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NCP6131NS52MNR2G

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Product Overview

Created on: 5/4/2012

NCP6131: IMVP7 1-, 2-, 3-Phase CPU Controller + 1-Phase GPU Controller

For complete documentation, see the data sheet

Product Description

NCP6151S/NCP6151SA/NCP6131S/NCP6131SA dual output four plus one phase buck solution is optimized for Intel VR12 compatible CPUs. The controller combines true differential voltage sensing, differential inductor DCR current sensing, input voltage feed-forward, and adaptive voltage positioning to provide accurately regulated power for both desktop and notebook applications.
The control system is based on dual-edge pulse width modulation (PWM) combined with DCR current sensing providing the fastest initial response to dynamic load events and reduced system cost. It also sheds to single phase during light load operation and can auto frequency scale in light load while maintaining excellent transient performance.

Features

- Meets Intel VR12/IMVP7 specifications
- Current mode dual-edge modulation for fastest initial response to transient loading
- Dual high performance operational error amplifier
- One digital soft start ramp for both rails

Applications

- Desktop and notebook processors

Part Electrical Specifications

Product	Compliance	Status	Topology	Phases	Control Mode	V_{CC} Min (V)	V_{CC} Max (V)	f_{SW} Typ (kHz)	t_{res} Typ (ns)	Package Type
NCP6131NS52MNR2G	Pb-free / Halide free	Active								QFN-52
NCP6131S52MNR2G	Pb-free / Halide free	Active								QFN-52

Package Availability

Type	Pb-free	Standard
QFN-52	✓	

For more information please contact your local sales support at www.onsemi.com