KTX9312

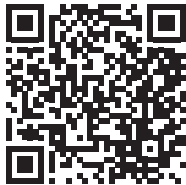## 3-phase BLDC Motor Controller for 3-wire with Built-in Gate Drivers

EVAL Kit Physical Contents

Item #	Description	Quantity
1	KTX9312 EVAL Kit fully assembled PCB	1
2	Arduino Nano	1
3	USB 2.0 Type A to Mini B cable	1
4	2 Position Terminal Block Plug, Female Sockets (5.08mm) 180° Free Hanging	1
5	3 Position Terminal Block Plug, Female Sockets (5.08mm) 180° Free Hanging	1
6	Anti-static bag	1
7	KTX9312 EVAL Kit Quick Start Guide -- printed 1-page (A4 or US Letter)	1
8	EVAL Kit box	1

QR Links for Documents

IC Landing Page	EVAL Kit Landing Page
https://www.kinet-ic.com/ktx9312	https://www.kinet-ic.com/ktx9312guan-mmev01

User-Supplied Equipment

1. Oscilloscope (20~50A current probe), used to measure phase current, driving PWM signals and FG signal.
2. Tachometer, used to measure the spinning speed of motor.
3. Motor with relative load.
4. DC power supply (40V/30A).

Quick Start Procedures

1. Connect the power supply to the KTX9312 evaluation board connector J1.
2. Connect the motor wires to J7.
3. Connect the KTX9312 evaluation board to a computer via the USB type-C cable and Arduino Nano which is mounted at the back of the evaluation board.
4. Install GUI software.
5. Turn on the power supply to power-up the board. LED1 is lighted on, indicating that the board is powered up.
6. Launch the GUI software, connect it to the evaluation board.
7. Load parameters configured excel file or configure the registers for matching the motor/application accordingly.
8. Select "Run" or "Stop" to run/stop the motor.

Graphical User Interface (GUI)

1. Download and install GUI software located on EVAL Kit Page.
   a. https://www.kinet-ic.com/ktx9312guan-mmev01
2. After installing software, select the available serial port of computer and connect it with KTX9312 evaluation board. The message of "connected to COM x" will appear in the status box.
3. If a communication failure occurs, please check to ensure that both the power supply and serial port connection are normal.