# AIC2354GV5TR

## **FEATURES**

- 2.5V to 5.5V Input Voltage Range
- 1.0A Guaranteed Output Current
- Up to 95% Efficiency
- Low RDS(ON) Internal Switche: 280mΩ
- No Schottky Diode Required
- 100% Duty Cycle in Low Dropout Operation
- Operating Frequency: 1.5MHz
- Accurate Reference 0.6V Provides Low Output Voltages

## **APPLICATIONS**

- LCD TV
- Multi-function Peripheral
- Cellular Phones
- CPU I/O Supplies
- Cordless Phones
- PDAs and Handy-Terminals
- Battery-Operated Devices (1 Li-Ion or 3 NiMH/ NiCd)

## DESCRIPTION

The AIC2354 is a low-noise, pulse-widthmodulated (PWM), DC-DC step-down converter. The device is available in an adjustable version and fixed output voltages of 1.0V, 1.2V, 1.8V, and 3.3V.

The device features an internal synchronous rectifier for high efficiency; it requires no external Schottky diode. The AIC2354 is ideally suited for Li-Ion battery applications. PWM/PSM mode extends battery life by switching to a pulse skipping-modulated mode during light loads. Shutdown mode places the device in standby, reducing supply current to under 1 $\mu$ A.Other features of the AIC2354 include high efficiency, low dropout voltage, short circuit protection, over temperature protection, and over voltage protection. It is available in a small 5 pins SOT-23 and a 6 pins DFN package.

### TYPICAL APPLICATION



Fig. 1 Fixed Step-Down DC/DC Converter