

YX8265 Four Switch Buck-Boost LED Driver EVM Demo Manual

1 Description and Features

This EVM is built to evaluate the performance of YX8265, which is a buck-boost LED driver controller. It has wide input and output range, compatible to drive GaN or Si FET and able to step-up or step-down the input voltage depending on the number of LEDs connected at output. This is extremely suitable for wide input voltage range system such as battery powered system and complicate LED control required systems. The main features of YX8265 can be concluded as bellow and can be evaluated on the demo board:

- Wide V_{IN} : 2.7V to 65V, Wide V_{OUT} : 2V to 65V
- PWM Dimming Control
- Analog Dimming Control
- Programmable soft start time
- Programmable input and output current limits
- Hiccup, keep running and latch off protection mode
- 5V Driver supply voltage for Si FET or GaN FET
- Frequency Spread Spectrum(FSS) for Lower EMI
- External Clock Synchronization

2 Board Specifications

Table 1 Board specification

Parameter	Value	Unite
Input Voltage	5 to 50	V
Output Voltage	12	V
Maximum Output Current	1	A
Default Switching frequency	400	kHz
Board Size	85X60	mm

3 Test Setup

