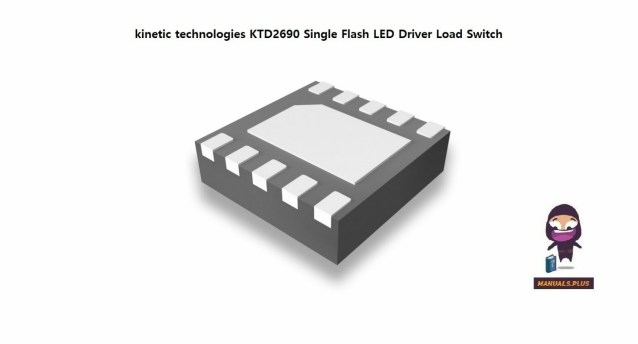

kinetic technologies KTD2690 Single Flash LED Driver Load Switch User Guide

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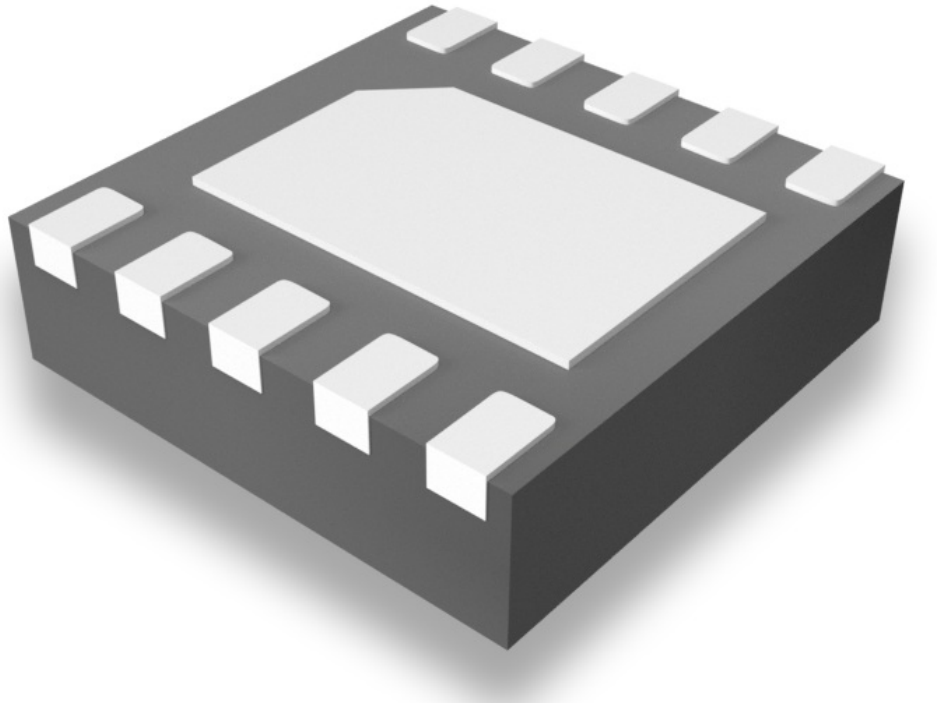

Product Information

Specifications

- **Product Name:** KTD2690 Single Flash LED Driver
- **Features:** Programmable 1.5A Current Source

Product Usage Instructions

Quick Start Procedures:

1. Ensure all components are included in the package.
2. Refer to the printed Quick Start Guide for step-by-step setup instructions.
3. Connect the MCP2221A Board to your computer using the USB cable provided.
4. Follow the instructions on the GUI for programming the LED driver.

Graphical User Interface (GUI):
The GUI allows you to program the LED driver with customizable settings such as current output, flash patterns, and timing.

FAQs

- **Q: Where can I find the IC Datasheet?**
  A: The IC Datasheet can be accessed through the following link: **IC DatasheetLink**
- **Q: What user-supplied equipment is required for operation?**
  A: User-supplied equipment such as a computer with a USB port is required for connecting the MCP2221A Board and programming the LED driver.

Physical Contents

Item #	Description	Quantity
1	KTD2690 EVAL Kit fully assembled PCB	1
2	MCP2221A Board – General Purpose USB to GPIO ADC I2C – Stemma QT / Q wiic	1
3	Stemma QT / Qwiic JST SH 4-pin Cable – 100mm Long	1
4	Anti-static bag	1
5	KTD2690 EVAL Kit Quick Start Guide — printed 1-page (A4 or US Letter)	1
6	EVAL Kit box	1

QR Links for Documents

IC Datasheet	EVAL Kit Landing Page
https://www.kinet-ic.com/ktd2690/	https://www.kinet-ic.com/ktd2690evab-mmev01/

User-Supplied Equipment

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

Quick Start Procedures

- Connect one pair of Banana-to-clip power cables to the test points at VIN and GND (left side of EVAL Kit).
- 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.
- Turn on the VIN bench supply and very slowly ramp its voltage to an appropriate voltage of 3.6V. 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.
- Use a digital multimeter to check the Standby supply current at VIN. For conditions of VIN = 3.6V in Standby mode, it should be below 2 A.
- Connect the Stemma QT 4-wire cable (GND, SDA, SCL) to the KTD2690 evaluation board connector CN3.
- Connect the other end of the Stemma QT 4-wire cable to the MCP2221A USB to the I2C interface board.
- Connect the MCP2221A board to a computer via the USB type-C cable.
- Connect the MCP2221A board output G0 to the KTD2690 board STROBE test point via the wire (STROBE) cable.

- Install GUI software.

Graphical User Interface (GUI)

- Download and install GUI software located on EVAL Kit Page (**https://www.kinet-ic.com/ktd2690evab-mmev01/**)
- After installing software, the 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.

Documents / Resources

	**kinetic technologies KTD2690 Single Flash LED Driver Load Switch** [pdf] User Guide KTD2690 Single Flash LED Driver Load Switch, KTD2690, Single Flash LED Driver Load Switch, Flash LED Driver Load Switch, LED Driver Load Switch, Driver Load Switch

References

- **Kinetic Technologies - Analog & Mixed-Signal Semiconductors**
- **KTD2690 Single Flash LED Driver with Programmable 1.5A Current Source**
- **User Manual**