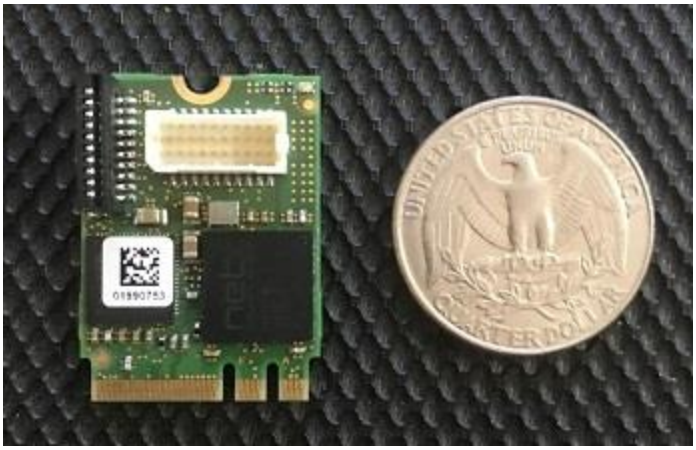
PRESS RELEASE: Add Real-time Networks to the Smallest PC-based Devices



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Add Real-time Networks to the Smallest PC-based Devices

New M.2 Format PCI Express Card Supports Fieldbuses and Real-Time Ethernets

LISLE, IL – Hilscher has launched something big—and in the world's smallest PC Card package. The new M.2 format PCI Express card adds real-time communications to PC-based systems. And it has never been easier. In just a few minutes, you can connect PC-based devices, such IPCs, HMIs and robotics, to Real-Time Ethernet and Fieldbus networks. The comprehensive package has all necessary hardware and software components, including protocol stacks, device drivers and network connectors. The M.2 card can be simply installed in new and existing devices to connect with industrial automation networks on the fly.

M.2 Format: Small Size, Huge Functionality

PCI Express M.2, briefly named M.2, is smaller than the Mini PCI Express format and was designed for very thin computing platforms like notebooks and tablets. Since its introduction, automation manufacturers of PC-based systems, such as Industrial PCs, vision systems, robotics, and human machine interfaces (HMIs), have integrated M.2 sockets into their devices for one simple reason. The tiny M.2 format allows many add-in functions to be included into their systems in very tight spaces. Now, with this Hilscher offering, M.2 cards can provide real-time automation network connectivity.

M.2 formats come in various widths, lengths, and socket keys. For this first M.2 card release, Hilscher is using the A+E key socket arrangement, as that is the PCI Express specification's generic form factor for connectivity add-ins, such as WiFi and Bluetooth. The M.2 2230 Key A+E card, with Hilscher product name CIFX M223090AE, is part of Hilscher's cifX family of PC Cards. cifX PC Cards are intended for easy integration of a network interface and fast time-to-market of the manufacturers' products and features.

Multiprotocol Support That's Future-Proof

At the heart of the M.2 2230 card is Hilscher's award-winning netX 90 multiprotocol communication chip. M.2 card users can choose among loadable firmware for PROFINET IO-Device, EtherNet/IP

Adapter, EtherCAT Slave and OpenModbus/TCP. Available in Q4 2020 is firmware for CC-Link IE Field Basic and Ethernet POWERLINK Slave. The appropriate network connector is included with delivery. There are adapters available from third-party vendors for other key formats, if required by the application. Additional firmware options, more card and key formats, and OPC UA and MQTT functionality will be released in the future.

Other benefits of the netX 90 ASIC include its small size, low power draw, reduced heat waste and extended temperature range. These features make CIFX M223090AE the smallest multiprotocol card in the market, at 22 mm X 30 mm, and allow it to operate in conditions from -20 deg C to +70 deg C. With its low power consumption, the M.2 2230 is ideal for energy saving applications.

Choosing the Hilscher M.2 card allows users to future-proof their designs. Hilscher continuously provides new firmware for Real-Time Ethernet, traditional Fieldbus and IIoT protocols. Besides a wide range of industrial protocols, Hilscher also provides device drivers for all major operating systems used in the industrial environment, including Windows, Linux, INtime, RTX, and QNX, as well as a C Toolkit for custom device drivers.

For more information, please contact Hilscher, or visit: https://www.hilscher.com/blog/hilscher-releases-a-new-member-of-cifx-pc-card-family-in-m2-2230-key-a-and-e-format

About Hilscher Gesellschaft für Systemautomation mbH and Hilscher North America, Inc.

Hilscher Gesellschaft für Systemautomation mbH is a global specialist in network connectivity solutions for device makers, OEMs and end-user manufacturers. Founded in 1986 and with locations worldwide, Hilscher focuses on industrial communications, with solutions spanning single-chip ASICS, embedded modules, PC cards, protocol converters and gateways, along with supporting software and development tools and services.

Hilscher's own netX "system-on-a-chip" network controller is at the heart of every solution. netX allows for universal Master and/or Slave connection to all popular communications protocols, including: Fieldbuses, such as DeviceNet, Modbus, CC-Link and PROFIBUS; Real-Time Ethernets, such as EtherNet/IP, EtherCAT, PROFINET, Modbus TCP, CC-Link IE, POWERLINK, Sercos and TSN; and IIoT protocols, such as OPC UA and MQTT.

To bring the benefits of Industry 4.0 and the Internet of Things to its customers, Hilscher has developed the netFIELD portfolio, a solutions platform for simplifying IIoT deployment. The netFIELD portfolio comprises: netFIELD Sensor-level Devices; netFIELD Edge Gateways; netFIELD Cloud, with a Software-as-a-Service Platform and Portal; and netFIELD Applications to provide functions such as configuration and connectivity to automation protocols and commercial clouds.

Hilscher North America, Inc., based in a Chicago suburb, is a wholly owned subsidiary of Hilscher Gesellschaft für Systemautomation mbH.

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