YX4705 Half Bridge EVM Demo Manual

1 Description and Features

This EVM is built to evaluate the performance of YX4705. The default evaluation input 48V,PWM 25%,output is 12V and the maximum output current is 10A. The YX4705 is a high performance half bridge gate driver. It integrates up to 100V gate drivers and bootstrap diode. The YX4705 can deliver high peak current up to 4A source and 8A sink into capacitive load. The YX4705 features under voltage lockout (UVLO) and over temperature protection (OTP) help ensure the device operates safely and reliably. The main features of YX4705 is listed in bellow and can be evaluated on the demo board:

- Up to 100V input voltage range
- 4A/8A peak source and sink current
- Extremely short propagation delay (10ns typical) and delay matching (1.5ns typical)
- Excellent noise rejection, switching node slew rate >50V/ns
- Integrated bootstrap switch

2 Board Specifications

Table 1 Board specification

Parameter	Value	Unite
Input Voltage	48	V
Output Voltage	12	V
Maximum Output Current	10	A
Default Switching frequency	100~1000	kHz
Board Size	73X65	mm

3 Test Setup

