



Orchid's FPGA designs unlock the power of Altera Cyclone devices in our industrial products.



"Orchid integrated hundreds of complex IO points onto a single FPGA. We were surprised at how much fits into a single chip. A happily cost effective solution suggested by Orchid Tech!"

*- Director of Engineering
Industrial Controls Division*

Altera Cyclone FPGA Design

Altera Cyclone FPGAs are a perfect cost-effective complement to a microcomputer's peripheral system. Often, pin-bound microcomputer designs may be cost effectively enhanced by 'bolting-on' a field programmable gate array. Maximizing board area while providing feature-packed smart IO signals is easily achieved with Cyclone FPGAs from Altera.

Smart IO Expansion Functions

Altera Cyclone FPGAs allow Orchid to add programmable functions to our industrial controller designs. Some of the functions that we've incorporated include:

• De-bounced Digital Inputs	• Registered Digital Outputs
• 16 and 32 Bit PWM Control	• 16 and 32 Bit Digital Timers
• 32 Bit Quadrature Encoders	• Analog Subsystem State Machines
• Low Cost UARTs with Parity	• Power Sub-system Sequencers
• Watchdog Timers	• PWM DAC Subsystems

Verilog Design and Test Bench Generation

Altera's Quartus design system provides the ideal environment in which to perform Verilog FPGA circuit design, simulation and verification. Orchid's experience with Verilog, VHDL, and AHDL design entry methods allow a great deal of design flexibility.

Orchid Technologies: Custom FPGA Design

The development of custom electronic products for our OEM clients is Orchid's entire business. The design of custom electronic products with rapid design cycles, demanding technical requirements, and unforgiving schedules sets us apart. Call Orchid Technologies today!

