

GLF8114

4 A, 1.25 MHz Synchronous Step-Down DC/DC converter

DESCRIPTION

The GLF8114 is a low quiescent current, peak current mode PWM synchronous step-down DC/DC converter. The device integrates switches capable of delivering an output current up to 4 A.

The GLF8114 operates over a wide input voltage range from 2.5 V to 5.5 V and runs in 1.25 MHz switching frequency to minimize the PCB and external components' size. The GLF8114 can automatically switch between PWM in heavy load operation and PFM for light-load operation to minimize the switch loss.

FEATURES

- Supply Voltage Range: 2.5 V to 5.5 V
- 4 A Output Current
- Low I_Q : 23 μ A Typ at 5 V_{IN}
- Low I_{SD} : 10 nA at 5 V_{IN}
- Efficiency up to 94 %
- 1.25 MHz switching frequency
- Peak current mode control
 - Power Save Mode for light-load
 - Internal compensation
- Cycle by cycle Over Current Protection
- Thermal Shutdown Protection
- Adjustable Soft-Start Time
- Power Good Window Comparator

PRODUCT TABLE

EV Version	Part Number	Output Voltage	Output Voltage Range	Output Current	Package Type
EV033-GLF8114	GLF8114-Q3G13	1.8 V	0.6 - 3.3 V (selectable)	4 A	3 mm x 3 mm QFN-16L

Note: Adjust V_{out} by changing the ratio of R1 and R2 through the formula $V_{OUT}=0.6*(1+R1/R2)$