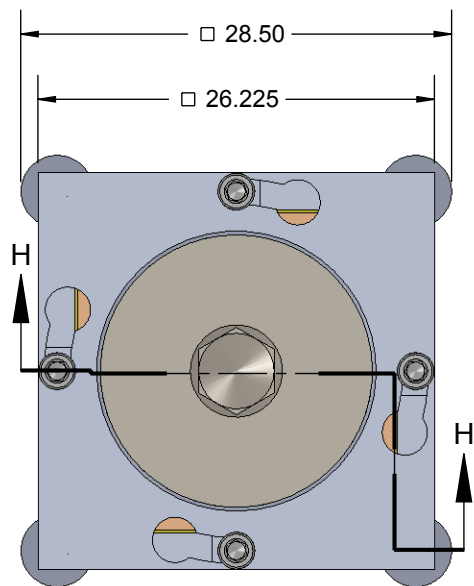
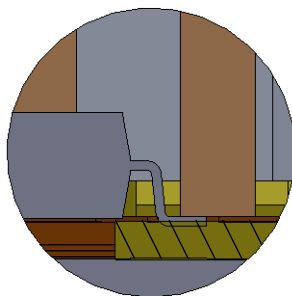


# GHz QFP Socket - Direct mount, solderless

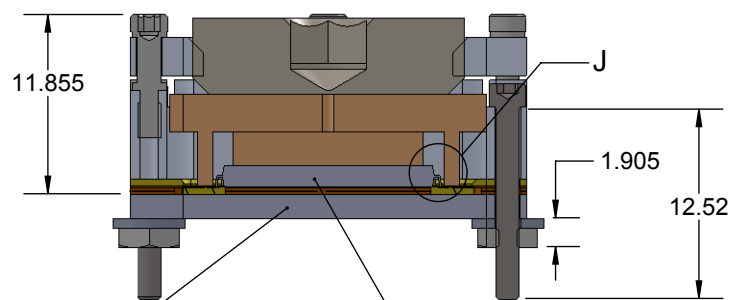
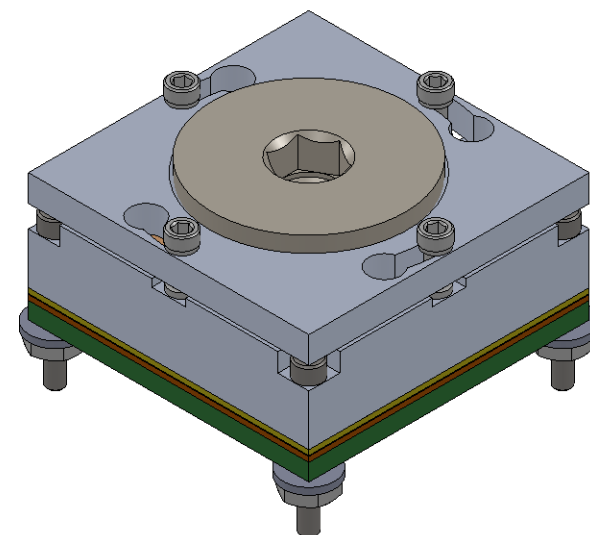


## Features

- Directly mounts to target PCB (needs tooling holes) with hardware
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Ball guide prevents over compression of elastomer
- Easily removable swivel socket lid



DETAIL J  
SCALE 10 : 1




Target PCB — QFP device

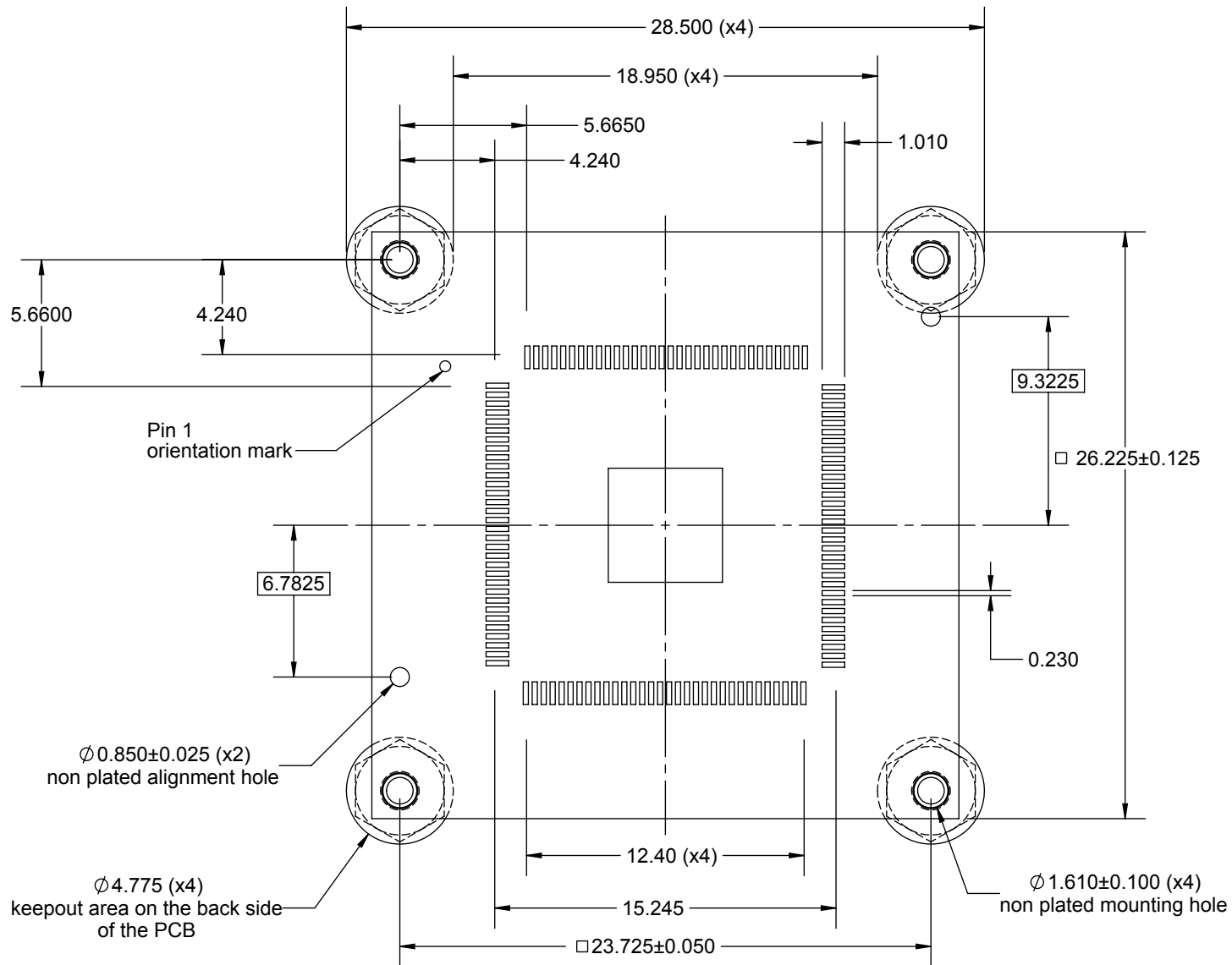
SECTION H-H

**Description: Socket for QFP128, 16x16 tip to tip dimension 14x14mm body 0.4mm pitch**

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.

 <p><b>SG-QFE-7015 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 15.37</p>	<p>STATUS: Released ENG: E. Smolentseva FILE: SG-QFE-7015 Dwg</p>	<p>SHEET: 1 OF 4 DRAWN BY: M. Raske DATE: 10/07/2013</p>	<p>REV. B SCALE: 2:1</p>




**Target PCB Recommendations**

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

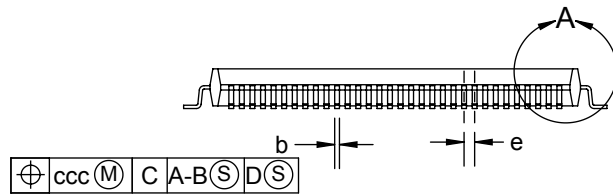
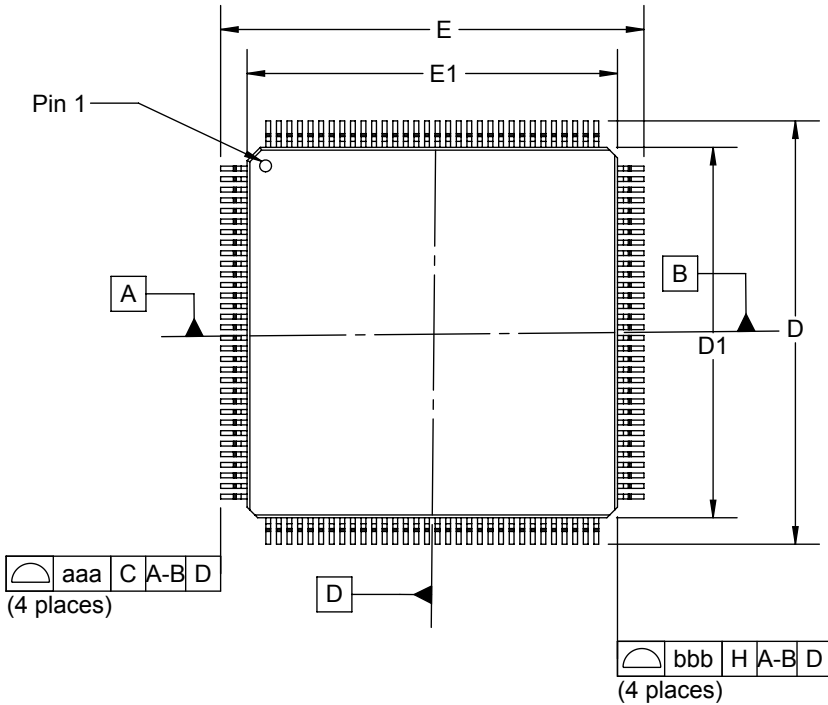
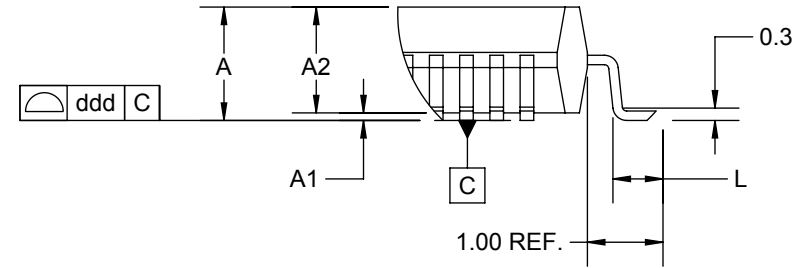
**Description: Recommended PCB Layout**

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.  
 Tolerances: Hole diameters ±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.

 <b>SG-QFE-7015 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 15.37	STATUS: Released	SHEET: 2 OF 4	REV. B
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 3.5:1
		FILE: SG-QFE-7015 Dwg	DATE: 10/07/2013	

# Ironwood Package Code QFE128SD

DETAIL A  
SCALE 10 : 1




DIM	MIN	NOM	MAX
A			1.6*
A1	0.05		0.15
A2	1.35	1.40	1.45
D	16.00 BSC		
D1	14.00 BSC		
E	16.00 BSC		
E1	14.00 BSC		
L	0.45	0.60	0.75
e	0.40 BSC		
b	0.13	0.18	0.23
c	0.09		0.20
aaa	0.20		
bbb	0.20		
ccc	0.07		
ddd	0.08		

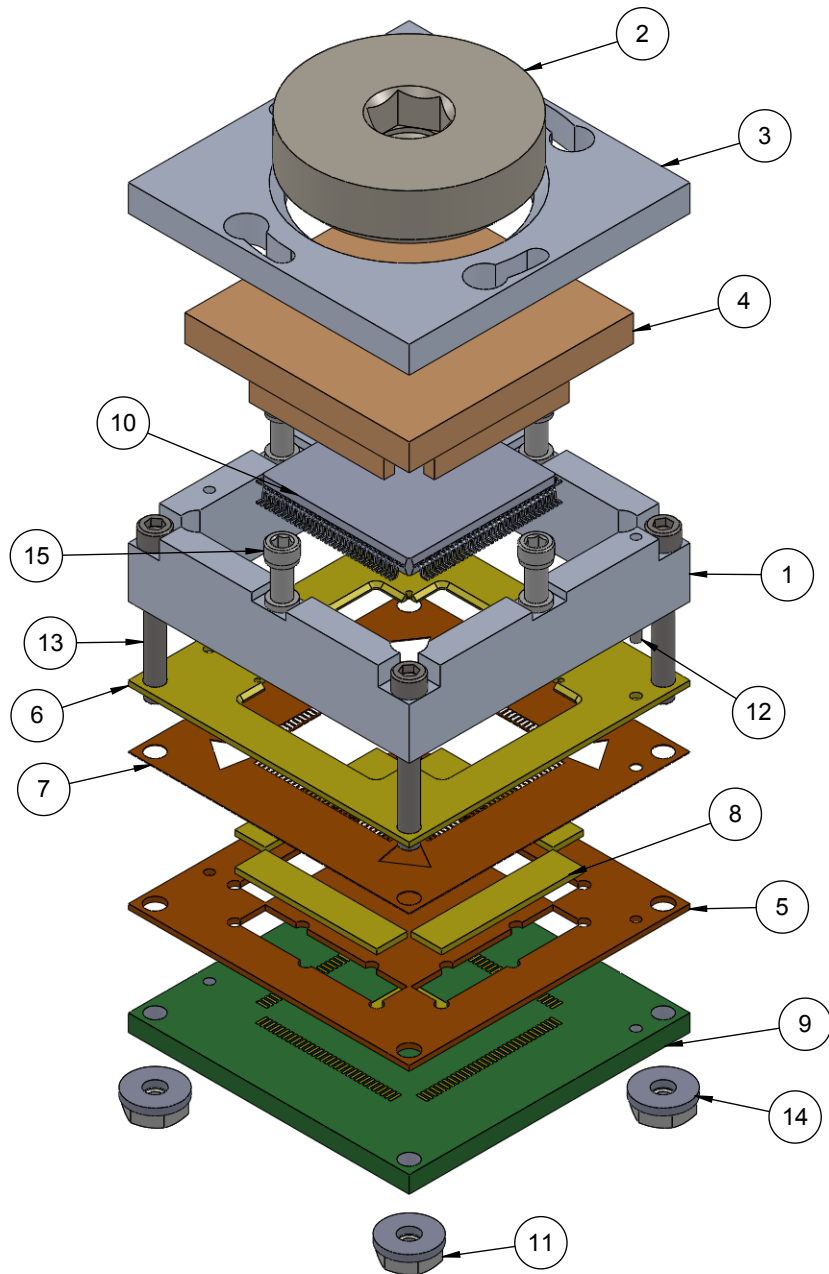
## Description: Compatible Device

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.

\*Note: this socket can accommodate devices up to 3.5mm tall.

 <p><b>SG-QFE-7015 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 15.37</p>	<p>STATUS: Released ENG: E. Smolentseva FILE: SG-QFE-7015 Dwg</p>	<p>SHEET: 3 OF 4 DRAWN BY: M. Raske DATE: 10/07/2013</p>	<p>REV. B SCALE: 3.5:1</p>
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ITEM NO.	Description	Material
1	Socket Base SBT BGA	7075-T6 Aluminum Alloy
2	Compression Screw, M18	7075-T6 Aluminum Alloy
3	Socket Lid, 26.225 X 26.225	7075-T6 Aluminum Alloy
4	Compression Plate	Ultem 1000
5	QFE Elastomer Guide 16mm IC	Kapton Polyimide
6	IC Guide	Torlon 4203
7	Lead Guide	
8	0.5mm thick, 0.05x 0.05mm pitch, 50mm sq. Z-axis conductive angled elastomer	20 Micron dia gold plated brass filaments arranged symetrically in a silicon rubber (63.5 degree angle), Thickness: 0.5mm
9	Test PCB, 16x16mm, QFP128, 0.4mm pitch	Material <not specified>
10	QFP128, 0.4mm pitch, 16x16 tip to tip, 14mm body	Material <not specified>
11	Nut, #0-80, SS	Stainless Steel (18-8)
12	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
13	#0-80 x 0.5, SH Cap Screw	Alloy Steel
14	Washer, #0 x .025", Nylon	Nylon 6/6
15	#0-80 Shoulder Screw, 0.090" thread length	Stainless Steel (303)

### Description: Assembly

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.

Rev	Date	Initials	Description
A	10/07/13	MR	Original
B	03/27/14	DH	Changed IC guide material to Torlon

 <b>SG-QFE-7015 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 15.37	STATUS: Released	SHEET: 4 OF 4	REV. B
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 3.5:1
		FILE: SG-QFE-7015 Dwg	DATE: 10/07/2013	