

PRISM150

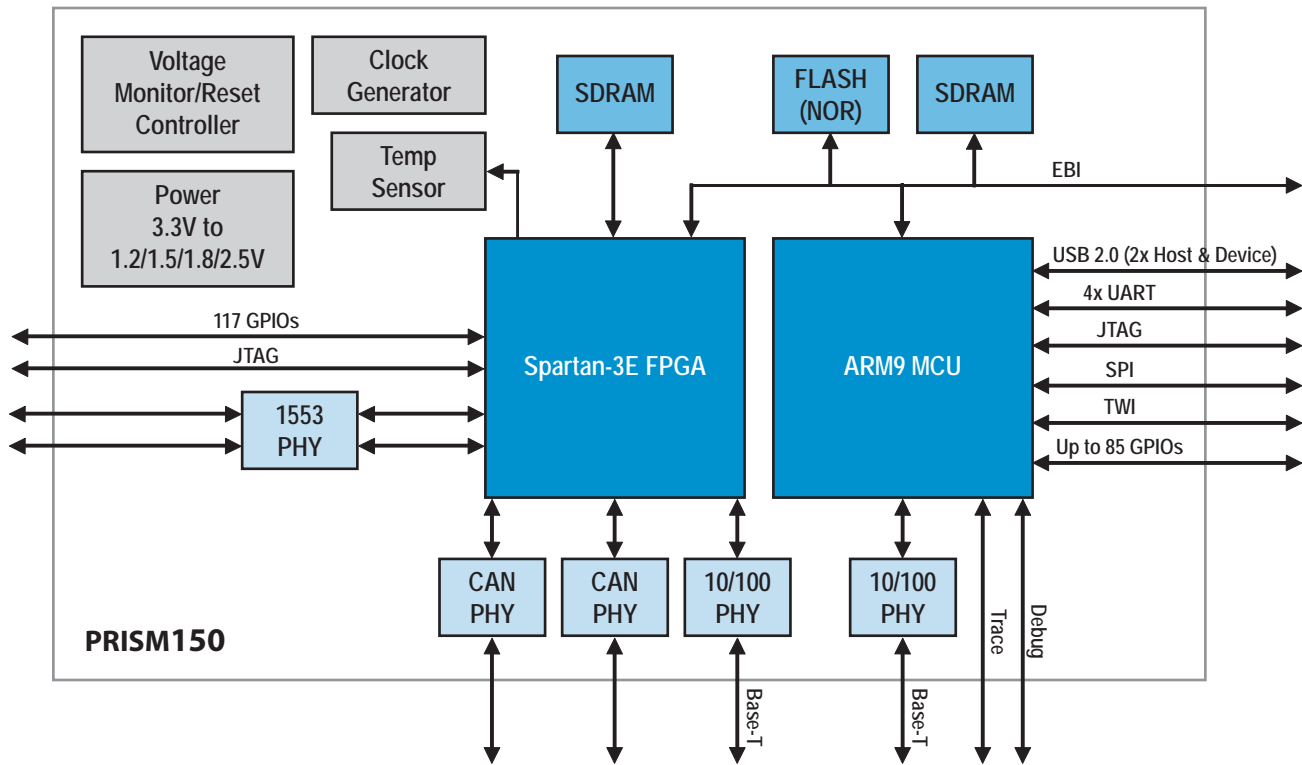


The **PRISM150** is designed for I/O intensive applications where power management and cost are extremely critical. Featuring an ARM9 processor and all its subsystem tightly coupled with a Xilinx Spartan FPGA, the PRISM150 provides a fully programmable and reconfigurable platform that exceeds most embedded needs. Virtually any industry standard or proprietary interface not typically supported by a common processor can be easily implemented on the PRISM. The PRISM150 can dramatically accelerate design times resulting in faster time to market and is ideal for long life cycle applications in industrial, medical, and military markets.

FEATURES

- Combines a flexible MCU with an I/O rich FPGA for maximum configurability
- Stores multiple images for fault tolerant applications
- Supports multiple power and performance profiles
- Supports most standard real-time operating systems
- Integrated support and bridging for multiple industry interfaces
- Features a small 2"x2" footprint
- Standard PGA packaging for pin compatible upgrade path
- Guaranteed obsolescence protection
- Available as highly ruggedized offering to deal with harsh environments
- Built-in self test and diagnostics capabilities

BLOCK DIAGRAM



SPECIFICATIONS

COMPONENTS

FPGA	Spartan-3E (XC3S1600E)
Processor	Atmel ARM9 (AT91RM9200) @ 180 MHz
MPU/FPGA Memory	32MB SDRAM / 32MB SDRAM
Flash Memory	64MB NOR
Interfaces	Dual 10/100 Base-T Ethernet USB 2.0 (2x Host & Device) Dual CAN MIL-STD-1553 4x UART SPI TWI
GPIOs MPU / FPGA	85 / 117 (43 input only)

MECHANICAL & ENVIRONMENTAL

Dimensions	2"x2" (height 272 mils w/ out heatsink)
Footprint	405 PGA
Power (typical)	2 - 2.5W
Environmental Specs	Military / Industrial / Commercial

OPERATING SYSTEM

- Linux
- VxWorks
- Full driver support for all components on the module
- Powerful bootloader support for any OS

UTILITIES

- Flash memory download software
- Upgrade framework for FPGA and OS images
- NOR Flash-based boot and configuration code for the ARM processor and FPGA
- Remote update utility including Ethernet download capability
- Diagnostics software