

Microelectronics

Cutting edge technology meeting demands of a constantly evolving industry

Microelectronics **Assembly**

Overview

 Assembly of very small microscopic electronic components into microelectronic assemblies. This includes microwave electronic assemblies used in mission critical satellite and defense, and medical applications.

Ceramic Substrates

 Manufacture of advanced components and packages, providing solutions for high interconnect density, compact networks and high-frequency applications.

Passive and Active Components

· Design, manufacture and assembly of radio frequency components.

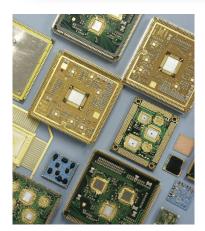
Design and **Test Solutions**

- · Design and Development of High Density Interconnect Modules, PCBA's and Box build assemblies.
- Automated Test Development for electronic assemblies including microwave modules.

- **Capabilities** Wafer & die processing. monolithic packaging and custom microelectronic packaging
 - · Automated ball, ribbon, and wedge bonding
 - Multi-chip packaging
 - Both automated & manual epoxy & eutectic attachment including GaN and GaAs die
 - Encapsulation utilizing dam and
 - Hermetic package seal utilizing seam sealing or laser welding
 - RF tuning
 - Precision and proprietary fully hands-free, automated manufacturing.
 - Chip-on-board, multi-chip technology, flip chip, die stacking and mixed technology devices.

- High-Density Multilayer LTCC solutions
- Precision Thick-Film Substrates
- High-Frequency Etched Thick-Film Substrates
- AIN substrates
- BeO substrates
- Plating
- · Automated manufacturing

- RF Filters
 - Low pass, bandpass
 - Tunable
 - Waveguide, coaxial, ceramic
- Multiplexers / Duplexers
- Attenuators
- Isolators & circulators
- Frequency multipliers & dividers
- Power dividers & combiners
- Oscillators
- Detectors & Mixers
- · Design and analysis of electronic assemblies using state-of-the-art software including Cadence layout and analysis tools, HFSS, AWR, SiWave, SolidWorks etc.
- Analysis DC, RF and Signal Integrity. Mechanical and Thermal.
- Development of automated high speed testers (up to Ka band) using the LabView programming environment.
- Valor DFM Software, integrated with the layout tools, validates the design prior to manufacturing.
- Mature product enhancement and redesign.







We make amazing things happen.







(818) 676-9058







Headquarters 9340 Owensmouth Ave Chatsworth, CA 91311