

# Controller Chips Preserve Microprocessor Function

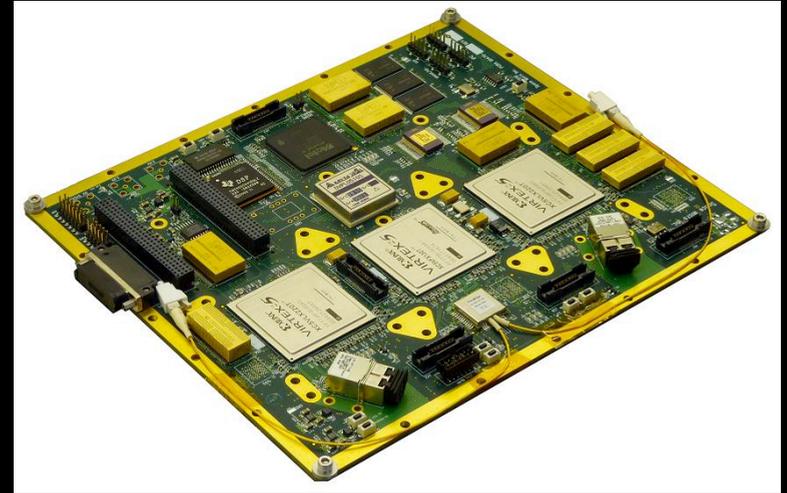


**Marshall Space Flight Center**

**Space Micro Inc.  
San Diego, California**

## NASA Technology

- ◆ A dip in the Earth's magnetic field over the southern Atlantic allows radiation to interfere with satellites
- ◆ Space radiation can cause physical damage to microchips and even change the software commands in computers, causing them to go into hibernation and become unresponsive



## Partnership

- ◆ Through a Small Business Innovation Research (SBIR) contract, Space Micro developed technology to mitigate radiation-caused interruptions
- ◆ A Space Micro computer was selected to run medical equipment on the ISS
- ◆ Space Micro received a "Tibbetts Award" in 2011 for its work and has been recognized by *Inc.* magazine for its fast growth

## Benefits

- ◆ Hardened-Core (H-Core) technology is a hardware/software combination that lets a system return to operation after interruption
- ◆ It's now marketed in space, aerospace, military, and domestic security markets
- ◆ Space Micro's revenue has grown from \$1 million to \$8 million