EVAL Kit Quick Start Guide
KTB1095

Synchronous Flyback Controller with Integrated Feedback & Digital Isolator

EVAL Kit Physical Contents KTB1095EYAA-MMEV01

Item #	Description	Included
1	KTB1095 Evaluation board fully assembled PCB	1
2	Anti-static bag	1
3	KTB1095 Quick Start Guide, printed 1 page (A4 or US Letter)	1
4	EVAL Kit box	1

Links for Documents

IC Datasheet	EVAL Kit Landing Page
https://www.kinet-ic.com/ktb1095/	https://www.kinet-ic.com/ktb1095eyaa-mmev01/

User-Supplied Equipment

Required Equipment

1. Power Sourcing Equipment Such a supply should provide 36V-75V up to 3A as needed for the intended application.
2. Digital Multimeters, two required – used to measure input/output voltages and currents.
3. Load – any of the following may be used:
   a. Electronic load capable of sinking 12V at 5A (60W).
   b. Power Resistor – 2.4Ω /60W or greater value is required.
   c. Actual system load that does not exceed 60W at 12V.
4. Test leads:
   a. One pair of banana-to-clip tests connect a voltmeter to the eval board VIN.
   b. Two pairs of banana-jack test leads connect VOUT/SGND to an electronic load and voltmeter.

Quick Start Procedures

The output voltage of this board is set to 12V by the Kinetic Technologies KTB1095 controller. Below is the method to power KTB1095 evaluation board:

Method: Connect to VIN Power Supply

1. Connect one pair of power cables to the Test pins (VIN and PGND) of EVAL Kit.
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 disable the power supply output or turn the supply off. While disabled or off, connect the VIN / PGND power cables' ends to the bench supply.
3. Connect a voltage meter to the VOUT and SGND output jacks.
4. Connect the load to the output VOUT and SGND output jacks.
5. Turn on the VIN bench supply and very slowly ramp its voltage to an appropriate voltage, such as 48V (36V ~ 75V). 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. Verify 12 Volts on the VOUT / SGND output jacks.