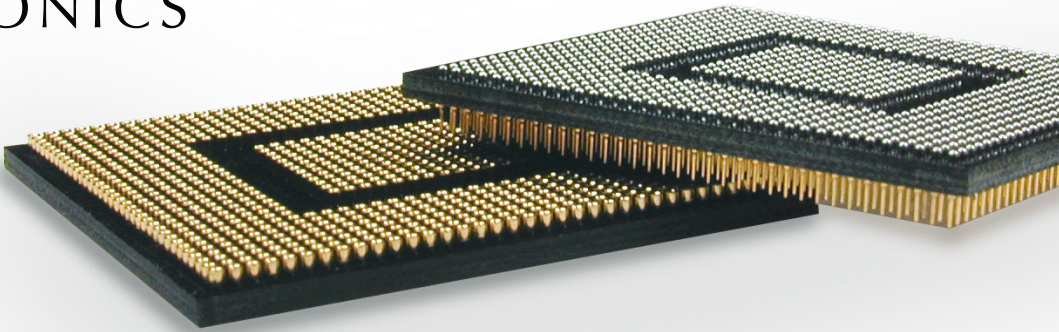




Giga-snaP

BGA SMT

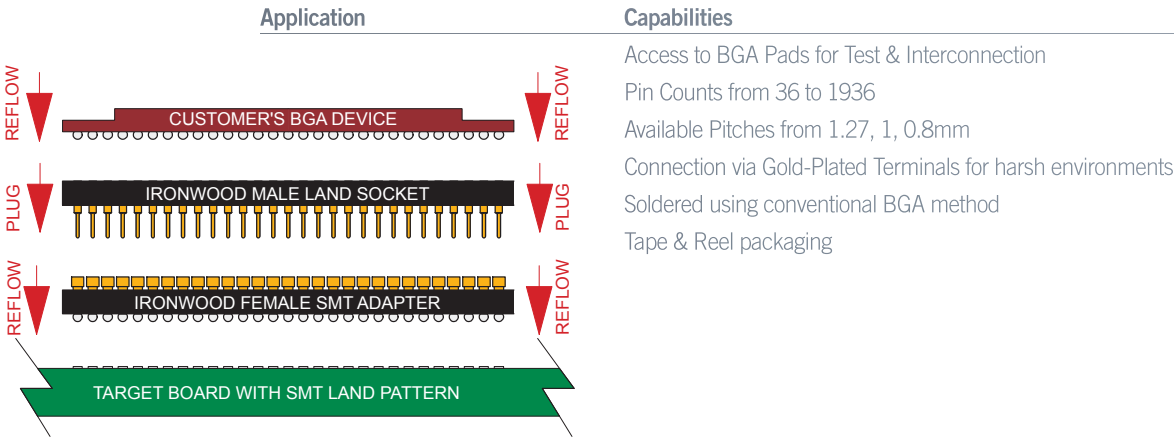
Adapters



The new Giga-snaP line of BGA SMT adapters provide the most reliable interconnect to BGA SMT pads. These patented adapters remain attached through many solder cycles and will not warp as plastic molded parts. They also offer half the insertion force of other SMT adapters.

FEATURES AND BENEFITS

Short Contact	High bandwidth applications - 3.6GHz
Gold plated clips & terminals	Low contact resistance $\leq 15\text{m}\Omega$
Chip size footprint	Easy to place inductors, capacitors, resistors, etc. for tuning & increasing bandwidth. Ideal for IC prototype & system testing & field upgradeable system designs
Epoxy over-mold & Matched CTE	No solder wicking & no substrate warping
Low insertion/extraction force	Easy operation to plug & remove module system



SPECIFICATIONS

Material Specification

Terminals	Material: Brass Alloy Plating : 10μ" Gold over 100μ" Nickel (min.)
Receptacles	Shell Material: Brass Alloy 360 1/2 Hard Plating: 10μ" Gold over 100μ" Nickel (min.) Contacts Material: Beryllium Copper Alloy 172, HT Plating: Gold 0.1 μm (min.) over Nickel 1.27 μm (min.)
Solder Ball	Eutectic 63Sn/37Pb or Lead Free SAC305 Coplanarity: ≤ 150μm
Insulator	FR4/G10, FR5

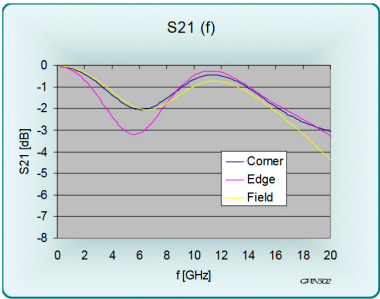
Mechanical Specification

Insertion Force	≤ 0.12N Initial insertion force (0.2mm diameter pin) ≤ 0.2N Initial insertion force (0.254mm diameter pin)
Extraction Force	≤ 0.12N Extraction force (0.2mm diameter pin) ≤ 0.2N Extraction force (0.254mm diameter pin)
Contact-durability	> 100 cycles
Operating Temperature	-55°C - 125°C

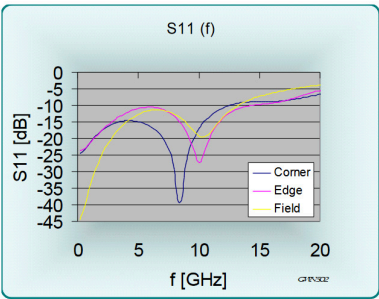
Electrical Specification

Current per contact	1A@85°C
Contact-Resistance	≤ 15mΩ
Isolation-Resistance between contacts	10x109Ω @500V
Frequency	3.6GHz @-1dB
Self Inductance	2.4nH
Mutual Inductance	0.4nH
Capacitance	67fF

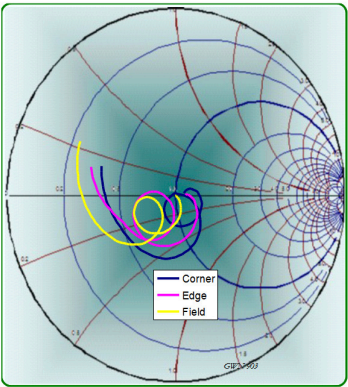
PERFORMANCE



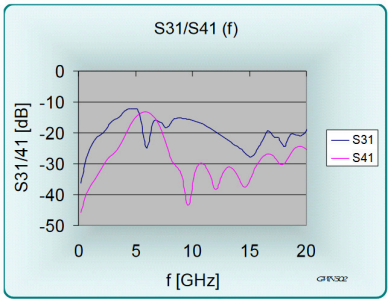
Insertion loss S21



Return loss S11



Smith chart for the thru measurement into a 50 Ohm probe



Crosstalk as a function of frequency