

High Performance Low Cost Off-line PWM Power Switch

FEATURES

- High Precision 5V Default Output
- Integrated with 500V MOSFET and High Voltage Startup Circuit
- Ultra Low System BOM Cost
- Support Buck and Buck/Boost Topology
- On/OFF Peak Current Mode Control
- Less than 50mW Standby Power
- Built-in 31KHz Oscillator with Frequency Shuffling
- Built-in Soft Start
- Very Low VDD Operation Current
- Build in Protections:
 - Over Load Protection (OLP)
 - On-Chip Thermal Shutdown (OTP)
 - Cycle-by-Cycle Current Limiting (OCP)
 - Leading Edge Blanking (LEB)
 - VDD UVLO
- TO-92 and SOT23-3L Package Available

APPLICATIONS

- Small Home Appliance
- Linear Regulator/RCC Replacement

TYPICAL APPLICATION CIRCUIT

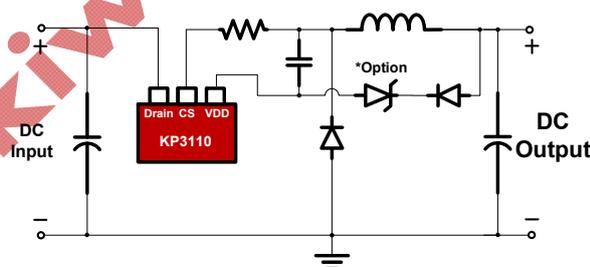
GENERAL DESCRIPTION

KP3110 is a low cost, highly integrated PWM power switch for non-isolated buck and buck-boost applications.

KP3110 combines a 500V power MOSFET with the ON/OFF PWM controller in one chip. The IC can achieve high precision 5V default Output at universal AC input. In KP3110, PWM switching frequency with shuffling is fixed to 31KHz. The IC has built-in green mode control for light and zero loadings, which can achieve less than 50mW standby power.

KP3110 integrates functions and protections of Under Voltage Lockout (UVLO), Cycle-by-cycle Current Limiting (OCP), On-chip Thermal Shutdown (OTP), Over Load Protection (OLP) Short Load Protection (SLP), etc.

Buck Converter



Buck/Boost Converter

