

## YX2165 Two Switch Boost DC-DC EVM Demo Manual

### 1 Description and Features

This EVM is built to evaluate the performance of YX2165, which is a boost DC-DC controller. The default evaluation output is 48V and the maximum output current is 5A. It has wide input voltage range with the recommended voltage from 3.5V to 65V. This controller is extremely suitable for wide input voltage range system such as 24V/12V/5V battery powered systems. The output can be also flexibly controlled to any voltage between 5V to 65V by changing the feedback resistor network. The main features of YX2165 is listed in bellow and can be evaluated on the demo board:

- Wide  $V_{IN}$ :3.5V to 65V, Wide  $V_{OUT}$ : up to 65V
- 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	5 to 36	V
Output Voltage	48	V
Maximum Output Current	5	A
Maximum Input Current	10	A
Default Switching frequency	400	kHz
Board Size	75 x 60	mm

### 3 Test Setup and Procedure

#### 3.1 Test Setup

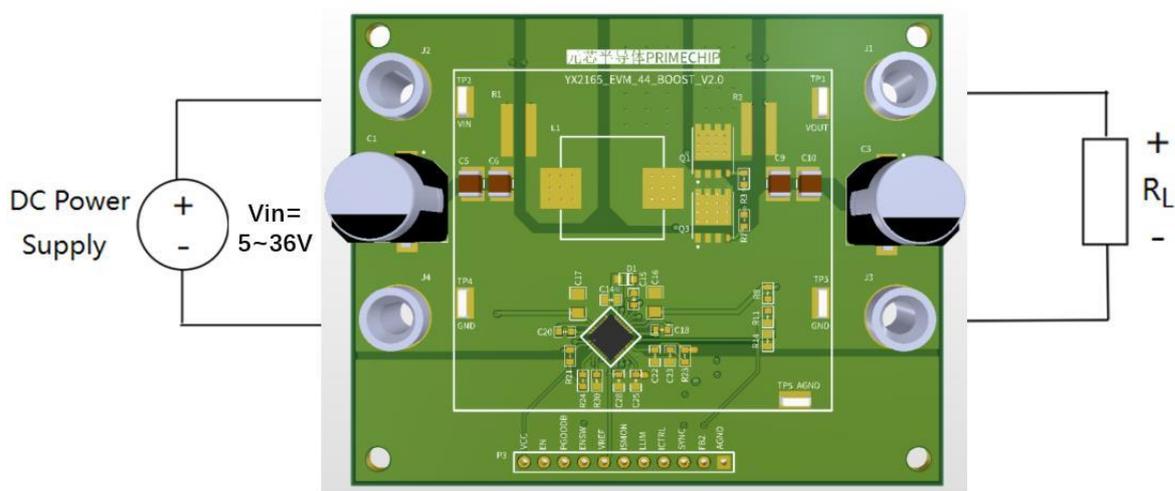


Figure 1. Demo Board Test Setup