

DESCRIPTION

The JW[®]3655E is a buck boost converter targets HVDC fast charging system.

The JW3655E supports 1 to 4 cells Li-ion battery, the full charge voltage and charge current can be programmable through external resistor.

The JW3655E implements the Buck Boost converter with an H-bridge. The integrated low R_{DS(on)} MOSFET minimizes physical footprint, maximizes charge efficiency. Built-in loop compensation simplifies the circuit and design. PFM is engaged to maintain high efficiency at light load current.

JW3655E guarantees robustness with thermal protection.

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FEATURES

- Integrate low R_{DS(on)} power MOSFET
- Wide input range: 4.2V-21.0V, support 1 to 4 cells battery charge
- Full charge voltage can be programmable through external resistor
- High efficiency
- 450kHz switching frequency
- Programmable charge current, up to 3A
- Quiescent current: <5uA
- Integrate battery short protection
- Integrate thermal protection
- QFN3X4-15 package

APPLICATIONS

- Power bank systems
- Battery and supercapacitor charging
- USB power delivery
- Industrial applications
- Automotive systems

TYPICAL APPLICATION

