

SmartFusion2 SoC FPGA

SmartFusion2 System on Chip FPGA

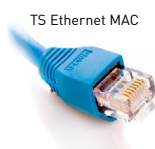
- ◆ Highest reliability, most secure, lowest power FPGA
- ◆ Up to 150K LEs with 5Mbit SRAM and 4.5Mbit NVM
- ◆ 166 MHz ARM Cortex-M3 microprocessor with Instruction Cache
- ◆ 5Gbps SERDES, PCIe, XAUI / XGXS+ Native SERDES
- ◆ Hard 667 mbps DDR2/3 controllers with SECDED
- ◆ Up to 50% lower power than SRAM-based Devices
- ◆ Flash-based: Instant-on and Non-volatile



The SmartFusion2 SoC FPGAs are complemented with a full ecosystem for seamless development

- ◆ Libero SoC Design Suite - Microchip's comprehensive, easy to use FPGA design suite
- ◆ SoftConsole IDE - Microchip's free software development environment that enables the rapid production of C and C++ executables and includes GNU ARM Eclipse Plug-in, GCC compiler, and GDB debugger
- ◆ Firmware Catalog - includes all of the available drivers and is installed with Libero or available standalone

More resources in low density devices with the lowest power, proven security and exceptional reliability



Secure Flash



DDR3 Controller



Lowest Power

- ◆ As low as 7mW Standby, Typical

Proven Security

- ◆ DPA Hardened, AES256, SHA256, On-Demand NVM Data Integrity Check

Exceptional Reliability

- ◆ SEU immune Zero FIT Flash FPGA Configuration
- ◆ SEU Protected/Tolerant Memories: eSRAMs, DDR Bridges (MSS, MDDR, FDDR), Instruction Cache, Ethernet, CAN and USB Buffers, PCIe, MMUART and SPI FIFOs