



Compact, high energy Lithium Ion batteries are an ideal energy source for today's electronic devices. Custom battery chargers from Orchid provide the juice.



"We needed to rapidly develop a retrofit battery charger for our existing equipment. Orchid saved the day by delivering working custom chargers in under six weeks. Fast, that's fast."

*- Advanced Development
Operations Manager*

Lithium-ion Battery Charger

Lithium-ion Batteries are a compelling energy source for light weight, compact electronic devices. Lithium-ion Batteries have low self-discharge rates giving them long shelf life while making charge-counting battery management circuitry highly reliable. Management of charge and discharge rates while monitoring cell temperature is essential to proper operation. High power density make Lithium-ion batteries a ready choice when selecting an energy source for today's low voltage electronic circuitry. Orchid Lithium-ion battery manager provides power on/off control and visual battery state of charge indications.

Microwatt Power Control Circuitry

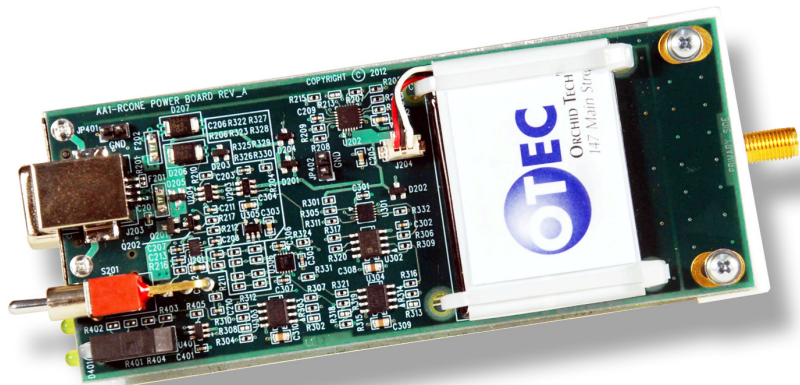
Operating with only microwatts of power, electronic on/off control of electronic devices makes for a flexible primary power source. Hard-switch on, delayed-switch-off, request to shut-down, and shut-down abort signals provide the proper energy controls for today's embedded processor-based devices. Today's power managers must draw less than ten microamps in their off state. Precision analog circuitry monitors charge voltage, charge current, and performs coulomb-charge-counting functions. Accurate state-of-charge makes a positive end-user experience.

Lithium-ion Charge State Safety

Constant-current, constant-voltage charging system switch operating modes as cell charge approaches 100%. Cell temperature monitoring circuitry adjusts charge output should high cell temperature occur. Internal battery system safety circuitry provides cell hard-disconnect safety functions.

Orchid Technologies: Custom Battery Charger

The development of custom electronic products for our OEM clients is Orchid's entire business. The design of custom battery charging devices 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

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