Giga-snap Socket & Adaptor

High Performance IC Sockets And Adaptors
Giga-snaP Socket/Adaptor

- An economical and reliable alternative to soldering BGA devices directly to the motherboard
- Same footprint as BGA device
- Compact, low-profile design maximizes PC board space.
- Ironwood has Fastest Delivery
- Soldering Very Similar to Soldering IC Package
- PCB can be reflowed with Giga-snaP
Giga-snaP Socket/Adaptor

- Access to BGA Pads for Test & Interconnection
- Pin Counts from 36 to 1936
- Available Pitches from 1.27, 1, 0.8 mm
- Smaller Pitch Adaptor In Development
- Connection via Gold-Plated Terminals
- Soldered Using Conventional BGA Method
Giga-snaP Socket/Adaptor

- Substrate Material: FR4/G10
- Pin Material: Brass 360, ½ Hard
- Contact material: Be Cu 172
- Finish: Gold over Nickel
- Pins Bonded w/ Epoxy Overmold
Giga-snaP Socket/Adaptor

- Pick & place support, reflow profiles
- Tape and reel support
- Solders same as IC it emulates
- No Warp Epoxy Over-mold
- Patent Pending
Giga-snaP Socket/Adaptor

- No CTE mismatch
- Component heat dissipation does not affect solder connections
- Short electrical path
- Co-planarity: < 100 micro meter
Giga-snaP Socket/Adaptor

- **Insertion Force:**
  - \( \leq 0.12N \) Initial insertion force (0.2mm diameter pin)
  - \( \leq 0.2N \) Initial insertion force (0.254mm diameter pin)

- **Extraction Force:**
  - \( \leq 0.12N \) Extraction force (0.2mm diameter pin)
  - \( \leq 0.2N \) Extraction force (0.254mm diameter pin)
Giga-snaP Socket/Adaptor

- Contact-durability: > 100 cycles
- Operating Temperature: -40°C - 125°C
- Socket: Mass
  - 388 position Female Receptacle: 4.25g
  - 388 position Male Land Socket: 3.5g
Giga-snaP Socket/Adaptor - RoHS

- Current per contact 1A@85C
- Contact resistance $\leq 15$ milliohms
- Isolation resistance 1E10 ohms
- Self inductance 2.4nH
- Mutual inductance 0.4nH
- Capacitance 67fF
Giga-snaP Socket/Adaptor - RoHS

- Substrate with Td > 350C
- SAC305 solder balls
- Withstands high temp solder profile
- Quick delivery
  - 3 days for standard part
  - 5 days for custom part
## Giga-snaP Socket/Adaptor - xRef

<table>
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<tr>
<th>SMD Adapter</th>
<th>Land Socket</th>
<th>Ball Count</th>
<th>Xilinx Compatible Package</th>
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Giga-snaP Adaptor – Bottom view
Giga-snaP Adaptor – Top view
Giga-snaP Socket – Top view
Giga-snaP Socket – Bottom view
Giga-snaP Socket/Adaptor
Giga-snaP Socket/Adaptor