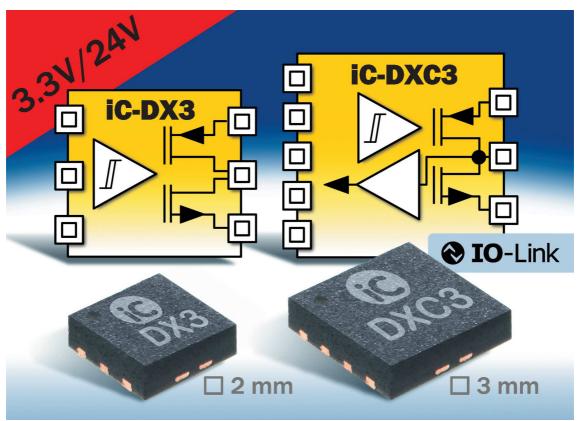
# **E**Haus

### iC-DX3 / iC-DXC3 – iC-Haus press release

# Universal, digital sensor output driver with 3.3V sensor supply Configurable NPN/PNP/PP/IO link driver stages for digital switching sensors

The universal digital output driver iC-DX3/DXC3 enables compact sensors to be equipped with NPN, PNP, push-pull, and IO link-compatible output driver options. From an input voltage of 8 to 30 V an integrated linear regulator provides the sensor electronics with a stable +3.3 V voltage and 10 mA loading. The iC-DX3 switching output supplies at least +/-150 mA of drive current; at 200 mA minimum drive current iC-DXC is also IO link-compliant, using the feedback channel with a polarity monitor for wake-up detection. The integrated temperature monitor protects both devices against overtemperature by disabling the output driver. An integrated reverse polarity protection circuit safeguards the sensor against incorrect wiring of the supply voltage.



Press photo of iC-DX3/iC-DXC3

Download text and photo at <a href="http://www.ichaus.com/pressroom/ichaus\_dx3\_dxc3\_pre.zip">http://www.ichaus.com/pressroom/ichaus\_dx3\_dxc3\_pre.zip</a>

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To drive inductive loads, a flyback circuit has been integrated into the device. iC-DX3/DXC3 are suitable for use as full interfaces with a sensor supply, particularly for small, digital switching sensors such as:

- Inductive or capacitive proximity switches
- Ultrasonic switching sensors
- One way and reflective light barriers
- Pressure sensors/switches
- Magnetic, capacitive, or optical end switches
- Gear wheel sensors.

The iC-DX3/DXC3 output stage can be controlled using inputs IN/NIN and OE to provide output functions as NPN, PNP, or push-pull driver. For sensors that are intended for IO link operation iC-DXC has an integrated feedback channel with a polarity monitor for wake-up detection. This flexibility enables the user to meet output configuration requirements on the worldwide sensor market (NPN, PNP, PP, and IO link) with little logistical effort and without having to invest further in development.

The small DFN6 housing for iC-DX3 (2 mm x 2 mm) and iC-DXC3's slightly larger DFN8 package (3 mm x 3 mm) allows sensors with tiny dimensions to be assembled. The operating temperature range covers -40  $^{\circ}$ C to +125  $^{\circ}$ C.

Further information is available at <a href="http://www.ichaus.com/sensor">http://www.ichaus.com/sensor</a>.

## iC-DX3 / iC-DXC3 – iC-Haus press release



#### **Introducing iC-Haus**

iC-Haus GmbH is a leading independent German manufacturer of standard iCs (ASSP) and customized ASiC semiconductor solutions. The company has been active in the design, production, and sales of application-specific iCs for industrial, automotive, and medical technology for over 25 years and is represented worldwide. The iC-Haus cell libraries in CMOS, bipolar, and BCD technologies are fully equipped to accomplish the design of sensor, laser/opto, and actuator iCs, among others.

The iCs are assembled in standard plastic packages or using iC-Haus chip-on-board technology to manufacture complete microsystems, multichip modules, and optoBGA<sup>TM</sup> or oQFN packages, the latter two in conjunction with sensors. Further information is available at http://www.ichaus.com/.

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