

### ■ GENERAL DESCRIPTION

The AS5420 is a monolithic step-down DC to DC converter. The AS5420 works from a 3.0V to 16V input voltage range, and offers up to 2A of continuous output current in a compact SOIC 8 package.

The AS5420 operates in voltage mode. Lower quiescent current and wider operating input-voltage range are implemented by A1semi's high-voltage BiCMOS-based technology. Alternative PWM/PFM control technique significantly improves the efficiency for both light load and heavy load.

The AS5420 also integrates soft-start, over load protection and under voltage lockout protection etc., which minimized external components and converter size.

### ■ FEATURES

- Built-in 90mΩ P-Channel MOSFET
- Wide 3.0~16V Input Voltage Range
- Adaptive PWM/PFM Operation Mode
- Up to 95% Efficiency
- Built-in Soft-Start Function
- Fault Protection (Auto Recovery Mode)
- <1μA Shutdown Current and 80μA Quiescent Current
- Low Temperature-Drift Coefficient of Bandgap Voltage
- Demo Board Available

### ■ APPLICATIONS

- Power Source for Battery-Powered Equipments.
- Distribute DC to DC Power Supply
- Pre-Regulator for Linear Regulator

### ■ ORDERING INFORMATION

AS5420D/TR-LF	SOIC 8	Pb Free	Tape & Reel	-25~+125°C
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### ■ BLOCK DIAGRAM

