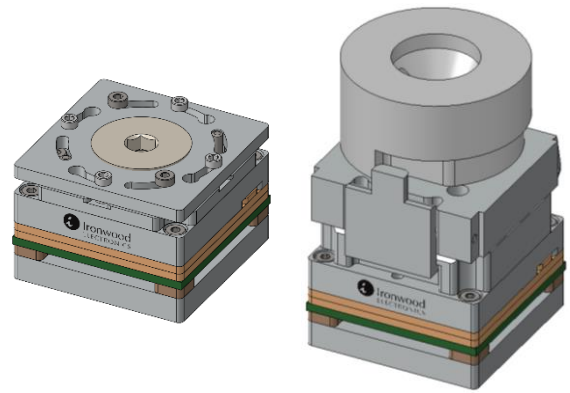




Aspen Socket Products

For Burn-in & Reliability Test



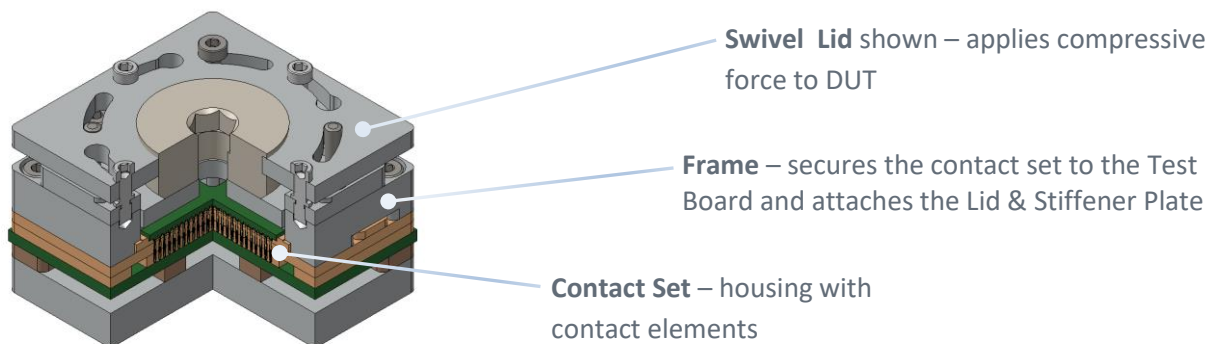
High Performance Sockets for 0.35mm + pitch devices
 Industry Standard Spring Pins in standardized footprint configurations

Ironwood Electronics’ Aspen line of sockets are designed in standardized stepped footprint configurations, incorporating industry standard high performance spring pins. Sockets can be designed to work with any type of IC package; BGA – LGA – QFN – DFN and even leaded devices where you have minimal space to fit a socket in place of your device to allow fast, easy testing and development.

FEATURES AND BENEFITS

Industry Standard Spring Pins	Ironwood Electronics has partnered with several Spring Pin manufactures, so we can provide designs based on your mechanical and electrical requirements, and cost points
Lid Options	Lid types include; a simple Swivel Lid, Spring-Loaded Clam Shell Lid and ½-Turn Lid for larger I/O devices
Excellent signal performance	Depending on the electrical performance needed, Ironwood Aspen sockets can be designed using the best contact element required for your application

METHODOLOGY



CONTACT – Spring Pin Variations

Minimum Pitch	0.35mm	0.40mm	0.50mm	1.00mm
Electrical Performance				
Bandwidth (@ -1dB S21)	23.5 – 26.1 GHz	20.5 – 31.7 GHz	5.2 – 15.7 GHz	14.1 – 21.9 GHz
Contact Resistance	< 65 mΩ	< 60 mΩ	< 35 mΩ	< 16 mΩ
Current Carrying Capacity	0.5 A	1.8 A	2.9 A	4.0 A
Self-Inductance	0.92 nH	0.75 nH	0.88 nH	0.93 nH
Mechanical Performance				
Operating Temperature	-55 / +160 °C	-55 / +180 °C	-55 / +180 °C	-55 / +180 °C
Insertion Cycles	50K	50K	125K	500K
Working Force	6 g	15 g	30 g	19 g
Materials				
Contact	BeCu, Au Plate	BeCu, Au Plate	BeCu, Au Plate	BeCu, Au Plate
Spring	SS, Au Plate	SS, Au Plate	SS, Au Plate	SS, Au Plate

STANDARD SOCKET SIZES

Socket Size	Device Size D/E (mm)	Footprint X / Y (mm)	Mounting A / B (mm)	Mounting
XS	1-11	24 x 24	19 x 19	4 x M2 + 2 x 1mm
S	12-21	34 x 34	29 x 29	4 x M2 + 2 x 1mm
M	22-31	44 x 44	39 x 39	4 x M2 + 2 x 1mm
L	32-41	54 x 54	49 x 49	4 x M2 + 2 x 1mm
XL	42-51	64 x 64	59 x 59	8 x M2 + 2 x 1mm
XXL	52-61	74 x 74	69 x 69	8 x M2 + 2 x 1mm
Decoupling Reliefs	Add 2 mm to each side of the device size			

