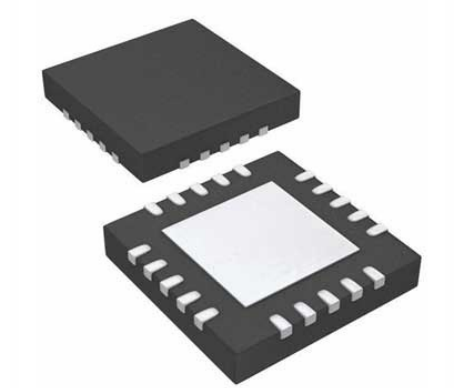


Motor / Motion / Ignition Controllers & Drivers RPM BASED FAN CONTRL MULTI TEMP ZONES

Manufacturers	Microchip Technology, Inc
Package/Case	QFN-20
Product Type	Power Management ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for EMC2112-BP-TR or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The EMC2112 is an SMBus, closed-loop, RPM-based fan driver with hardware (HW) thermal shutdown and reset controller. The EMC2112 offers a single High Side fan driver capable of sourcing up to 600mA from a 5V supply.

The EMC2112 utilizes Beta Compensation (an implementation of the BJT or transistor model for thermal diodes) and Resistance Error Correction (REC) to accurately monitor up to three (3) external temperature zones. These features allow great accuracy for CPU substrate thermal diodes on multiple process geometries as well as with discrete diode-connected transistors. Both Beta Compensation and REC can be disabled on the EMC2112 to maintain accuracy when monitoring AMD thermal diodes.

The EMC2112 provides a stand-alone HW thermal shutdown block. The HW thermal shutdown logic can be configured for a few common configurations based on the strapping level of the SHDN_SEL pin on the PCB. The HW thermal shutdown point can be set in 1°C increments by using a discrete resistor connected to the TRIP_SET pin.

The EMC2112 also provides 5V supply 'power good' function with a threshold of 4.5V. This function is provided on the RESET# pin.

Features

Features

Closed-Loop RPM-Based Fan Controller

1% accuracy with external clock input

3% accuracy with internal clock

Internal clock can be used as a source

Aging fan detection

Integrated Linear Fan Driver

600mA drive capability

HW Thermal Shutdown (SYS_SHDN#)

1°C incremental set points for thermal shutdown

Cannot be disabled by software

Provides Reset Function (RESET#) On 5V Supply

Up to Three (3) Remote Thermal Zones

0.125°C resolution

Designed to support 45nm, 65nm, and 90nm CPU Diodes using BJT and transistor model

Eliminates temperature offset due to series resistance from PCB traces and thermal 'Diode'

Operates From Single 3.0 - 3.6V Supply

5V supply for linear fan driver and reset generator

SMBus 2.0 and I2C™ compatible

User selectable SMBus address using pull-up resistor on ADDR_SEL pin

Supports Block Read and Write functionality

Available in 20-pin, 4x4 QFN RoHS Compliant package

Application

Notebook Computers

Desktop Computers

Embedded Applications

Related Products



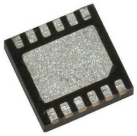
[EMC2305-1-AP-TR](#)

Microchip Technology, Inc
QFN-16



[EMC2103-2-AP-TR](#)

Microchip Technology, Inc
QFN-16



[EMC2303-1-KP-TR](#)

Microchip Technology, Inc
QFN-12



[EMC2302-1-AIZL-TR](#)

Microchip Technology, Inc
MSOP-10



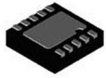
[TC1313-ZD0EMFTR](#)

Microchip Technology, Inc
DFN-10



[TC1313-VD0EMFTR](#)

Microchip Technology, Inc
DFN-10



[TC1313-1H0EMFTR](#)

Microchip Technology, Inc
DFN-10



[TC1313-1P0EMFTR](#)

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