Tom Terlizzi <u>terlizzi@gmsystems.com WEB SITE http://www.gmsystems.com/</u>
631-269-3820 (OFFICE) 516-807-9488 (CELL) Colored coded product lines
ASSEMBLY SERVICES - ELECTRONIC COMPONENTS, DESIGN, TEST AND SOFTWARE SERVICES
SUBSTRATES & PACKAGES - EQUIPMENT & TOOLS - MATERIALS & ADHESIVES

#### **ASSEMBLY SERVICES**

Advanced Circuit Technology is a contract manufacturer of hybrid circuits and SMT printed circuit board assemblies and boxes. Advanced Circuit Technology is ITAR certified, has a secure facility for classified work, an Altitude Chamber, and a SCS Parylene Conformal Coater (<a href="http://www.advcircuit.com/index.php">http://www.advcircuit.com/index.php</a>)

<u>Cirtek Electronics</u>-semiconductor and SMT device assembly providing services from wafer probe, wafer back grinding, wire bonding, assembly and packaging and final testing of semiconductor devices. Plastic Package offerings range from diodes, QFN's, Metal can TO-packages, to Chip on Board (COB). (<a href="https://www.cirtek-electronics.com">https://www.cirtek-electronics.com</a>)

**RETRONIX-** Robotic Component Solder dipping and tinning, (Change ROHS to tin-lead or vice versa ) Reballing, 3d-xray inspection, Counterfeit testing, Component Reclaim off scrap boards,

#### RF AND MICROWAVE COMPONENTS

<u>Agile Microwave Technology</u> design, develops and manufactures standard and custom RF and Microwave LNA's and Power Amplifiers, multi-function RF & Microwave modules and MCM's for Wireless, Telecom, Military and Space Markets. (http://www.agilemwt.com)

AUREL with Over 50 YEARS OF TECHNOLOGY SOLUTIONS is the leader in the development and manufacture of electronic circuits in Thick Film Technology, Electronic manufacturing services, design and assembly of custom hybrid circuits, RF wireless modules, electronic circuits for automotive, biomedical, automation and telecommunications. (https://www.aurel.it/en/)

<u>DTA-SA</u> is Satellite Equipment Manufacturer (Amplifiers-SSPA, Demodulator, Down Converters, Embedded software) providing development of customized and standard products in the field of satellite communication both for turnkey terrestrial solutions as well as for on board satellite Flight systems. (http://www.dta-sa.com/index.html)

# 1553 TRANSFORMERS AND HIGH TEMPERATURE POWER COMPONENTS (greater than 200C)

COMPUPOWER PRIVATE LIMITED- over the years has provided highly reliable 1553 databus couplers and transformers for Mil-Std-1553 applications as well as providing custom design, manufacturing and test services related to Mil-Std-1553 Data Bus Products. In addition to offering of-the –shelf products for Military and Aerospace markets. (http://www.compupowerindia.com/index.html)

#### **INTEGRATED CIRCUITS**

<u>CISSOID</u> is the leader in high temperature semiconductor solutions, delivering standard products and custom solutions for power management, power conversion and signal conditioning in extreme temperature and harsh environments. CISSOID provides high reliability products guaranteed from -55°C to +225°C and commonly used outside that range, from cryogenic lows to upper extremes. (http://www.cissoid.com)

Represented through " \* " sub-rep with Pacific Rim Engineering, " = " by site", "no indicator GM Systems direct" "\$" PRODUCT LINE SHARED WITH WALTER BECKER WJB SALES

NOTE ACTIVE LINKS ON ALL PRODUCT LINES

1

NETSOL CO LTD -A fabless memory semiconductor company in South Korea, developing non-commodity

memory products with high standard of quality & reliability. Memory products: Async Fast SRAM, & Low Power

SRAM, Sync SRAM, DDR SRAM, QUADRUPLE SRAM & STT-MRAM (SEE POWERPOINT PRESENTATION FOR

STT-MRAM) GM SYSTEMS is the USA marketing and sales representative for NETSOL CO LTD

<u>DISTRIBUTOR</u> /MANUFACTURER OF BARE DIE, capacitors, magnetics semiconductors, AND PACKAGED PARTS to Mil-PRF-19500/38534/38534

\$ ES Components is a franchised bare die and packaged part distributor supplying Military and Commercial grade Bare Die and Epoxy Mountable Passive components to the Hybrid and MCM markets. With an extensive inventory of over 40,000line items, managed inventory solutions and value-added services, ES Components is your source for active and passive microelectronic components in wafer, bare die, and package form. (See page3-4 for product lines) (http://www.escomponents.com/index.php)

#### **EQUIPMENT & TOOLS**

\*Micro Printing Systems is the worldwide manufacturer and supplier of the MPS screen printers, Models TF100 and SP1500, to the hybrid, ceramic, micro-electronic and PC solder paste industries. & Squeegee materials. (<a href="http://www.mps-intl.com">http://www.mps-intl.com</a>)

Micro-Coat Technologies provides specialized adhesives, coatings equipment for UV exposure and dispensing applications (<a href="http://www.m-coat.com/">http://www.m-coat.com/</a>)

\*PPI SYSTEMS -thick and thin film laser resistor trimming, PCB & MEMS laser drilling and custom laser systems for medical applications.

#### MATERIALS and ADHESIVES

\*Koartan Microelectronic Interconnect Materials manufactures standard and custom thick film pastes which include silver, gold, and copper conductors, resistors, NTC and PTC thermistors, multilayer, cross-over, and capacitor dielectrics, sealing glasses, BeO and aluminum-nitride compatible pastes, thin-print, etchable, and nickel platable conductors. As well as aluminum wire bondable conductors for high temperature electronics. (http://koartan.com)

Micro-Coat Technologies provides specialized adhesives, coatings and equipment for high-tech and high-reliability applications used in semiconductors, military, medical, aerospace, high temperature electronics, and solar products. The company's diverse offerings include UV, Thermal & Air Cure Coatings, and Adhesives for the Semiconductor and SMD/PCB Assembly (Die Attach, Lid Seal, and Board Coatings), Optoelectronics and LED's (Optical coatings). (http://www.m-coat.com/)

\*LK TUNGSTEN & MOLYBDENUM TECHNOLOGY COMPANY Are Experts in Manufacturing Tungsten & Molybdenum deep-processed products, Molybdenum, Tungsten plate/Sheet/wire/bar/rod/boat/disc and 3338 more Products Like moly tabs for semiconductor packging.

#### **SUBSTRATES & PACKAGES**

\*Microcertec specializes in the Precision Grinding of advanced design ceramics. Our unique expertise is to combine precision grinding of 3D ceramics, thin-film metalizing and laser micro machining to serve high-tech markets as photonics, electronics, aerospace, semiconductors, and analytical instrumentation. (<a href="http://www.microcertec.com/">http://www.microcertec.com/</a>)

FAILURE ANALYSIS, CONSULTING SERVICES AND TRAINING

TJ GREEN LLC and GM SYSTEMS RF/MICROWAVE TRAINING FOR MICROELECTRONIC ASSEMBLY, CONSULTING, MIL-PRF-38534/MIL-STD-883, FAILURE ANALYSIS and CMSE SYMPOSIUM AND EXHIBIT-APRIL 25-18, 2023 AT LAX



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# **Product Solutions for all High Reliability Markets:**

World Class Vendors / Turn-key Legacy DMS Solutions / Best-in-class Service



#### **ESC MANUFACTURING:**

#### DLA Certified MIL-PRF-38535

- · Siliconix Asset Acquisition
- Hermetic JFETs, MOSFETs
- Hermetic Analog Switches
- JTX, JTXV, JANS, /883B
- ESC -2 flow and all SCD's
- Thru-hole and SMT

#### **ESC ADDED VALUE SERVICES:**

- COTS Up-screening
- SLDC sorting and traceability
- · Tin/Lead (SnPb) lead finish
- · Date Code re-certification
- · QCI, Element Evaluation, and Lot Acceptance Testing (LAT)
- VMI (Vendor Managed Inventory)

#### **OBSOLESCENCE SOLUTIONS:**

- Fairchild discrete 'DIE" alternatives
- · Custom Hirel Packaging to 19500 and 38535 equivalent
  - Extensive DMS Die stock
  - Support all SCD flows
- Analog / Mix Signal ASIC's including Rad Hard, Analog, and Bipolar logic functions



#### **Aerospace and Defense**

- Dale & Duluth
- Electro-Films (EFI)
- Gen Semi
- IR Divested
- **Optoelectronics**
- Semiconductors
- Sfernice
- Siliconix
- Sprague
- Vishay Thin-Film

MICROCHIP

Aerospace and Defense

Rad Hard

Mosfets & IC's

Atmel

Microsemi

PLI PhaseLink

**Supertex** 

Vitramon



# **Power Mosfets**

- Low Rds(on) / High dv/dt
- Ultra low Gate Charge



#### JAN certified Diodes, Mosfets, Transistors. SCR's

JANTX / TXV / JANS / JANSR JANHC / KC / KCR Bare Die

#### Rad Hard Mosfets in stock Analog & Mixed Signal ASICs:

- Rad Hard and non-Rad Hard
- PWM's, Reg, Ref, Op Amps,
- Low or NO NRE's / On Shore

## Si Time

**MEMS Timing Products** OCXO - TCXO - VCXO XO - DCXO - VCTCXO

Mil Temp / Auto / Industrial

**ENDURA** ruggedized solutions with single lot date code

**COTS Military upscreening to** MIL-PRF-55310 equivalent











### **SENSITRON** SEMICONDUCTOR

### JANHC / JANKC Diode Die

- Ultrafast Rectifiers
- Small Signal Diodes

- 1.5W & 5W Power Zeners
- Power Rectifiers & Schottkys
- TVS Diodes and Die Stacks

### SEMICOA

#### **JAN Bipolar Transistors** and Diodes

- Rad Hard to 300KRads
- JANTX / V / S, JANSR / F
- JANHC / KC / KCR / F
- Rad Tolerant LEO devices

LS Mtron **ULTRACAPACITORS** 



















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