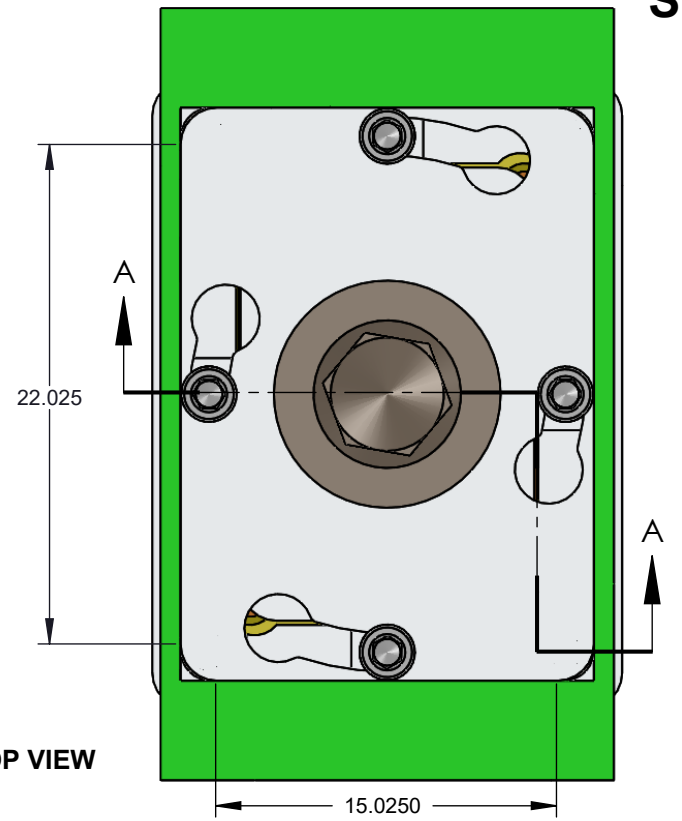
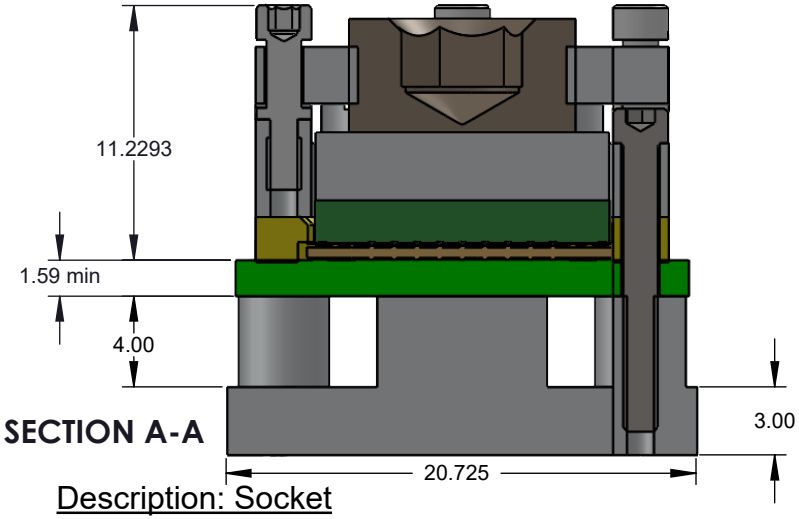
SMP SOCKET - direct mount, solderless



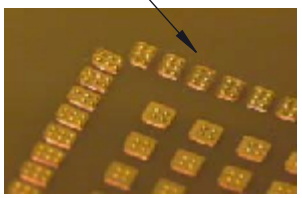
TOP VIEW

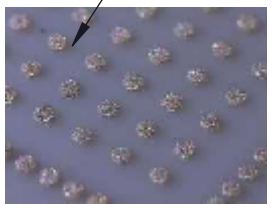


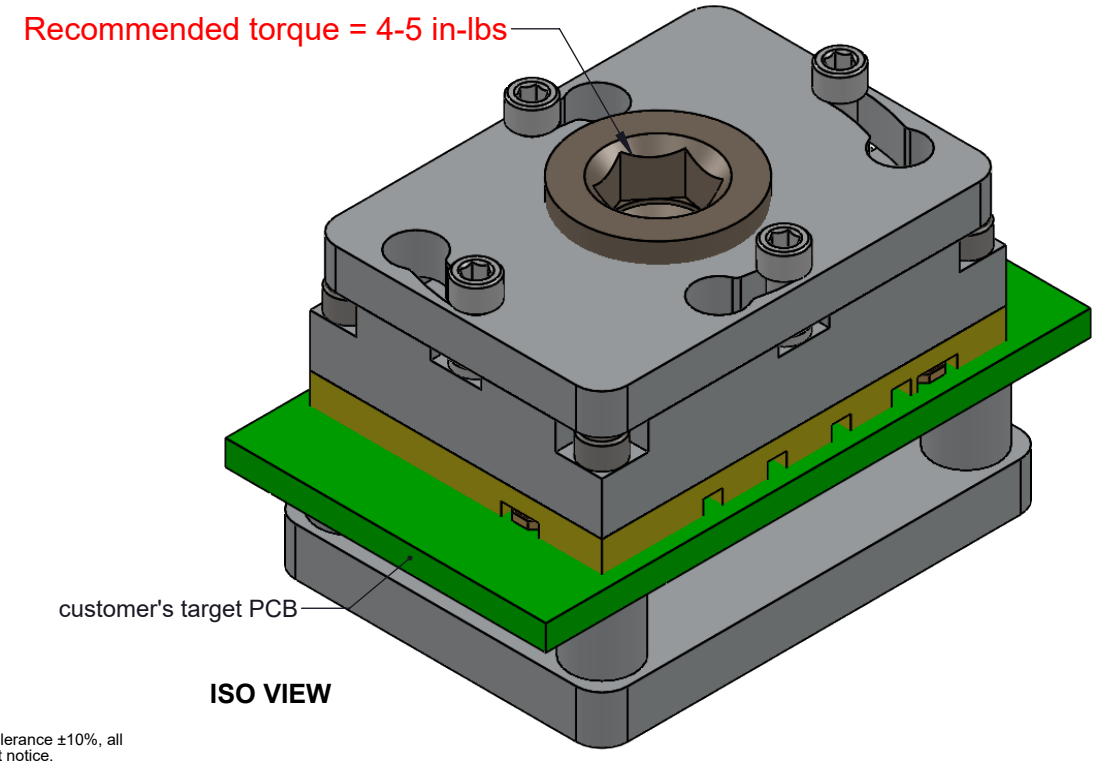
SECTION A-A

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







ISO VIEW

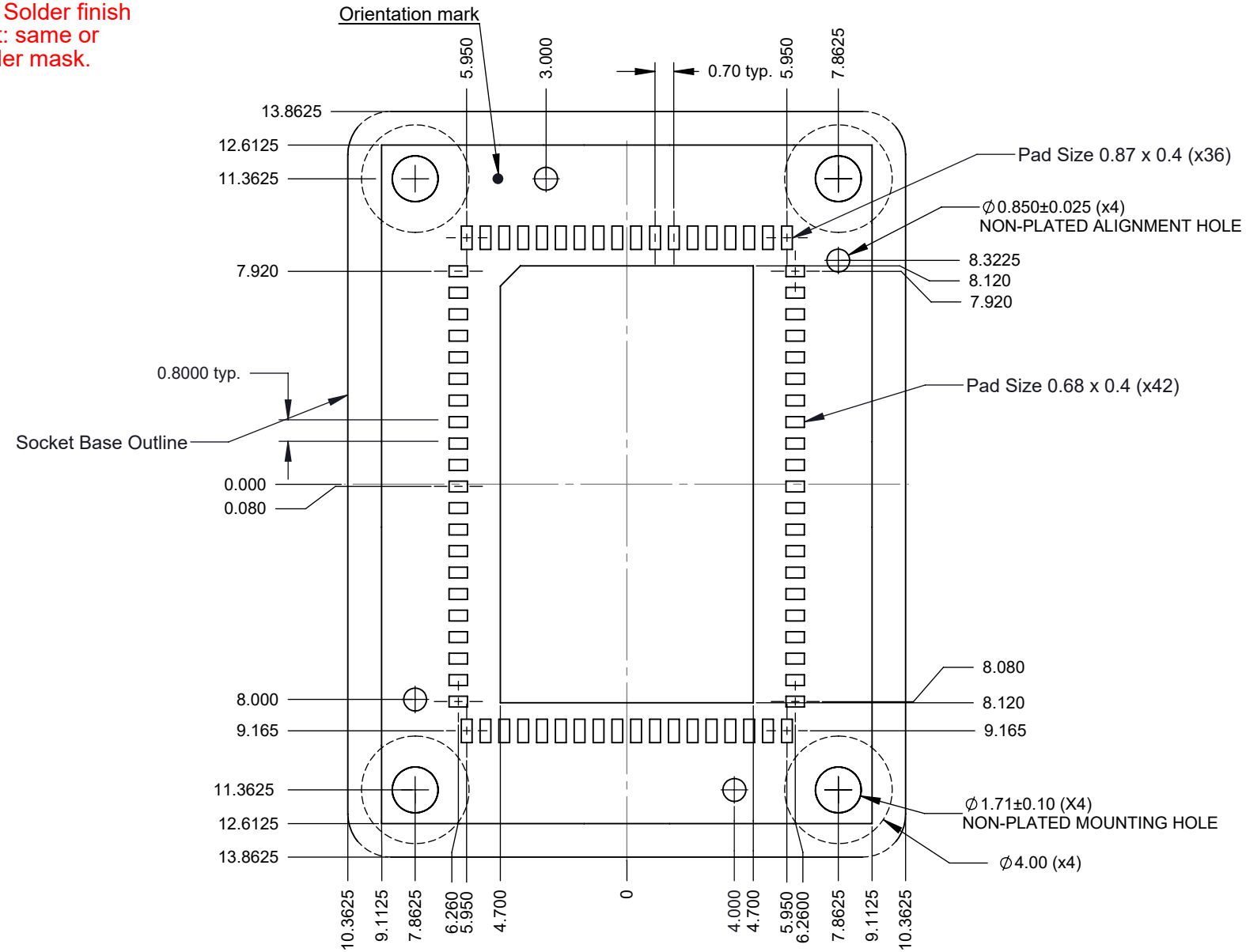
Description: Socket

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-8011 Drawing	Material: N/A Finish: N/A Weight: 18.10	STATUS: Released	SHEET: 1 OF 6	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: SMP-QFN-8011 Dwg	DATE: 12/7/2015	

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



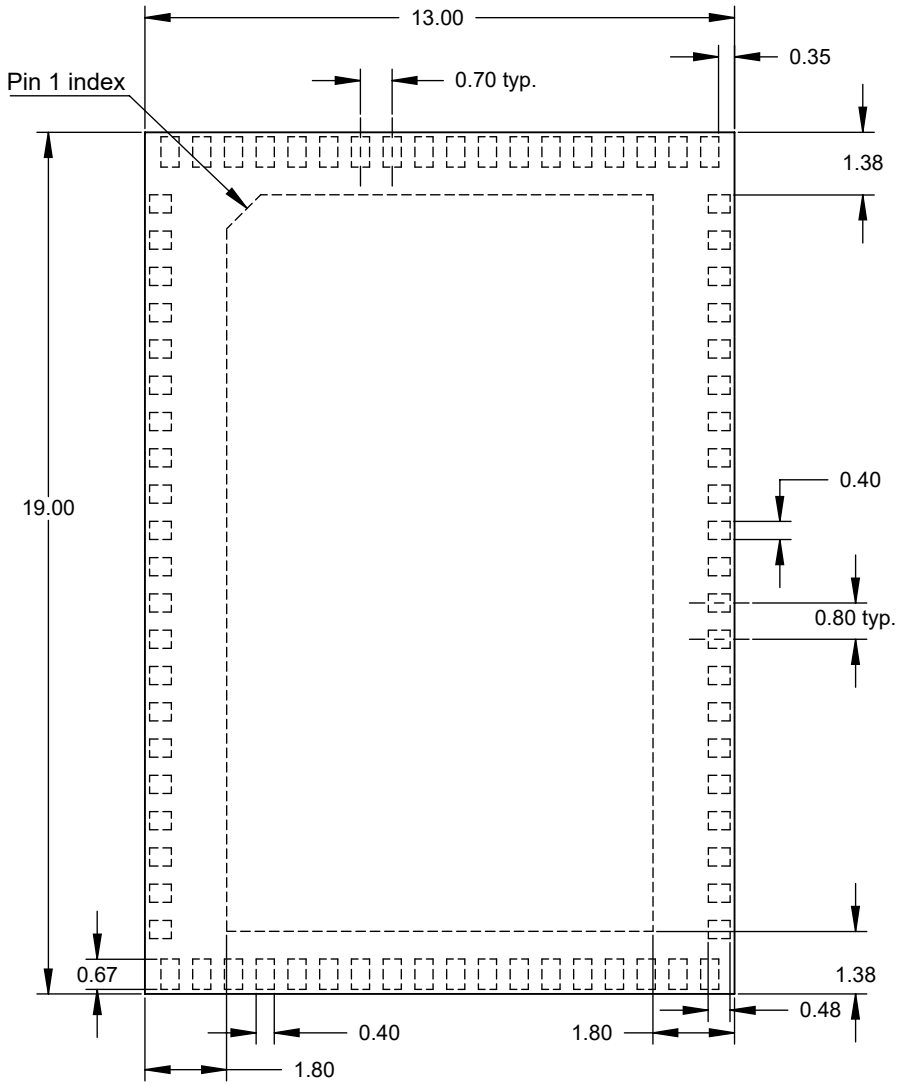
Description: Recommended PCB layout

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

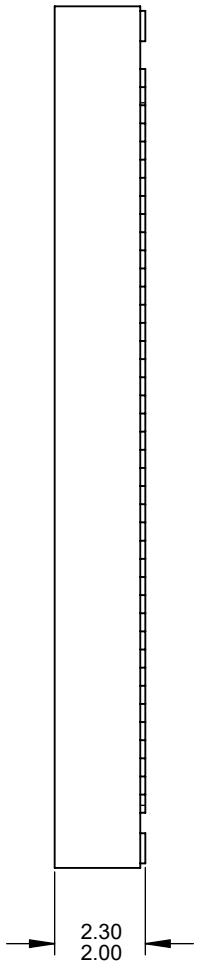
Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

SMP-QFN-8011 Drawing	Material: N/A Finish: N/A Weight: 18.10	STATUS: Released	SHEET: 2 OF 6	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 4.5:1
		FILE: SMP-QFN-8011 Dwg	DATE: 12/7/2015	

Ironwood Package Code: QFN78A



TOP VIEW



SIDE VIEW

Description: QFN

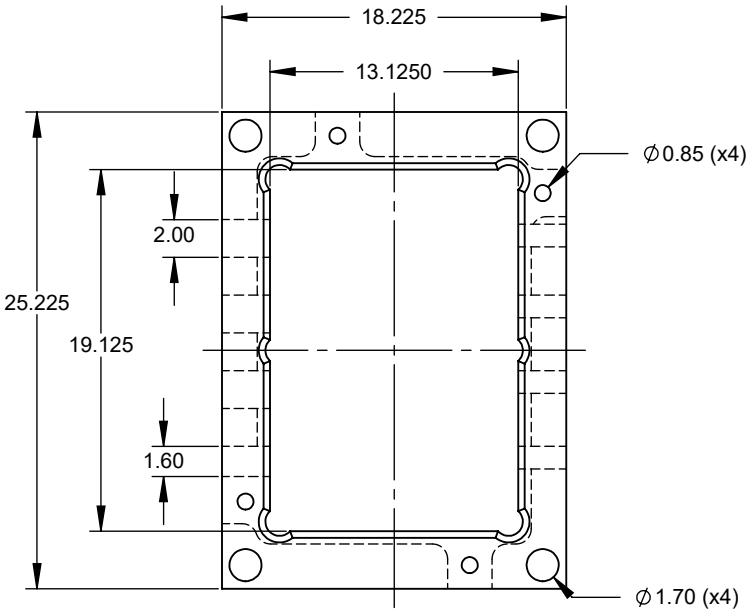
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

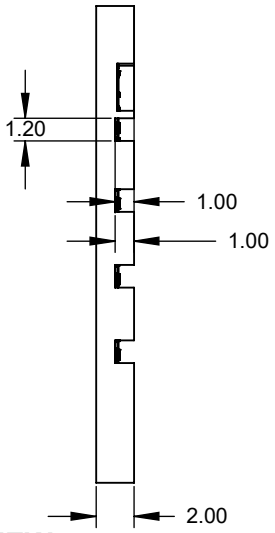
1. Dimensions are in millimeters.
2. Pad Tolerance: +/- 0.05mm.
   Overall Package Dimension: +/- 0.1mm.

SMP-QFN-8011 Drawing	Material: N/A Finish: N/A Weight: 18.10	STATUS: Released	SHEET: 3 OF 6	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 6:1
		FILE: SMP-QFN-8011 Dwg	DATE: 12/7/2015	

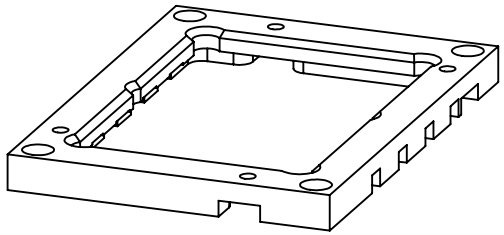
IC GUIDE



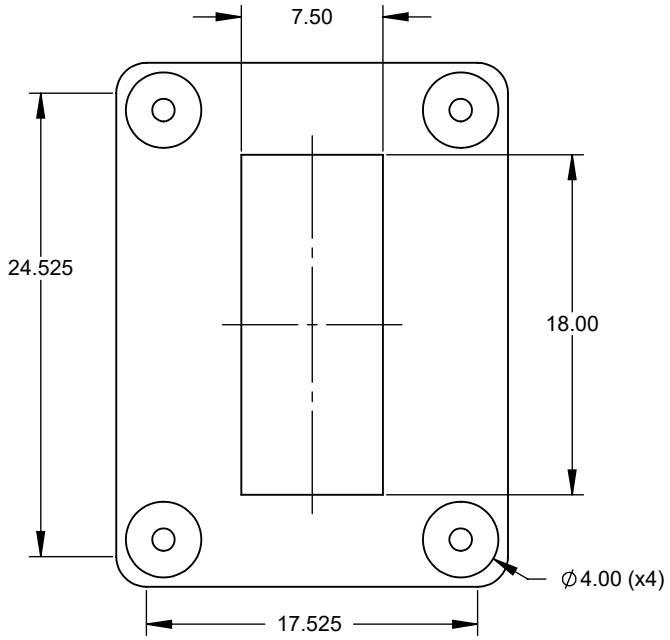
TOP VIEW

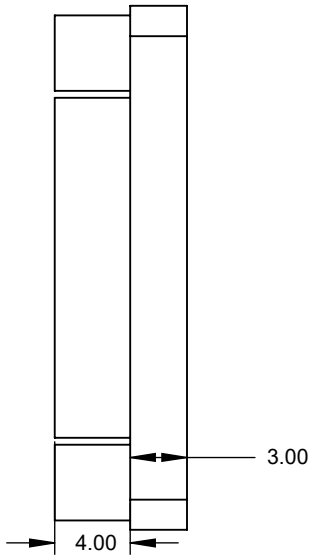


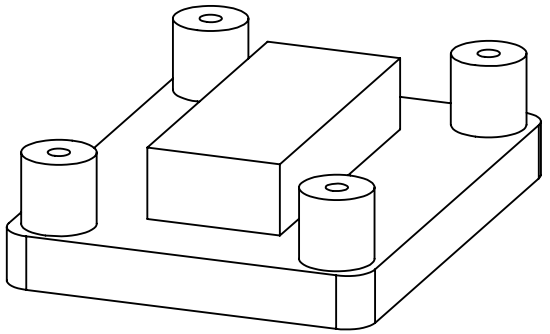
SIDE VIEW



BACKING PLATE





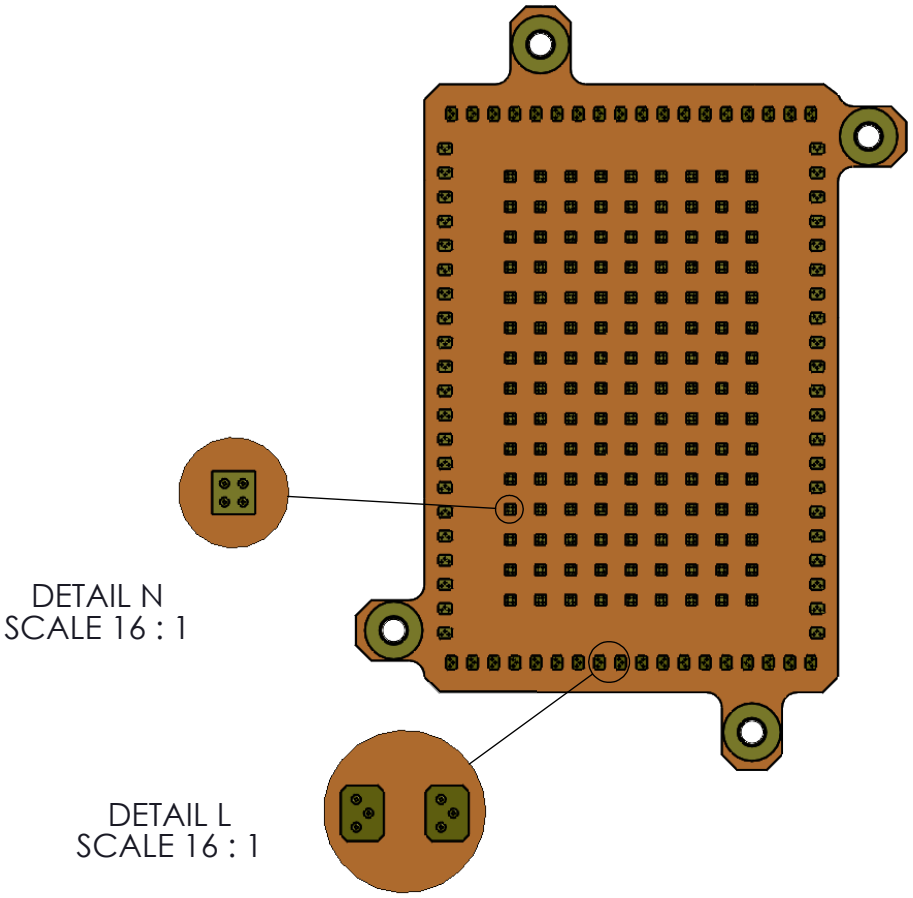


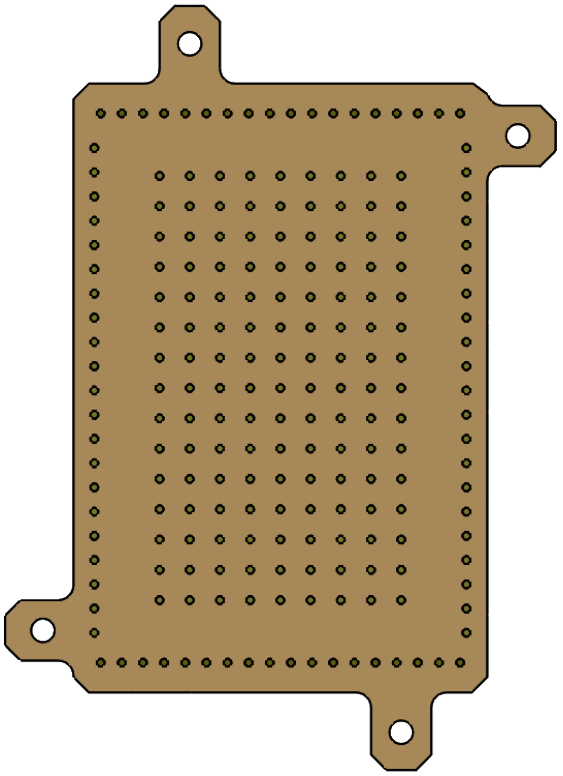
Description: Component Detail

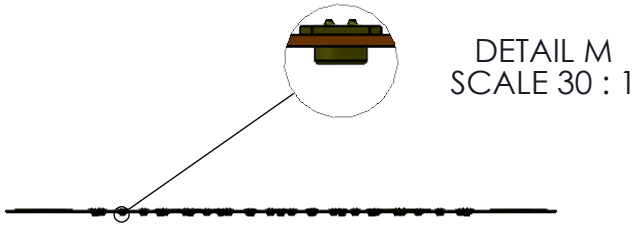
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

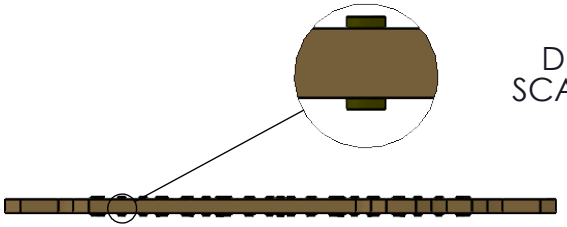
SMP-QFN-8011 Drawing	Material: N/A Finish: N/A Weight: 18.10	STATUS: Released	SHEET: 4 OF 6	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 2.5:1
		FILE: SMP-QFN-8011 Dwg	DATE: 12/7/2015	







SMP protective layer



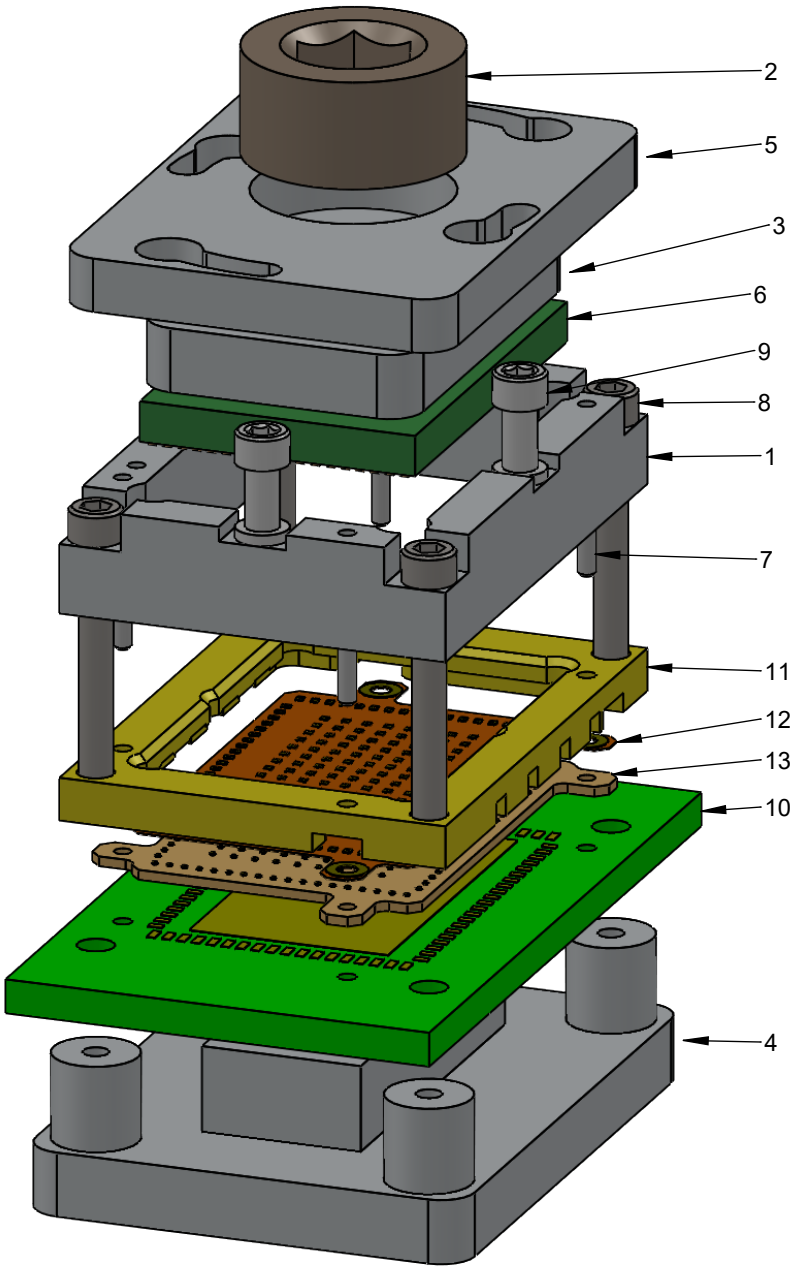
SMP SM layer

Description: SMP/SM interposer detail

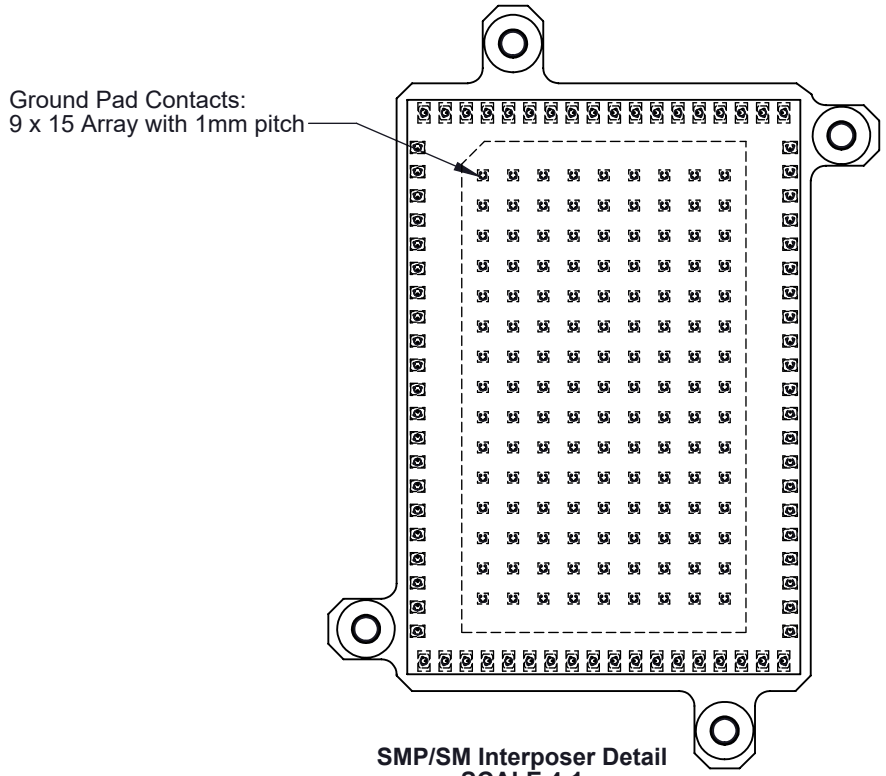
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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-8011 Drawing	Material: N/A Finish: N/A Weight: 18.10	STATUS: Released	SHEET: 5 OF 6	REV. A
©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: SMP-QFN-8011 Dwg	DATE: 12/7/2015	



ITEM #	DESCRIPTION	Material
1	Socket Base 13x20mm IC	7075-T6 Aluminum Alloy
2	Compression Screw M10	7075-T6 Alumium Alloy
3	Compression Plate 13x20mm IC	7075-T6 Aluminum Alloy
4	Backing Plate with 4 post and rectangular center pad for 13x20mm chip	7075-T6 Alumium Alloy
5	Socket Lid Swivel 13x20mm IC	7075-T6 Aluminum Alloy
6	Customer's IC 13x19mm, 0.7/0.8mm pitch QFN78	FR4 High temp
7	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
8	#0-80 x 0.5, SH Cap Screw	Alloy Steel
9	#0-80 Shoulder Screw, 2.29mm thread length	Stainless Steel (303)
10	Customer's target PCB	FR4 High temp
11	SMP IC Guide for 13x19mm IC	Torlon 4203
12	SMP protective layer for 13x19mm 0.7/0.8mm QFN78	SMP
13	SMP SM interposer for 13x19mm 0.7/0.8mm QFN78	SM elastomer



SMP/SM Interposer Detail
SCALE 4:1

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-8011 Drawing	Material: N/A Finish: N/A Weight: 18.10	STATUS: Released	SHEET: 6 OF 6	REV. A
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: SMP-QFN-8011 Dwg	DATE: 12/7/2015	