
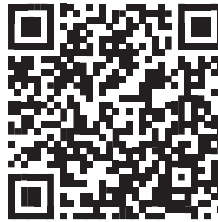


### 5A eFuse with Current Limit Control and Reverse Blocking FET Control

## EVAL Kit Physical Contents KTS1630AEVAD-MMEV01

Item #	Description	Quantity
1	KTS1630 EVAL fully assembled PCB	1
2	Anti-static bag	1
3	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
 <a href="https://www.kinet-ic.com/kts1630/">https://www.kinet-ic.com/kts1630/</a>	 <a href="https://www.kinet-ic.com/kts1630aevad-mmev01/">https://www.kinet-ic.com/kts1630aevad-mmev01/</a>

## User-Supplied Equipment

### Required Equipment

1. Bench Power Supply for VIN – 5V to 18V and 3A/5A, as needed for the intended application.
2. Digital Multimeter – one or more, used to measure input/output voltages and currents.

### Optional Equipment

1. Bench Power Supply for VIO – 1.5V to 5V, low current. Needed to enable the part (EN = H).
2. Oscilloscope – for dynamic testing of voltages (and currents with a current probe, if available).
3. Load – either an eLoad, power resistors, or an actual system load.
4. Additional Digital Multimeters

## Quick Start Procedures

1. Connect the VIO bench power supply between VIO testpoint and GND. Turn on VIO power supply to 3V.
2. Set Jumper to default: EN = H (e-Fuse switch enabled)
3. Connect one pair of Banana-to-clip power cables to the test points at VIN and GND (left side of EVAL Kit).
4. Before connecting the EVAL Kit to the VIN bench supply, turn on the supply and adjust the voltage as close to 0V as possible. Then turn off the supply. While off, connect the banana ends of the Banana-to-clip power cables to the VIN bench supply.
5. Turn on the VIN bench supply and very slowly ramp its voltage to an appropriate voltage, such as 5, 12V, 15V. 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.
6. With a valid VIN voltage for example 12V, use a digital multimeter to check the output voltage between the K\_U1\_OUT and GND terminals on the EVAL Kit. It should be nearly the same as the input voltage.
7. Use a digital multimeter to check the no-load supply current at VIN. Consult the KTS1630 datasheet for the expected current range at the VIN voltage condition in use. For conditions of VIN = 12.0V, EN = H, and no-load, the VIN supply current should be close to 350µA.