

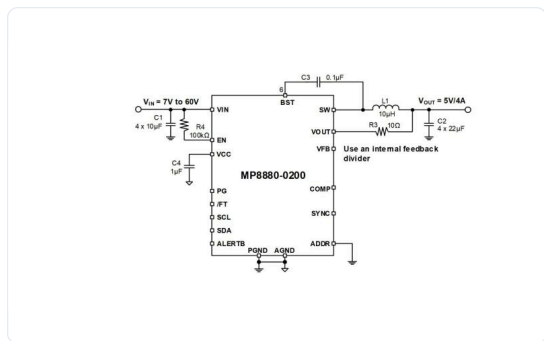


Search

[Overview](#)[Related Products](#)[Resources](#)[Design Resources](#)[Technical Forum](#)[Quality](#)[Order](#)

MP8880

MP8880

**60V, 4A, High-Efficiency, Digital, Configurable,
Synchronous Step-Down Converter with PMBus Interface****New****MPL**[Datasheet](#)

Description

MPL Optimized Performance with MPS Inductor

The MP8880 is a high-frequency, synchronous, rectified step-down converter with a PMBus control interface. It can achieve up to 4A of continuous output current (I_{OUT}), with excellent load and line regulation across the wide input voltage (V_{IN}) supply range.

The output voltage (V_{OUT}) can be controlled on the fly via the PMBus serial interface. V_{OUT} can be set between 0.6V and 24V in internal feedback divider mode, with a 48V maximum in external feedback divider mode. The voltage slew rate, switching frequency (f_{SW}), and power-save mode can also be selected via the PMBus interface.

Current mode operation provides fast transient response and facilitates loop stabilization. Full protection features include under-voltage lockout (UVLO), over-voltage protection (OVP), over-current protection (OCP), and thermal shutdown.

The MP8880 supports multiple-time programmable (MTP) memory to provide flexible configurations. The device can be paralleled with up to four phases for applications with higher I_{OUT} . The integrated, internal high-side and low-side power MOSFETs (HS-FETs and LS-FETs, respectively) provide high efficiency without requiring an external Schottky diode.

With an internal feedback divider and compensation, the MP8880 offers a very compact solution with a minimal number of readily available, standard external components. It is available in a QFN-20 (4mmx5mm) package.

[Show less](#) ^

Features & Benefits

Wide 4V to 60V Input Voltage (V_{IN}) RangeWide 0.6V to 48V Output Voltage (V_{OUT}) RangeUp to 4A of Output Current (I_{OUT})

Can be Paralleled with Up to Four Phases

Supports PD3.1 EPR 240W and AVS

Configurable 150kHz to 2.2MHz, Constant Switching Frequency (f_{SW}) with External Clock SynchronizationInternal, Low 60mΩ/43mΩ On Resistance ($R_{DS(ON)}$) MOSFETs