The Xilinx Spartan-6 FPGA introduces significant enhancements in the low-power FPGA arena, with industry leading features such as suspend and hibernate, combined with up to 60% less operating power compared to Spartan-3A.

Amber is an easy to use FPGA Development board featuring Xilinx Spartan-6 FPGA. Amber is specially designed for experimenting and learning system design with FPGAs. This development board features Xilinx XC6SLX9 TQG144 FPGA with maximum 70 user IOs, FT232H USB device, R422/485, RS232 serial communication interfaces, on board SPI flash and DDR2 memory.

Applications

- Product Prototype Development
- Development and testing of custom embedded processors
- Signal Processing
- Communication devices development
- Educational tool for Schools and Universities

Board features

- FPGA: Spartan-6 XC6SLX9 in TQG144 package

Board includes

- Xilinx Spartan-6 FPGA
- 128 Mbit DDR2 SDRAM
- FT232H USB device
- SPI flash Memory (Configuration)
- RS422/485, 232 serial communication interfaces
- General purpose IOs
- FPGA configuration via JTAG

- 4Mb SPI flash memory
- 50MHz crystal oscillator
- The FT232H is a single channel USB 2.0 Hi-Speed (480Mb/s) to UART/FIFO IC. It has the capability of being configured in a variety of industry standard serial or parallel interfaces.
- JTAG programming interfaces compatible with Xilinx's iMPACT
- 70 IOs for user defined purposes
- The 128-Mbit Double-Data-Rate SDRAM uses a double data-rate architecture to achieve high-speed operation
- On-board voltage regulators for single power rail operation