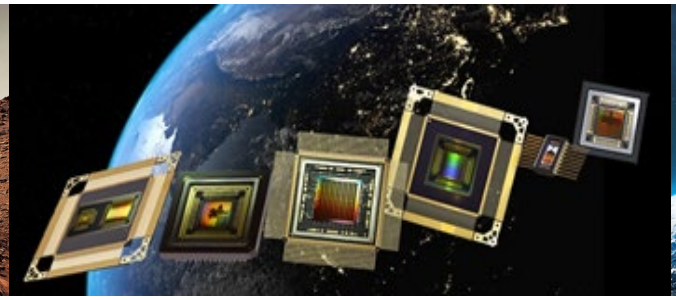
Microchip

Making Your Space Design Easier

MICROCHIP
Aerospace & Defense

A Leading Provider of Smart, Connected and Secure Embedded Control Solutions

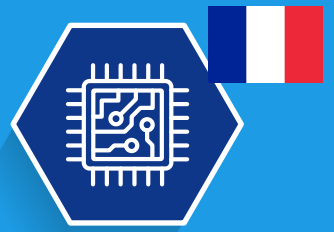

SMART | CONNECTED | SECURE

ADCSS2024 – Exhibitor Session

A Space portfolio with European Assets

Connectivity

RF Modules & Microwave Solutions

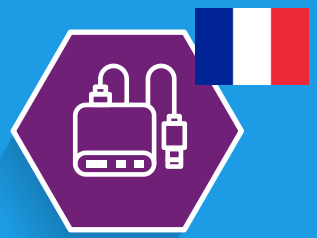


Processing

8-, 32- & 64-Bit MCUs
Microprocessors
FPGAs

Clock & Timing

Cesium Clocks
Chip Scale Atomic Clock (CSAC)
Oscillators



Interface & Connectivity

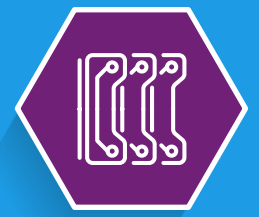
SpaceWire, Ethernet, CAN

Analog & Mixed Signal

Telemetry and Motor Control System Managers
Power Supply protection

Power Management

Power Discretes: JANS Diodes, Bi-Polar SST, MOSFETs
Isolated DC-DC Converter
Hybrids: Linear & POL
High Voltage Electromechanical Relays



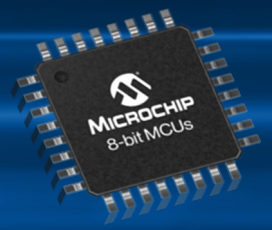
Memory & Storage

Serial & Parallel EEPROM
SRAM

Microchip's Expanding Compute Portfolio

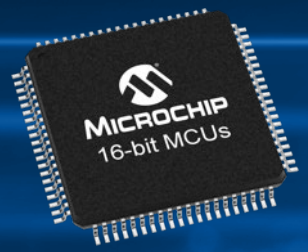
Scalable Computing at the Intelligent Edge

8-bit



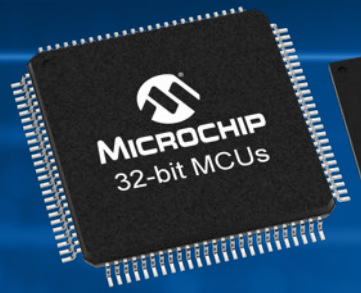
PIC® MCUs
AVR® MCUs

16-bit

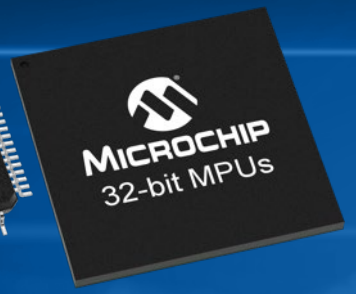


PIC® MCUs
dsPIC® DSCs

32-bit MCUs & MPUs



PIC® MCUs



SAM MPUs

PIC64 Family of 64-bit MPUs

Quad-Core
5K DMIPS

Octal-Core
TSN Switch, Vectors
Space-Grade
26K DMIPS

Scalable Processing to Enable the Intelligent Edge

Performance levels from 8-to 64-Bits

Unified software tool MPLAB®, supports migration across compute landscape and agnostic to ISA

MICROCHIP

New products Announcements

PIC64-HPSC

Microchip Unveils Industry's Highest Performance 64-bit HPSC Microprocessor (MPU) Family for a New Era of Autonomous Space Computing

JANxx Transistors

Microchip Adds Military-Standard Enhanced Low Dose Radiation Sensitivity (ELDRS) Qualification to Its Portfolio of Small-Signal Bipolar Junction Transistors to Ensure High Reliability for Critical Applications

SAMD21RT

Microchip Expands its Radiation-Tolerant Microcontroller Portfolio with the 32-bit SAMD21RT Arm® Cortex®-M0+ Based MCU for the Aerospace and Defense Market

LE50-28

Radiation-Tolerant DC-DC 50-Watt Power Converters Provide High-Reliability Solution for New Space Applications

RT PolarFire® system-on-chip (SoC) FPGA

Radiation-Tolerant PolarFire® SoC FPGAs Offer Low Power, Zero Configuration Upsets, RISC-V® Architecture for Space Applications

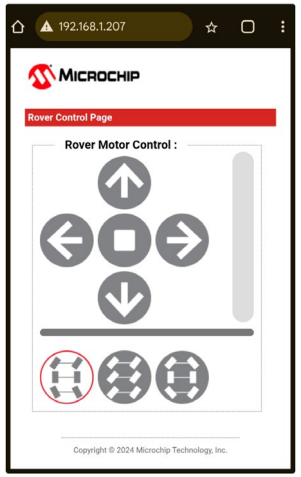
New integrated actuation power solution

Integrated Actuation Power Solution Aims to Simplify Aviation Industry's Transition to More Electric Aircraft

Visit us on the Microchip booth

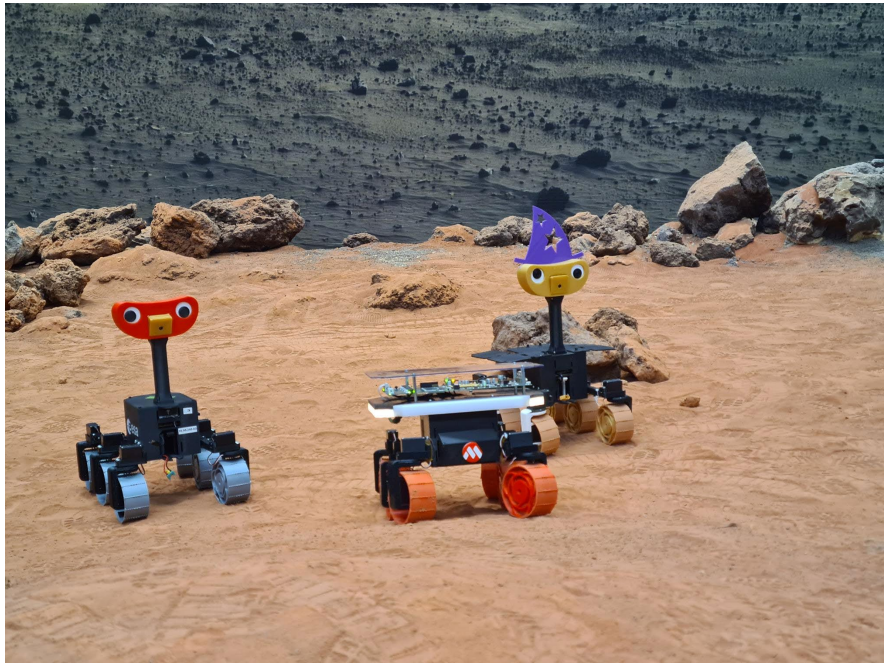
Space Rover

ESA « ExoMy » open source design basis



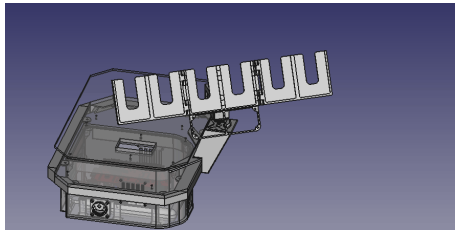
WiFi controlled

Demonstration Rover

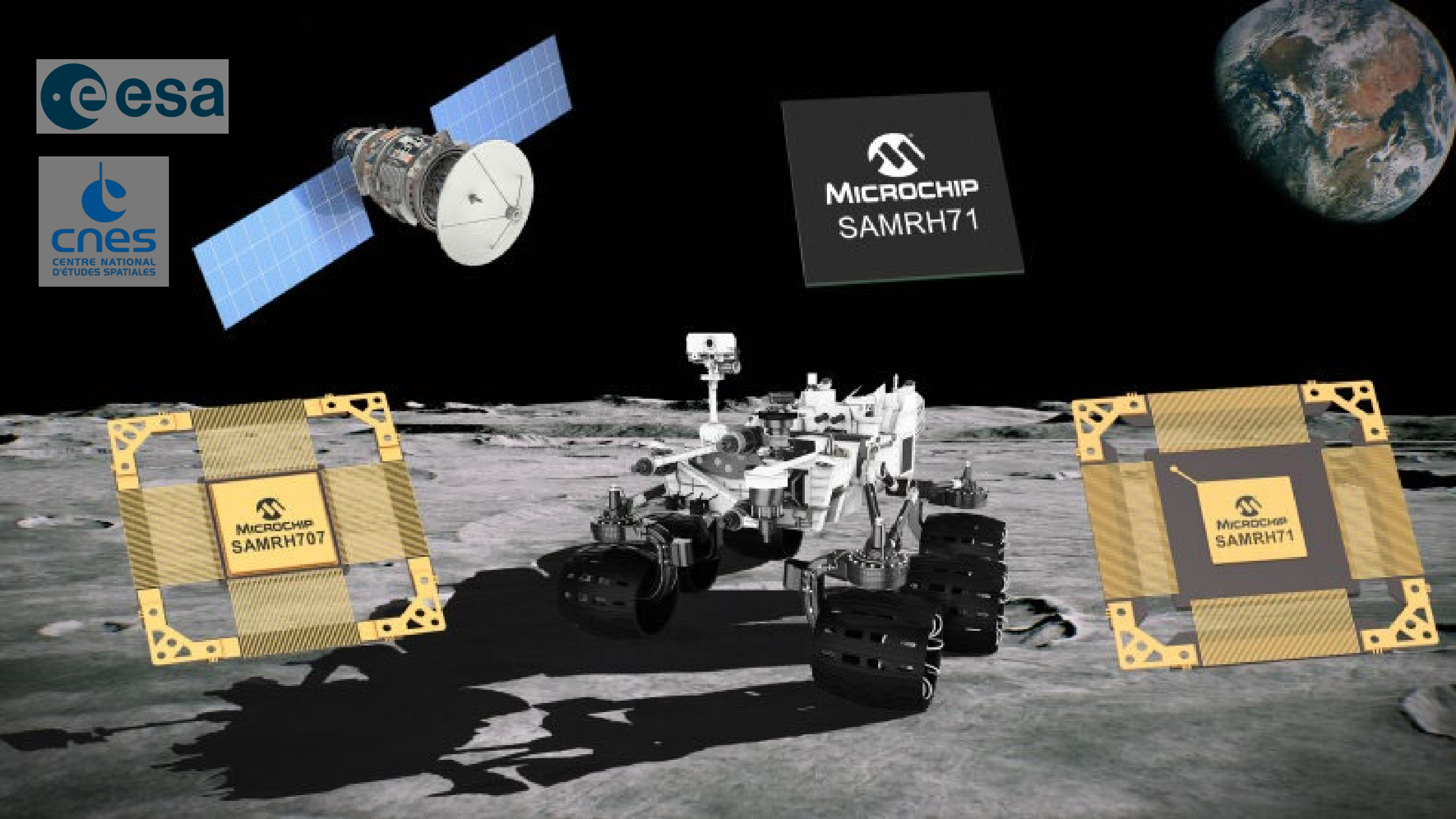


Demonstrated in Planetary Robotics Lab @ESA boothSpace

- **SAMRH71 based operations**
- **SAMD21RT based Solar Tracker integration on-going**



Solar Tracker Modelization


esa
cnes
CENTRE NATIONAL D'ÉTUDES SPATIALES
MICROCHIP
SAMRH71
MICROCHIP
SAMRH707
MICROCHIP
SAMRH71