# General Purpose Industrial Controller ARM Cortex-M3/M4 Microcontroller

## Design Note #73



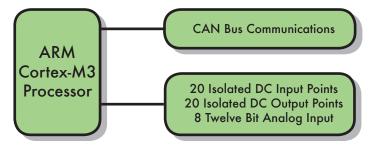
The control and operation of large machinery often requires the monitoring of hundreds of electrical signals. Powerful controllers from Orchid Technologies lead the way.

### **General Purpose Industrial Controller**

The control and operation of large machinery often requires that hundreds of electrical signals be monitored. Custom controllers from Orchid Technologies make that task simple. Based on ARM Cortex-M3 processor technology, these custom controllers are capable of control loop speeds exceeding 10µs per loop.

#### **Cortex-M3/M4 Processor Power**

Orchid's newest controllers are based on ARM Cortex-M3 and Cortex-M4 processors. These low cost, low power 32-bit processors are revolutionizing the embedded computer world. Running at high speed, Cortex-M3 and Cortex-M4 processors are capable of performing general computing tasks while simultaneously running the millions of floating point calculations needed to perform PID control algorithms. Once exclusively performed by specialty DSPs, Cortex-M3 and Cortex-M4 based devices allow high-tech design at low-end price points.



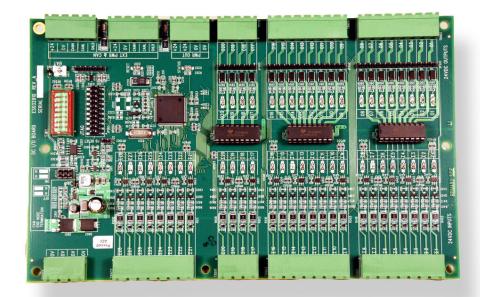
## **Orchid Technologies: Industrial Controls**

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



"Our new controller, based on Orchid's Cortex-M3 processor choice has plenty of compute bandwidth for our application."

- Engineering Manager





ORCHID TECHNOLOGIES
ENGINEERING & CONSULTING, INC.

## **Custom Engineering From Concept to Production**

147 Main Street, Maynard, MA 01754 www.orchid-tech.com 978-461-2000 fax: 978-461-2003