

IO-LINK Actuator Tower Light

Description

This is an IO-LINK Actuator Tower Light to demonstrate how to trigger and configure the actuator tower light through the standard IO-LINK interface. The individual LEDs can be switched individually via digital inputs parameters set by IO-LINK master. In the reference design, the L6364Q IO-LINK PHY works as a device to enable direct access to process and diagnose data, then MCU controls four channels' status of the low side power switch IPS4260L via IOs.

Advantages: Flexible and easy-to- control RGB LED tower light by IO-LINK interface; Reduce software effort; Shorten time to market

Features

- M12 standard industrial connector
- Actuator tower light control through IO-LINK interface
- Different modes configurable via IO-Link
- IO-Link version 1.1/1.0 physical layer compliance
- Configurable current limitation threshold of CQ and DIO lines, or CQ//DIO line (Join Mode)
- Quartz-free IO-Link clock extraction and timing generation at COM2 (38.4k Baud) and COM3 (230.4k Baud)



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Core Chip

- **ST** – Quad Low-side Intelligent power switch: IPS4260L; IO-LINK Dual channel transceiver IC: L6364Q, ARM Cortex -M0+ 32-bit MCU: STM32G071; 8Kbit serial EEPROM: M24C08, 1500W TVS: SMB15F24A, High-speed CMOS Analog multiplexer: STG3157
- **Murata** – MEMS Resonator 32.768kHz: WMRAG32K76CS1C00R0; Ceramic Resonator 8MHz: CSTNE8M00G520000R0
- **Amphenol ICC** – M12 Circular 4 POS ST Thru hole 4 terminal 1 port: M12A-04PMMP-SF8001; BergStik board-to-board connector: 77311-1180xLF

Applications

- Actuator Tower Light control
- Factory Automation and Control
- Building Automation

Block Diagram

