

Features

- Input Voltage (VDD): Supports 2.5V Rail, 3.3V Rail and 5V Rail
- VTT_IN Voltage (VIN) Range: 1.0V to 3.6V
- EN Input
- Remote Sensing (VTTS)
- PGOOD to Monitor Output Regulation
- $\pm 10\text{mA}$ Buffered Reference (VREF)
- REFIN Input Allows for Flexible Input Tracking Either Directly or Through Resistor Divider
- Built-in Soft Start, UVLO, OCP and OTP
- Supports DDR, DDR2, DDR3, DDR4 and Low-Power DDR3/DDR4 VTT Applications
- TDFN10-3x3 Package
- Green Product (RoHS, Lead-Free, Halogen-Free Compliant)

Applications

- Memory Termination Regulator for DDR, DDR2, DDR3, DDR4 and Low-Power DDR3/DDR4
- Notebook/Desktop/Server
- Telecom/Datacom, GSM Base Station, LCD-TV/PDP-TV, Copier/Printer, Set-Top Box

General Description

The GS7901 is a sink/source Double Data Rate (DDR) termination regulator. It is specifically designed for low input voltage, low noise and low external component count systems where space is a key application parameter.

The GS7901 provides a fast load transient response and only requires a minimum output capacitance of 20 μF .

The GS7901 supports a remote sensing function and regulated power required by DDR, DDR2, DDR3, DDR4 and low-power DDR3/DDR4 VTT bus termination.

The GS7901 supplies an open-drain PGOOD output signal to monitor the output regulation state. It also accepts an EN input signal to discharge VTT during EN pull low.

In addition, the GS7901 includes over current limit and thermal shutdown to prevent the regulator from damage. The built-in soft start minimizes stress on the input power source by reduction the capacitive inrush current on start-up.

The GS7901 is available in the thermally efficient TDFN10-3x3 package.