

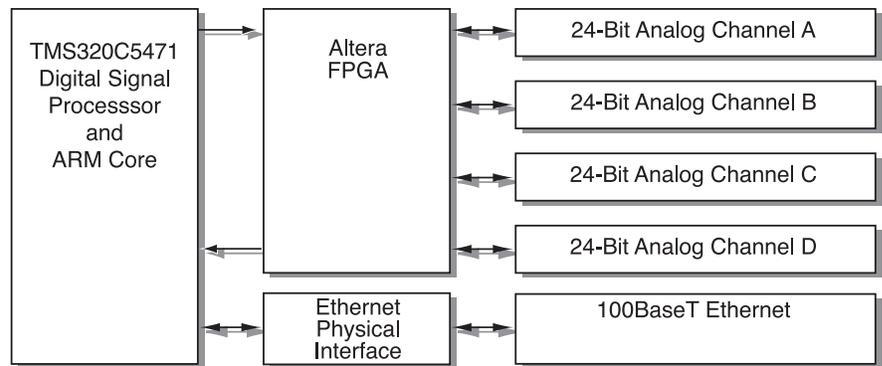
Semiconductor wafer fab demands exacting process controls. Orchid's precision electronics performs analog and digital controls.

Semiconductor Wafer Fabrication

Silicon wafer fabrication requires precision control of pressurized bladders during polishing operations. Fail-safe digital signal processing (DSP) together with high precision 24-bit analog instrumentation enable high-quality materials handling techniques.

Digital Signal Processing – TMS320C5471

Working with Texas Instruments' TMS320C5471 ARM/DSP core, Orchid Technologies fashioned a robust DSP Core. Using Pulse-Width-Modulation (PWM) techniques, multi-channel, precision control of pressurized equipment can be achieved.



High Precision 24-Bit Analog Electronics

Twenty Four Bit high precision analog conversion electronics together with Pulse Width Modulation control systems form the control plane of this multi-channel pressure control system. Data conversion rates of 40KHz together with multi-channel PWM outputs enable high performance.

Orchid Technologies Rapid Design Cycle

From concept to working prototype units in less than six weeks! Orchid Technologies delivers when the pressure's on! Call Orchid Technologies today to design precision control system electronics for you too.

"Great job, Orchid's an engineering firm that delivers when the pressure's on. I would use you guys again in a heartbeat."
Director of Engineering

