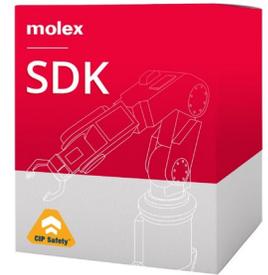


## CIP Safety SDK

Using CIP Safety SDKs (software development kits), industrial safety device manufacturers can quickly and efficiently embed the CIP Safety protocol in scanners or adapters. For scanner device manufacturers, the included customizable product configuration tool (PCT) provides the ability to support end users by enabling the configuration and diagnosis of CIP Safety scanner devices.



### ADVANTAGES AND FEATURES

#### Simplifies implementation of safety systems and accelerates time to market

Easy-to-compile pre-certified modular ANSI C code and a manufacturer's product configuration tool enable quick commissioning and diagnostic tasks.

#### Eases development and installation with Molex industrial automation solutions

The design is ideal for Molex network interface cards and software stacks, delivering a complete safety communication solution.

Protocol	CIP Safety
Hardware Compatibility	32- or 64-bit microprocessors
Operating System (OS)	Any OS, real time or not
Code Footprint (approx.)	200 kB (adapter) or 400 kB (scanner)

#### Enables installation in a wide variety of devices by complying with industry standards

The SDK meets industry certification standards including IEC 61508-SIL3 and ODVA's CIP Safety specification.

#### Helps deliver fully integrated safety functionality over the product life

The SDK includes a range of developer solutions and ongoing engineering and technical support that enables customers to leverage Molex expertise in industrial automation.

### MARKETS AND APPLICATIONS

#### Industrial Automation

- Automated packaging systems
- Automotive manufacturing systems
- Ethernet-capable complex machines
- Food and beverage manufacturing equipment
- Heavy industrial equipment
- I/O devices, sensors/actuators
- Network interfaces (PC cards, gateways)
- Process instruments
- Programmable logic controllers (PLCs)
- Robot controllers
- Robot tooling systems
- Textile and printing machines
- Vision systems and displays



*Automated Packaging Systems*



*Programmable Logic Controllers*



*Ethernet-Capable Complex Machines*

# CIP Safety SDK

## SPECIFICATIONS

### Basic Information

CIP Safety: Fully compatible ODVA  
(test suite CT20ES)

CIP Safety Object: Safety User specific object

Redundant Implementation: Up to SIL-3

Execute on top of Molex EtherNet/IP SDK

### Reference Information

Compliance: CIP Safety 2.22/CT20ES, IEC 61508,  
TÜV Certified

Hardware Compatibility: 32- and 64-bit processors  
(SDK is independent of hardware)

Supported Operating System (OS): No OS required  
(SDK is independent of OS)

Stack Implementation: Single- or multi-task,  
socket-based or UDP optimization

Development Process: TÜV 61508, hardware  
and software in line with safety requirements

### SDK Contents

Pre-certified ANSI C source code

Safety integration manual, including safety  
measure requirements

Documentation required by certification bodies  
(TÜV, ODVA)

CIP Safety configuration tool

### Product Configuration Tool (PCT) Features

OS: Windows 11

Generate scanner stack configuration files

EDS device library management

Adapter commissioning (automatic device  
detection, online actions, etc.)

Support of modular devices such as Rockwell  
FlexIO and PointIO devices with chassis and  
module management

Integrated diagnostics

OEM customization

Software protection