

XC9131 Series

1A Driver Transistor Built-In, Multi Functional Step-Up DC/DC Converters



General Description

XC9131 series are synchronous step-up DC/DC converters with a 0.2 (TYP.) N-channel driver transistor and a 0.2 (TYP.) synchronous P-channel switching transistor built-in. A highly efficient and stable current can be supplied up to 1.0A by reducing ON resistance of the built-in transistors.

The series are able to start operation under the condition which has 0.9V input voltage to generate 3.3V output voltage with a 33 load resistor, suitable for mobile equipment using only one Alkaline battery or one Nickel metal hydride battery.

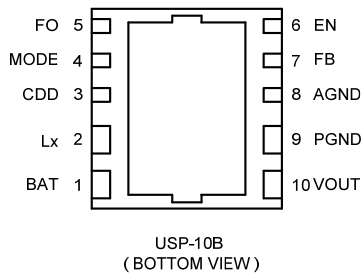
During the operation of a shutdown, the load disconnection function enables to cut the current conduction path from the input to the output.

The XC9131 series has 0.5V ± 0.01V reference voltage integrated and being able to set an output voltage with external components.

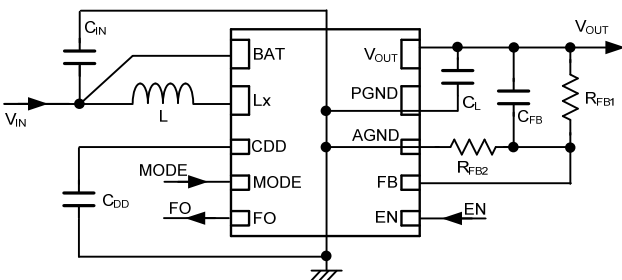
Features

- Input Voltage Range:** 0.65V~5.5V
(Absolute Maximum Rating: 7.0V)
- Voltage Adjustable Type:** $V_{FB}=0.50V \pm 0.01V$ Set up with external components
- Oscillation Frequency:** 1.2MHz (±15%)
- Input Current:** 1.0A
- Output Current:** 500mA @ $V_{OUT}=3.3V, V_{IN}=1.8V$ (TYP.)
- Control Mode Selection:** PWM or Auto PWM/PFM
- Load Transient Response:** 100mV @ $V_{OUT}=3.3V, V_{IN}=1.8V, I_{OUT}=1mA, 200mA$
- Protection Circuits:** Thermal shutdown
Over-current limit
Integral latch method
- Functions:** Soft-start
Load Disconnection Function
 C_L Discharge Function
Flag-out Function
- Output Capacitor:** Ceramic Capacitor
- Package:** USP-10B
- Environmentally Friendly:** EU RoHS Compliant, Pb Free

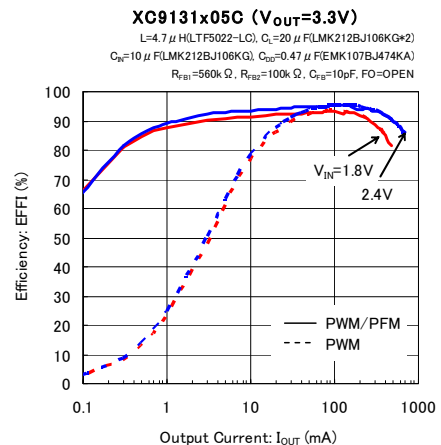
Pin Configuration



Typical Application Circuit



Typical Performance Characteristics



Ordering Information

XC9131 - (*)

DESIGNATOR	DESCRIPTION	SYMBOL	DESCRIPTION
	C_L Discharge	F	Available
		H	Not Available
	Reference Voltage (FB)	05	0.5V (Fixed)
	Oscillation Frequency	C	1.2MHz
-	Package (Order Unit)	DR-G	USP-10B (3,000/Reel)

(*) The "-G" suffix indicates that the products are Halogen and Antimony free as well as being fully RoHS compliant.

For more detailed information on this product please contact Torex.