High Efficiency 8-CH LED Backlight Driver with Dual LCD Bias Power

EVAL Kit Physical Contents

Item #	Description	Quantity
1	KTZ8868 Evaluation board fully assembled PCB	1
2	Kinetic I2C adapter module	1
3	Adapter 3-pin + 2-pin Cables	1
4	Anti-static bag	1
5	KTZ8868 Quick Start Guide, printed 1 page (A4 or US Letter)	1

QR Links for Documents

IC Datasheet	EVAL Kit Landing Page
 https://www.kinet-ic.com/ktz8868	 https://www.kinet-ic.com/ktz8868euad-mmev01

User-Supplied Equipment

Required Equipment

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

Quick Start Procedures

- Configure Kinetic I2C adapter output voltage jumper to 3.3V.
- Connect 5 Kinetic I2C adapter wires to evaluation board connector P1 (VDD_IO, HWEN, SDA, SCL, GND).
- Connect the other end of I2C adapter module to USB port on the computer.
- Connect one pair of banana-to-clip power cables to EVB test points at VIN and GND.
- Before connecting EVB to VIN bench supply, turn on supply and adjust voltage as close to 0V as possible. Turn off supply. While off, connect banana ends of Banana-to-clip power cables to VIN bench supply.
- Turn on VIN bench supply and ramp its voltage to 3.6V. While ramping VIN slowly, use bench supply's output current indication to monitor the VIN current. If the current becomes high, reduce VIN voltage quickly to prevent damage. Inspect the setup for any wiring errors. Once VIN voltage settles to 3.6V, supply current should only be around a few µA since the KTZ8868 and KTC2115 devices are in shutdown mode.

Graphical User Interface (GUI)

The program software must be installed on a computer to communicate and program the KTZ8868 device. Install and run the KTZ8868 GUI executable file software on the computer as follows.

- Download and install GUI software located on EVAL Kit Page (https://www.kinet-ic.com/ ktz8868euad-mmev01).
- Run GUI software "KTZ8868 Control Panel Rev 1.4" program on the computer. Verify that the USB-to-I2C adapter module has been detected in the lower left corner of the GUI.
- GUI interface will appear with the status message "USB Device Attached" at the bottom left side of the window.
- If the displayed message is "USB Device Detached", make sure the computer is properly connected to the board.