Contact sales@powerx-ic.com for Full Datasheet

POWER X
博尔芯半导体科技

PXL8060

High-Speed Laser Driver IC
80V, 60A

1 Features

- 1-ns typical minimum output pulse width
- V_{LASER} operating range up to 80V
- 60A peak current
- Switching frequency greater than 50 MHz
- 5-V nominal logic power supply
- 3.3-V/5-V logic compatible input control
- UVLO and over-temperature protection
- 3.3-ns delay time from input to output
- 3mm*2mm LGA Package

2 Applications

- Lidar
- LDS Laser Drivers
- Augmented Reality

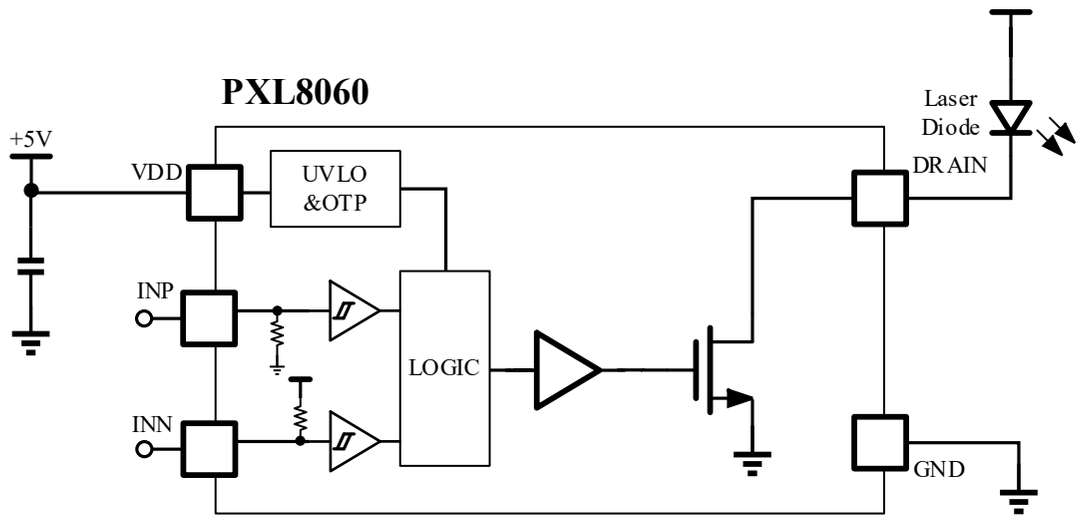
3 Description

The PXL8060 is a laser driver for high-speed & high-frequency applications. The very fast switching frequency combined with the ultra-narrow pulse width significantly enhance the Lidar performance. The minimum 1-ns output pulse width makes higher power/current allowable in these applications to improve mapping range and resolution. The extremely small propagation delay of 3.3-ns significantly improves the control loop response time.

The driver features undervoltage lockout (UVLO) and over-temperature protection (OTP) to ensure the device is not damaged in overload or fault conditions.

PXL8060 is available in 3mm*2mm LGA package to meet the size and gate loop inductance requirements for high-speed switching applications.

Typical (Simplified) System Diagram



Simplified Lidar Driver Stage Diagram