 80.96
MATERIAL: N/A
FINISH: N/A



Target PCB Recommendations
 Total thickness: 1.5mm min.
 Plating: Gold or Solder finish

Description: Recommended PCB layout

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

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

SM-BGA-9011 Drawing

STATUS: Released

SHEET 2 OF 5

REV. A



Ironwood Electronics, Inc.
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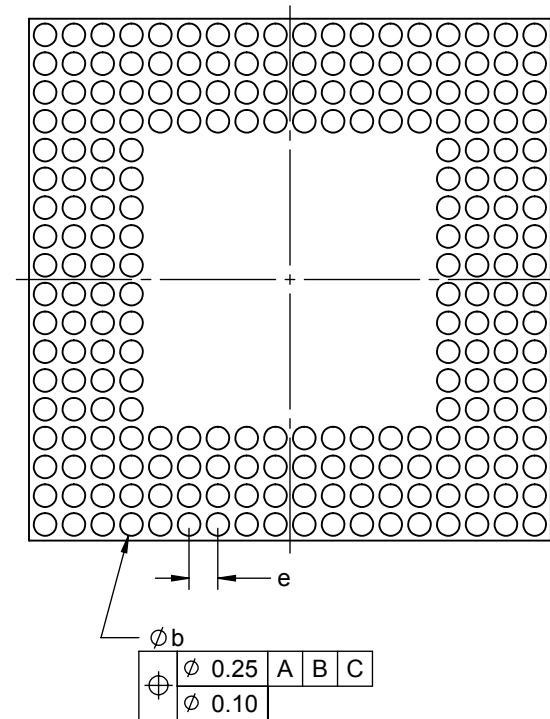
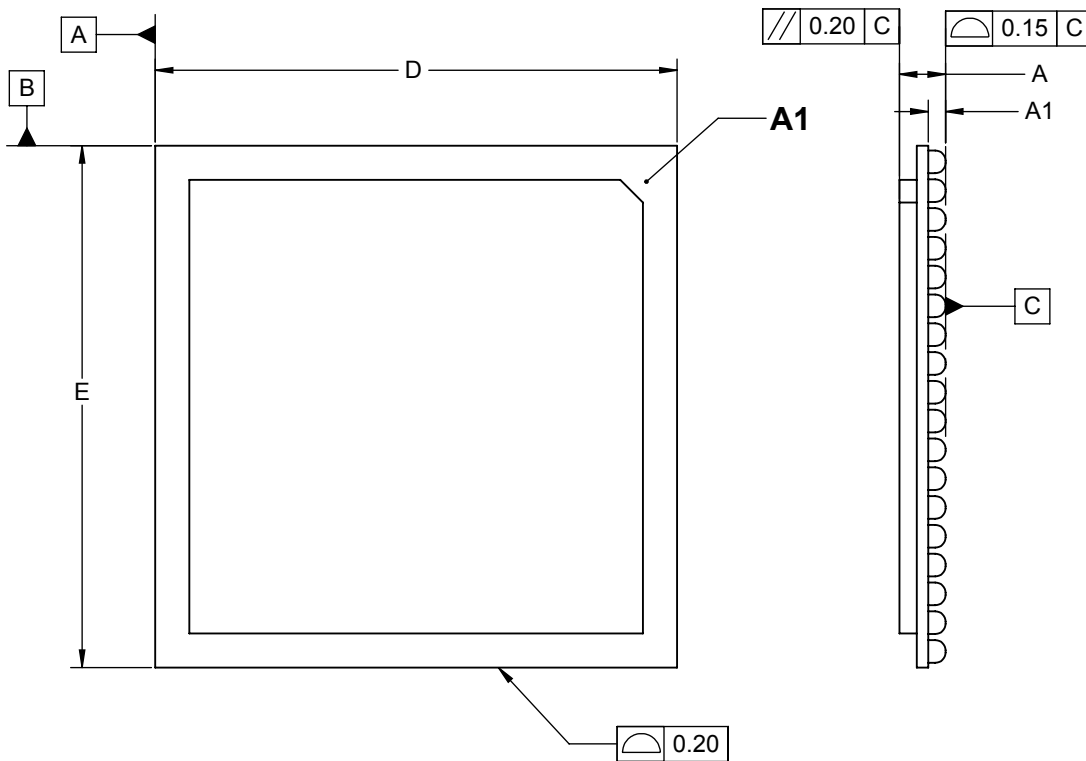
WEIGHT: 80.96
 MATERIAL: N/A
 FINISH: N/A

DRAWN BY: M. Raske

SCALE: 3:1

File: SM-BGA-9011

DATE: 6/13/2012



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	MIN	MAX
A	1.85	2.21
A1	.762 before reflow	
b	.762	
D	22.86	23.14
E	22.86	23.14
e	1.27	

Description: BGA

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

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

SM-BGA-9011 Drawing

STATUS: Released

SHEET 3 OF 5

REV. A



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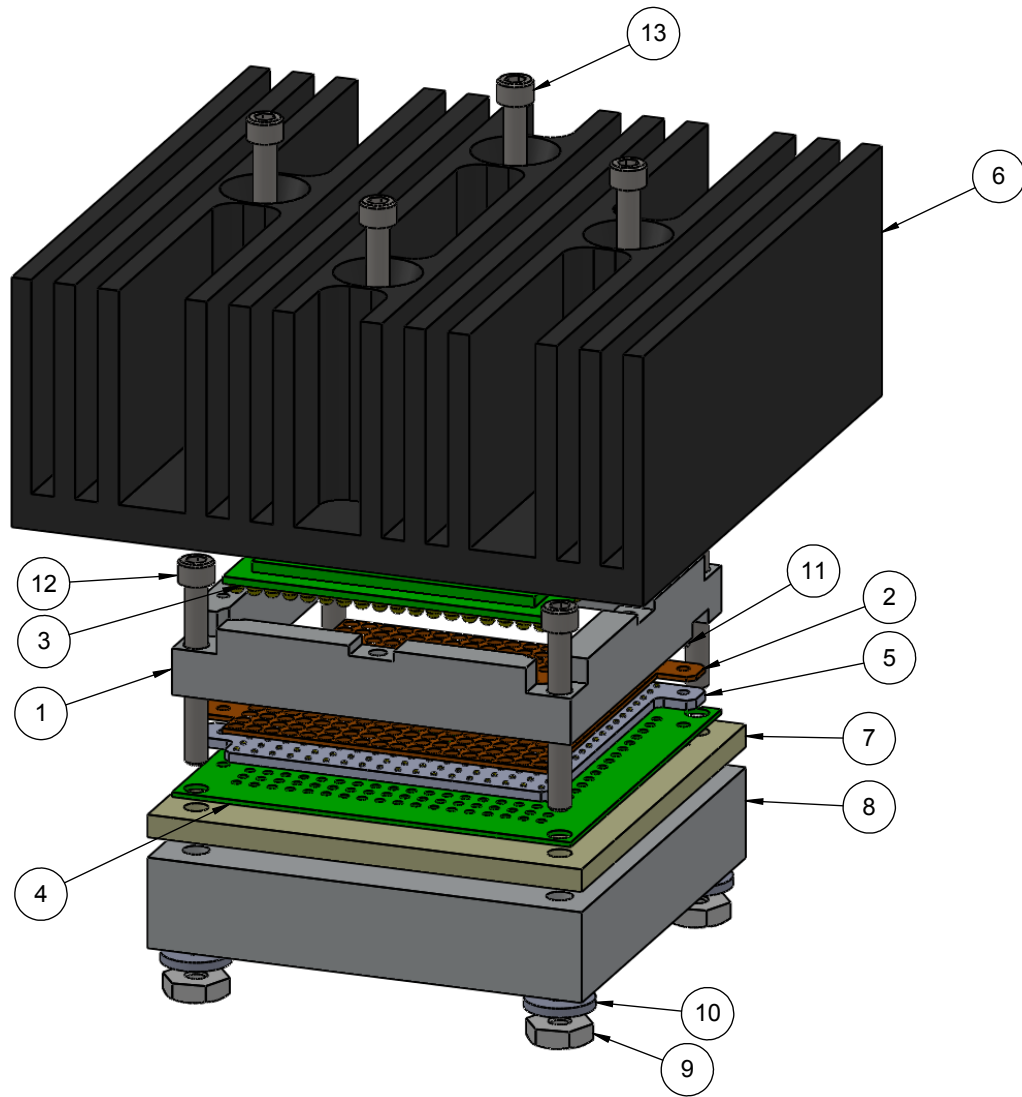
WEIGHT: 80.96
 MATERIAL: N/A
 FINISH: N/A

DRAWN BY: M. Raske

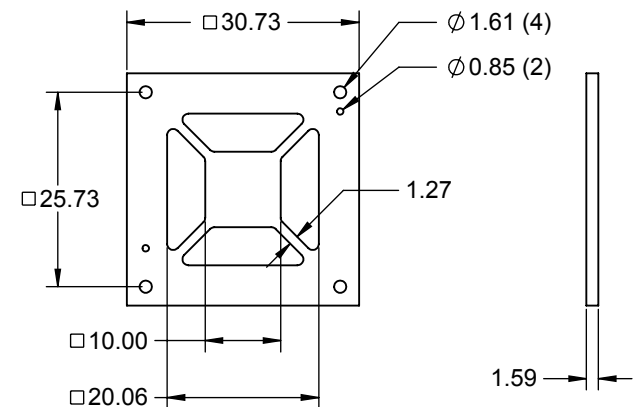
SCALE: 3:1

File: SM-BGA-9011

DATE: 6/13/2012



ITEM NO.	DESCRIPTION	Material
1	Socket Base, SM, 23mm	7075-T6, Plate (SS)
2	Ball Guide, SM, 23mm, 18X18	Kapton Polyimide/Cirlex
3	Test Chip, SM-BGA224	Material <not specified>
4	Test PCB, SM-BGA224	Material <not specified>
5	SM Contactor	Material <not specified>
6	Heat Sink Lid, 23mm, IC, 12W	7075-T6 Aluminum Alloy
7	Insulation plate for 23x23mm IC	FR4 High temp
8	Backing Plate	7075-T6 Aluminum Alloy
9	Nut, #0-80, SS	Stainless Steel (18-8)
10	Washer, #0 x .025", Nylon	Nylon 6/6
11	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
12	#0-80 x 0.5, SH Cap Screw	Material <not specified>
13	#0-80 X .625 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel



Description: Skt, Insulation Plate, Pin Det

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.

SM-BGA-9011 Drawing

STATUS: Released

SHEET 4 OF 5

REV. A



Ironwood Electronics, Inc.
Tele: (800) 404-0204
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WEIGHT: 80.96
MATERIAL: N/A
FINISH: N/A

DRAWN BY: M. Raske

SCALE: 1:1


File: SM-BGA-9011

DATE: 6/13/2012

Rev	Date	Initials	Description
A	-	-	Original

DESCRIPTION: Revisions

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

 SM-BGA-9011 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		WEIGHT:	STATUS: Released	SHEET: 5 OF 5	REV. A
		MATERIAL:	DRAWN BY:	SCALE: 1:1	
		FINISH:	File: SM-BGA-9011	DATE: 8/17/2012	