

# 1MHz, 1A Synchronous Buck Converter with 500mA LDO

## Features

- Operation Voltage 2.7V~5.5V
- Oscillation Frequency 1MHz
- Output Current Maximum 1A (DC-DC Converter)
- Built-In 500mA/LDO
- AT1358 Built-in Timing Control
- AT1358A with extra 100mA/LDO
- Built-In Current Limit
- Built-In UVLO
- Built-In Thermal Shut-Down

## General Description

The AT1358N/AT1358AN provides complete control for a DC/DC converter optimized for high-performance microprocessor applications. AT1358N consists of a synchronous step-down DC/DC converter and a high-speed LDO regulator. AT1358AN consists of a synchronous step-down DC/DC converter and two high-speed LDO regulators. DC/DC converter and LDO regulators have the different power input. DC/DC converter is operated on current mode architecture for excellent line and load transient response. 1MHz operation frequency is allowing the use of small surface mount inductor and capacitor. The internal synchronous switch increases efficiency and eliminates the need for an external schottky diode. The AT1358N/AT1358AN is a family of low-noise synchronous step-down DC/DC converters that is ideally suited for systems powered from a 1-cell Li-ion battery or from a 3-cell to 4-cell NiCd, NiMH, or alkaline battery. It can also be used to USB-based power system.

## Applications

- Power Supply for Slim Type devices

## Ordering Information

Part Number	Package	Marking
AT1358N_GRE	TDFN3x3-8, Green	1358N
AT1358AN_GRE	TDFN3x3-8, Green	1358AN

*\*For more marking information, contact our sales representative directly.*

## Pin Configuration

