

Low Resistance Load Switch with Current Limit Control and Over-Voltage Reverse Blocking Protection

EVAL Kit Physical Contents

Item #	Description	Quantity
1	KTS1688 EVAL fully assembled PCB	1
2	XT30-to-Banana power cables, red/black pair	2 pairs
3	Anti-static bag	1
4	Quick Start Guide, printed 1 page (A4 or US Letter)	1
5	EVAL Kit box	1

QR Links for Documents

IC Datasheet	EVAL Kit Landing Page
 https://www.kinet-ic.com/kts1688/	 https://www.kinet-ic.com/kts1688euh-mmev01/

User-Supplied Equipment

Required Equipment

1. Bench Power Supply for VIN – 5.0V (or 5.1V) from 1A up to 3A capable, as needed for the intended application.
2. Digital Multimeters – one or more, used to measure input/output voltages and currents.

Quick Start Procedures

1. Set Jumper to default: CTRL (P1) On/Off = H, ON to VIN to enable the device. ON to GND disables the device.
2. Connect one pair of XT30-to-Banana power cables to the XT30 connector at VIN and GND (right edge of EVAL Kit).
3. 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 or disable the supply output. While off, connect the banana ends of the XT30-to-Banana power cables to the VIN bench supply.
4. Turn on the VIN bench supply and very slowly ramp the output voltage to an appropriate level, such as 5.0V or 5.1V. 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.
5. With valid VIN voltage, use a digital multimeter to check the output voltage between the KVOOUT and GND terminals on the EVAL Kit. It should be nearly the same as the input voltage. The active low OC_FLAG output should be equal to VIN or a logic high level.
6. Use a digital multimeter to check the no-load supply current to VIN. Consult the KTS1688 datasheet for the expected current range at the VIN voltage condition in use. For conditions of VIN = 5.0V, CTRL (P1) = H, and no-load, the input supply current should be close to 120μA.