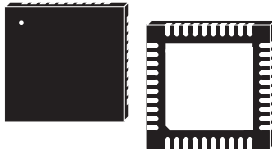


VR13.HC dual digital multiphase controller with PMBus™



VFQFPN40 5x5 mm

Features

- Intel® VR13.HC N+M phase compact digital controller
- Programmable phase assignment between two loops; from 8+0 up to 4+4
- VR13 Compliant w/ 25 MHz SVID bus rev 1.8
- PMBus™ rev 1.2 at 400 kHz
- High performance digital control loop (Digital STVCOT™)
- Fully configurable through PMBus™
- Auto DPM - automatic dynamic phase management
- Output voltage range: 0.5 to 2.5 V
- Remote sense; <math><0.5\% V_{out}</math> accuracy with calibration
- Current monitor signal with calibration
- Programmable voltage positioning
- OV, UV and FB disconnection protection
- Embedded non-volatile memory (NVM)
- VFQFPN40 5x5 mm target package

Applications

- High current power regulation for VR13.HC based Intel® based microprocessors
- DDR memory power regulation for VR13 based Intel® based systems
- High current POL and networking application

Description

The PM6779 is a high performance dual digital loop controller designed to power Intel's VR13.HC processors: all required parameters are programmable through PMBus™ interface.

The device utilizes digital technology to implement all control and power management functions to provide maximum flexibility and performance. NVM is embedded to store custom configurations.

The PM6779 can support up to 8 phases and allows programmable phase assignment between the two loops.

The PM6779 supports Power State transitions featuring Pulse Skipping, and programmable DPM, maintaining the best efficiency over all loading conditions without compromising transient response. The device assures fast and independent protection against load overcurrent, under/overvoltage and feedback disconnections.

The device is available in VFQFPN40 5x5 mm.

Product status link

PM6779

Product summary

Order code	Package	Packing
PM6779TR	VFQFPN40 5x5x1 mm	Tape and reel

Revision history

Table 1. Document revision history

Date	Version	Changes
13-May-2021	1	Initial release

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