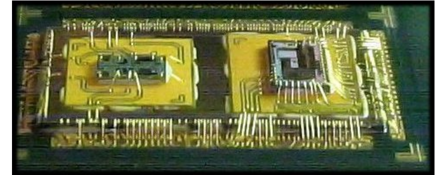
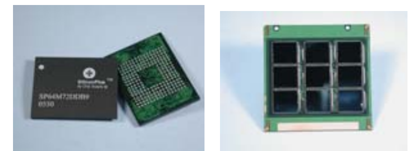
# Chip Supply, Inc. Packaging Technology



**Three die, three substrate BGA**. The largest ASIC die was attached to a custom six metal layer main laminate substrate. Two one metal layer flex substrates are attached onto the top of the large die then a smaller ASIC die and a linear die were attached to them. All die wire bonded prior to encapsulation.

---

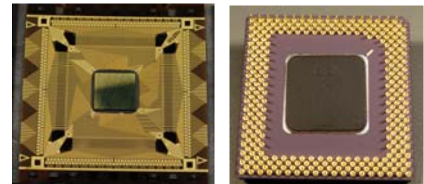


**Nine die 4.6 Gb, 64M X 72 DDR memory BGA**. Six metal layer laminate substrate. Die are flipchip assembled then module is transfer molded. The use of WLCSP allows individual die electrical screening. Final electrical screening done at finished product.

---

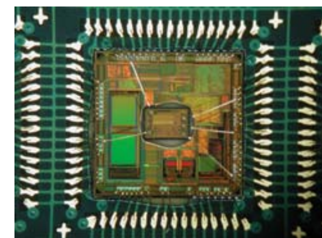
**Freescale 603R Power PC in high "G" hermetic package.** 603R die flipchip assembled into a custom 2.54mm pitch PGA with seal ring. Final product tested from -55C to 125C.

---



**Obsolete Intel Pentium Processor in original PGA Package.** Only die available were in TAB format. Die were reclaimed from TAB package and assembled into original PGA.

---

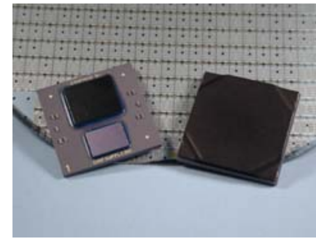


**Stacked die CSP.** Two die are stacked on a custom laminate substrate, wire bonded then transfer molded.

---


Copyright Chip Supply, Inc. 2010

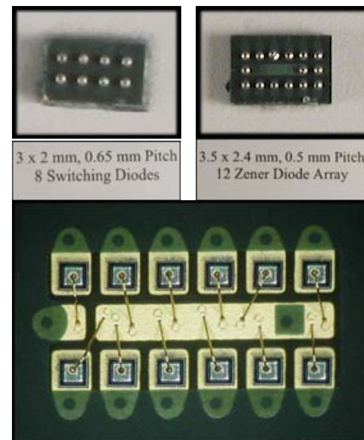
**Freescale MPC7410 Power PC with on-board SRAM cache.**



Original package size and footprint with
heat sink added for operation to 125C.

---

**Multiple diode array surge protection CSP's.**

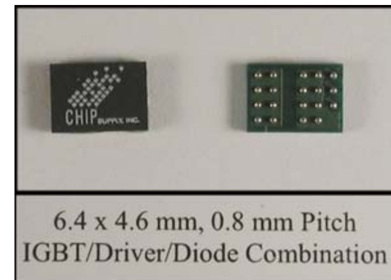



Can include signal diodes, zener diodes, etc.

These products are available "off the shelf".

---

**Multiple die CSP's.**




Any die combinations including processors, memories or
ASIC's.

---

**MIL-PRF-38535 Level "Q" Qualified Military Line (QML) supplier.**

Standard and custom packages are available including DIP,
Leaded and Leadless Chip Carriers, Flat Packs, PGA's, BGA's
and a variety of Metal Cans.

---

7725 N. Orange Blossom Trail
Orlando, Fl USA
407-298-7100

Copyright Chip Supply, Inc. 2010