

Freescale i.MX53 / i.MX6 Custom Controller Design Note #97

Service Station Monitoring Equipment



Custom i.MX products designed by Orchid Technologies keep petroleum flowing safely everyday.



“We were pleasantly surprised when Orchid’s Phase 1 board worked right from the start. Excellent attention to detail.”

- HW Development Manager and
- SW Development Engineering

Freescale i.MX Custom Controller Design

High volume applications benefit from the long term cost savings of a custom i.MX controller design. Running at ten thousand units annually, a custom hardware design saves significant cost over a seven to ten year product life-cycle. The custom i.MX controller shown below has been highly tuned for the application at hand. Circuit board size, peripheral placement, peripheral selection, power control, security services, display and user input services have been designed specifically for the end application. Custom hardware design realizes the lowest cost, high quality electronic sub-assembly design for high volume applications.

i.MX Design – COTS or Fully Custom

Custom electronic product design is a detailed oriented, highly technical discipline. Orchid Technologies has performed numerous designs that perform correctly right from the start. Orchid can incorporate an existing COTS module into a semi-custom design, or we can realize additional savings with a fully custom design; placing the i.MX processor down on the product itself. Applications where annual volume exceeds 5,000 units reap real benefit from a fully custom design approach.

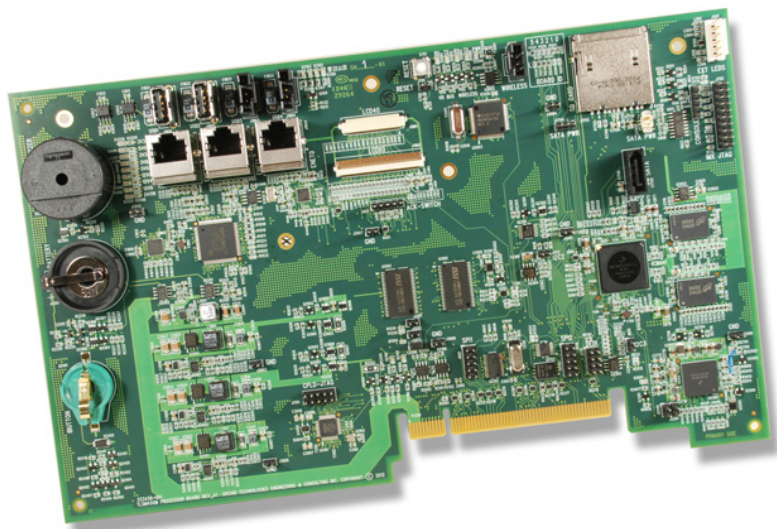
Custom i.MX Design Elements

Custom i.MX hardware design can include the following peripherals:

- 2G DDR3 Memory System
- 10/100BaseT Ethernet Ports
- High Resolution LCD Display
- General Purpose Input/Output
- SD Card Sub-system
- SRAM and Backup RAM Systems
- Custom Power Monitor Systems
- Backlight Controllers
- Gigabit Ethernet Ports
- Analog Data Collection Systems
- Touch Screen Controllers
- USB Type 1.1 and 2.0 Ports
- SATA Drive Ports
- Security Device Implementations
- RS232/485 UART Ports
- Watchdog Monitor Systems

Orchid Technologies: Custom i.MX Design

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



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

Copyright © 2014 Orchid Technologies Engineering & Consulting Inc., all rights reserved. OTEC and the Orchid Technologies logo are trade marks of Orchid Technologies Engineering & Consulting, Inc. All other marks are the property of their respective owners.