TUV Rated High Voltage Industrial Controller STMicro STM32H745 Dual Core Processor

Design Note #145



TUV rated high voltage industrial control electronics from OTEC interface with mission critical safety equipment for 24/7 reliable operation

Touch GFX

"On time, on budget, and meeting all our performance goals. This project ran so much more smoothly than I ever expected. Design, test, production all within a year. Outstanding OTEC!"

– Engineering Manager,Industrial Controls Engineering

TUV Rated High Voltage Industrial Controls

TUV rated high voltage industrial controllers are required for mission critical control applications. High voltage controls with redundant fault monitoring, redundant interlock systems, and redundant parallel processors combine to make applications programs safe by design. OTEC control systems design has over thirty years experience in these types of designs. OTEC's know-how provides proven circuitry where safety really counts.

STMicro STM32H745 Dual Core Processor

STM32H745 features a dual core architecture consisting of ARM7 and ARM-M4 cores. Operating independently, GUI applications can execute efficiently while real time, mission critical applications run on the M4 core. Both cores share resources, but function autonomously. Application cross checking permits the implementation of safety rated output interlocks.

TouchGFX Graphics Applications

With over five years experience developing TouchGFX-based graphics applications, OTEC is uniquely positioned to rapidly develop custom GUI software. TouchGFX running with either capacitive or resistive touch screens presents an efficient user input system. TFT LCD displays are driven at high frame rates to a provide smooth and flexible graphics appearance.

High Voltage Input / Output System

Isolated high voltage input and output directly controls line voltages to external equipment. Multiple dry relay contact outputs are robust and reliable.

CAN Bus Communications

CAN Bus communications are accomplished over six independent, isolated CAN interfaces. Each CAN Bus can run at its own independent baud rate and addressing format. CAN Bus software gateways provide interbus data transfer.

Orchid Technologies: Industrial Controls Design

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





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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