

1 Features

- 500-ps typical minimum output pulse width
- V_{LASER} operating range up to 30V
- 18A 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
- 3.0*3.0mm LGA Package

2 Applications

- Facial Recognition
- LDS Laser Drivers
- Augmented Reality

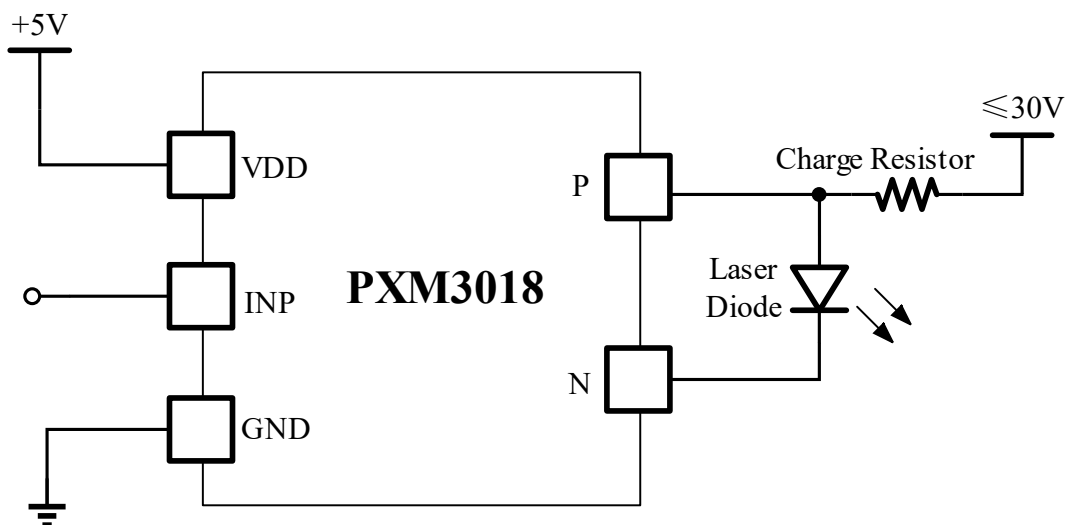
3 Description

The PXM3018 is a laser driver for high-speed and high-frequency applications. The very fast switching frequency combined with the ultra-narrow pulse width significantly enhance the LDS performance. The minimum 500-ps 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.

PXM3018 is available in 3.0mm*3.0mm LGA package to meet the size and gate loop inductance requirements for high-speed switching applications.

Typical (Simplified) System Diagram and Testing Waveform



Simplified LDS Driver Stage Diagram