NCP51400

3 Amp VTT Termination Regulator DDR1, DDR2, DDR3, LPDDR3, DDR4

Product Overview

For complete documentation, see the data sheet.

The NCP51400 is a source/sink Double Data Rate (DDR) termination regulator specifically designed for low input voltage and low-noise systems where space is a key consideration. The NCP51400 maintains a fast transient response and only requires a minimum output capacitance of 20 F. The NCP51400 supports a remote sensing function and all power requirements for DDR VTT bus termination. The NCP51400 can also be used in low-power chipsets and graphics processor cores that require dynamically adjustable output voltages.

Features

- Input Voltage Rails: Supports 2.5 V, 3.3 V and 5 V Rails
- PVCC Voltage Range: 1.1 V to 3.5 V
- Fast Load-Transient Response
- PGOOD - Logic output pin to Monitor VTT Regulation
- EN - Logic input pin for Shutdown mode
- VRI - Reference Input Allows for Flexible Input Tracking Either Directly or Through Resistor Divider
- Built-in Soft Start, Under Voltage Lockout and Over Current Limit

Applications

- DDR Memory Termination
- Servers and Networking equipment
- Graphics Processor Core Supplies
- Chipset/RAM Supplies as Low as 0.5 V

End Products

- Desktop PC's, Notebooks, and Workstations
- Telecom/Datacom, GSM Base Station
- Set Top Boxes, LCD−TV/PDP−TV, Copier/Printers

Part Electrical Specifications

Product	Pricing ($/Unit)	Compliance	Status	DDR Memory Type	I_{OUT} V_{TT} Max (A)	I_Q Typ (µA)	V_{CC} Bias Min (V)	V_{CC} Bias Max (V)	Remote Sense	Power Good	Package Type
NCP51400MNTXG	0.3379	Pb H	Active		3	700	2.375	5.5	Yes	Yes	DFN-10
NCV51400MNTXG	0.3703	A P Pb H	Active		3	700	2.375	5.5	Yes	Yes	DFN-10
NCV51400MWTXG	0.3703	A P Pb H	Active		3	700	2.375	5.5	Yes	Yes	DFN-10