

NetStaX™ EADK

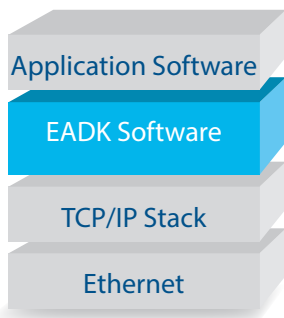
ETHERNET/IP ADAPTER DEVELOPERS KIT

Benefits

- CIP secure connections
- High performance
- Out-of-the-box examples
- Simplified porting
- Minimized resource use
- Rich set of features
- Scalable

The EADK Contains

- EtherNet/IP Adapter Class Protocol Stack source code
- CIP Security features
- EADK C# and COM APIs - 32 and 64 bit DLLs included (for using the EADK with VB6 and .NET)
- EADK Getting Started and software reference manuals
- Sample EDS file, prepared to allow the EADK to be used as a Class1 connection target by remote tools, such as RSNetWorx for EtherNet/IP
- Adapter Class example code
- Sample STC file for conformance testing



PYRAMID
SOLUTIONS

ENABLING SECURE ETHERNET/IP CONNECTIVITY

Pyramid Solutions' NetStaX™ EtherNet/IP Adapter Development Kit (EADK) enables you to quickly introduce secure EtherNet/IP Adapter Class functionality for your products.

Our stack provides complete I/O server, message server, and message client functionality along with an Application Programming Interface (API) for using Common Industrial Protocol (CIP) via TCP/IP. The stack API interfaces with your product's application software and to your product's socket level TCP/IP interface.

Rest assured that your connections will be secured with the EADK's CIP Security features. The EADK adds secure connection capabilities that will allow your product to communicate with other devices that support conformant CIP Security EtherNet/IP functionality. Secure connectivity prevents bad actors from attempting to spoof connections to your products and spoofing devices on your network.

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Features

EtherNet/IP Compatibility

- Enables EtherNet/IP Adapter Class functionality
- CIP Security enabled
- Compliant with ODVA CT 17
- UCMM (unconnected) message client and server
- Class 3 (connected) message server
- Class 1 (I/O) connection server

Resource Utilization and Management

- All resources initialized at stack startup
- No dynamic memory or thread allocation
- Runs on a single thread
- Scalable for optimizing resources

Platform, OS and TCP/IP Stack Compatibility and Portability

- "Platform file" approach separates routines into a single set of platform files to simplify porting
- Sample platform files for Linux, UNIX/AIX, uC/OS, Windows CE/Mobile, Windows™ (XP through 10), STM32, ColdFire, and other target platforms

- Stack core source is 'C' code for portability
- The EADK source code is designed using an object-oriented approach. It's building blocks, such as TCP/IP sessions, CIP connections, explicit requests, and all implemented CIP objects, including assemblies, are grouped into separate modules with corresponding functionality. This allows for easy understanding and debugging of the source code.

Supported/Included Objects

- Message router
- Connection manager
- CIP Security specification
- Port
- Identity
- Ethernet link
- TCP/IP
- QOS
- DLR
- CIP sync
- Assembly
- Custom objects
- File object
- Class 0 support
- Energy object

EtherNet/IP™