

NCP81140

Multiple-Phase Controller with SVID Interface

Product Overview

For complete documentation, see the data sheet.

The NCP81140 Multi-Phase buck solution is optimized for Intel VR12.5 compatible CPUs with user configurations of 4/3/2/1 phases. 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 at reduced system cost. It has the capability to shed to single phase during light load operation and can auto frequency scale in light load conditions while maintaining excellent transient performance.

Applications

- Industrial CPU based applications

End Products

- Infotainment, Mobile, Automation, Medical and Security

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	Phases	Control Mode	V _{CC} Min (V)	V _{CC} Max (V)	f _{sw} Typ (kHz)	Package Type
NCP81140MNTXG	1.1146	<div><div>Pb</div><div>H</div></div>	Active	Step-Down		Voltage Mode	4.75	5.25	600	QFN-32