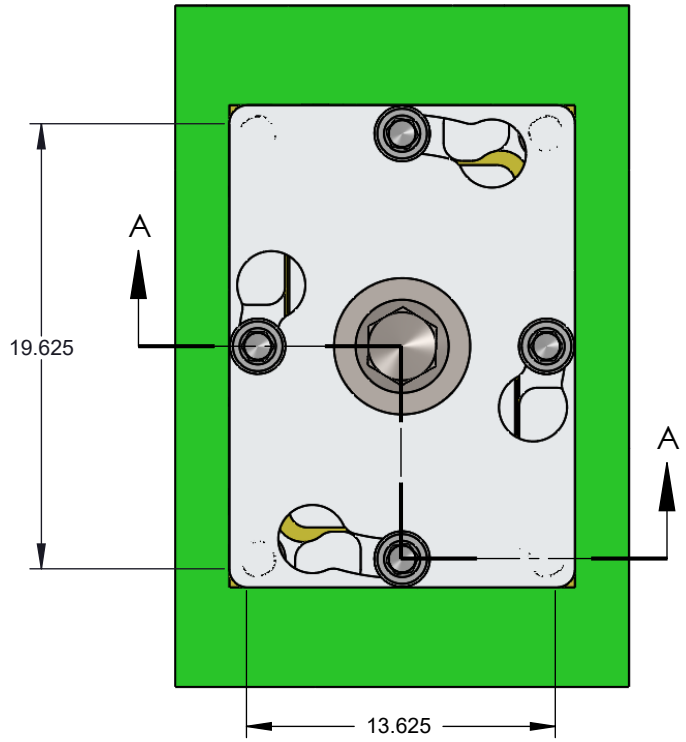
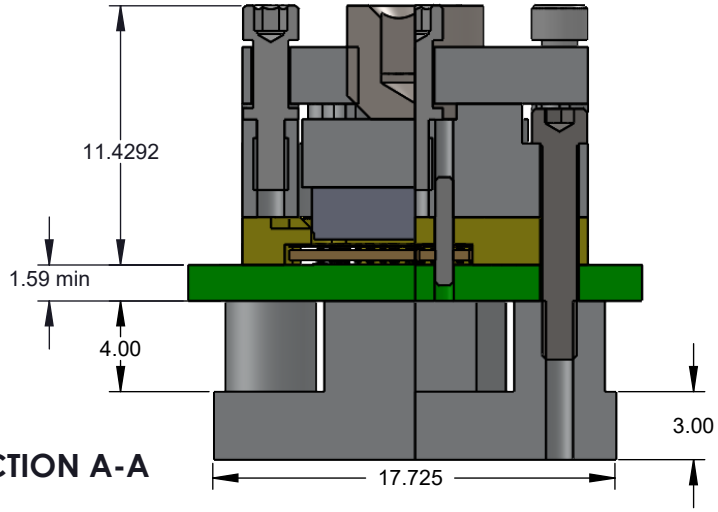
SMP QFN SOCKET - direct mount, solderless

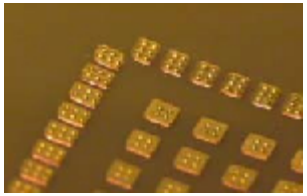




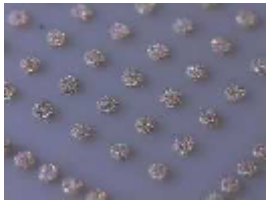
SECTION A-A

Features

- Directly mounts to target PCB (needs tooling holes) with hardware.
- Wide temperature range (-55C to +150C).
- Current capability is 4A per pin at 14C temperature rise.
- Over 40GHz bandwidth @-1dB for edge pins
- Low and stable contact resistance for reliable production yield.
- Self inductance under 0.21nH.
- Easily removable swivel socket lid

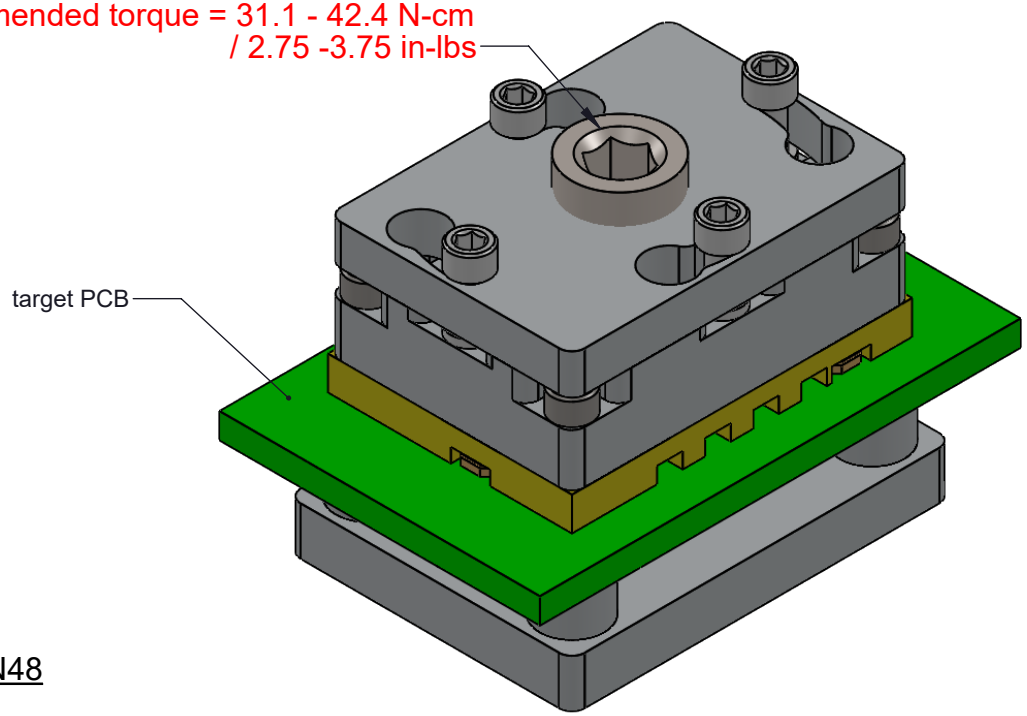


Silver ball matrix protective layer



Silver ball matrix elastomer

Recommended torque = 31.1 - 42.4 N-cm
/ 2.75 -3.75 in-lbs

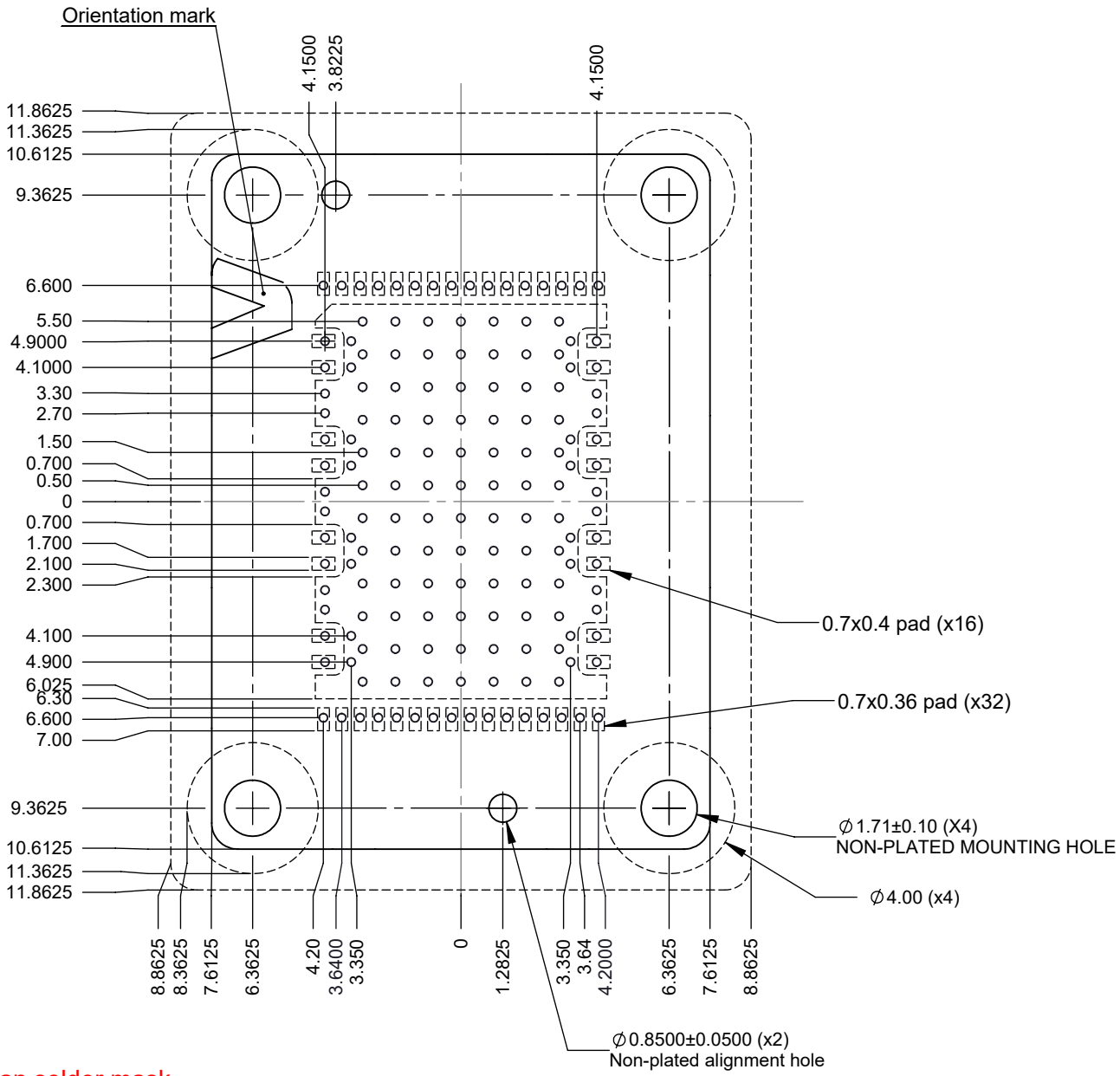


Description: SMP Socket for 9.1x14mm 0.56/0.8mm pitch QFN48

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.

SMP-QFN-8013 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 14.00	STATUS: Released	SHEET: 1 OF 6	REV. A
		ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 3:1
		FILE: SMP-QFN-8013 Dwg	DATE: 10/13/2015	



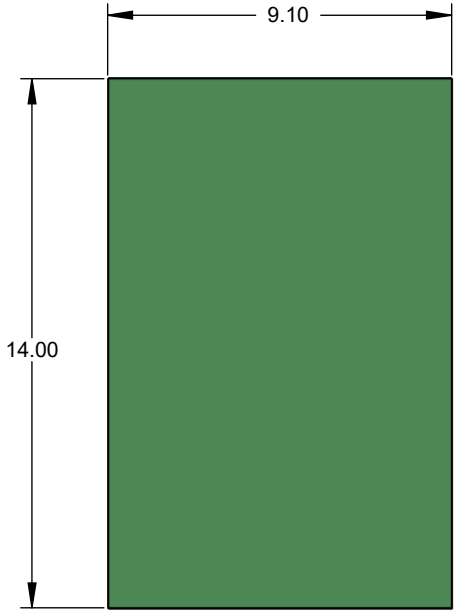
Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish
PCB Pad height: same or higher than solder mask.

Description: Recommended PCB layout

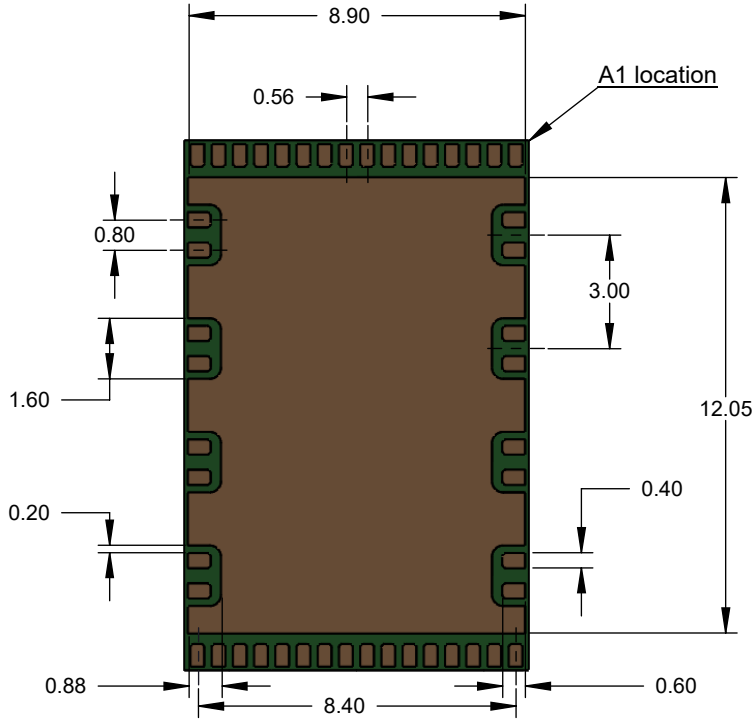
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

SMP-QFN-8013 Drawing	Material: N/A Finish: N/A Weight: 14.00	STATUS: Released	SHEET: 2 OF 6	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 5:1
		FILE: SMP-QFN-8013 Dwg	DATE: 10/13/2015	



TOP VIEW



BOTTOM VIEW



SIDE VIEW

1. Dimensions are in millimeters.
2. Pad Tolerance: +/- 0.05mm.
   Overall Package Dimension: +/- 0.1mm.

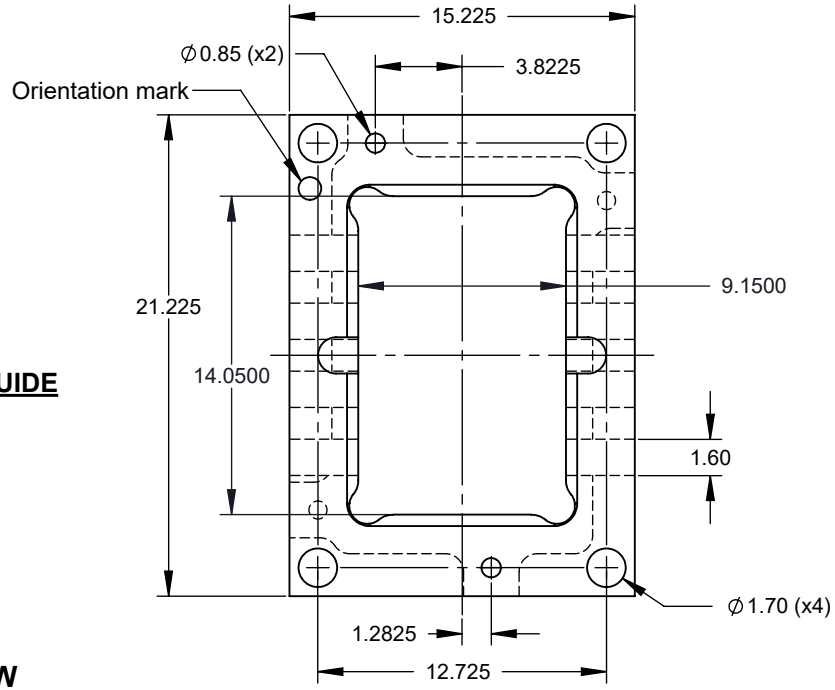
Description: QFN

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

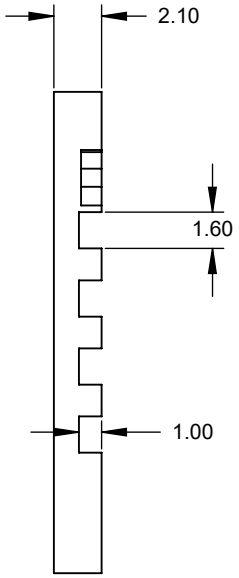
Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

SMP-QFN-8013 Drawing	Material: N/A Finish: N/A Weight: 14.00	STATUS: Released	SHEET: 3 OF 6	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 5:1
		FILE: SMP-QFN-8013 Dwg	DATE: 10/13/2015	

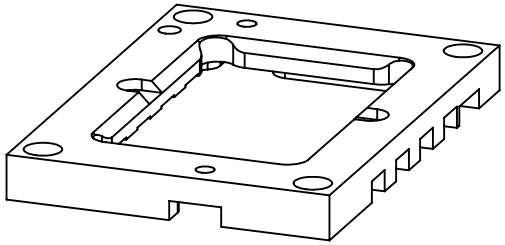
IC GUIDE



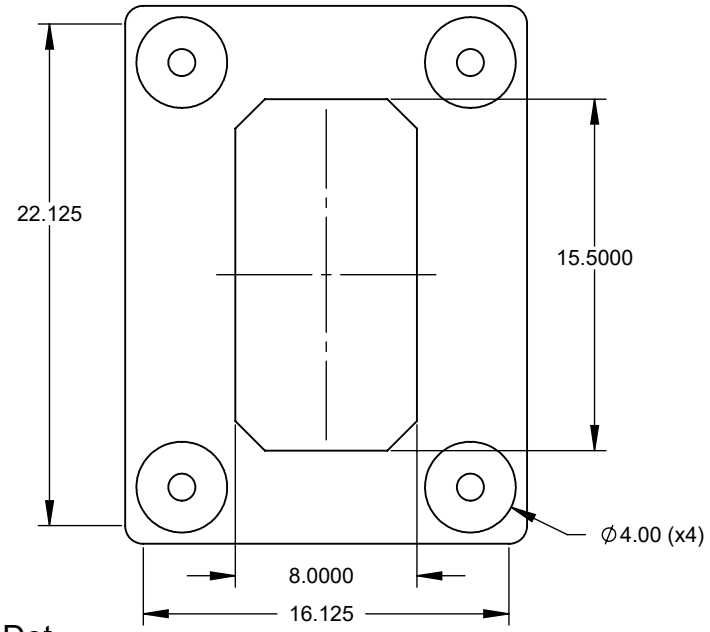
TOP VIEW

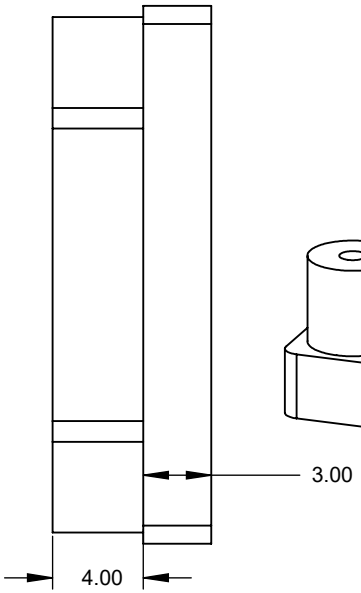


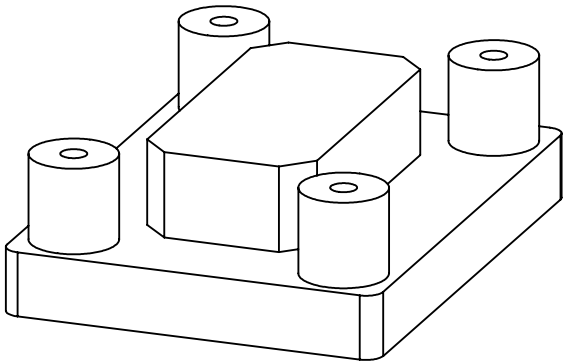
SIDE VIEW



BACKING PLATE





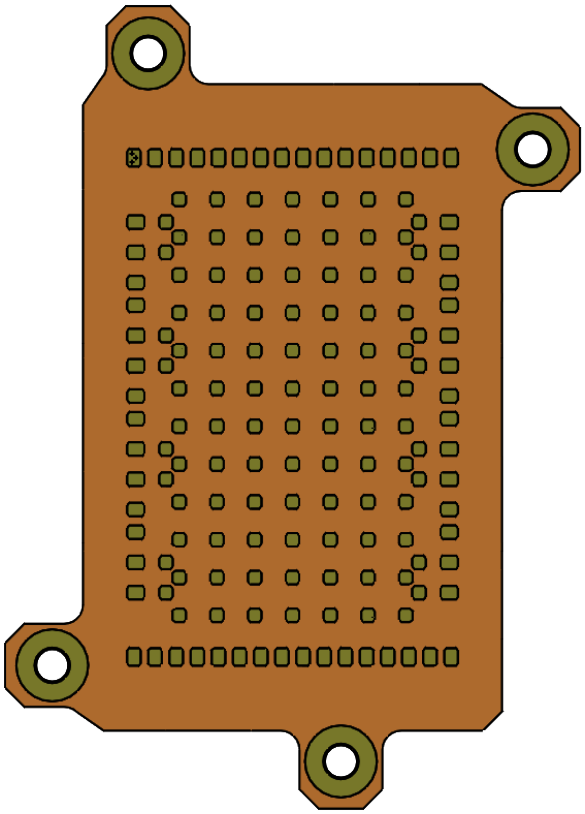


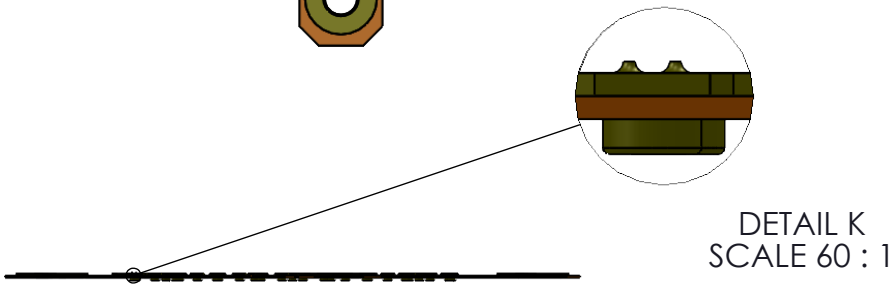
Description: Comp Det

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.

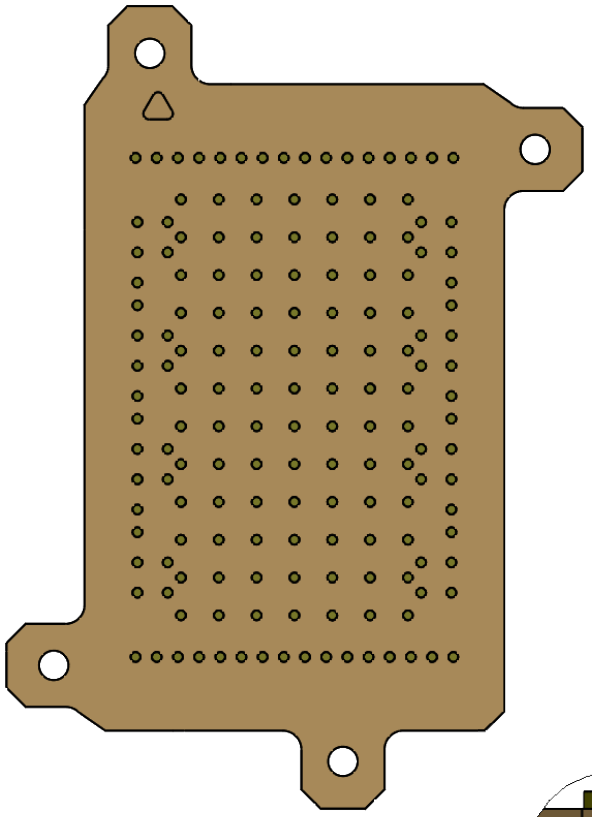
SMP-QFN-8013 Drawing	Material: N/A Finish: N/A Weight: 14.00	STATUS: Released	SHEET: 4 OF 6	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 3:1
		FILE: SMP-QFN-8013 Dwg	DATE: 10/13/2015	

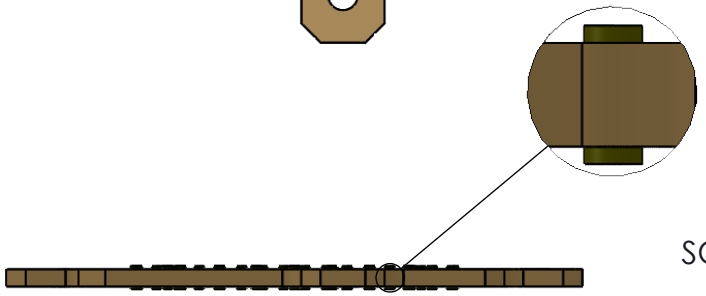




DETAIL K
SCALE 60 : 1

SMP protective layer





DETAIL L
SCALE 30 : 1

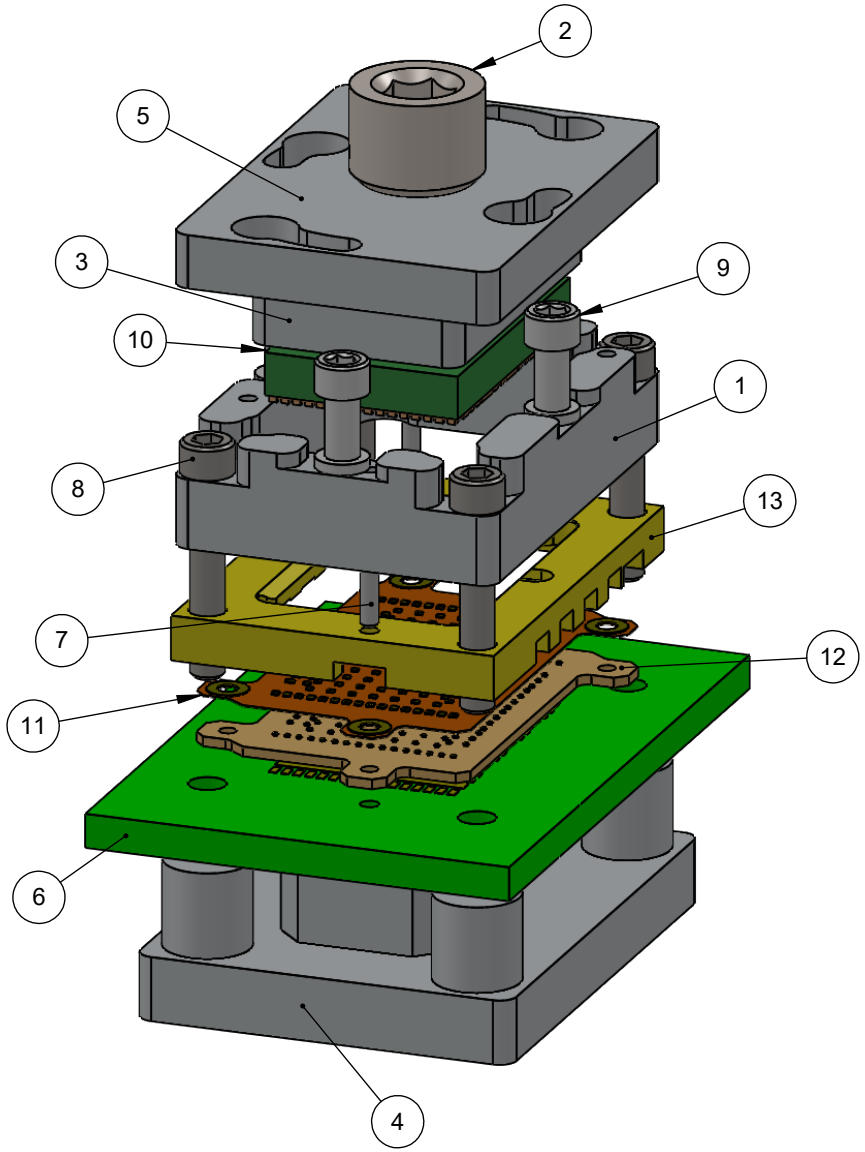
SMP SM layer

Description: SMP/SM interposer detail

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.

SMP-QFN-8013 Drawing	Material: N/A Finish: N/A Weight: 14.00	STATUS: Released	SHEET: 5 OF 6	REV. A
©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 5:1
		FILE: SMP-QFN-8013 Dwg	DATE: 10/13/2015	



ITEM NO.	DESCRIPTION	Material
1	Socket Base 10x16mm IC	7075-T6 Aluminum Alloy
2	Compression Screw M6x1	Stainless Steel (18-8)
3	Compression Plate 10x16mm IC	7075-T6 Aluminum Alloy
4	Backing Plate with 4 post and rectangular center pad	7075-T6 Alumium Alloy
5	Socket Lid Swivel 10X16mm IC	7075-T6 Aluminum Alloy
6	Customer's target PCB	FR4 High temp
7	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
8	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
9	#0-80 Shoulder Screw, 2.29mm thread length	Stainless Steel (303)
10	Customer's IC 9.1x14mm, 0.56/0.8mm pitch QFN48	FR4 High temp
11	SMP Protective layer for 9.1x14mm 0.56/0.8mm QFN48	SMP
12	SMP SM interposer for 9.1x14mm 0.56/0.8mm QFN48	SM elastomer
13	SMP IC Guide for 9.1x14mm IC	Torlon 4203

Rev	Date	Initials	Description
A	10/13/15	SH	Original

Description: Skt Det

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.

SMP-QFN-8013 Drawing	Material: N/A Finish: N/A Weight: 14.00	STATUS: Released	SHEET: 6 OF 6	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 3:1
		FILE: SMP-QFN-8013 Dwg	DATE: 10/13/2015	