



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

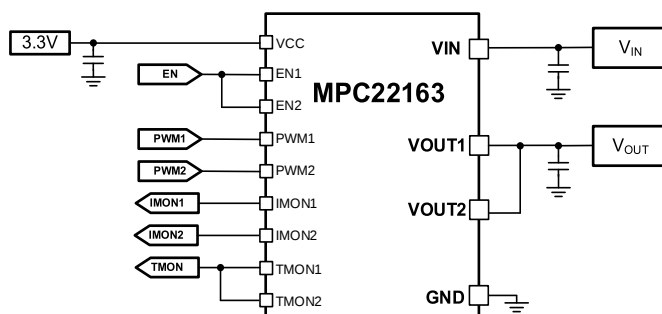
- Quiet Switcher™ Technology (QST) Limits Peak Switching Voltages
- Wide 4V to 16V Input Voltage (V_{IN}) Range
- Up to 130A Continuous Output Current (I_{OUTx})
- Accu-Sense™ Current Sense (CS)
- Temperature Sense
- Compatible with Tri-State Pulse-Width Modulation (PWM) Signals
- Over-Current Protection (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

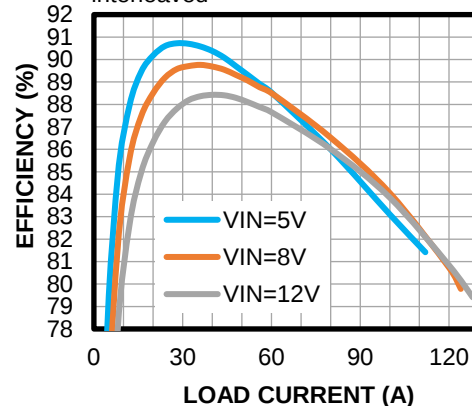
All MPS parts are lead-free, halogen-free, and adhere to the RoHS directive. For MPS green status, please visit the MPS website under Quality Assurance. "MPS", the MPS logo, and "Simple, Easy Solutions" are trademarks of Monolithic Power Systems, Inc. or its subsidiaries.

TYPICAL APPLICATION



Efficiency vs. Load Current

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



ORDERING INFORMATION

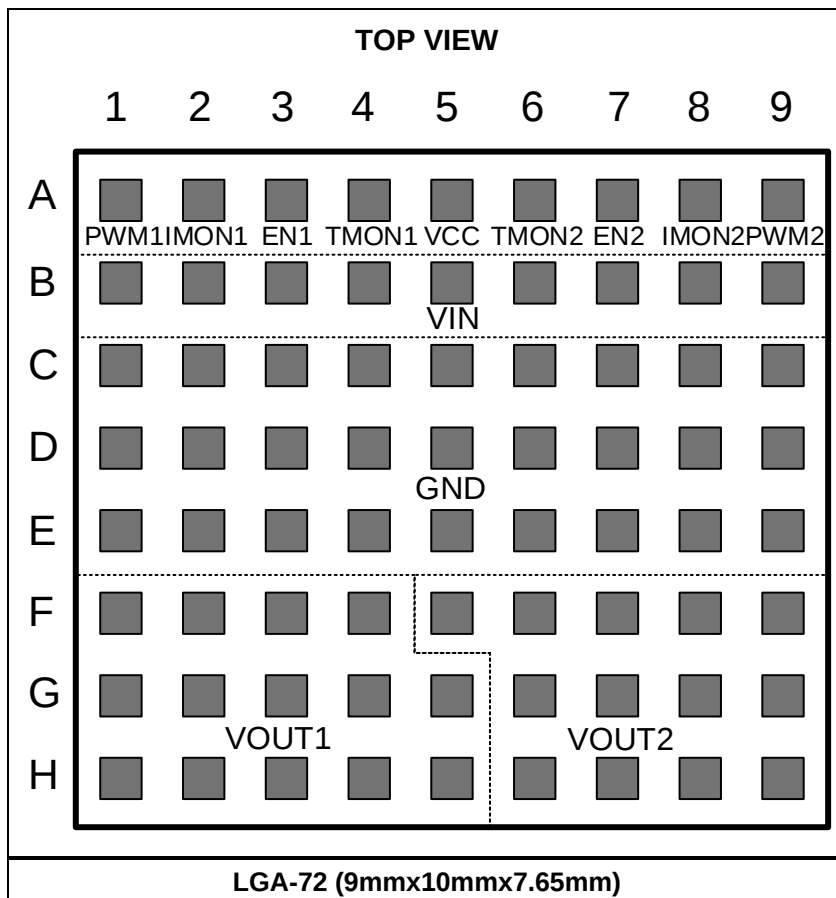
Part Number	Package	Side Label	MSL Rating
MPC22163-130	LGA-72 (9mmx10mmx7.65mm)	See Below	3

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

SIDE LABEL

Date Code
Vendor's Serial Number
LOT ID

PACKAGE REFERENCE



Notice: The information in this document is subject to change without notice. Please contact MPS for current specifications. Users should warrant and guarantee that third-party Intellectual Property rights are not infringed upon when integrating MPS products into any application. MPS will not assume any legal responsibility for any said applications.