

Product Overview

NCP51199: 2 Amps DDR Termination Regulator

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 ± 2 A peak currents for DDR-2 and DDR-3 up to ± 1.5 A while regulating the VTT output voltage to within ± 10 mV. 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 10 μ F 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	$I_{OUT} V_{TT}$ Max (A)	I_O Typ (μ A)	V_{CC} Bias Min (V)	V_{CC} Bias Max (V)	Remote Sense	Power Good	Package Type
NCP51199PDR2G	0.1944	Pb-free Halide free non AEC-Q and PPAP	Active	DDR DDR2 DDR3	2	800	4.75	5.25	No	No	SOIC-8 NB EP
NCV51199PDR2G	0.284	AEC Qualified PPAP Capable Pb-free Halide free	Active	DDR DDR2 DDR3	2	800	4.75	5.25	No	No	SOIC-8 NB EP

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Created on: 1/20/2021