# IO-Link actuator for industrial tower light based on L6364Q and IPS4260L



## Features

- IO-Link Class-A interface based on the L6364Q dual channel IO-Link device transceiver
- IO-Link mini-stack running on the STM32G071CBT6
- 4 low-side output channels based on the IPS4260L (intelligent low-side power switch)
- Supply current for external load 1A/Ch (max. total current 2 A)
- 4 buttons used as digital input channel
- Operating voltage from 18 V to 30 V DC
- TVS protects the device from surge based on the SMBJ30CA
- M12 4-pin connector to satisfy the IO-Link spec and industrial needs.

## Applications

- Factory automation

## Description

The EVLIOL4LSV1 is an IO-Link actuator for traditional tower lights used in factory automation and system alarm indicator applications: it is a turnkey solution that can be used as a reference design ready for industrialization.

With IO-Link, the EVLIOL4LSV1 becomes an actuator for smart tower lights. It can also be used as a funnel material indicator for material quantity or urgency level.

The EVLIOL4LSV1 is designed with the L6364 as the IO-Link device transceiver, the low power STM32G071CB MCU, and the IPS4260L as the low-side driver for industrial loads. A dedicated SWD 5-pin connector is used for MCU programming.

With the use of an IPS4260L quad low-side switch, the solution can drive an external low-side load, such as a tower light, valve, or pump. It can diagnose whether the LED is working or not using the open load detect function of the IPS4260L.

This EVLIOL4LSV1 works with an IO-Link master board and control tool GUI software with the correspondent IODD file.

| Product summary | |
|---|---|
| IO-Link actuator for industrial load based on L6364Q and IPS4260L | EVLIOL4LSV1 |
| Mainstream Arm Cortex®-M0+ MCU with 128 Kbytes of flash memory | STM32G071CB |
| Dual channel transceiver IC for SIO and IO-Link sensor applications in QFN package | L6364 |
| Quad low-side intelligent power switch | IPS4260L |
| 600 W, 30 V TVS in SMB | SMBJ30CA |

**DB5300 - Rev 2 - September 2024**
For further information contact your local STMicroelectronics sales office.

www.st.com

# 1 Specifications

Board specifications are provided in the following table.

Table 1. EVLIOL4LSV1 - specifications

| Parameter | | Value |
|---|---|---|
| Supply voltage | Nominal | 24V DC |
| | Full operating range | 18V ~ 30V DC |
| Maximum current | DC[1] | 2A |
| Transmission rate | IO-Link | COM3 (230.4kbps) |

1. *Actual maximum current could be limited by power dissipation.*

# Revision history

**Table 2.** Document revision history

| Date | Version | Changes |
|---|---|---|
| 03-Sep-2024 | 1 | Initial release. |
| 09-Sep-2024 | 2 | Added links in Section Product status link / summary. |

# Contents

**IMPORTANT NOTICE – READ CAREFULLY**