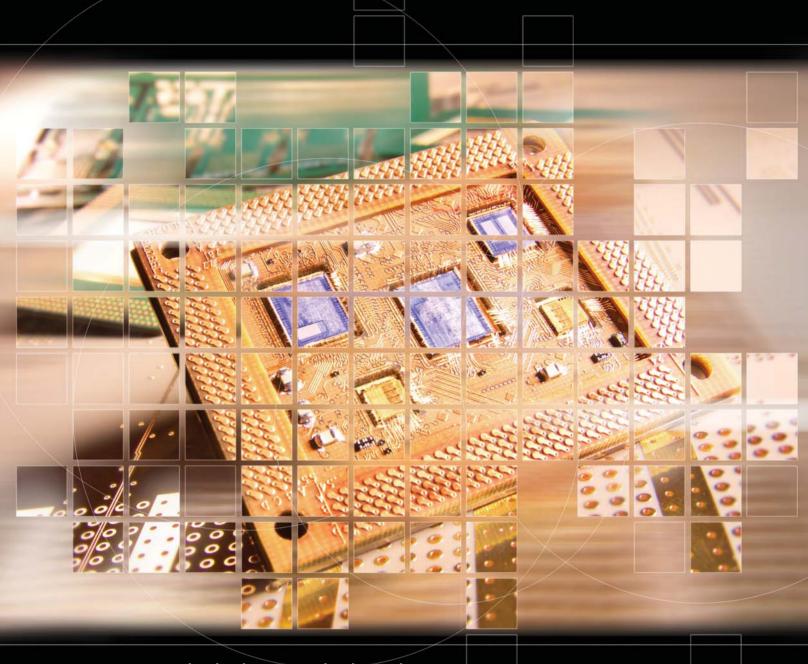
# CHIP CARRIERS & MULTI-CHIP MODULES

HDI • MULTI-TIERED CAVITY • MCM-L



Maintaining the highest standards in design and manufacture of high-density, highly complex carriers and modules.



#### CHIP CARRIERS AND MULTI-CHIP MODULES

### Compunetics excels in customized products and prototypes that can be produced in small runs with fast turnaround.

These products can combine many of these valuable features:

- High density
- Buried resistors
- Multi-tiered cavity
- Edge plating
- 2 mil (50 µm) trace/space
- Heat spreader
- Aluminum wedge or gold ball wirebond surface
- Flip chip
- Low-to-moderate volume
- Quick turnaround

#### Applications include:

- Digital imaging, including real-time x-ray
- Global Positioning Satellite (GPS) Systems
- Handheld applications
- Custom chip packaging
- Military, including: Smart Weapons & Undersea Ordinates
- IC Testing
- High speed computing
- Fiber optic networks

#### **CHIP CARRIERS**

#### High density packaging for the most complex die.

#### **Specifications**

Layers: 4

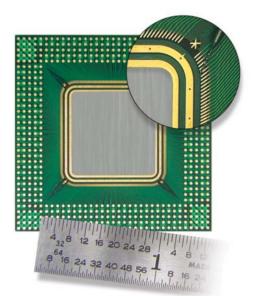
Trace/Space: 3/2 (75/50 µm)

Finish: Electrolytic Ni/Au

Bonded Heat Spreader

Edge Plating Blind Microvias

Material: High Tg FR4



#### MCM — MULTICHIP MODULES

## Highly functional and reliable solutions to your MCM needs.

#### **Digital Imaging**

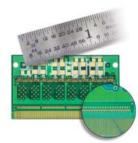
Layers:

Material: High Tg FR4

Trace Width: 0.0015 +/-0.0003"

Surface Finish: Electrolytic Gold

and Nickel



#### Military

Layers: 8

Material: Thermount/Polyimide

(Arlon 85N)

Trace Width: 0.002 +/- 0.0003"
Stacked Microvias: L1 to L2 to L3;

ked Microvias. LI to L2 to L3

L8 to L7 to L6

Surface Finish: Electrolytic Gold

and Nickel

#### Supercomputing

Layers: 8

Material: High Tg FR4

Trace Width: 0.002 +/- 0.0003"

Controlled Impedance (75 Ohms +/- 10%) Two Tiered Cavity Design

Edge Plating 406 Buried Resistors

(65ohms +/- 15%; Ohmega material)

Surface Finish: Electrolytic Gold and Nickel

