

## PWM Step-up Controller

### ❖ GENERAL DESCRIPTION

The AX5301 is high efficient PWM step-up controller. Designed to drive an external N-channel MOSFET, Output voltage is programmable with 1.0V of standard voltage supply internal, and using externally connected components, output voltage (FB) can be set up at will.

The AX5301 can be operated at switching frequencies of 500kHz allowing for easy filtering and low noise, the size of the external components can be reduced.

This controller also contains an error amplifier circuit as well as a soft-start circuit that prevents inrush-current at startup. An enable function and thermal shutdown functions are built inside.

### ❖ FEATURES

- Input voltage: 3.0V to 24V
- Output voltage: Define by N-channel MOS.
- Duty ratio: 0% to 80% PWM control
- Oscillation frequency: 500KHz ( $\pm 20\%$ ) .
- Enable function
- Soft-Start function
- Thermal Shutdown function
- External SW N-channel MOS.
- MSOP-8L & SOP-8L Pb-Free Package.