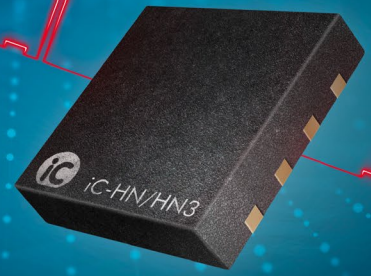


# iC-HN/HN3

## Short Pulse 1.4/2.8A Laser Driver



### Description

Laser switch iC-HN enables spike-free switching of laser diodes with well-defined current pulses.

The pulse width is adjustable down to 2 ns. The diode current is determined by the voltage at pin CI. The switch is controlled via LVDS inputs.

The output channel can be operated up to 1.4/2.8 A pulsed current depending on the frequency, duty cycle, and heat dissipation.

With a laser supply voltage of up to 30 V, the iC-HN covers a wide range of laser sources and enables the connection of multiple lasers in series.

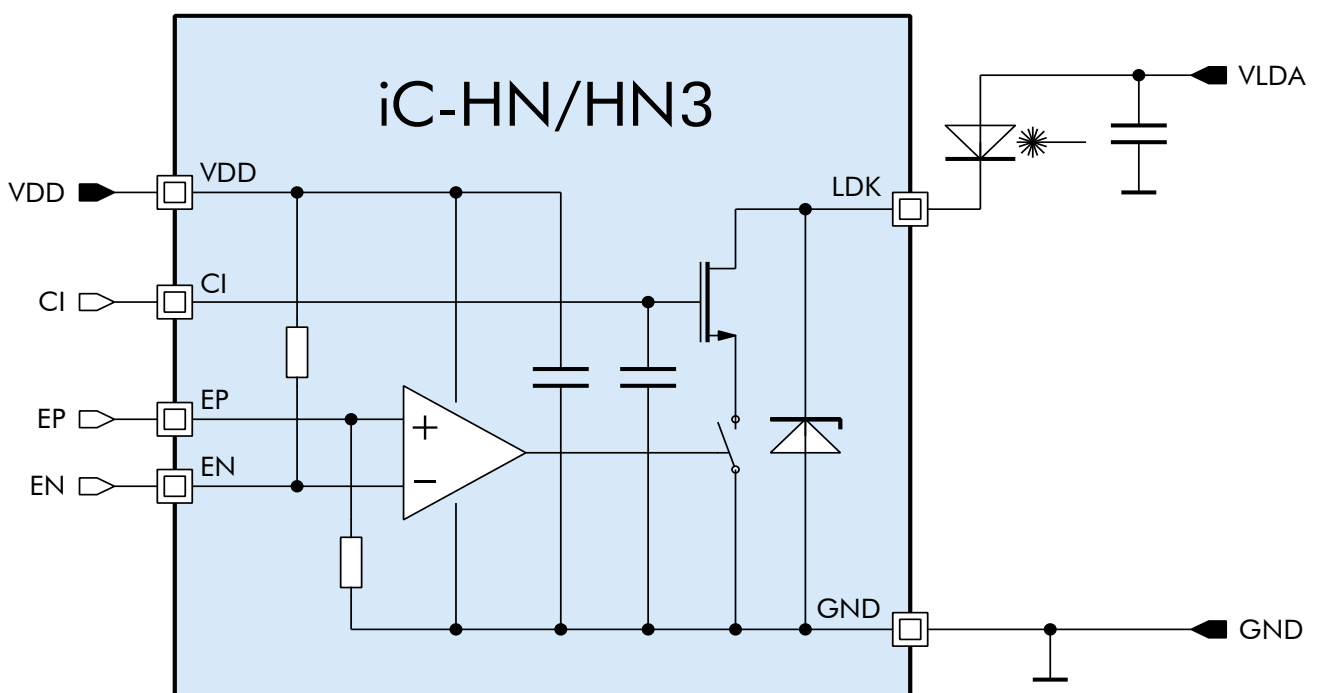
### Features

- Pulsed operation with up to 1.4/2.8 A
- Spike-free switching of the laser current
- Operates as switched, voltage-controlled current sink
- Up to 30 V laser supply voltage
- LVDS switching input

### Applications

- TOF Range Finders
- LIDAR
- 3D scanning
- Gesture recognition
- IR security illumination

### Block Diagram



# iC-HN/HN3

## Short Pulse 1.4/2.8A Laser Driver

### Key Specifications

#### General

Permissible Supply Voltage	3.0 to 5.5 V
Laser Current	up to 1.4/2.8 A

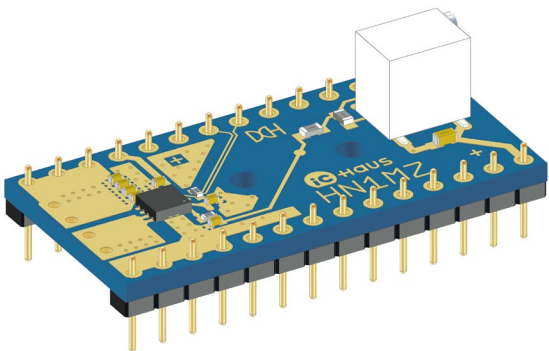
#### Laser Driver

Permissible Voltage at LDKx	-0.2 to 30.5 V
Permissible Pulse Current in LDKx	1.4/2.8 A max.
Laser Current Rise/Fall Time	1 ns max.
Laser pulse width	2 ns min.
Propagation Delay	5 ns
Laser Supply voltage	30 V max.

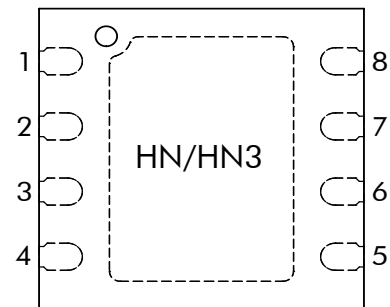
### Pin Functions

No.	Name	Function
1	CI	Current control voltage
2	VDD	Supply voltage
3	EP	Positive LVDS switch input
4	EN	Negative LVDS switch input
5	GND	Ground
6	GND	Ground
7	LDK	Laser diode cathode
8	LDK	Laser diode cathode

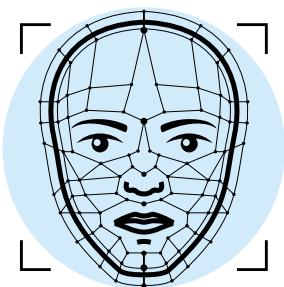
### High Speed Module



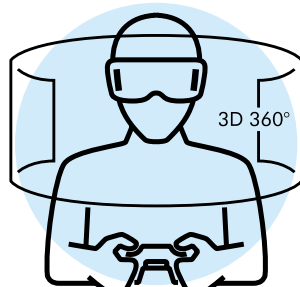
### Pin Configuration DFN8 3x3



### Application Examples



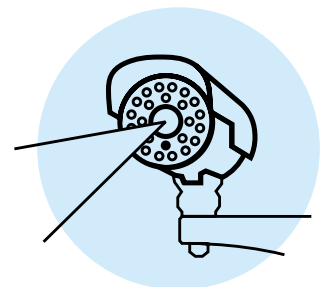
Identification



Augmented Reality



Lidar



Security

