



microcross

one source. one solution.™



Space Products & Capabilities

- Full TurnKey Flight Model Solution
- Comprehensive Test Capability including Mixed Signal ASIC
- In-house Test Hardware And Software
- In-house Burn-In Platform Development
- High Pin Count CQFP And CGA Packaging
- Monolithic & Multi-Chip Modules
- Column Grid Array (CGA) QML Certified Line
- CTE enhancement of lead-less carriers (BTCE)
- Broad Component Expertise
- Highest Level of Quality & Customized Support
- Customized Customer SCD's
- Radiation Testing Support
- ESA ESCC 9000 Component Processing
- MIL-PRF-38535 V-Level Assembly
- MIL-PRF-38534 Class K

Support Chip Design
& Wafer Fabrication

Wafer Probe

Wafer Saw

Die Inspection

Hermetic Packaging
Design & Selection

Assembly
Including CGA

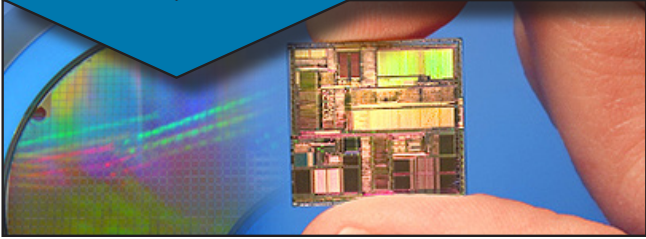
Environmental Screening

Electrical Test & Burn-In

Lot Validation Tests

Fully Qualified
Flight Model

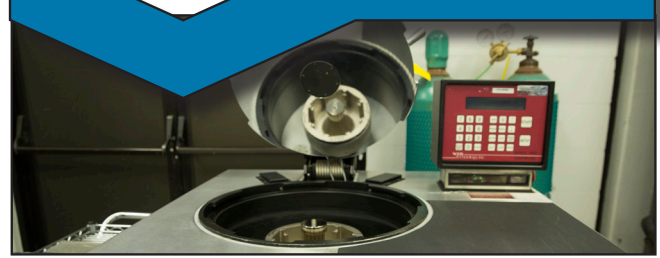
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Support Chip Design
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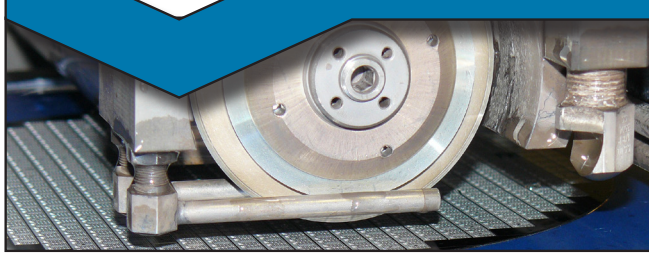
Wafer Probe



Environmental Screening



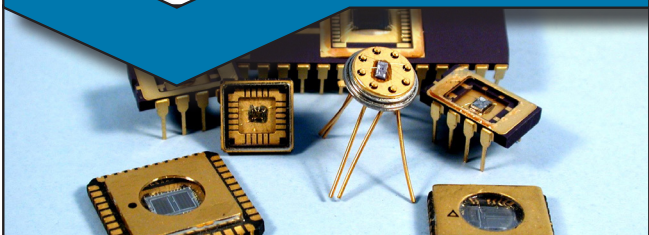
Wafer Saw



Electrical Test & Burn-In



Die Inspection

Hermetic Packaging
Design & Selection

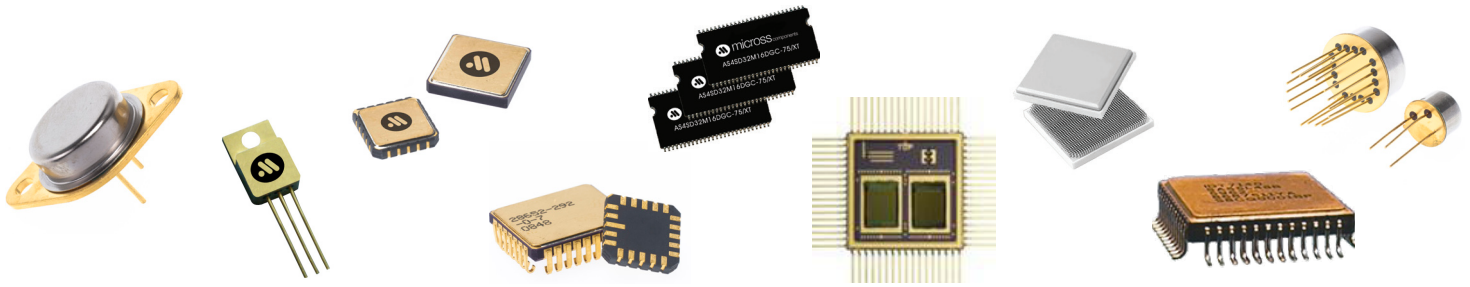
Lot Validation Tests



Micross is the leading one-source, one-solution global provider of Bare Die & Wafers, Advanced Interconnect Technology, Custom Packaging & Assembly, Component Modification Services, Electrical & Environmental Testing and Hi-Rel Products to manufacturers and users of semiconductor devices. In business for more than 35 years, our comprehensive array of high-reliability capabilities serve the global Defense, Space, Medical, Industrial and Fabless Semiconductor markets. Micross possesses the sourcing, packaging, assembly, test and logistics expertise needed to support an application throughout its entire program cycle.

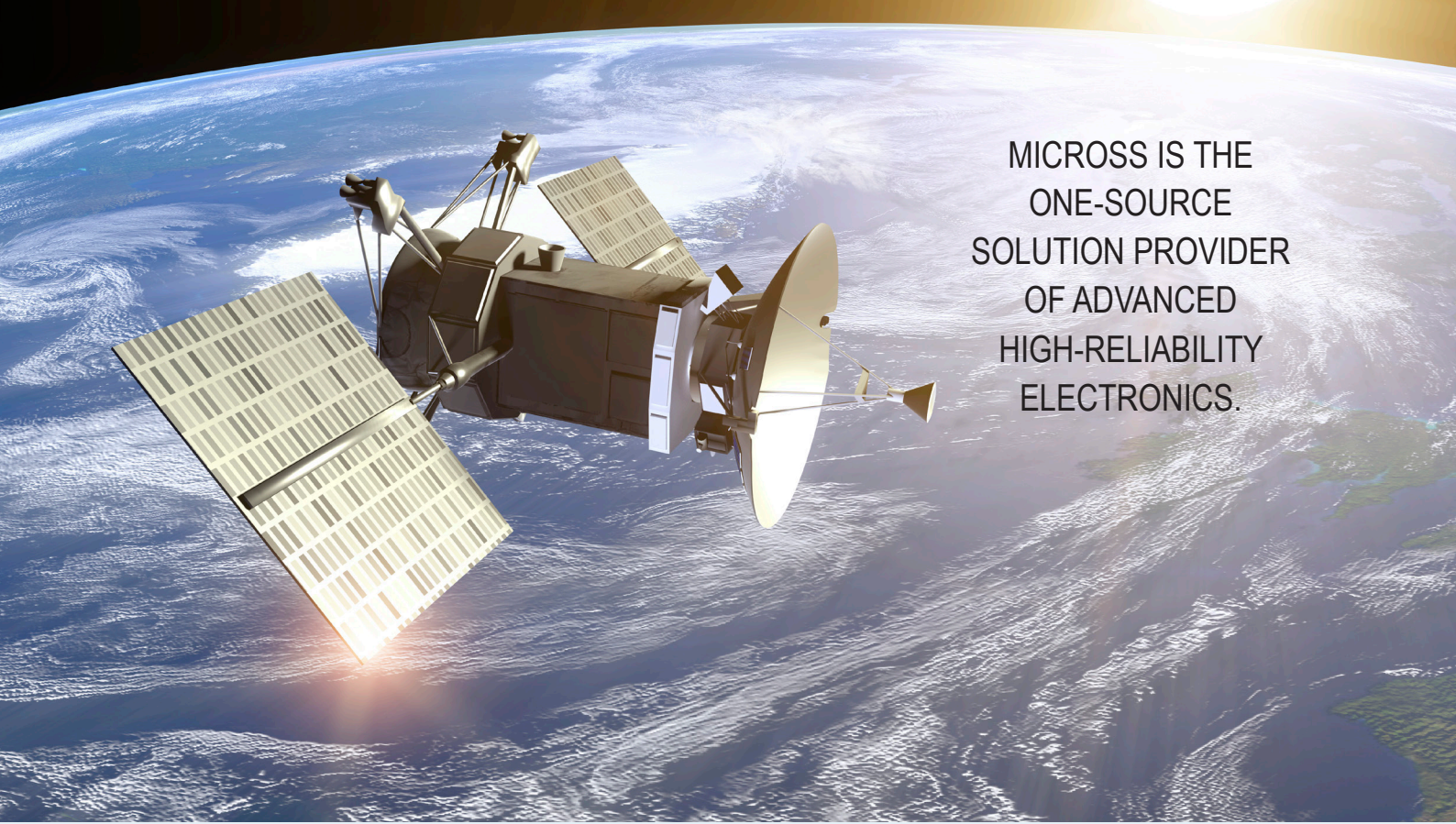
A SELECTION OF SPACE PROGRAMS THAT MICROSS HAS PARTICIPATED IN:

- Cassini
- Milstar
- Aerion
- Earthcare
- NPOESS
- Astrolink
- SWARM
- Metop 2nd Generation
- AEHF1-6
- Gallileo
- Sentinel
- TerraSAR-X



The devices contained in the table below are representative of the variety, complexity and breath of space products for which Micross has proven manufacturing capability.

DISCRETE	INTERFACE	MIXED SIGNAL	LINEAR	MEMORY	VLSI	SPECIAL FUNCTION	LOGIC	
Diode Diode Array Diode Bridge FET Array FET Transistor Hall Effect Switch IGBT Transistor JFET Transisto MOSFET Transistor Array Optocoupler Optocoupler/ Transistor Power MOSFET Transistor Transistor Array SiC diodes SiC MOSFETs	Analog MUX Analog Switch Clock Driver Decoder/Counter Driver LED Driver Line Driver Line Driver/Receiver Line Receiver Linear Driver Logic Level Driver MOSFET Driver Motor Controller Multiplexer Peripheral Driver Power Driver Power Supply Supervisory Pulse Width Modulator Serial Adapter TAXI Chip Timer Special Function Interface Driver Multiplexer Transceiver	A/D Converter Controller D/A Converter Custom IC PLLs DSP based measurements LVDS drivers & health monitoring DC Characterization	Analog Gate Analog Switch Current Amp Current Buffer D/A Converter Four Quadrant Multiplier Instrumentation AMP Log-Amp Modulator/ Demodulator Op-Amp Phase Decoder Phase Locked Loop RF/IF Op-Amp RMS Sensor Sample and Hold Amp VCO Voltage Comparator Voltage Converter Voltage Follower Voltage Reference Voltage Regulator	DRAM Dual-Port RAM ECL PAM EEPROM EPLD FIFO Module Nonvolatile RAM PROM SRAM, SDRAM SDRAM, DDR, DDR3	4 bit Slice Microprocessor DMA Address Generator Dual-Rate Demodulator FFT Processor LAN Controller Peripherals SCSI Controller Vector Signal Processor VLSI FPGA Spacewire I/O	RF CAPABILITY Splitter VCO Power Amplifiers Synthetizers	Data Synchronizer Avionic Receiver- Transmitter Cache Tag RAM Checker/Generator Clock Generator Comparator Data Synchronizer DC-DC Converter Divider Four Phase Clock Driver Freq. To Digital Converter Function Generator HD Path controller Log Adder Manchester Encoder/Decoder Motor Driver Nuclear Event Detector Phase-Frq. Detector Poser Seq. Program Control Unit PAM I/O Timer Supply Voltage Supervisor System Timing Controller Temperture Sensor Timer Tri-Quint Counter Voltage Supervisor Voltage To Freq. Converter	BI-Bus Transceiver BICMOS CMOS STL ECL PLD Serial Adapter Shift Register TTL (L, LS, AS, S, H, etc.)



MICROSS IS THE
ONE-SOURCE
SOLUTION PROVIDER
OF ADVANCED
HIGH-RELIABILITY
ELECTRONICS.

QUALIFICATIONS

- Certified to V-Level Class S for MIL-PRF-38535. MIL-PRF-38535 Qualified Manufacturer Listing (QML) Certification for Column Attach
- Pursuing Class 'K' for MIL-PRF-38534 for programs requiring space level processing for hybrids and memory modules.
- ESA ESCC 9000 Component Processing
- NASA NSTS 5300.4 and EEE-INST-002 Plastic Up-qual.
- Certified to AS9100 and ISO9001.
- Radiation shielded packaging available. Boosts TID by >6X.
- Regularly audited by DSCC, hundreds of customers and various DOD agencies.
- Micross employee experience levels contribute tremendously to the final product quality and reliability levels. Average employee experience is 15+ years.
- Poised to meet the toughest customer specifications and standards.
- DSCC QML
 - MIL-PRF-38534, Class H (Class K in process)
 - MIL-PRF-38535, Class Q
 - MIL-PRF-38535, Class V (assembly only)
 - Laboratory Suitability (MIL-STD-883)
- SMD, Q level and M level
- NSTS 5300.4
- EEE-INST-002
- ECSS-ST-60-13
- MIL-STD-883, Commercial Laboratory Suitability
- Capabilities for Class S Manufacturing
- Customer-specific, Source Control Drawing (SCD)

