



## **IO-Link Transceiver Includes Integrated Step-Down Regulator & LDO**

MILPITAS, CA – June 30, 2014 – The [LT3669](#) is an IO-Link PHY compatible (COM1/COM2/COM3) industrial transceiver that includes a high efficiency step-down regulator and a low dropout linear regulator. The device offers cable interface protection to  $\pm 60\text{V}$ . Wake-up detect functionality as well as a programmable power-on reset timer are included for system reliability. The LT3669/-2 operates from a 7.5V to 40V input voltage range, making it ideal for industrial sensor applications. The LT3669's internal switching regulator can deliver up to 100mA of load current, whereas the LT3669-2 delivers up to 300mA. Both versions can deliver high efficiency at output voltages from 0.8V to 16V. The integrated LDO, powered from the switcher output, provides an additional output to offer additional design flexibility while maintaining high efficiency. Both versions feature constant frequency/synchronizable operation with programmable switching frequencies between 250kHz and 2.2MHz. This enables the use of tiny externals, which combined with the 4mm x 5mm QFN-28, offer a highly compact solution footprint for industrial IO-Link sensor applications.


The LT3669/-2 feature rugged line drivers with adjustable slew rates and current limit which are externally adjustable to optimize EMC performance. The line drivers can source/sink up to 250mA of current each or 500mA when connected together, with a minimal residual voltage of less than 2.1V. An adaptive line driver pulsing scheme safely switches heavy loads. The drivers are easily configurable as push-pull, pull-up or pull-down to maximize system flexibility. Other features include current limit detection and thermal shutdown. The LT3669EUFD and LT3669EUFD-2 are both available from stock in a 28-Pin thermally enhanced 4mm x 5mm QFN package. 1,000 piece pricing starts at \$3.55 each. Industrial grade versions, the LT3669IUFD and LT3669IUFD-2, are guaranteed to operate over the  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  operating junction temperature range and the high temperature grade versions, the LT3669HUFD and LT3669HUFD-2 are guaranteed to operate over the  $-40^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$ . All versions are available from stock. For more information, visit [www.linear.com/product/LT3669](http://www.linear.com/product/LT3669)

**Photo Caption:** IO-Link Transceiver with Integrated High Efficiency Step-Down Regulator & LDO**Summary of Features: LT3669/-2**

- IO-Link PHY Compatible (COM1/COM2/COM3)
- Cable Interface Protected to  $\pm 60V$
- Operation from 7.5V to 40V
- Integrated Step-Down Switching Regulator
- Max Load Current: 100mA (LT3669)/ 300mA (LT3669-2)
- Synchronizable & Adjustable Switching Frequency: 250kHz to 2.2MHz
- Output Voltage: 0.8V to 16V
- Integrated 150mA LDO Linear Regulator
- Rugged Line Drivers with Adjustable Slew Rate & Current Limit
- Adaptive Line Driver Pulsing Scheme to Switch Heavy Loads Safely
- Drivers Configurable as Push-Pull, Pull-Up or Pull-Down
- Adjustable Power-On Reset Timer
- Small 28-Pin Thermally Enhanced 4mm  $\times$  5mm QFN Package

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