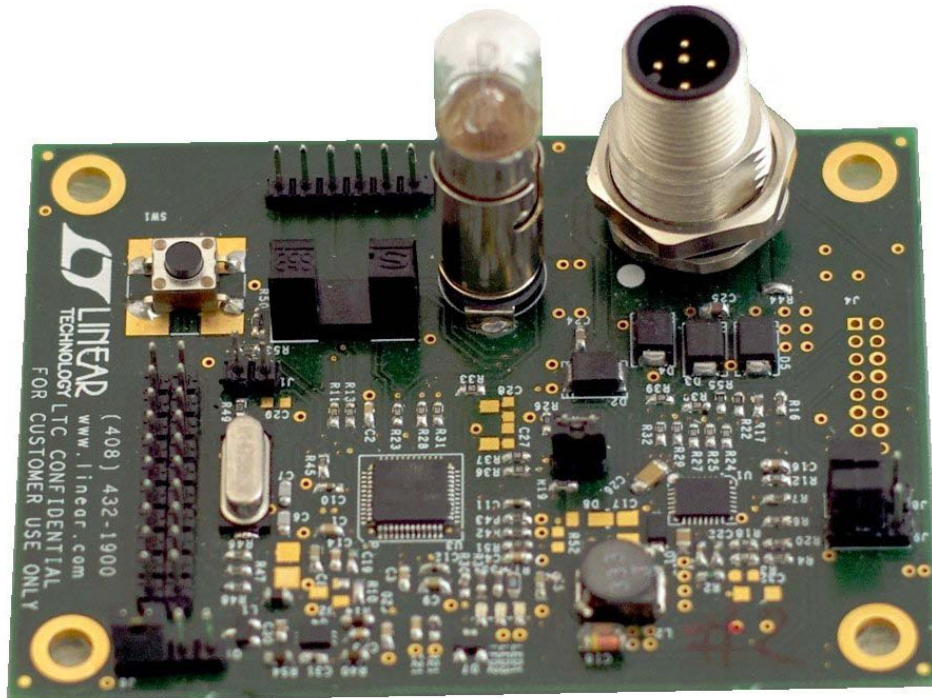


## IO-Link Device Evaluation Board LT3669



### Overview

Current sensors and actuators are equipped with small but powerful microprocessors that introduce advanced features like parameterization and diagnostics to these devices. However, those features are currently not visible to standardized project planning tools.

**IO-Link™**, the new bi-directional, digital, point-to-point communication standard (**IEC 61131-9**) now offers a standardized mapping of advanced sensor and actuator features into the automation tool environment.

The following evaluation board demonstrates the new LT3669 device PHY with DC-DC and LDO to power an ARM-based microcontroller.

### Specifications

- IO-Link compliant PHY (COM1/COM2/COM3)
- $\pm 60V$  line protection
- Operates from 7.5V to 36V (using TVS SM6T39A)
- Adaptive Line Driver Pulsing Scheme to Switch Heavy loads Safely
- Low Residual Voltages (<2V @ 250mA)

### Features

- Two sensors implemented on this evaluation board:
  - A high precision temperature sensor based on the LTC2997.
  - A light barrier that demonstrates switching applications.
- A 28V/100mA light bulb is on board. Powered via the second driver output of the LT3669, it demonstrates the ability of the LT3669's ability to operate even with low impedance loads. (Light bulbs have a very small internal resistance when starting up. The nominal resistance is not reached before the light bulb reaches its full brightness.)
- The board uses the IO-Link device stack from TEConcept.