

DEVICENET CONTROLLER SOURCE CODE STACK

KEY FEATURES

- ▶ 100% ANSI C-based source code written in-house by our DeviceNet experts
- ▶ Single loop compatible—no RTOS required
- ▶ Compatible with many leading microprocessors supporting standard CAN interfaces
- ▶ No-nonsense single-family product licensing with no royalties
- ▶ Easy-to-use single task integration
- ▶ Supports implicit and explicit connections
- ▶ Group 2 (only) Controller or UCMM nodes
- ▶ Maintained to current ODVA certification

DeviceNet Controller Source Code Development Kit

Royalty-Free Source Code for Embedded Devices

Looking to add DeviceNet to your device? With RTA's development kit, you can ship an unlimited number of devices with no ongoing royalties or hidden fees.

Trusted in thousands of real-world applications, this kit has been enabling devices like PLCs, VFDs, barcode readers, I/O blocks and more for over two decades. It's market-tested, reliable and built for demanding industrial use.

What's Included in the Kit?

Everything you need to enable DeviceNet in your device—fast:

- Royalty-free ANSI-C source code
- All required CIP objects
- Sample applications for Windows and Linux
- Sample object models and EDS generation tools
- Easy-to-use API and support for different CAN controller interfaces
- Full documentation and integration guidance
- Hands-on support from RTA's DeviceNet Engineers

You could be shipping DeviceNet-enabled devices in weeks—not months.

How Integration Works

The DeviceNet Controller Development Kit provides you with the encoding/decoding, transport and the required application layer interfaces. You provide the mapping from the DeviceNet data encoding (object/instance/attribute) to your internal data encoding, allowing you to modify or extend your DeviceNet data model without outside assistance.

Why Choose an RTA Source Code Development Kit?

When you use an RTA Development Kit, you're getting more than just source code, you're gaining a protocol partner. Our DeviceNet experts work directly with you to design a solution tailored to your device and your goals.

Our source code is 100% developed in-house and has been deployed in hundreds of devices and over 100,000 applications. It's proven, reliable and built for embedded microcontrollers in demanding industrial environments.

SPECIFICATIONS

Operation Modes	Group 2 only or UCMM
Object Support	All required objects included
Message Support	Implicit and explicit supported
Compatibility	All certified DeviceNet Device modules
Fragmentation	Fully supports explicit and I/O message fragmentation

PLATFORM REQUIREMENTS

Processor	Any
RTOS	None required but compatible with many popular RTOS products
CAN Controller Interface	Fully compatible with standard microprocessor CAN interfaces
Memory	32K Flash, 64K RAM, < 1K NV
Compiler	Any ANSI-C compiler

API—APPLICATION PROGRAMMING INTERFACE

Configuration	Functional call interface
Explicit Message Interface	Function call interface—decoding of all DeviceNet data requests handled by user to enable modification or addition of user objects
Input Assembly Interface (data to scanner)	Buffer managed and filled by user application
Output Assembly Interface (data from scanner)	Buffer managed by user application and filled by DeviceNet with output assembly data

What Is the Development Process?

PICK YOUR PACKAGE

Not sure where to start? We'll help you decide whether to take our code and a consult, or send us your device and let us handle it all.

MEET YOUR ENGINEERDS®

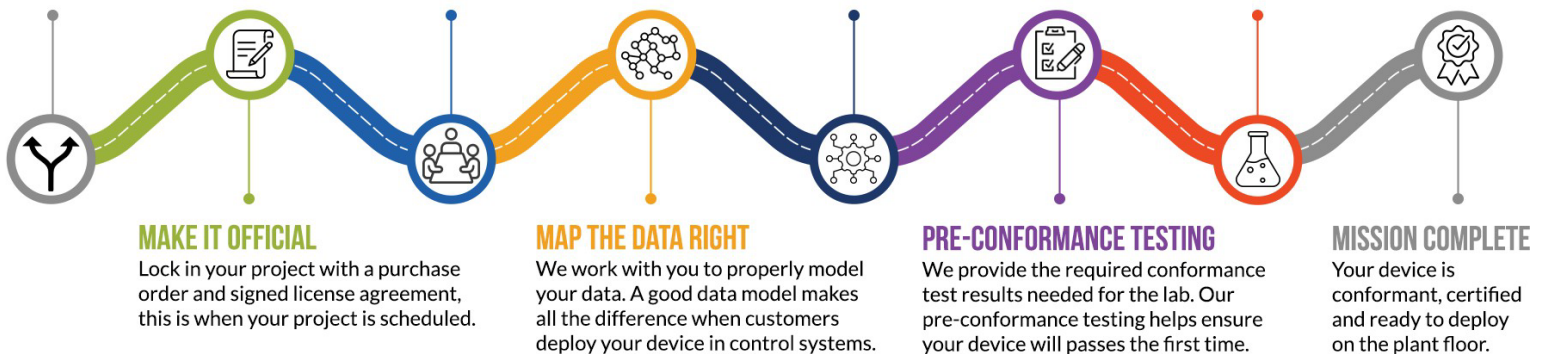
We'll walk through goals, project scope and next steps to make sure everyone's aligned and ready to roll.

STACK INTEGRATION

Depending on your path, we'll either help your team integrate our code—or we'll do the integration on your behalf. This step ends with a completed device deployment.

LAB TIME WITH BACKUP

You schedule with the conformance lab, our Engineerds represent your device at the lab.



Ready to Get Started?

Schedule a 30-minute call with one of our developers to walk through what it takes to integrate DeviceNet into your device. No pressure—just straight answers and expert guidance.

Email us at sales@rtautomation.com or call (800) 249-1612 to schedule your call.