



Altera FPGA Design and Circuit Board Design Services gives you the confidence to sail on.



“Orchid Technologies is one of the oldest and most experienced Altera CPLD and FPGA designers in the country. Stratix, Cyclone, 10K, 3000, 7000 series, Orchid’s done them all.”

Altera Corporation
Technical Marketing

Dual Altera Cyclone FPGA Devices

Orchid Technologies’ latest circuit board design features dual Altera Cyclone devices. Dual Cyclone devices perform high speed video image management, video enhancement and video capture services. Orchid’s selection of dual Cyclone devices was driven by both Cyclone’s lowest cost—highest FPGA performance advantage and Orchid’s many years of Altera design experience. “Bringing up an Altera Design is virtually risk free,” says lead Orchid Technologies designer Paul Nickelsberg. He adds, “The Quartus toolset and our years of Altera design experience help us get the job done on schedule and on budget.”

Altera Quartus II Design Expertise

Orchid Technologies is an old hand at Altera FPGA and CPLD design and development. Working within Altera’s new Quartus environment gives Orchid much greater design control. Orchid inputs design data in AHDL, Verilog or VHDL depending upon the required FPGA performance. Altera PROBE signals and Quartus’ rapid compile time permits enhanced debug and timing verification, once the design actually hits the lab bench. Quartus simulation and test bench facilities allow pre-verification of the design before circuit board implementation.

A Five by Five 64-Bit-Wide Convolution Filter

Using on-chip synchronous SRAM, Orchid implemented video image LUT lookup tables, a seven line deep digital video input FIFO and a five by five 64 bit wide convolution filter to perform real-time video edge enhancement functions. No DSP can perform twenty-five 64 bit-wide multiplies in three clock ticks—but a very wide parallel Cyclone design can!

Orchid Technologies Delivers

The development of custom Electronics Technology solutions for our OEM clients is Orchid’s entire business. FPGA design and circuit-board implementation with rapid design cycles, demanding technical requirements, and unforgiving schedules set us apart. Call Orchid Technologies today, we’ll design custom Altera FPGA electronics for you too!

