

Product Overview

NCP51400: 3 Amp VTT Termination Regulator DDR1, DDR2, DDR3, LPDDR3, DDR4

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_O Typ (μ A)	V_{CC} Bias Min (V)	V_{CC} Bias Max (V)	Remote Sense	Power Good	Package Type
NCP51400MNTXG	0.3733	Pb-free Halide free non AEC-Q and PPAP	Active	DDR DDR2 DDR3 DDR3L DDR4	3	700	2.375	5.5	Yes	Yes	DFN-10
NCV51400MNTXG	0.4293	AEC Qualified PPAP Capable Pb-free Halide free	Active	DDR DDR2 DDR3 DDR3L DDR4	3	700	2.375	5.5	Yes	Yes	DFN-10
NCV51400MWTXG	0.4293	AEC Qualified PPAP Capable Pb-free Halide free	Active	DDR DDR2 DDR3 DDR3L DDR4	3	700	2.375	5.5	Yes	Yes	DFN-10

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