

MCP19122/3

Digitally Enhanced Power Analog Controller with Integrated Synchronous Driver

General Information

The MCP19123 offers excellent regulation accuracy, in a variable output analog PWM controller with an integrated microcontroller for supervisory and management functions. It is a mid-voltage (4.5–40V) analog-based synchronous buck PWM controller with an integrated 8-bit PIC® Microcontroller. This device is similar to the MCP19122, but with four added pins and a serial debug interface.



Features

- Wide operating voltage range: 4.5–40V
- Wide output voltage range: 0.3–16V
- Analog emulated average-current mode Pulse-Width Modulation (PWM) control
- Integrated 8-bit PIC microcontroller
- Integrated synchronous high- and low-side MOSFET drivers
- Integrated high-side current sense
- Integrated 10-bit ADC

Benefits

Significant configurability: adjustable analog compensation, switching frequency, UVLO, OVLO, start-up behavior, MOSFET deadtime, configurable GPIO pins, internal compensation network, I²C communication interface and fault behavior.

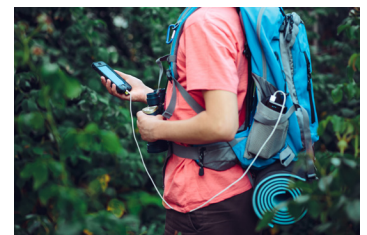
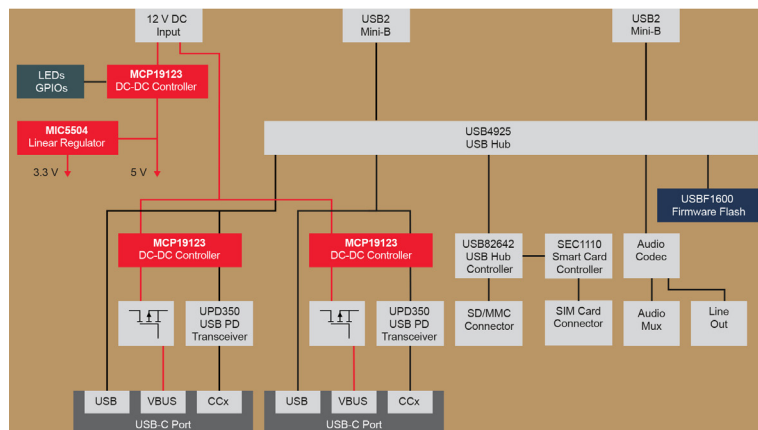
- Multi-phase and multi-rail support as a master or slave device
- Shutdown and brown-out support
- Minimal external components needed

Applications

- Servers
- Embedded controllers
- Telecom equipment
- Networking
- Set top boxes
- Gaming devices



USB Type-C™/Power Delivery Media Hub



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