

XC9263/64 18V 500mA Step-Down DC/DC Converter



The XC9263/64 is a synchronous step-down DC/DC with **P-Ch High Side Switch** to ensure low Voltage operation with 100% max duty ratio. It can operate from 3.0V~18.0V and deliver loads up to 500mA making it an ideal replacement for inefficient Linear Regulators used in many industrial applications.

Designed for very **high efficiencies at low output loads**, with low quiescent current and automatic PFM/PWM mode. The XC9263/64 also works with Low ESR ceramic capacitors and comes with a choice of three switching frequencies, adjustable soft start and a power good output.

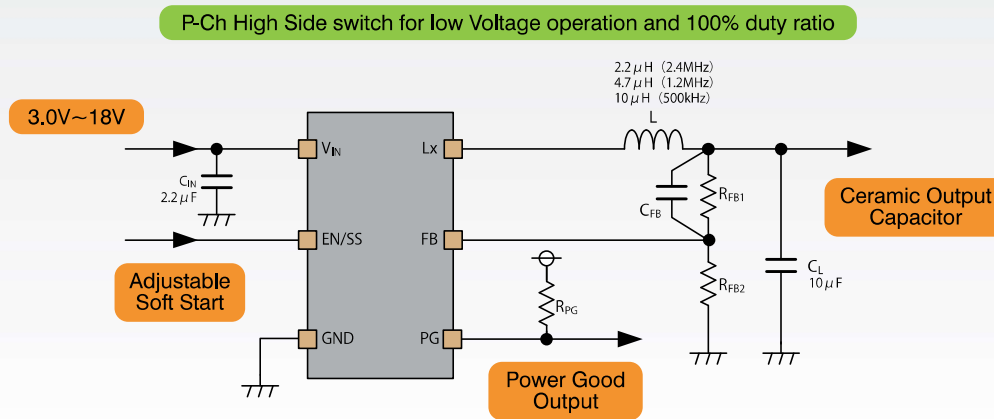
Available in the ultra small USP-6C package, measuring only 2.0 x 1.8 x 0.6mm an extremely small DC/DC circuit can be implemented with a minimal number of external components.

The XC9263/64 includes Over Current and VOUT short-circuit protection circuits, the designer can select either a Latch or Auto-restart configuration depending on the application requirements.

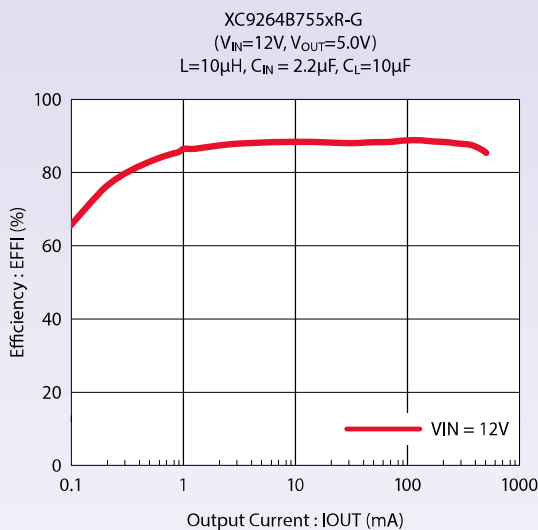
KEY FEATURES

Output Current		500mA
ON Resistance (VIN = 12V)	P-Ch	0.99Ω (typ)
	N-Ch	0.64Ω (typ)
Input Voltage Range		3.0V ~ 18V (Ab. Max 20V)
FB Voltage		0.75V±1.5%
Output Voltage Range		1.0V ~ 15.0V
Switching Frequency		500kHz, 1.2MHz, 2.4MHz
Quiescent Current		12μA
Product Select	XC9263	Fixed PWM Control
	XC9264	PWM/PFM Automatic Switching
Max Duty Cycle		100%
Protection Circuits	Current Limit Circuit	
	Short Circuit Protection	
	UVLO (2.7V)	
	Thermal Shutdown	
Additional Features: Adjustable Soft-start, Power Good Output, Optional CL Discharge, Low ESR Ceramic capacitors		
Op. Ambient Temperature		-40°C ~ +105°C
Packages		USP-6C, SOT25

TYPICAL APPLICATION CIRCUIT



EFFICIENCY VS. OUTPUT CURRENT



OUTPUT RIPPLE VS. OUTPUT CURRENT

