MPC22165-170

170A, 2-Phase Intelli-Phase™ Power Module with Quiet Switcher™ Technology

DESCRIPTION

The MPC22165-170 is a 2-phase, non-isolated, high-efficiency step-down power module. It integrates driver MOSFETs (DrMOS) and inductors to provide high efficiency and a small footprint, which is ideal for server applications.

The device has two independent outputs, which can be used separately or in parallel. It can achieve up to 170A (85A/phase) of output current (I_{OUTx}) across a wide input voltage (V_{IN}) range.

The MPC22165-170 offers many features to simplify system design. The device works with tri-state pulse-width modulation (PWM) signal controllers, has Accu-Sense™ current sensing to monitor the inductor current (I_L), and has temperature sensing to report the junction temperature (T_J).

The MPC22165-170 is available in an LGA-72 (9mmx9.9mmx9.65mm) package.

FEATURES

- Quiet Switcher™ Technology (QST) Limits Peak Switching Voltages
- Wide 4V to 16V Input Voltage (V_{IN}) Range
- Up to 170A Continuous Output Current (I_{OUTx})
- Accu-Sense™ Current Sense (CS)
- Temperature Sense
- Tri-State Pulse-Width Modulation (PWM) Signal Compatible
- Over-Current Protection (OCP)
- Over-Temperature Protection (OTP)
- Fault Reporting
- Typical Weight: 3.6g
- Available in an LGA-72 (9mmx9.9mmx9.65mm) Package

APPLICATIONS

- Servers and Computing
- Field-Programmable Gate Array (FPGA) and Application-Specific Integrated Circuit (ASIC) Core Power
- Graphic Card Core Regulators

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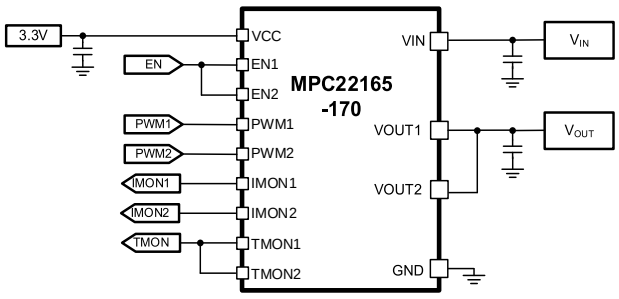
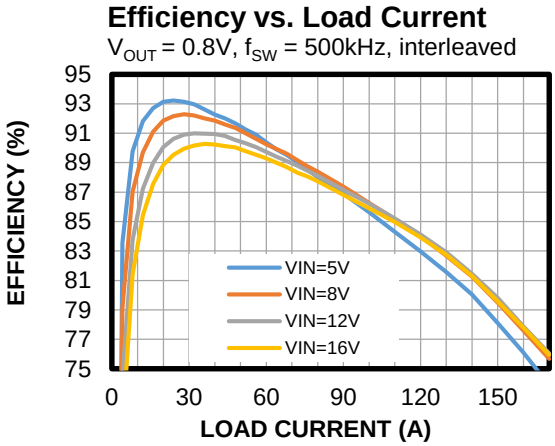
TYPICAL APPLICATION



Typical Application Circuit



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ORDERING INFORMATION

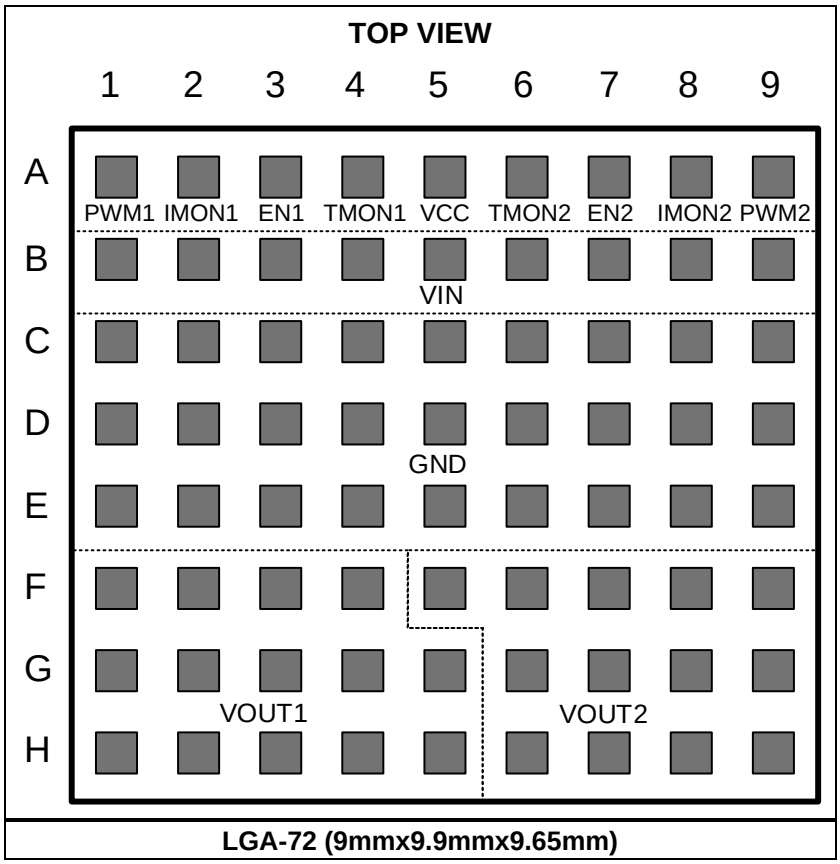
Part Number	Package	Side Label	MSL Rating
MPC22165-170	LGA-72 (9mmx9.9mmx9.65mm)	*See Below*	3

* For Tray, add suffix -T (e.g. MPC22165-170-T).

SIDE LABEL

Date code
Vendor's serial number
LOT ID

PACKAGE REFERENCE



LGA-72 (9mmx9.9mmx9.65mm)

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