YX2065 Two Switch Buck DC-DC EVM Demo Manual

1 Description and Features

This EVM is built to evaluate the performance of YX2065, which is a buck DC-DC controller. The default evaluation output is 12V and the maximum output current is 10A. It has wide input voltage range with the recommended voltage from 14V to 65V. This controller is suitable for wide input voltage range system such as 48V/36V/24V battery powered systems. The output can be also flexibly controlled to any voltage between 2V to 60V by changing the feedback resistor network. The main features of YX2065 is listed in bellow and can be evaluated on the demo board:

- Wide V_{IN}: 14V to 65V, Wide V_{OUT}: 2V to 60V
- Programmable soft start time
- Programmable input and output current limits
- Frequency Spread Spectrum (FSS)
- Optional External Clock Synchronization

2 Board Specifications

Table 1 Board specification

Parameter	Value	Unite
Input Voltage	14 to 65	V
Output Voltage	12	V
Maximum Output Current	10	A
Default Switching frequency	400	kHz
Board Size	75X60	mm

3 Test Setup and Procedure

3.1 Test Setup

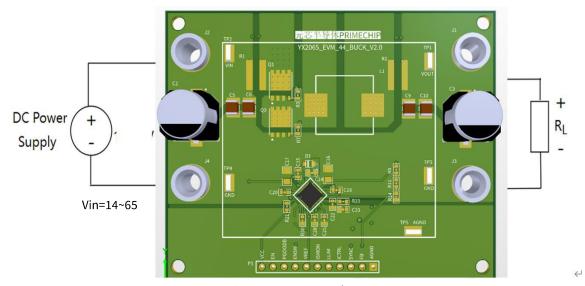


Figure 1. Demo Board Test Setup