

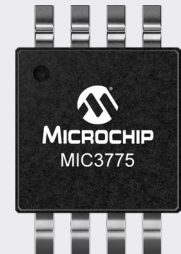
ANALOG SPOTLIGHT

MIC3775

750 mA Low-Voltage μ Cap LDO

General Information

The MIC3775 is a 750 mA low-dropout linear voltage regulator that provides low-voltage, high-current output from an extremely small package. The MIC3775 is ideal for PC add-in cards that need to convert from standard 5V to 3.3V or 3.0V, 3.3V to 2.5V, or 2.5V to 1.8V or 1.65V. A guaranteed maximum dropout voltage of 500 mV overall operating conditions allows the MIC3775 to provide 2.5V from a supply as low as 3.0V and 1.8V or 1.5V from a supply as low as 2.25V. The MIC3775 is fully protected with overcurrent limiting, thermal shutdown and reverse leakage protection. Fixed and adjustable output voltage options are available with an operating temperature range of -40°C to $+125^{\circ}\text{C}$.



Features

- Fixed and adjustable output voltages to 1.24V
- 280 mV typical dropout at 750 mA
 - Ideal for 3.0V to 2.5V conversion
 - Ideal for 2.5V to 1.8V or 1.65V conversion
- Stable with ceramic capacitor
- 750 mA minimum guaranteed output current
- 1% initial accuracy
- Low ground current
- Current limiting and thermal shutdown
- Reverse leakage protection
- Fast transient response
- Low-profile power MSOP-8 package

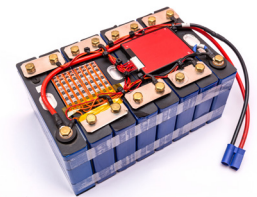
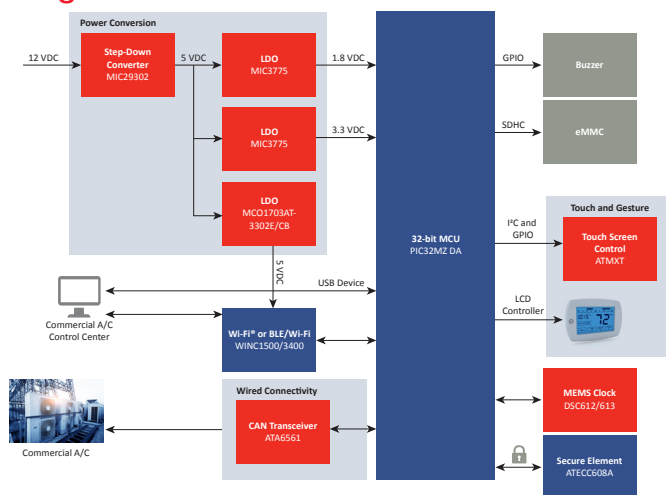
Applications

- Low-voltage microcontroller and digital logic
- Multimedia and battery chargers
- LDO linear regulator for PC add-in card
- Fiber optic modules

Benefits

- Full protection from damage due to fault conditions, makes the device very reliable
- Excellent transient response to variations in input voltage and load current without large output capacitors, which helps reduce overall cost of bill-of-materials
- Power MSOP-8 package features half the thermal resistance and offers cost effectiveness

Diagnostic Tool



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