

NCP51199

2 Amps DDR Termination Regulator



Product Overview

For complete documentation, see the data sheet.

The NCP51199 is a linear regulator designed to supply a regulated VTT termination voltage for DDR-2 and DDR-3 memory applications. The regulator is capable of actively sourcing and sinking $\pm 2A$ peak currents for DDR-2 and DDR-3 up to $\pm 1.5A$ while regulating the VTT output voltage to within $\pm 10mV$. The output termination voltage is regulated to track VDDQ2 by two external voltage divider resistors connected to the PVCC, GND, and VREF pins.

Features

- Supports DDR2 VTT Termination to 2 A, DDR3 to 1.5 A (peak)
- Supports DDR VTT Voltages as low as 600 mV at 1.2 A (peak)
- Integrated Power MOSFETs
- Stable with 10uF Ceramic Capacitance on VTT Output
- High Accuracy VTT Output at Full Load
- Fast Transient Response
- Built-in SoftStart
- Shutdown for Standby or Suspend Mode
- Integrated Thermal and Current Limit Protection

Applications

- SDRAM Termination Voltage for DDR2 / DDR3
- Motherboard, Notebook, and VGA Card Memory Termination
- Set Top Box, Digital TV, Printers

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	DDR Memory Type	$I_{OUT, VTT, Max}$ (A)	I_o Typ (μA)	$V_{OC, Bias, Min}$ (V)	$V_{OC, Bias, Max}$ (V)	Remote Sense	Power Good	Package Type
NCP51199PDR2G	0.245		Active		2	800	4.75	5.25	No	No	SOIC-8 NB EP