

Altera Cyclone IV Reference Design with XRP7714

The Altera Cyclone IV reference design with XRP7714 is a complete reference platform that includes Altera Cyclone IV FPGA powered by XRP7714 based programmable power solution. The power system provides 1.2V, 1.8V, 2.5V, and 3.3V. The order and ramp rates for each supply are programmed to accommodate Altera Cyclone IV FPGA sequencing requirements. All power supply operations can be controlled over an I2C interface. Faults, output voltages, and currents can also be monitored. The board is supported by PowerArchitect™ 4.x and connects to the Exar Communications Module (XRP77XXEVB-XCM). These evaluation boards may be available for loan through your Exar sales representative.

Exar Corporation advanced Programmable Power Management Solutions provide the performance, integration and advanced power and energy management features required to interface with Altera Cyclone IV family of FPGAs. The solution showcases Exar's XRP7714, a quad-output programmable power management system with a built-in LDO for standby power and GPIOs. This device provides a complete power management system solution in one IC and is fully programmable via an I2C serial interface. Independent Digital Pulse Width Modulator (DPWM) channels regulate output voltages and provide all required protection functions such as current limiting and over-voltage protection.

