



REACT Processor Card

Neptec's REACT high-performance processor card is targeted for Low Earth Orbit (LEO) applications. It is fully space qualified with flight heritage on multiple missions.

The onboard PowerPC MPC8548 provides over 3000MIPS of processing power. It also offers double-precision floating point with vectorization, a capability that makes this device a high-performance processing solution for a wide range of scientific applications. A Virtex FPGA can be user programmed for increased data processing capability and easy interfacing to external devices.

REACT runs a ruggedized Linux 2.6 Operating System and comes with a complete SDK. This configuration is well-suited for rapid prototyping on a desktop environment and ideal for migration to the flight platform.

Features

- PowerPC MPC8548, 1.2GHz core clock
- 64kB of L1 cache, 512kB of L2 cache with parity protection
- 512MB of DDR2 memory with ECC protection and scrubbing
- 256MB of fully redundant Flash memory with Reed-Solomon FEC and double device correction
- Integrated software and hardware watchdogs
- Advanced built-in self-test and monitoring system
- Xilinx Virtex 2 Pro (XC2VP20) FPGA
- 2 x RS422 Interfaces
- 2 x USB 2.0 interfaces
- 2 x 100Mbps Ethernet ports
- 3 x I2C Serial Interfaces
- Custom IO interface



302 Legget Drive, Suite 202
Kanata, ON K2K 1Y5
Canada
+1 (613) 599-7602

neptec.com



Harwell Innovation Center
Building 173, Curie Avenue
Didcot, Oxfordshire OX11 0QG
+44 (0) 1235 838544