# YX4725 Half Bridge EVM Demo Manual

# **1** Description and Features

This EVM is built to evaluate the performance of YX4725. The default evaluation input 48V,PWM25%,output is 12V and the maximum output current is 10A. The YX4725 is a high performance half bridge gate driver. It integrates up to 100V gate drivers and bootstrap diode and supports tri-sate PWM input. The YX4725 features output current and temperature sensing and reporting to controller. Built in under voltage lockout (UVLO), over temperature protection (OTP), high side MOSFET short protection (HSS) and over current protection (OCP) help to ensure the device operates safely and reliably.

- Up to 100V input voltage range
- 4A/8A peak source and sink current
- Programmable over current threshold and dead time
- Excellent noise rejection, switching node slew rate >50V/ns
- Enable control for low standby power

### 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

