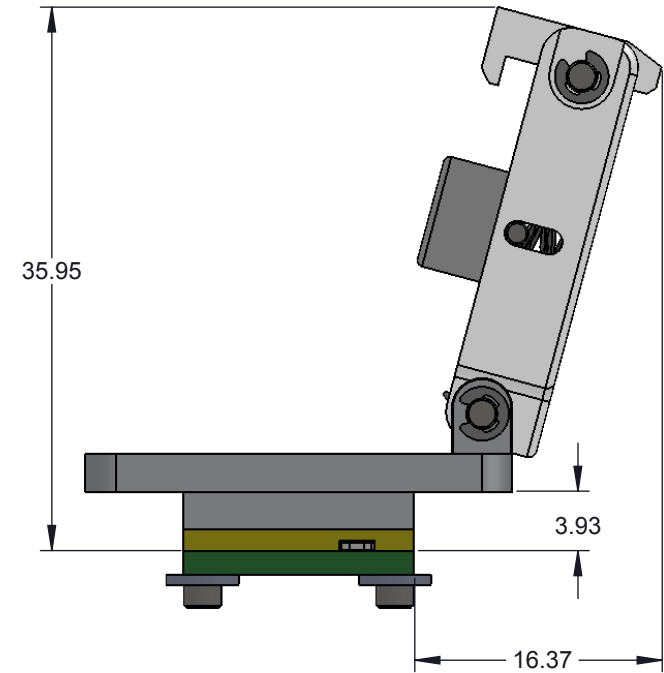
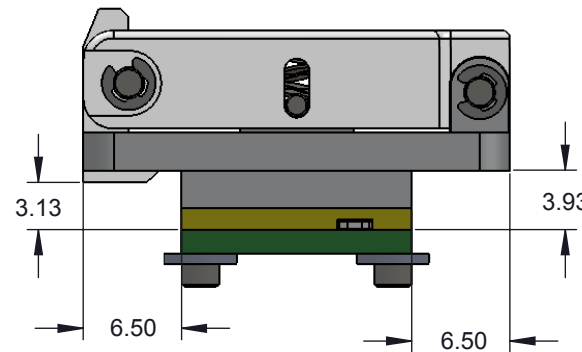
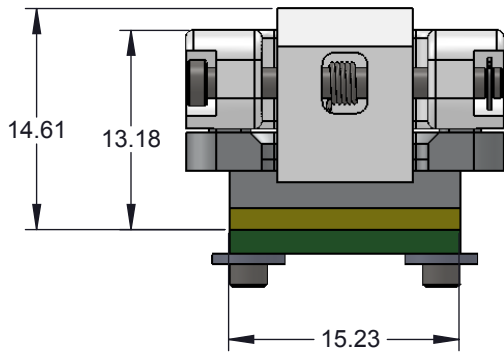
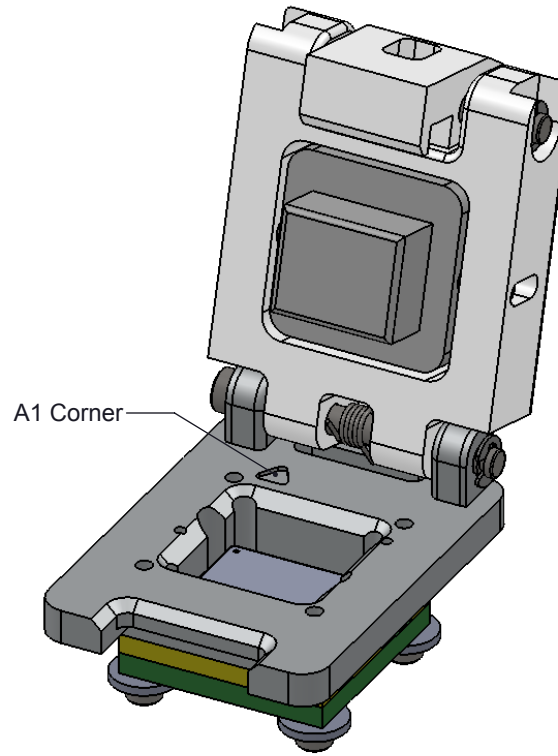
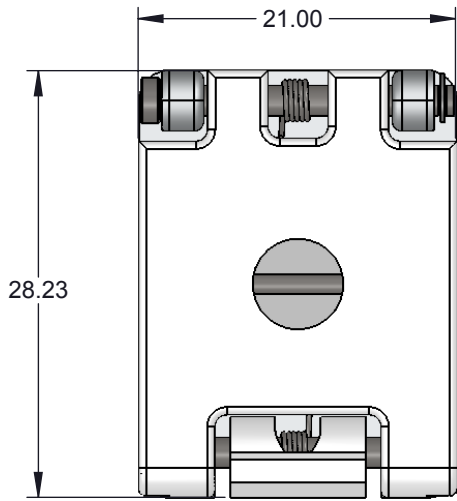


Silver Ball Matrix socket - Direct mount, solderless

Features


- Direct mounts to target PCB with hardware.
- High speed, reliable connection
- Minimum real estate required



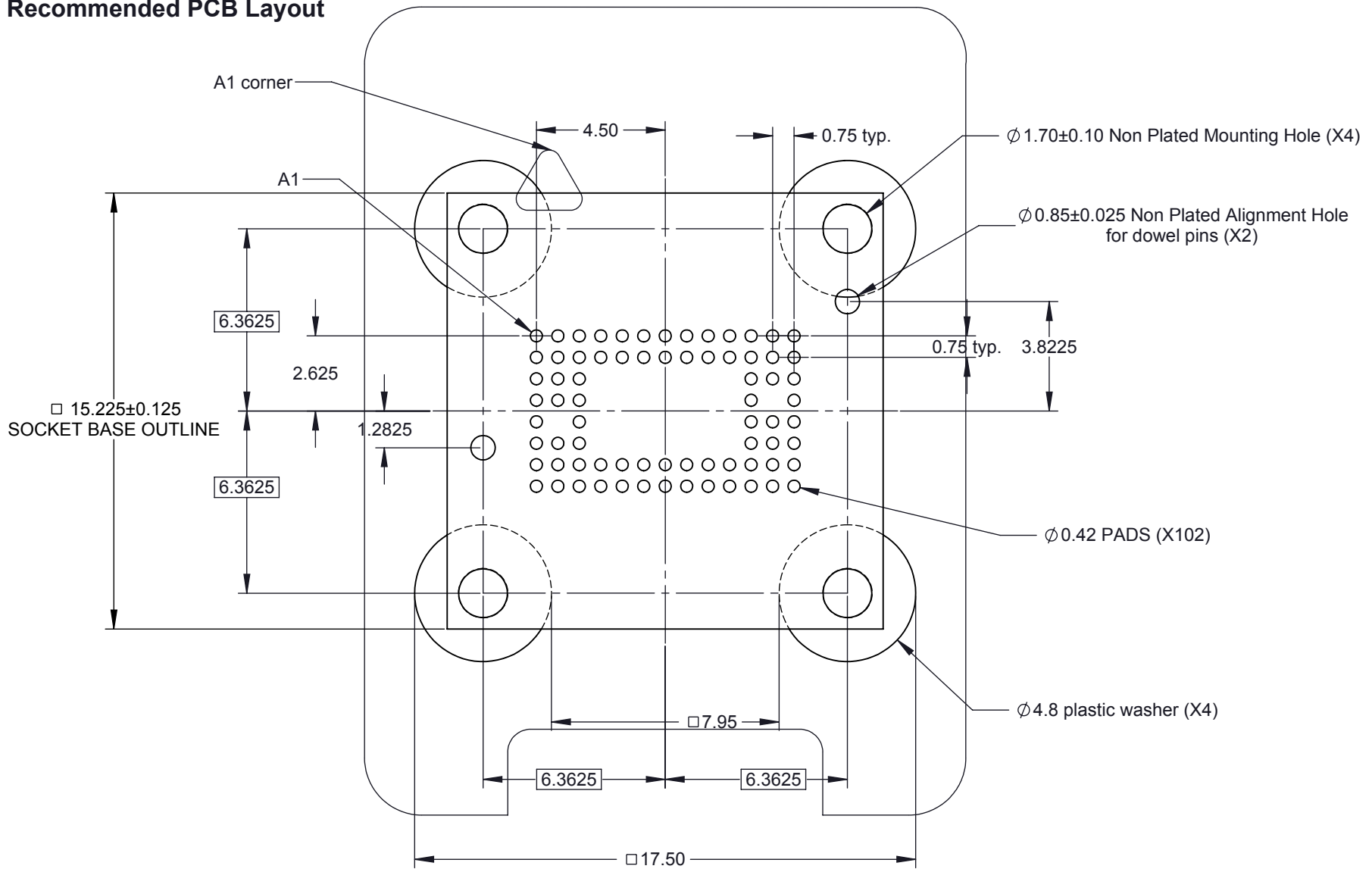
Description: SM socket for 9.75x6mm, 13x8 0.75mm pitch BGA74

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

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

 SM-BGA-9012 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 10.96	STATUS: Released ENG: E. Smolentseva FILE: SM-BGA-9012 Dwg	SHEET: 1 OF 4 DRAWN BY: D. Hauer DATE: 6/12/2012	REV. B SCALE: 2:1

Recommended PCB Layout




Target PCB Recommendations

- Total thickness: 0.864mm min.
- Plating: Gold or Solder finish
- PCB Pad height: same or higher than solder mask

Description: Recommended PCB layout

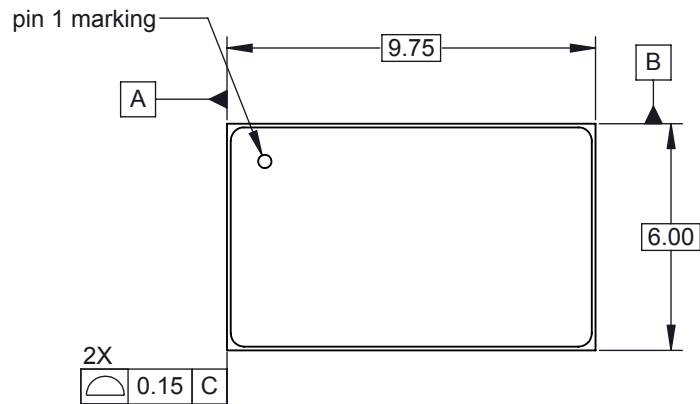
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

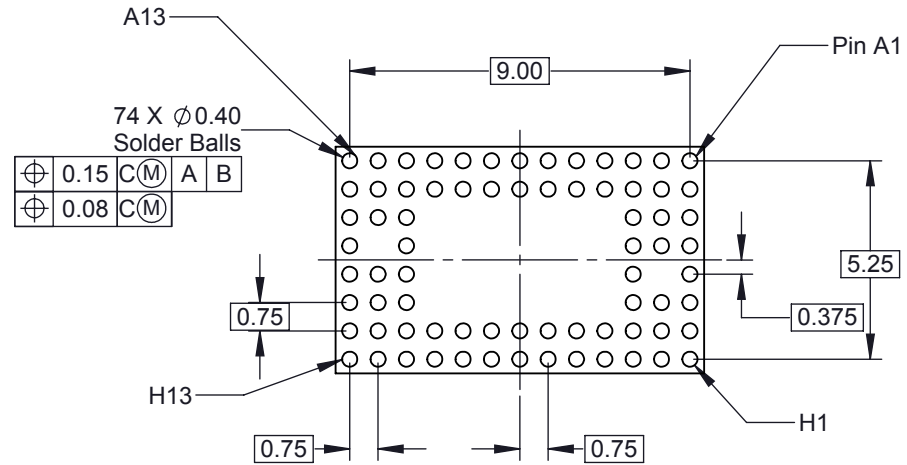
 SM-BGA-9012 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 10.96	STATUS: Released ENG: E. Smolentseva FILE: SM-BGA-9012 Dwg	SHEET: 2 OF 4 DRAWN BY: D. Hauer DATE: 6/12/2012	REV. B SCALE: 5:1

Compatible BGA IC

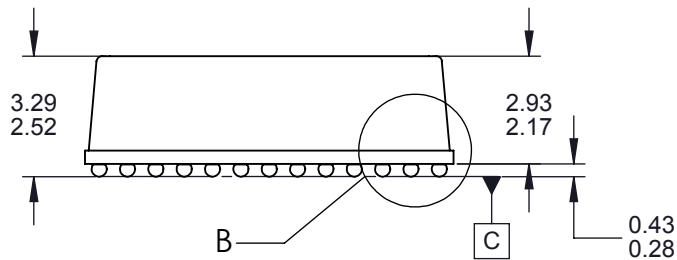
IRONWOOD PACKAGE CODE : BGA74B1



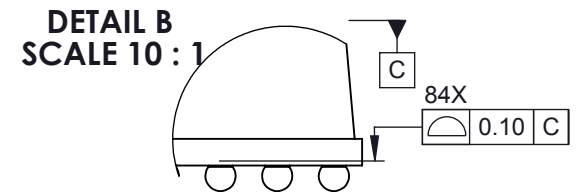
TOP VIEW



BOTTOM VIEW



SIDE VIEW




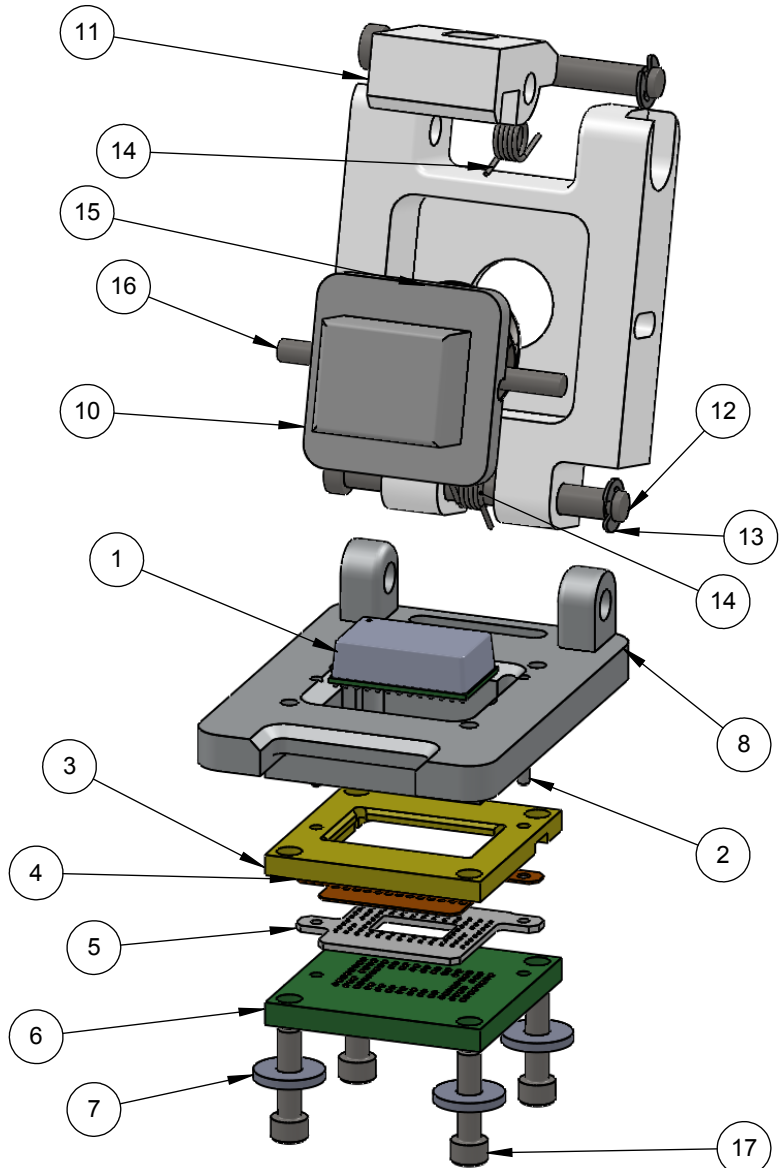
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane C.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

Description: IC package

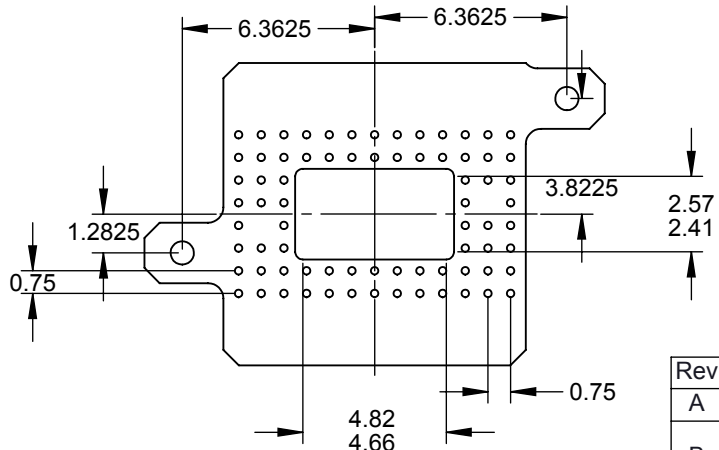
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

	SM-BGA-9012 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 10.96	STATUS: Released ENG: E. Smolentseva FILE: SM-BGA-9012 Dwg	SHEET: 3 OF 4 DRAWN BY: D. Hauer DATE: 6/12/2012	REV. B SCALE: 5:1
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ITEM NO.	DESCRIPTION	Material
1	Customer's BGA74, 13x8 array 0.75mm pitch	Material <not specified>
2	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
3	IC guide	Torlon 4203
4	BGA ball guide	Kapton Polyimide/Cirlex
5	Interposer, 13x8 0.75mm pitch BGA74	Silmat
6	Customer's target PCB	FR4 High temp
7	Washer, #0 x .025", Nylon	Nylon 6/6
8	Socket Base	PPS
9	12mm Plastic Snap Clamshell Socket Lid	PPS/Ultem
10	Compression Plate Plastic	PEEK Ceramic filled/Ultem
11	Clamshell Latch Snap Lid Socket (modified M2695 latch)	PPS/Ultem
12	2mm diameter Hinge Pin, 20 mm long	Alloy Steel
13	Snap ring for 2mm Hinge pin 0.15" OD	
14	Torsion Spring, 180 0.109" OD, Ccw/Rh	Steel Music Wire
15	Wave Spring 0.375"OD 0.15" In 100lbs/in	Steel Music Wire
16	Dowel Pin, M1.5 X 20mm LG, 18- 8 SS	AISI 347 Annealed Stainless Steel (SS)
17	#0-80 X .25 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel




Interposer Detail
SCALE: 4:1

Rev	Date	Initials	Description
A	06/12/12	DH	Original
B	07/23/15	DH	Changed IC Guide material from Ultem to Torlon

Description: Exploded View

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

 <p>SM-BGA-9012 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 10.96</p>	<p>STATUS: Released ENG: E. Smolentseva FILE: SM-BGA-9012 Dwg</p>	<p>SHEET: 4 OF 4 DRAWN BY: D. Hauer DATE: 6/12/2012</p>	<p>REV. B SCALE: 2:1</p>
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