



# MPC22163-130

## 130A, Dual-Phase Intelli-Module™ with Quiet Switcher™ Technology

### DESCRIPTION

The MPC22163-130 is a dual-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 MPC22163-130 has two independent outputs, which can be used separately or in parallel. It can achieve up to 130A (65A/phase) of output current ( $I_{OUTx}$ ) across a wide input voltage ( $V_{IN}$ ) range.

The MPC22163-130 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 MPC22163-130 is available in an LGA-72 (9mmx10mmx7.65mm) package.

### FEATURES

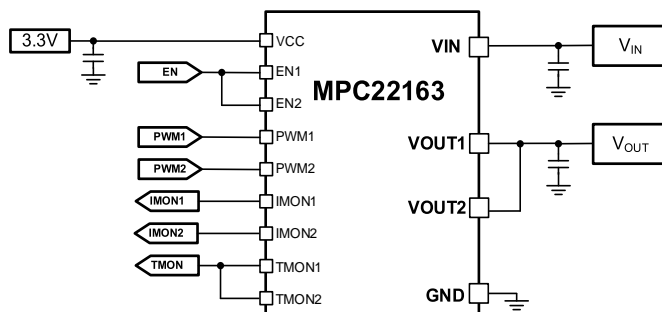
- Quiet Switcher™ Technology (QST) Limits Peak Switching Voltages
- Wide 4V to 16V Input Voltage ( $V_{IN}$ ) Range
- Up to 130A Continuous Output Current ( $I_{OUTx}$ )
- Accu-Sense™ Current Sense (CS)
- Temperature Sense
- Compatible with Tri-State Pulse-Width Modulation (PWM) Signals
- Over-Current Protection (OCP)
- Over-Temperature Protection (OTP)
- Fault Reporting
- Typical Weight: 2.6g
- Available in an LGA-72 (9mmx10mmx7.65mm) Package

### APPLICATIONS

- Servers and Computing
- Field-Programmable Gate Arrays (FPGAs) and ASIC Core Power
- Graphic Card Core Regulators

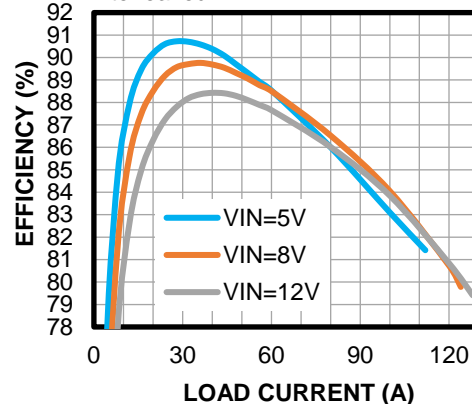
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### TYPICAL APPLICATION



#### Efficiency vs. Load Current

$V_{OUT} = 0.8V$ ,  $f_{SW} = 700kHz$ ,  
interleaved



## ORDERING INFORMATION

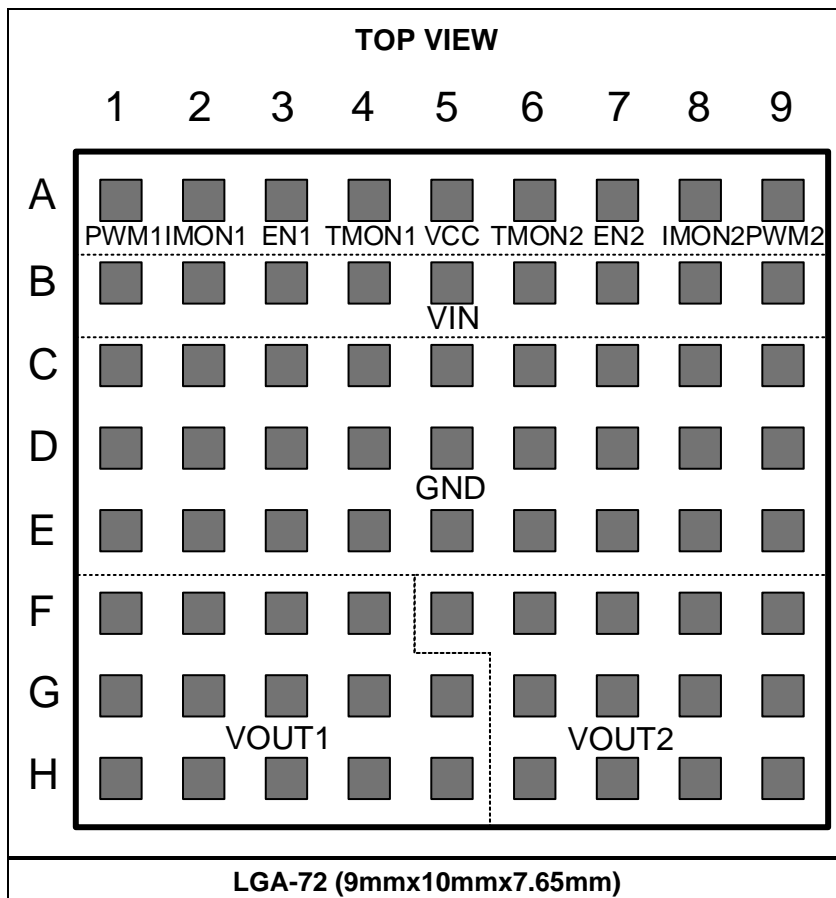
Part Number	Package	Side Label	MSL Rating
MPC22163-130	LGA-72 (9mmx10mmx7.65mm)	See Below	3

\* For Tray, add suffix -T (e.g. MPC22163-130-T).

## SIDE LABEL

Date Code  
Vendor's Serial Number  
LOT ID

## PACKAGE REFERENCE



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