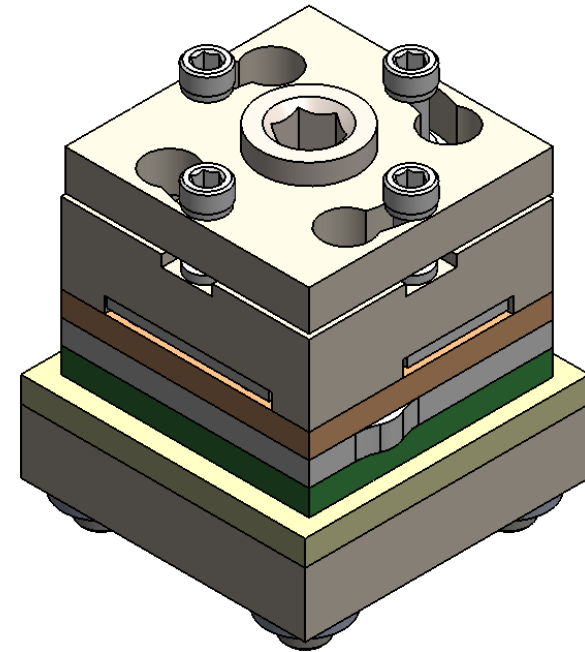
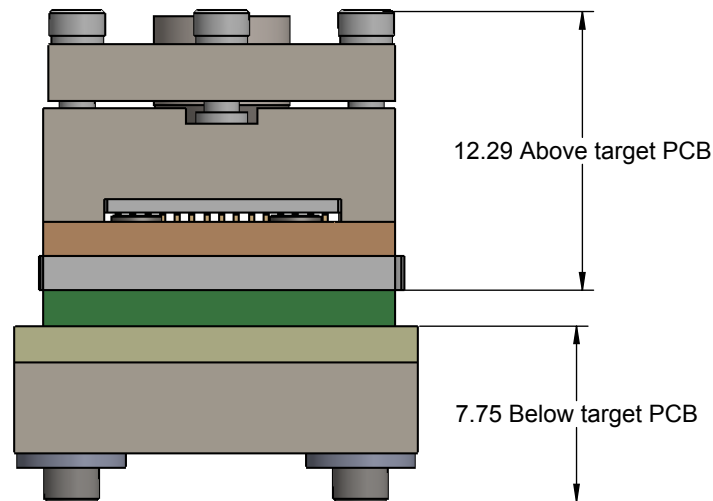
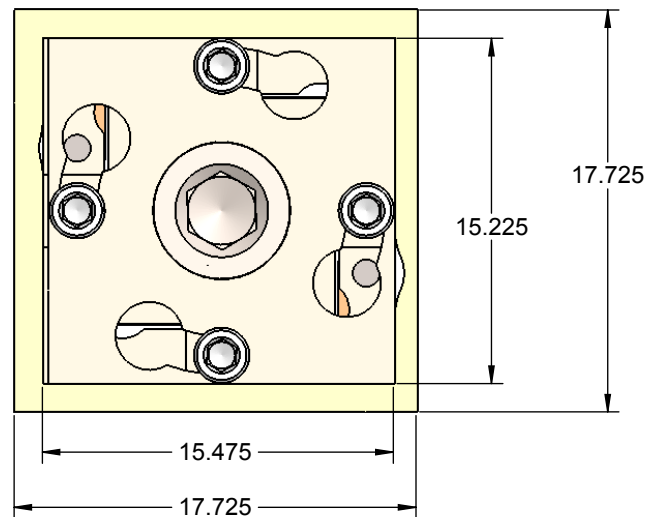


SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

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.



Description: SBT-BGA 10x10mm, 0.65mm pitch, 15x15 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-7012 Drawing



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

Material: Material <not specified>
Finish:
Weight: 10.99

STATUS: Released

ENG: E. Smolentseva

FILE: SBT-BGA-7012 Dwg

SHEET: 1 OF 5

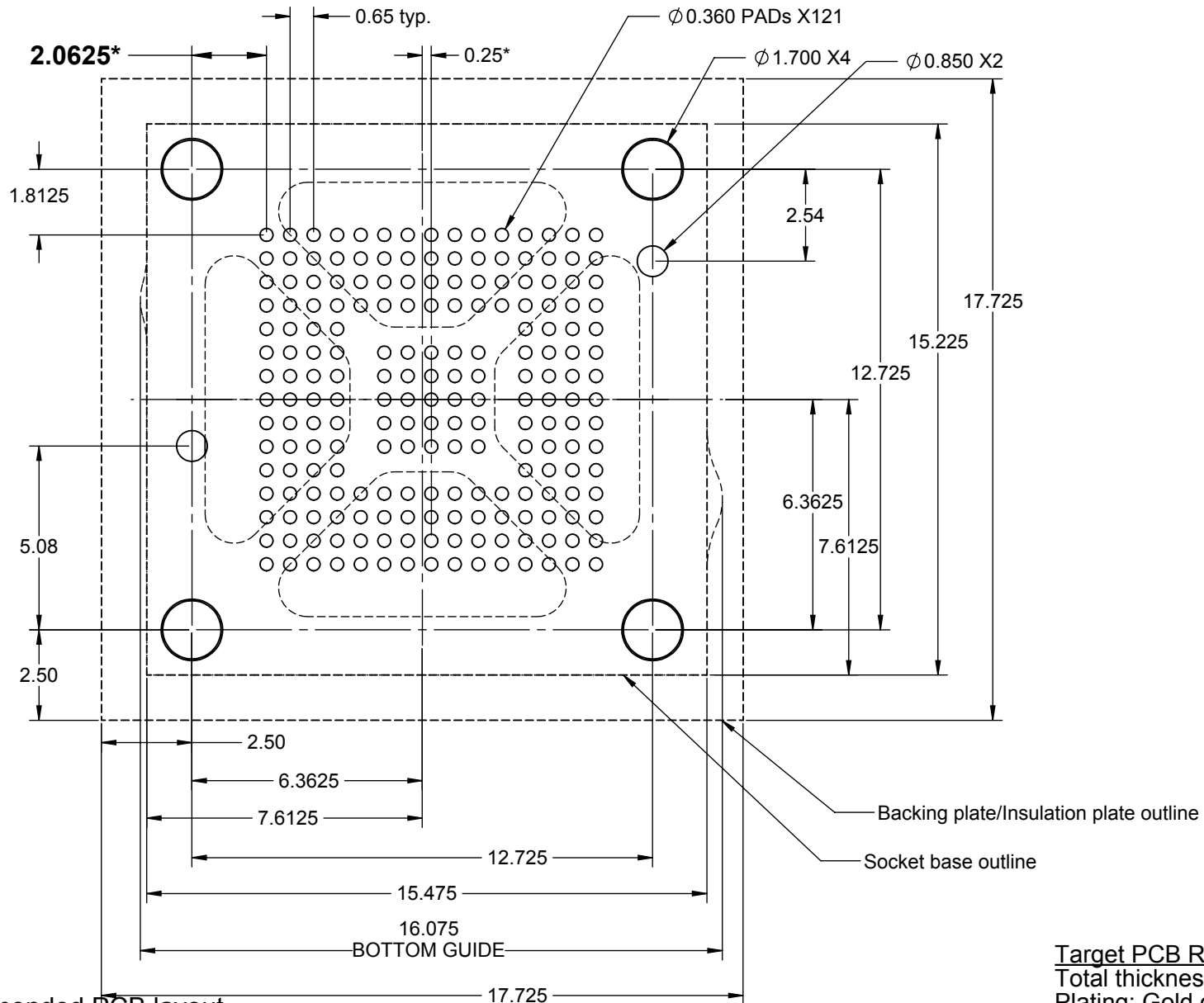
DRAWN BY: M. Raske

DATE: 10/8/2013

REV. B

SCALE: 3:1

***Note: BGA pattern is not symmetrical with respect to the mounting holes. BGA pattern shifted 0.25mm right of center of mounting hole pattern**




Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish

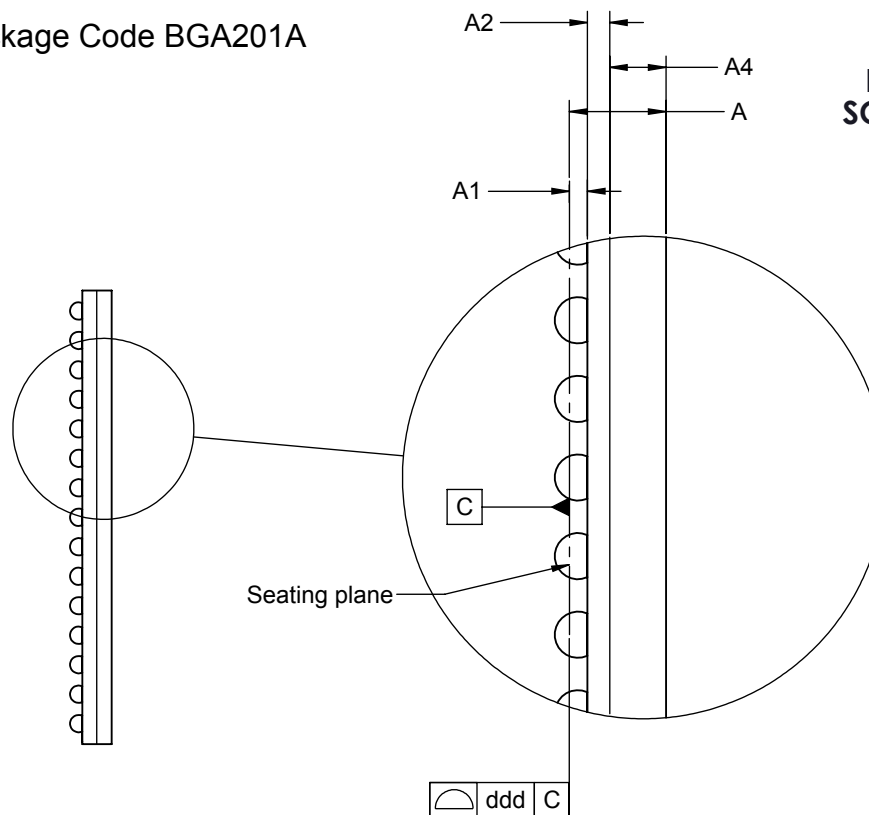
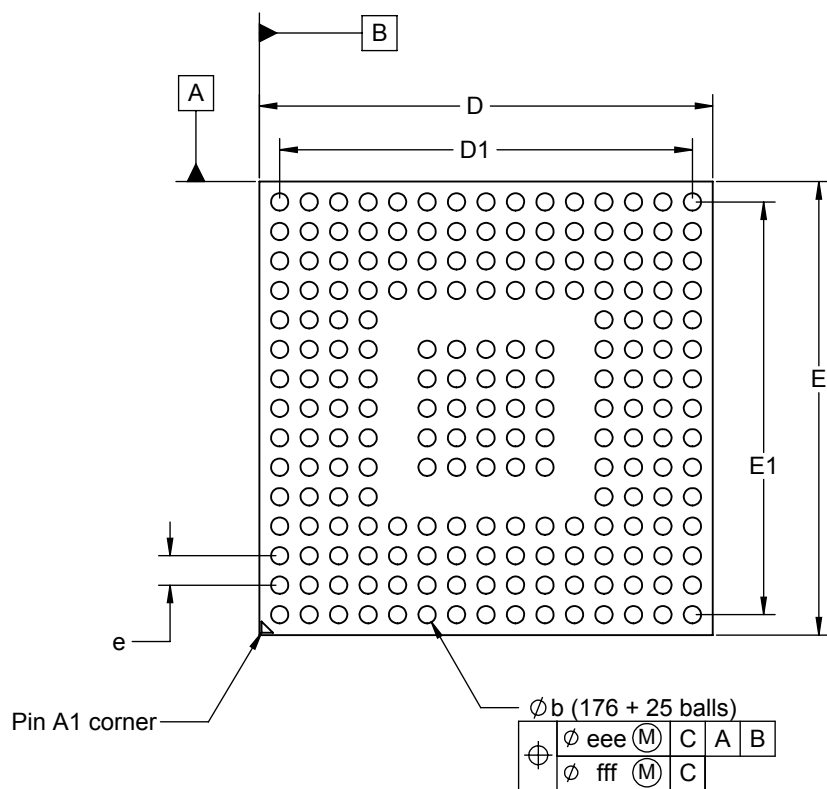
Description: Recommended PCB layout

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.

SBT-BGA-7012 Drawing  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 10.99	STATUS: Released ENG: E. Smolentseva FILE: SBT-BGA-7012 Dwg	SHEET: 2 OF 5 DRAWN BY: M. Raske DATE: 10/8/2013	REV. B SCALE: 5.8:1
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Ironwood Package Code BGA201A



DETAIL A
SCALE 16 : 1

15 x 15 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 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.

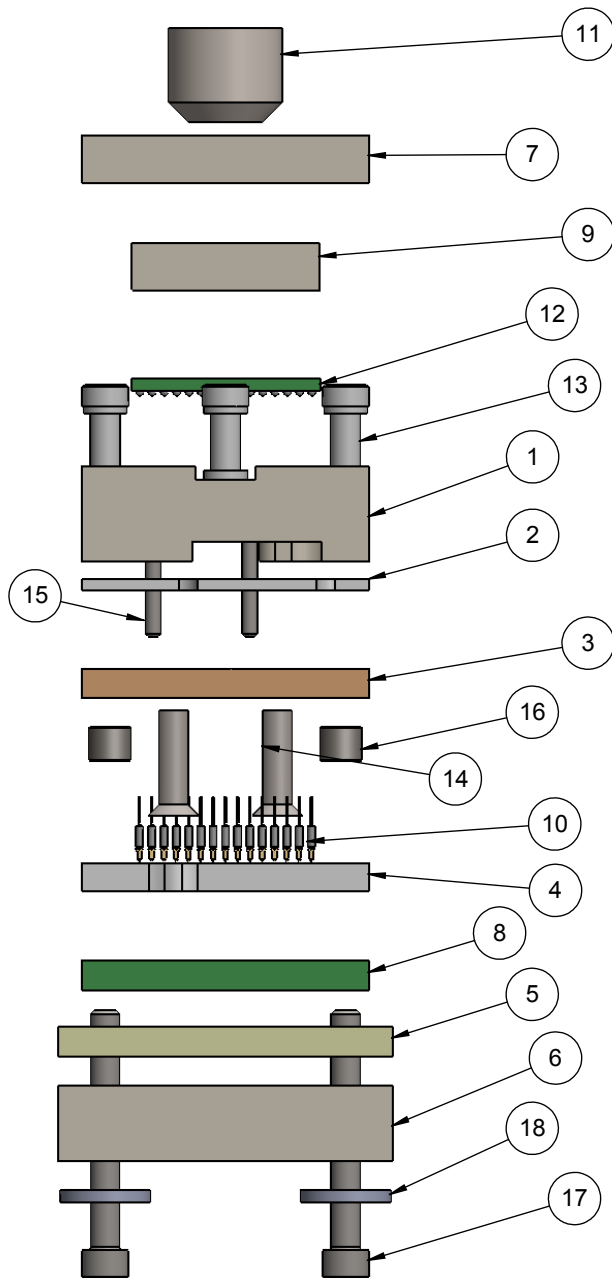
DIM	MIN	NOM	MAX
A	-		1.12
A1	0.22	0.27	0.32
A2	0.16	0.20	0.24
A4	0.57	0.585	0.60
b	0.30	0.35	0.40
D	9.95	10.00	10.05
D1		9.1	
E	9.95	10.00	10.05
E1		9.1	
e		0.65	
ddd			0.10
eee			0.15
fff			0.08

Description: BGA

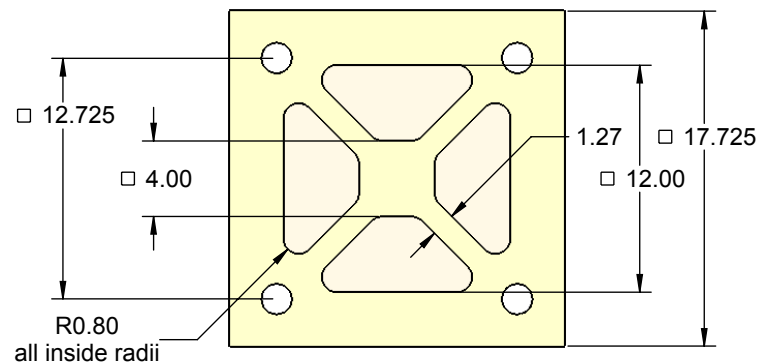
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters $\pm 0.0254\text{mm}$ [$\pm 0.001"$], Pitches (from true position) $\pm 0.0762\text{mm}$ [$\pm 0.003"$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.127\text{mm}$ [$\pm 0.005"$] unless stated otherwise. Materials and specifications are subject to change without notice.

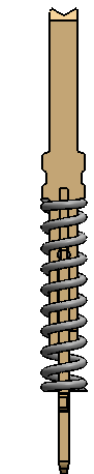
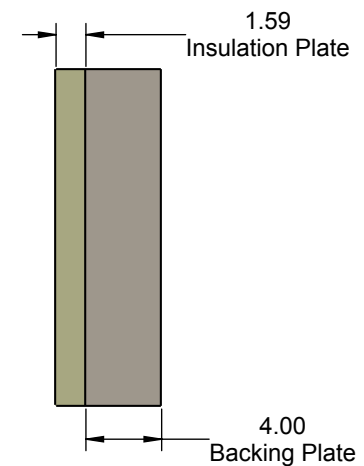
SBT-BGA-7012 Drawing		STATUS: Released	SHEET: 3 OF 5	REV. B
 ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified>	ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 6:1
	Finish: 10.99	FILE: SBT-BGA-7012 Dwg	DATE: 10/8/2013	



ITEM NO.	DESCRIPTION	Material
1	Socket Base SBT BGA 10x10	7075-T6 Aluminum Alloy
2	Floating Guide for 10x10mm, 0.65mm pitch 15x15 array	Semitron MDS 100
3	Middle Guide, for 10x10mm 15x15 0.65mm pitch BGA201	Semitron MDS 100
4	Bottom Guide for 10x10mm 15x15 0.65mm pitch BGA201	Semitron MDS 100
5	Insulation Plate	FR4 High temp
6	SBT/CBT Ni plating backing plate 13mm	7075-T6 Aluminum Alloy
7	Socket Lid	7075-T6 Aluminum Alloy
8	customer's target PCB	FR4 High temp
9	Compression Plate	7075-T6 Aluminum Alloy
10	SBT Pin, SBT-BGA 0.5mm-0.8mm	
11	Compression Screw M6x1	Stainless Steel (18-8)
12	Customer's BGA device	FR4 High temp
13	#0-80 Shoulder Screw, 0.090" thread length	Stainless Steel (303)
14	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
15	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
16	Floating Guide Spring	Alloy Steel (SS)
17	#0-80 x 0.5, SH Cap Screw	Alloy Steel
18	Washer, #0 x .025", Nylon	Nylon 6/6



Insulation Plate detail



PIN Detail
16:1 scale

Description: Skt, Insulation Plate, Pin Det

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-7012 Drawing



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

Material: Material <not specified>
Finish:
Weight: 10.99

STATUS: Released

ENG: E. Smolentseva

FILE: SBT-BGA-7012 Dwg

SHEET: 4 OF 5

DRAWN BY: M. Raske

DATE: 10/8/2013


REV. B

SCALE: 2.5:1

Rev	Date	Initials	Description
B	2/12/15	RP/MR	P-P196A was P-P149A, R3200 was R2885, Adjusted location of dowel pins

Description: REVISIONS

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.
Tolerances: Hole diameters $\pm 0.0254\text{mm}$ [$\pm 0.001"$], Pitches (from true position) $\pm 0.0762\text{mm}$ [$\pm 0.003"$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.127\text{mm}$ [$\pm 0.005"$] unless stated otherwise. Materials and specifications are subject to change without notice.

 SBT-BGA-7012 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Finish: Weight:	STATUS: Released	SHEET: 5 OF 5	REV. B
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 2.5:1
		FILE: SBT-BGA-7012 Dwg	DATE: 10/8/2013	