

Industrial Communications Explorer (ICE)

Industrial Communications Explorer (ICE) is a cross-platform software tool for developers and engineers working with Industrial Ethernet protocols such as PROFINET®, EtherNet/IP™, EtherCAT® and others.

ICE enables rapid device detection, configuration and protocol testing using the GOAL device detection protocol, streamlining industrial automation development workflows.

The ICE tool serves as a platform for evaluating NXP industrial Ethernet protocol software.

Industrial Ethernet protocol support

PROFINET-RT controller emulator

- Configure station names, IP settings and I&M records

EtherNet/IP scanner

- Discover adapters, test I/O exchanges and read device data

EtherCAT MainDevice emulator

- Manage state transitions, access object dictionaries and configure PDOs

Device discovery and configuration

- Scan active network interfaces for supported devices
- Read and write device configurations using ConfigManager
- Reset devices, view logs and update firmware

Cross-platform compatibility

Available for Windows® and Linux®

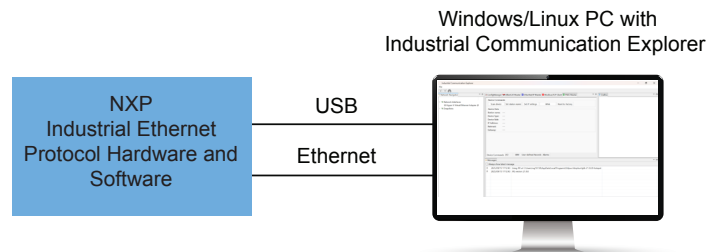
Getting started with ICE

1. Download the relevant evaluation binaries and flash to the board
2. Download the [Industrial communication explorer](#) evaluation tool
3. Access the [Industrial networking protocols knowledge base](#) on the NXP Community for installation and usage instructions

Additional resources

1. [i.MX RT1180 evaluation kit](#)
2. [NXP support](#) and [technical community](#)

Industrial Communications Explorer block diagram



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