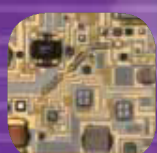
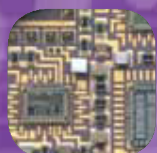




Microelectronics in Space



TELEDYNE
MICROELECTRONIC TECHNOLOGIES
A Teledyne Technologies Company



**Over 45 Years
of Proven Performance
in Microelectronics Packaging**

Over 45 Years of Proven Performance

Teledyne Microelectronic Technologies provides multichip modules and microelectronics for today's most demanding applications. Designing, fabricating and testing high reliability microelectronics has been our expertise since pioneering this technology over 45 years ago.

Optimize SWAP: Size, Weight, Power and Performance

We focus on collaboration to achieve

- Smaller size
- Lighter weight
- Lower power
- Improved performance
- Equal or improved reliability

Services

At any phase of your design, from concept or schematic to manufacturing drawings, we work with you to provide a cost effective, innovative packaging solution. Our team of experienced engineers achieve your size, weight and performance requirements through circuit layout, mechanical analysis, component selection, and solve thermal and power management issues. 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

Accreditations

Teledyne Microelectronics is certified to AS9100, ISO 9001:2000 and MIL-PRF-38534, Class H and K. We are a DOD DMEA Microelectronics Trusted Source, accredited for Microelectronics Packaging, Assembly and Test Services.



Contact us to find out how we can help solve your toughest packaging challenges through a miniaturized and optimized custom packaging solution.

800.518.1015
microelectronics@teledyne.com

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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