

IEEE 802.3at PoE PD with Integrated DC-DC Controller

EVAL Kit Physical Contents

Item #	Description	Quantity
1	KTA1137A EVAL fully assembled PCB	1
2	Anti-static bag	1
3	KTA1137A EVAL Kit Quick Start Guide -- printed 1-page (A4 or US Letter)	1
4	EVAL Kit box	1

QR Links for Documents

IC Landing Page	EVAL Kit Landing Page
 https://www.kinet-ic.com/kta1137a/	 https://www.kinet-ic.com/kta1137aeuab-mmev02/

Note: The full EVAL Kit Manual is available for download on the EVAL Kit Landing Page.

User-Supplied Equipment

1. Power Sourcing Equipment (PSE) or Bench Power Supply for VIN = 37V-57V and 1A as needed for the intended application.
2. Digital Multimeter – used to measure input/output voltages and currents.
3. Load – either power resistors, an E-Load, or an actual system load.

Quick Start Procedures

The output voltage of this board is set to 12V. There are two methods to start KTA1137AEUAB-MMEV02:

Method 1: Connect to PSE

1. Connect a voltage meter to the output VOUT and AGND test pins, it should measure the output voltage.
2. Connect the load to the output VOUT and AGND test pins.
3. Connect the cable coming from the PSE into the Ethernet Jack J1. The board will automatically startup.

Method 2: Connect to Power Supply

1. Connect one pair of power cables to the connector of EVAL Kit at VADP (TP1) and PGND (TP2).
2. Before connecting the EVAL Kit to the bench power supply, turn on the supply and adjust the voltage as close to 0V as possible. Then turn off the supply. While off, connect the power cables ends to the bench supply.
3. Connect a voltage meter to the output VOUT and AGND test pins, it should measure the output voltage.
4. Connect the load to the output VOUT and AGND test pins.
5. Turn on the VIN bench supply and very slowly ramp its voltage to an appropriate voltage, such as 48V. While ramping VIN slowly, use the bench supply's output current indication (or a digital multimeter) to monitor the VIN current. If the current becomes high, reduce the VIN voltage quickly to prevent damage. Then inspect the setup for any wiring errors.