

## Product Overview

### FSL518: High Performance 800 V Off-line Switcher with HV Startup and SenseFET

For complete documentation, see the data sheet.

The FSL5x8A/H is an integrated peak-current-mode controlled pulse width modulation (PWM) power switch, specifically designed for off-line switch-mode power supplies. The PWM controller includes an advanced soft-start, frequency hopping, optimized gate driver, internal transconductance amplifier, temperature-compensated precise current source for loop compensation and enhanced self-protections circuitry as well. Compared with a discrete MOSFET and PWM controller solution, the FSL5x8A/H allows to reduce total cost, component count, size, and weight, while simultaneously increase efficiency, productivity, and system reliability. This device provides a basic platform for cost-effective design of both isolated and non-isolated Flyback converters.

#### Features

- Rugged 800V FET with 6.3Ω Typ. RDS(on) with Built-in HV current source for start up
- Fine-tunable Skip Mode Operation
- Integrated Line Compensation
- Line Brown-in, Brown-out Function
- Line Over-voltage Protection (LOVP)
- Fsw options: 100 & 130 kHz
- Peak Current: FSL518A = 610mA and FSL518H = 460 mA
- Seamless implementation of isolated and non-isolated topologies

#### Applications

- Auxiliary & Stand-by Power Supply
- Major Home Appliances power supplies
- Low to medium Power Chargers & Adapters

#### Benefits

- Easy and Rugged design with minimal external components
- High Efficiency across all operating conditions
- Constant Maximum power Limitation
- Robust design in case of poor Ac grid network
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- Allows design trade-offs between space and efficiency
- Design versatility
- Design flexibility

#### End Products

- White Goods (Air-con, Fridges, Washing machines, ....)
- E-Meters
- Industrial equipments
- Consumer Equipment Power Supply

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Control Mode	f <sub>sw</sub> Typ (kHz)	f <sub>jitter</sub> Typ (%)	Stand-by Mode	R <sub>DS(on)</sub> Typ (Ω)	V <sub>DSS(BR)</sub> Max (V)	I <sub>Peak</sub> (mA)	HV Start-up Min (V)	DSS (mA)	UVLO	Short Circuit Protection	Over Power Compensation	Brown-out	Latch	Package Type
FSL518APG	0.5867	Pb-free Halide free	Active	Current Mode	100	Yes	Yes	6.3	800	610	Yes	4	8	Yes	Yes	Yes	No	PDIP-7
FSL518HPG	0.5867	Pb-free Halide free	Active	Current Mode	130	Yes	Yes	6.3	800	460	Yes	4	8	Yes	Yes	Yes	No	PDIP-7

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