EVLIOL4LSV1

Data brief

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

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

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.

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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.*

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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.

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