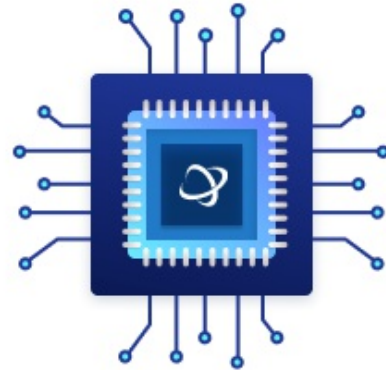


Distributed Power Unit for P9180A / P9145

Manufacturers	Renesas Technology Corp
Package/Case	
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for P9148NRGI8 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

Flexible output current capabilities are key to address modern multi core SoC solutions with a variety of different skews. The IDT P9148 distributed power units (DPU) operate as additional phases to theandto increase the output current of the solution. The device works as a controlled current source fully controlled by the host PMIC. Multiple P9148 devices may be used in parallel to provide additional current to the load. A high-speed proprietary interface between the P9180A, P9145 and the P9148 provides control and feedback information. The device seamlessly integrates into the PMIC eco-system and is flexible and transparent to the user. P9148 has been designed for systems with single 5V supply available and supports additional features compared to P9147 (optional thermal limit warning flag, load current monitor and automatic load-balancing among phases).

Features

Single 4.5 V to 8.4 V input voltage range

Output voltage controlled by host PMIC (P9180A / P9145)

Up to 6 A peak output current per device/phase

2.0 MHz switching frequency, internal PWM generation

Support automatic phase-shedding, PFM and LDO modes

Simple 2 wire interface for device configuration, control and status exchange to the host PMIC

Automatic detection by Host PMIC

No analog feedback to PMIC required

Thermal limit warning flag and load current monitor capability optional

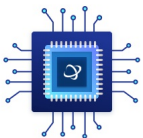
Automatic load-balancing and heat re-distribution among phases optional

Digital modulation and ML-based error correction

Industrial temperature range of -40°C to +85°C

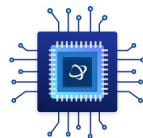
12-ld 3x4 mm DFN (NRG12)

Related Products



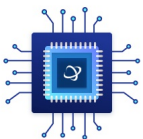
[P9222-RAZG18](#)

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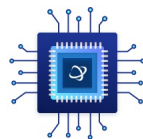
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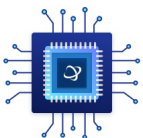
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Renesas Technology Corp



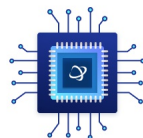
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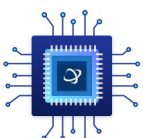
[P9148ANRG18](#)

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