

Analog Devices Unveils Robust, Low-Latency PHY Technology for New ADI ChronousTM Portfolio of Industrial Ethernet Solutions

Analog Devices, Inc. (ADI) announces the release of new robust, industrial Ethernet physical layer (PHY) products to help manufacturers address key Industry 4.0 and smart factory communication challenges surrounding data integration, synchronization, edge connectivity, and system interoperability. The ADIN1300 is a low-power, single port Ethernet transceiver with industry leading power and latency specifications primarily designed for time-critical industrial Ethernet applications up to Gigabit speeds. As industrial automation increases the adoption of Ethernet and pushes in the boundaries of data rates, the ADIN1300 is designed to operate reliably in harsh industrial conditions over extended ambient temperature ranges.

Analog Devices will showcase the ADIN1300 and other industrial Ethernet solutions at the Smart Productions Solutions (SPS) exhibition November 26 – 28, 2019 in Nuremberg, Germany. ADIN1300 is the latest technology developed for the **ADI Chronous**TM Ethernet portfolio, ADI's newly expanded portfolio of industrial Ethernet solutions. **ADI Chronous** Ethernet solutions – which include the ADIN1200, a low-power single port 10/100 robust Ethernet PHY for today's real time industrial Ethernet networks – encompass a range of advanced industrial Ethernet technologies from real-time Ethernet switches, PHY transceivers and protocol processing to complete network interface products.

Targeting such industrial Ethernet applications as motion control, factory automation, building automation, test and measurement, and industrial Internet of Things (IIoT), ADIN1300 offers the following features:

- 10BASE-Te/100BASE-TX/1000BASE-T IEEE[®] 802.3[™] compliant MII, RMII and RGMII MAC interfaces
- 330mW power consumption 1000BASE-T

- 290ns 1000BASE-T RGMII Latency (Rx + Tx)
- EMC Test Standards:
 - o IEC 61000-4-5 surge (±4 kV)
 - o IEC 61000-4-4 electrical fast transient (EFT) (±4 kV)
 - o IEC 61000-4-2 ESD (±6 kV contact discharge)
 - o IEC 61000-4-6 conducted immunity (10 V)
 - o EN55032 radiated emissions (Class A)
 - o EN55032 conducted emissions (Class A)
- Unmanaged configuration using multi-level pin strapping
- Start of Frame Detection for IEEE 1588 Time Stamp Support
- 40-lead, 6mm x 6mm LFCSP

"Within industrial environments, even one millisecond of communications timing being off can produce a negative, expensive impact on quality, throughput, and efficiency for manufacturers," said Brendan O'Dowd, General Manager of the Industrial Automation Business Unit for Analog Devices. "ADIN1300 ensures real time, robust industrial communications by targeting important challenges of deploying industrial Ethernet connectivity with low latency in a smaller package size to reduce industrial Ethernet network cycle times. We are also excited to unveil our updated suite of **ADI Chronous** Ethernet solutions to set new standards for industrial Ethernet speed, scalability, and range of multi-protocol support, all backed by ADI's commitment to long life cycle product availability and support."

ADI will be exhibiting ADIN1300 and other **ADI Chronous** Ethernet portfolio solutions at SPS November 26 – 28, 2019 in Nuremberg, Germany at the NurnbergMesse GmBH event centre (Booth #5.129).

For more information, visit:

- http://www.analog.com/ADIN1300
- http://www.analog.com/ADIN1200
- https://www.analog.com/en/education/education-library/videos/6093458457001.html
- http://www.analog.com/industrial-ethernet
- http://www.analog.com/industry4.0

About Analog Devices

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