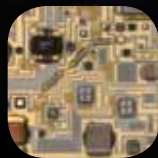


Microelectronics in Space



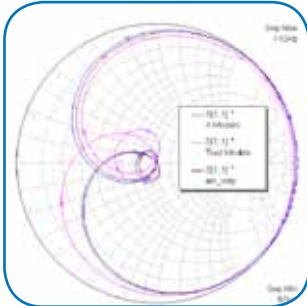
TELEDYNE
MICROELECTRONIC TECHNOLOGIES
A Teledyne Technologies Company



**LEADER IN THE
HI-REL SCIENCE OF
SPACE MICROELECTRONICS**

LEADER IN THE HI-REL SCIENCE OF SPACE MICROELECTRONICS

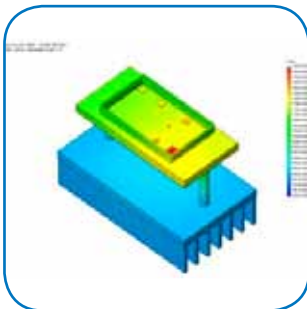
For over 45 years, we have led the industry in providing innovative, custom high-density, high-reliability microelectronics packaging solutions for the most demanding applications.



Optimize SWAP: Size, Weight, Power and Performance

Our dedicated team of scientists and engineers work with you to optimize your size, weight and performance requirements through:

- Circuit layout design
- Mechanical analysis
- Materials selection
- Thermal and power management analysis
- Power Integrity (PI) and Signal Integrity (SI) analysis



Services

At any phase of your design, we work with you to provide a cost effective, innovative packaging solution. Reliability and producibility are designed into every circuit, achieving a state-of-the-art quality product.

Advanced Technologies

We utilize a full array of advanced technologies to achieve optimal packaging for your circuit:

- WLP - Wafer Level Packaging
- CSP - Chip Scale Packaging
- SIP - System in Package
- MCM - Multichip Module
- MCA - Microwave Assembly
- Flip Chip/Flip Chip on Flex
- BGA/CGA - Ball/Column Grid Array
- Stud Bumping
- COB - Chip on Board
- SMT - Surface Mount Technology



Quality

Every employee is committed to producing the highest quality product. We are a DoD DMEA Microelectronics Trusted Source, accredited for Microelectronics Packaging, Assembly and Test Services and maintain the highest level industry certifications:

- AS9100
- ISO 9001:2008
- MIL-PRF-38534, Class H and K



Contact our team to find out how we can help solve your toughest technology challenges.



Class K Microelectronics in Space

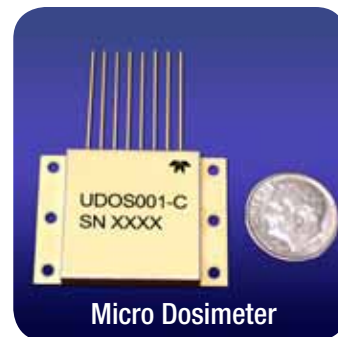
We are certified by Defense Supply Center, Columbus (DSCC) to manufacture microelectronics and multichip modules to MIL-PRF-38534 Class K for space applications. From the Voyager launched in 1977 to the James Webb Space Telescope (JWST) to be launched in 2014, Teledyne Microelectronics has a rich heritage in providing high-reliability space level modules.

With over 45 years of experience in extended environments, Teledyne Microelectronics is well established as the premier space level supplier.

Space-Rated MCMs



- Analog, Digital, Microwave and Optoelectronics
- Inertial Navigation
- Power Management and Control
- Video, Audio and Data Communications
- Thruster and Stepper Motor Control & Stabilization
- Heater Control
- Imaging, Camera Pointing and Control
- Processor and Memory
- Total Dose Radiation Measurement



Pioneers in Space

Spacecraft		
• ISSA	• Voyager	• Viking
• Hubble	• Mars Obsv	• Galileo
• Susei	• Magellan	• Giotto
• MESUR	• Ulysses	• Spacelab
• Sakigake	• Cassini	• Huygens
• Clementine	• Mars Global Surveyor	
• Lunar Reconnaissance Orbiter		

Satellites		
• Tiros	• DOT	• ANIK
• INTELSAT	• Galaxy	• Palapa
• ERS	• Westar	• Brazilsat
• SBS	• GOES	• DRIRU
• OAO	• Landsat	• Solarmax
• Globalstar	• HS601/701	• Spaceway
• Satcom4000/5000		• GLAST
• James Webb Space Telescope (Sidecar)		

Launch & Rentry Vehicles		
• Titan	• Delta	• IUS
• Centaur	• Atlas	• MK12A
• Shuttle	• Scout	• MX
• Minuteman	• Trident	• D5

Military Spacecraft		
• DSCS	• PMALS	• Milstar
• GPS	• DMS	• PMS
• TDRSS	• PRISM	• Zodiaque
• SDI	• Crosslink	• Classified

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