

YX8065 Two Switch Buck LED Driver EVM Demo Manual

1 Description and Features

This EVM is built to evaluate the performance of YX8065, which is a buck LED driver controller. It has wide input and output range, compatible to drive GaN or Si FET and able to step-down the input voltage to power a number of LEDs connected at output.

It is extremely suitable for wide input voltage range system such as battery powered system and complicate LED control required systems. The main features of YX8065 can be concluded as bellow and can be evaluated on the demo board:

- Wide V_{IN} : 2.5V 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 for LED open or short fault
- 5V Driver supply voltage for Si FET or GaN FET
- Frequency Spread Spectrum(FSS) for Lower EMI

2 Board Specifications

Table 1 Board specification

Parameter	Value	Unit
Input Voltage	14 to 65	V
Output Voltage	12	V
Maximum Output Current	1	A
Default Switching frequency	400	kHz
Board Size	75X60	mm

3 Test Setup

