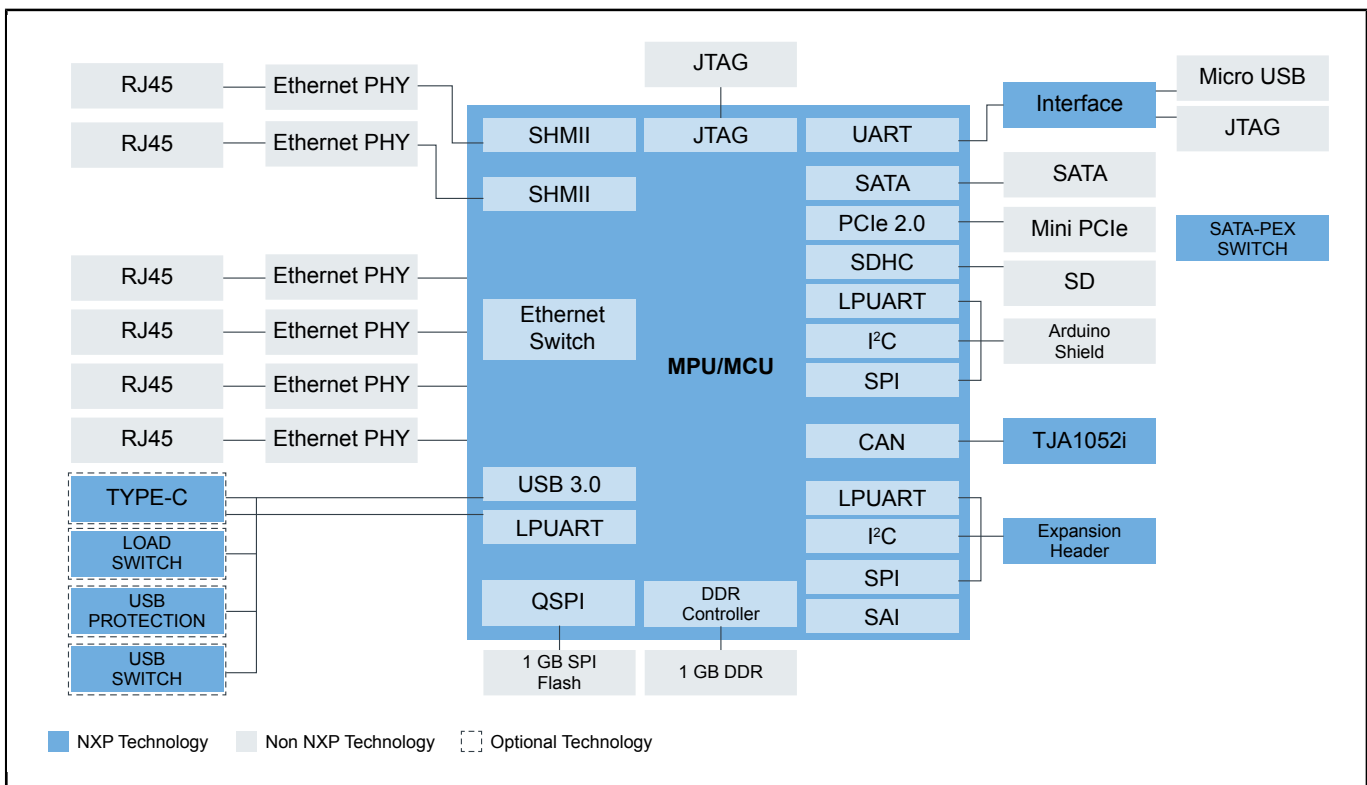# Industrial Networking Devices

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Industrial network systems must move large amounts of data in real time. For synchronized and orchestrated automation across a factory floor, these systems must unite IT and OT networks and their mixes of protocols, as well as address heightened security threats. Secure advanced processing, wired and wireless connectivity and support for a range of industrial protocols are required.

At NXP, solutions portfolio offers these foundational components for secure networking devices that advance automation, including feature-rich microcontrollers (e.g. i.MX RT1180) and processors (e.g. LS1028A) with integrated security and discrete secure elements, software stacks and development boards (e.g. LS1028ARDB). And by supporting a wide range of industrial protocols such as EtherCAT, Profinet, Ethernet/IP or CC-Link IE as well as newer time sensitive networks and OPC-Ua based protocols, we provide a path for seamless and secure interoperability across manufacturing systems.

Networking Block Diagram

Recommended Products for Networking	
MCU/MPU	• MCX-A14X-A15X: MCX A14x/15x MCUs with Arm® Cortex® M33, Scalable Device Options, Low Power and Intelligent Peripherals • MCX-N94X-N54X: MCX N94x/54x Highly Integrated Multicore MCUs with On-Chip Accelerators, Intelligent Peripherals and Advanced Security • LS1028A: Layerscape® 1028A Applications Processor • i.MX-RT1180: i.MX RT1180: Crossover MCU with TSN Switch and EdgeLock®
Load Switch	• Load Switches: Load Switches
USB Type-C	• PTN5150: CC Logic for USB Type-C Applications
USB Protection	• NX20P0477: USB Type-C CC Smart Protection
USB Switch	• High-Speed Signal Switches: High-Speed USB Signal Switches • USB Redrivers: USB Redrivers - Signal Conditioners • CBTU02044: High-speed Two-differential 1-to-2 Switching Chip
SATE-PEX Switch	
Isolated CAN Transceiver	• TJA1052IT: Galvanically-Isolated High-Speed CAN Transceiver

View our complete solution for Industrial Networking Devices.

Note: The information on this document is subject to change without notice.