



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

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## Overview

## Specifications

[»View Material Composition](#)[»No Product Change Notifications exist](#)

### 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

### Technical Information

[Application Notes \(1\)](#)[Package Drawings \(2\)](#)

### Availability and Samples

Product	Status	Pb-free	Description	Package		MSL*	Container		Budgetary Price/Unit
				Type	Case Outline		Type	Qty.	
NCP6131D52MNR2G	Consult Sales Office		IMVP7 1-, 2-, 3-Phase CPU Controller + 1-Phase GPU Controller	QFN-52	485AV	1	Tape and Reel	2500	
NCP6131NS52MNR2G	Active		IMVP7 1-, 2-, 3-Phase CPU Controller + 1-Phase GPU Controller	QFN-52	485BE	1	Tape and Reel	2500	<a href="#">» Sample</a>
NCP6131S52MNR2G	Active		IMVP7 1-, 2-, 3-Phase CPU Controller + 1-Phase GPU Controller	QFN-52	485BE	1	Tape and Reel	2500	<a href="#">» Sample Inventory</a>

Moisture Sensitivity level (MSL) for surface mount devices (lead free measured at 260°C reflow, non lead free at 235°C reflow)

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