

## Press Release

### Open for open source: Rexroth drives integrate into Linux environment

Sustainable and economic automation with the Open Core Interface for Drives

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Open Core Interface for Drives makes drives fit for Industry 4.0: with application programs that run on a Linux-based system, directly access on the firmware of Rexroth IndraDrive servo drives.

**Open source software continues to gain significance in mechanical engineering, because developers can save costs and flexibly realize their own functions. With Open Core Interface for Drives, OEMs can now program individual application programs for the Rexroth IndraDrive servo drives in high-level IT languages, and can also store them on external devices with the Linux operating system.**

On top of the PLC-based application pursuant to IEC 61131-3, with Open Core Interface for Drives, Rexroth opens the firmware of IndraDrive drives for IT programming languages and operating systems. In addition to the previously supported operating systems Windows, iOS, Android, and Windows Phone, users can now also use the individual control programs on the Linux operating system. This lowers system costs and increases future-readiness, because with open source operating systems users are not dependent on the decisions of individual manufacturers that may discontinue products and cancel service.

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Linux is very transparent, stable, and flexibly expandable. Rexroth complements these advantages with Open Core Interface for Drives. For example, users simply program the desired start-up software in the usual Linux development environment Eclipse with C/C++ or Java, which can access the IndraDrive drives parallel to PLC. Communication between Linux PC and arbitrary drives takes place via standard Ethernet using the Sercos Internet protocol S/IP. In addition to using comfort functions (e.g. MoveRelative), the standardized reading and writing of device parameters is also possible.

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### **Simply download: Open Core Interface SDK**

In order to program their machines, users simply download the software development kit "Open Core Interface for Drives" from the Rexroth Engineering Network ([www.boschrexroth.com/network](http://www.boschrexroth.com/network)) and install it on their target system. Thus they can create drive, process, diagnostic, and operating functions in their usual development environment. On Engineering Network, developers across the globe discuss the implementation of special functions and find a comprehensive offer for information and support on automation with control units and drives by Rexroth.

Users are already utilizing the options of Open Core Interface for Drives for commissioning with Rapid Control Prototyping (e.g. with LabVIEW or Matlab), IT automation, and for the development of innovative operating options via smart phones and tablets. It also allows the automation of simple movements without external control hardware and PLC knowledge in FUP or ST.

IndraDrive servo drives consistently cover the output range from 100 W to 4 MW with the same intelligence and functionality and can be integrated via the Open Core Interface. The PLC variables of the drive-based Motion Logic System IndraMotion MLD for decentralized regulation of up to ten drives can also be used in the application software.

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*Economical, precise, safe, and energy efficient: drive and control technology from Bosch Rexroth moves machines and systems of any size. The company bundles global application experience in the market segments of Mobile Applications, Machinery Applications and Engineering, Factory Automation, and Renewable Energies to develop innovative components as well as tailored system solutions and services. Bosch Rexroth offers its customers hydraulics, electric drives and controls, gear technology, and linear motion and assembly technology all from one source. With locations in over 80 countries, the company generated sales of 5.6 billion euros in 2014, according to preliminary figures.*

*To learn more, please visit [www.boschrexroth.com](http://www.boschrexroth.com)*

*The Bosch Group is a leading global supplier of technology and services. The company employs roughly 360,000 associates worldwide (as per April 1, 2015), and generated sales of 48.9 billion euros in 2014, according to preliminary figures.\* Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. The Bosch Group comprises Robert Bosch GmbH and its roughly 440 subsidiary and regional companies in some 60 countries. Including its sales and service partners, Bosch is represented in roughly 150 countries. This worldwide development, manufacturing, and sales network is the foundation for further growth. In 2014, Bosch applied for some 4,600 patents worldwide. The Bosch Group's strategic objective is to create solutions for a connected life. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life."*

*Additional information is available online at [www.bosch.com](http://www.bosch.com), [www.bosch-press.com](http://www.bosch-press.com) and <http://twitter.com/BoschPresse>*

*\*The preliminary sales figure disclosed for 2014 does not include the former joint ventures BSH Bosch und Siemens Hausgeräte GmbH (now BSH Hausgeräte GmbH) and ZF Lenksysteme GmbH (now Robert Bosch Automotive Steering GmbH), which have since been taken over completely.*

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