

DESCRIPTION

The JW5701A / JW5701B / JW5701E / JW5701F / JW5701G provides an ultra-low power solution for products powered by either a one-cell coin cell or one-cell Li-ion or other kinds of battery. It integrates a synchronous boost converter with a low-dropout linear regulator (LDO) or load switch and provides dual output rails.

The JW5701 series is capable of supplying up to 100mA total output current at 1.25V input to 3.3V output. Based on a hysteretic controller topology, the boost uses synchronous power switches to obtain maximum efficiency at minimal quiescent current.

The JW5701 series has two operation modes: Active mode and Low Power mode. In Active mode, both outputs are enabled with enhanced performance. In Low Power mode, the LDO or load switch is disabled for minimum quiescent current.

The JW5701 series is available in DFN 1.5 1.5mm×1.5mm-6 package.

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FEATURES

- 700nA Ultra-low I_q in Low Power Mode
- Startup into Load(3k Ω) at 1.25V Input Voltage
- 1.25V to 5.5V Operating Input Range
- 500mA Switch Peak Current Limit.
- Integrated LDO/load Switch
- Two Modes Controlled by MODE Pin
 - Active Mode: Dual Outputs at Set Values
 - Low Power Mode: LDO/load Switch off; Boost Keeps on
- Automatic Pass-through
- Up to 80% Efficiency at 10uA Load from 2V to 3.3V Conversion (Low Power Mode)
- Up to 90% Efficiency at 5mA ~ 100mA Load from 2V to 3.3V Conversion
- Thermal Shutdown
- Available in DFN1.5mmx1.5mm-6 Package

APPLICATIONS

- Single Coin Cell, Single or Two-cell Alkaline Powered Applications
- Wearable Applications
- Low Power Wireless Applications
- Portable Consumer or Medical Products

TYPICAL APPLICATION

