



Whisper quiet and safe, OTEC's low power automatic door controllers make access a pleasure.



life.augmented

"100uA and running during power down – remarkable! Your attention to detail really paid off."

–Automatic Door Division
–VP Development



**ORCHID TECHNOLOGIES
ENGINEERING & CONSULTING, INC.**

Safety Rated Automatic Door Controller

Safety rating of automatic door controllers requires careful attention to hardware and software design. OTEC's proprietary non-preemptive real time operating system is a key element when obtaining TUV or SIL software approvals.

Proprietary Non-Open Source Software

OTEC's proprietary non-preemptive real time operating system is specifically designed for small footprint implementation on ARM Cortex-M based processors. Operating in an efficient manner, OTEC's RTOS achieves high performance levels in small, power conservative hardware environments. Leveraging the power of 32 Bit ARM Cortex-M cores, OTEC's RTOS makes even complex numerical calculations possible in small environments.

Low Power Battery Back Up Design

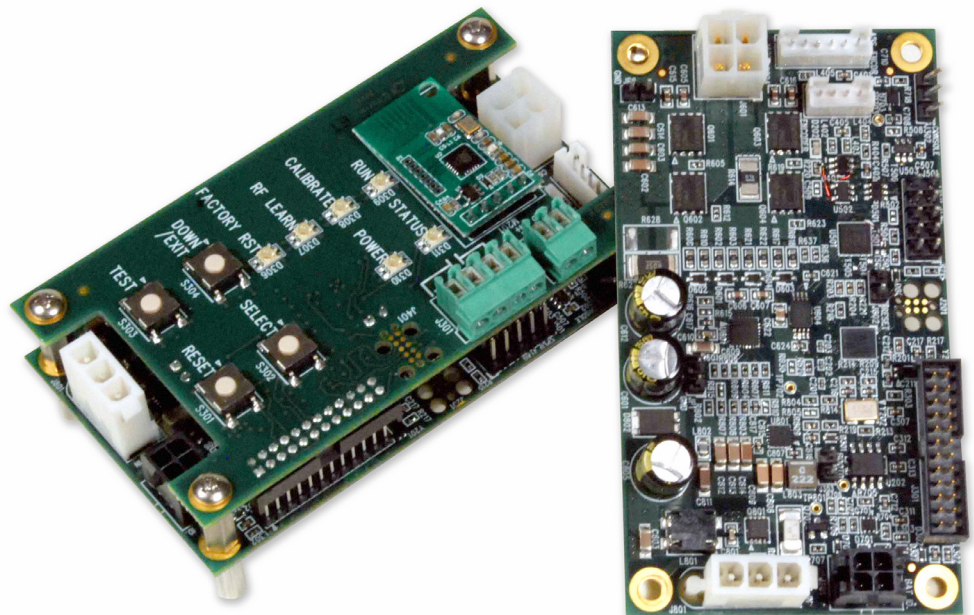
Emergency operation mandates that long-term battery back up operation is always available. Running on STM32L class devices, OTEC achieves processor backup operation at current levels below 100uA. 32KHz clocked operation proceeds efficiently using OTEC's RTOS. Switchover from low power to high power modes is seamless.

Custom H-Bridge Power Stage

Driving a low cost brush-DC Motor, OTEC's custom H-Bridge allows power efficient precision control of motor speed, torque, and direction. Implemented with discrete FET devices, cooling, power management, and EMI reduction are all taken into account.

Orchid Technologies: Automatic Door Control

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



Custom Engineering From Concept to Production

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