

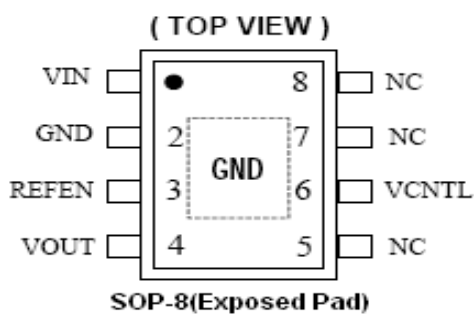
### General Description

The AS9174 is a simple, cost-effective and high-speed linear regulator designed to generate termination voltage in double data rate(DDR) memory system to comply with the JEDEC SSTL\_2 and SSTL\_18 or other specific interfaces such as HSTL,SCSI-2 and SCSI-3 etc. devices requirements. The regulator is capable of actively sinking or sourcing up to 2A while regulating and output voltage to within 40mV. The output termination voltage can be tightly regulated to track  $1/2 V_{DDQ}$  by two external voltage divider resistors or the desired output voltage can be programmed by externally forcing the REFEN pin voltage. The AS9174 also incorporates a high-speed differential amplifier to provide ultra-fast response in line/load transient.

### Order Information

Order Number	Package	Remark
AS9174D/TR-LF	SOP-8(Exposed Pad)	Pb-Free

### Pin Configuration



### Features

- ◆ Sink and Source 2A continuous current
- ◆ Integrated power MOSFETS
- ◆ Ideal for DDRI,DDRII and DDRIII  $V_{TT}$  application
- ◆ High accuracy output voltage at full-load
- ◆ Output adjustment by two external resistors
- ◆ Low external component count
- ◆ Shutdown for suspend to RAM(STR) functionality with high-impedance output
- ◆ Current limiting protection
- ◆ On-chip thermal protection
- ◆ SOP-8(Exposed Pad) package

### Application

- ◆ DDRI,DDRII and DDRIII Memory Systems
- ◆ Desktop PCs, Notebooks and Workstations
- ◆ Set-Top-Box, Digital TVs and Printers
- ◆ Graphics Card Memory Termination
- ◆ Active Termination Buses

### Block Diagram

