



EMINENT
TECHNOLOGIES

Line Card

*Specializing in Custom Technology
Solutions*

Eminent Technologies

A Manufacturers Representative

- Incorporated 2007
- Headquartered in Orange County, California
- Covering Los Angeles, Orange, San Diego and Riverside Counties as well as parts of Mexico.
- Eminent's management team has over 150 years of technology experience in the Southern California market
- Our sales team averages more than 30 years technology sales experience in the Southern California market.
- Key long standing relationships with the Tier 1 and Tier 2 customers in the Southern California market.

Eminent Line Card



➤ TTM

- Rigid, Rigid-Flex and Flex Printed Circuit Boards and Electro-Mechanical Solutions
- Top 2 Global manufacturer, in both manufacturing footprint and sales, of rigid, rigid-flex PCB's in the world.
- \$2.6B estimated Sales
- 28 world wide facilities (12 China facilities and 14 North American sites)
- Seamless manufacturing – choose from local North America facilities and seamlessly transfer to China for high volume production.
- ITAR, MIL-PRF-31032, MIL-PRF-55110, ISO 9001, ISO/TS 16949, TL 9000, AS9100, ISO 14001:2004, UL796, ISO/IEC 17025:2005, Bellcore Compliant, ISO 14064
- Target volumes - low single lot quick turn, NPI, pre-production to mass production
- DFM services (no cost)
- Layers - from 2 through 60 layers
- High Density Interconnect / High Layer Count
- Advanced Type III HDI
- Micro Via Solutions
- Via-in-Pad & Copper Filled Micro Via
- RoHS Compliant Products and Leadable Capable Manufacturing and Materials
- High Aspect Ratio Plating
- Aspect Ratios as high as 18:1
- RF / Microwave Applications
- Thermal Management Solutions
- Buried Capacitance ZBC Licensed
- Back Drilling
- Heavy Copper UL up to 3oz (do up to 6 oz)
- Complex Backplanes (24" x 50") up to 400 mils thick

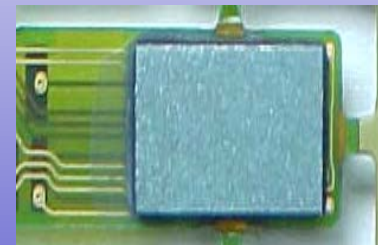
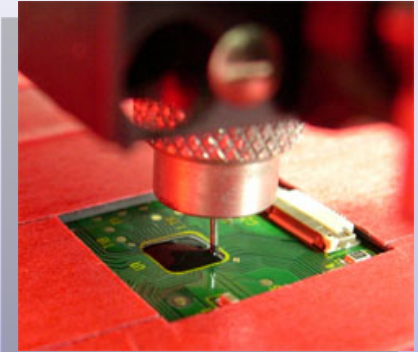
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HANA Microelectronics Public Co., Ltd.

➤ Hana Microelectronics

- Annual Revenue \$500M
- **Semiconductor Packaging and Test**
 - Capabilities:
 - Assembly and test of low/medium IO IC's.
 - Custom packages and optoelectronic devices.
- **Contract Manufacturing**
 - Capabilities
 - Chip On Board
 - Chip On Flex
 - Flip Chip
 - PCB Assembly
 - Hybrid Modules



➤ www.hanagroup.com



- Full Turn-Key Analog, Mixed-Signal ASIC Supplier
- World-Class team of Analog Design and Test Engineers
- ISO9001 and ITAR Certified
- Support Commercial, Industrial, Medical, Automotive and Military / Aerospace markets
- Over 300 tape-outs since founded in 1996
- All design work and prototype/production testing performed in-house at 30,000 sq ft corporate headquarters located in Irvine, California.

Eminent Line Card

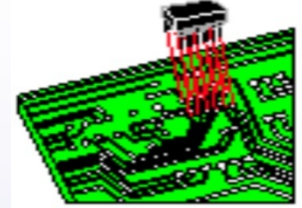


- **Electronic Manufacturing Services (quick turn assembly to production volumes)**
- **Interconnect Products**
- **Machining (precision metal working)**
- **DFx**
- **Test Labs (DLA certified)**
- **Custom Design and Fabrication for Automated In-Circuit and Functional Test including boundary scan, RF, HASS, vibration, and dynamic ESS testing**
- **Markets served:** Military/Aerospace, Medical and Industrial markets with an emphasis in Mission Critical and Life-Saving applications.
- **Certifications:** ISO 9001:2008 certified, ITAR registered, Nadcap and AS9100C certified, ISO 13485 certified, ISO 17025 accredited laboratory, IPC-approved Validation Services test Laboratory
- **Capabilities:**
 - PCBA, Interconnect, Test and Lab Services are all under one roof, minimizing transit time, simplifying logistics, reducing costs and expedites problem solving.
 - Only EMS with an on-site laboratory that has been approved by the Defense Logistics Agency (DLA) for their Qualified Testing Supplier List (QTSL) program which deems the site suitable to conduct various QTSL and military testing standards including counterfeit component analysis
 - Functional testing for digital, analog, JTAG compliant devices, and FR from LF to SHF bands
 - FDA registered and IQ/OQ/PQ support for medical products
 - Leaded or lead-free soldering for IPC-A-610 or J-STD-001 Class 3
 - In-house conformal coating including acrylic, silicone, polyurethane, and parylene
 - Dedicated engineering staff to custom design and fabricate molded cable assemblies
 - Custom EMI/RFI shielding back shells terminated with over mold boots and strain reliefs
 - RF/VSSR testing to super high frequency (SHF)
 - Harnessing for complex assemblies with multiple breakouts and junction points
 - In-house design engineering services for chassis and enclosure design
 - CNC machining, sheet metal fabrication, laser cutting, welding
 - Plating, painting, graining, and silk screening finishing services
 - Logistics management and direct order fulfillment to the end customer
 - 3 US Locations totaling approximately 350,000 Sq. Ft. of manufacturing

HCC - Flex (Manufactured In China w/ Local Warehousing)

- **Up to 8 layers Flex (including Reverse & Double Bare Flex).**
- **Up to 8 layers Rigid-Flex (Including Adhesiveless Base).**
- **Adhesiveless base.**
- **Thin-core FR4**
- **Shielding: copper, silver epoxy.**
- **Flex with rigidizer: P.I., FR4, Metal.**
- **Flex with dimples.**
- **Pre-formed Flex.**
- **Flex with Impedance control ($\pm 10\%$)**
- **Flexible Circuit Assembly.**
- **Line-width/Spacing: 3 mil / 3mil**
- **Layer to Layer: ± 5 mil**
- **Minimum hole size: 8 mil**
- **Copper thickness: 1/3 oz min.**
- **Panel Size: 18" \times 24" , 457mm \times 610mm**
- **Cover: P.I., P.I.C., Flexible Solder Mask**
- **Adhesiveless material**
- **Stiffener material: P.I., FR4, and metal**
- **Finishing: Hard/Soft/Immersion Gold, Tin/Lead, Tin, Gold fingers (to 50 micron)**
- **Outline to outline dimension: ± 3 mil**
- **Punched hole to outline dimension: ± 3 mil**
- **Drilled hole to outline dimension: ± 8 mil**
- **RoHS compliant**
- **QS9002, ISO9002, UL, MIL**

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➤ Ultra Circuits Design

➤ **PCB Design Capabilities**

- 30 Years of Experience in PCB Design and DFM Engineering
- Full PCB DFM Support
- Complex PCB Design
- Commercial and Military Experience
- High Speed Digital, RF and Analog Designs
- Blind and Buried Via
- HDI Micro Via and Via in Pad
- Packages
 - SMT, Thru Hole, Hybrid Boards
 - BGA, Micro BGA, CSP, FCP
 - Pitches 1.2 mm, 1.0 mm, 0.8 mm, 0.5 mm
- Impedance Control
 - Microstrip, Coated Microstrip, Coplanar Microstrip
 - Centered Stripline, Off Center Stripline, Dual Stripline
 - Horizontal Differential Pairs, Broadside Differential Pairs
- Matched Line Lengths
- High Current

Standard Deliverables

- Allegro Design Data Base
- Valor ODB ++
- Gerber Data
- IPC-D-356 Net List
- NC Drill Data
- Fabrication & Assembly Drawing
- PDF, PLT or DXF Format
- SMT Stencil
- Component Placement Files

Tools

- Cadence Allegro Design Suite
- Valor/Frontline Genesis 2000
- Downstream Technology CAM350

CONFIDENTIAL

Eminent Line Card

RANODA TECHNOLOGY

Corporate Background:

- Providing interconnect solutions inclusive of standard products to customer engineered requirements and world class antenna solutions

Capabilities:

- COMPUTER AND PERIPHERALS CONNECTORS: SATA-SAS-USB 2.0-USB3.0-PCI EXPRESS-DIMM-FPC-FFC-SFF BOARD TO BOARD-MINI USB-MICRO SATA-PCMCIA
- AUDIO VISUAL CONNECTORS: HDMI-DVI-MINIDIN-RCA-D SUB-DISPLAY PORT
- MEDICAL CONNECTORS: BLOOD GLUCOSE METER CONNECTOR
- RF CONNECTORS: F TYPE-SMA-SMB-MCX-MMCX-TNC
- MICRO COAXIAL CONNECTORS: SMA-SMB-RP SMA-MCX-MMCX-PAL(IEC)-F TYPE
- MICRO COAXIAL CABLE ASSEMBLIES; RG 178-RG 316-RG 179-RG 400
- SMA STRAIGHT TO MCX R/A PLUG – SMA STRAIGHT PLUG TO ENDS CABLE
- IPEX JACK 1.37 TO OPEN CABLE- IPX JACK 0.81 TO OPEN CABLE
- IPEX JACK 1.13 WITH FERRITE TO SMA BULKHEAD JACK CABLE
- SMA R/A JACK TO OPEN CABLE
- CUSTOMER ENGINEERED SOLUTIONS: MOLDING & STAMPING TOOLINGS FROM CAD GENERATED DRAWINGS.



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THANK YOU!