

## **2A PWM Buck DC/DC Converter**

### ❖ GENERAL DESCRIPTION

The AX3015/A/B/C series are monolithic IC designed for a step-down DC/DC converter, and own the ability of driving a 2A load without additional transistor. It saves board space. The external shutdown function can be controlled by logic level and then come into standby mode. The internal compensation makes feedback control having good line and load regulation without external design. Regarding protected function, thermal shutdown is to prevent over temperature operating from damage; current limit is against over current operating of the output switch that set by outside resistance. Current limit depends on  $R_{SENSE}$  value. The over voltage protection (OVP) that can avoid high  $V_{OUT}$  voltage to damage circuit and capacitor, the OVP voltage is set by outside resistances. When SCP happened and  $V_{ENCT} > 0.5V$ , the driver can be auto restart that can prevent driver damage. The auto-restart time set by outside capacitor. The chip is available in SOP-8L-EP package which features small size as exposed pad to reduce the junction-to-case resistance.

### ❖ FEATURES

- Operating voltage can be up to 40V.
- Adjustable version output voltage range form 1.2V to 30V.
- Output load current: 2A.
- External OVP setting function.
- Operating Frequency:  
AX3015/A: 130KHz  
AX3015B/C: 50KHz
- Voltage mode non-synchronous PWM converter
- Thermal-shutdown and current-limit protection.
- Shutdown function and auto restart control.
- Short Circuit Protect (SCP).
- External current limit setting.
- Under voltage Lockout.
- SOP-EP Pb-Free package.
- Built-in switching transistor on chip.