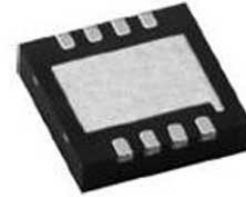


Buck Switcher - 2.2Mhz, 3A and 48V

| | |
|---------------|---|
| Manufacturers | Microchip Technology, Inc |
| Package/Case | VDFN |
| Product Type | |
| RoHS | |
| Lifecycle | |



Images are for reference only

Please submit RFQ for MCP16362T-E/NMX or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The MCP16361/2/3 family of devices are highly integrated, high-efficiency, fixed-frequency, step-down DC-DC converters in a compact 8-lead 3x3 mm VDFN wettable flank package that operates from input voltage sources up to 48V. Integrated features include a high-side switch, fixed-frequency Peak Current Mode Control, Internal Compensation, Power Good, Peak Current Limit and Overtemperature Protection. The MCP16361/2/3 provides all the active functions for local DC-DC conversion, with fast transient response and accurate regulation.

High efficiency conversion is achieved by integrating the current-limited, low-resistance, high-speed N-Channel MOSFET and associated drive circuitry. High switching frequency minimizes the size of external filtering components resulting in a small size solution.

The MCP16361/2/3 can supply 3A of continuous current while regulating the output voltage from 2.0V to 24V. An integrated, high-performance peak current mode architecture keeps the output voltage tightly regulated, even during input voltage steps and output current transient conditions that are common in power systems.

The MCP16362 runs in PWM-only mode, and is recommended for applications in which the low-frequency component associated with PFM mode of operation is not desirable.

Output voltage is set with an external resistor divider. The Power Good output pin will go from logic low to logic high (through an external pull-up resistor) once the output voltage is within 92% of the nominal set point.

The EN input is used to turn the device on and off. While off, only a few micro-amps of current are consumed from the input.

The MCP16361/2/3 is offered in a space-saving 8-lead 3x3 mm VDFN wettable flanks surface mount package

Features

Input Voltage Range: 4.0V to 48V

Adjustable Output Voltage Range: 2.0V to 24V

Integrated N-Channel Buck Switch: 100 mOhm

3A Output Current

2.2 MHz Switching Frequency

Shutdown Current: 5 μ A typical

Fixed PWM Mode of Operation

Power Good Output

Undervoltage Lockout (UVLO)

Peak Current Mode Control

Internal Compensation

Internal Soft-Start

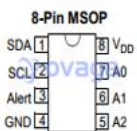
Internal Bootstrap Diode

Cycle-by-Cycle Peak Current Limit

Overtemperature Protection

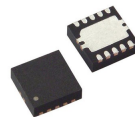
Package: 8-lead 3x3 mm wettable flanks VDFN

Related Products



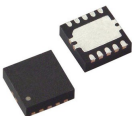
[MCP9808T-E/MS](#)

Microchip Technology, Inc
MSOP-8



[ATSAMC21G17A-MZTVAO](#)

Microchip Technology, Inc
VQFN



[MCP16502TAC-E/S8B](#)

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VQFN



[BM64SPKS1MC1-00M2AA](#)

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SMD



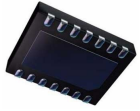
[MCP2517FDT-H/SL](#)

Microchip Technology, Inc
SOIC-14



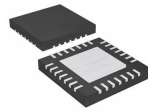
[MCP2517FD-H/SL](#)

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