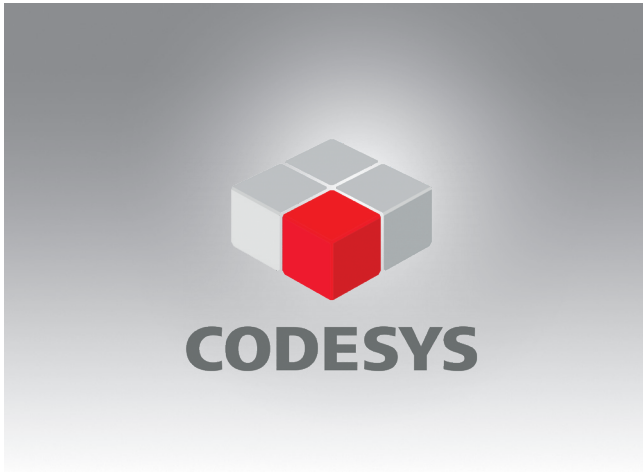


AMAX Runtime

CODESYS runtime with Advantech Value-Added Features



Features

- **Comprehensive CODESYS runtime package** supporting a wide range of native CODESYS functions.
- **The Agent & Data Connect (ADC) service** provides flexible and efficient data exchange between edge controllers and supervisory gateways; it is available for Windows and Linux runtime systems on x86 platforms.
- **Advantech PCM-2300MR** is supported by the runtime system to enable data retention features.
- **Built-in I/O on AMAX x86 control platforms** can be controlled via the Linux runtime system. Windows runtime support is available upon request.
- **Selected Advantech iDoor modules on AMAX x86 control platforms** are compatible with the Linux runtime system. Windows runtime support is available upon request. Support list: PCM-26D2CA, PCM-34R2GL, PCM-34D2R2, PCM-34D2R4, PCM-37D24DI
- **LwIP (Lightweight IP) optimization** for EtherCAT networks is available for the Linux runtime system.

Introduction

The AMAX runtime system integrates Advantech's value-added features into CODESYS Control RTE (Windows) and CODESYS Control V3 High (Linux). In addition to these add-on features, the Advantech engineering team also provides real-time optimization for CODESYS Control V3 High specifically for the AMAX platform. By combining the AMAX runtime system with AMAX control platforms, users can leverage a comprehensive product portfolio and a powerful set of toolkits.

Installation System Requirement

- CPU architecture: x86_64
- Windows 10/11. Highly recommend to use Advantech version OS image.
- Ubuntu 20.04/22.04 with Preempt_RT patch. Highly recommend to use Advantech version OS image.
- Highly recommend to use Advantech AMAX control platform with optimized BIOS and Ubuntu image.

Windows CODESYS runtime for x86 (CODESYS Control RTE) Function Table

Part Number		360TCDSWRTE0A1	360TCDSWRTEVA1	360TCDSW00SMA1	360TCDSW00CNCA1	360TCDSWREDNA0
Product Description	Control RTE	Control RTE	Control RTE WV, TV	Control RTE WV, TV, SM	Control RTE WV, TV, SM, CNC + Robotics	CODESYS Control Redundancy
Basic Functions	Runtime	CODESYS Control RTE V3.5 SP20				
	OT Network	EtherCAT MainDevice, PROFINET IO-Controller, EtherNet/IP Scanner (IEC/CIFX), PROFIBUS Master & CANopen Manager (Driver from netX of Hilscher®)				
	IT Network	Modbus/TCP Client and Server, Modbus/RTU Client, OPC UA Server, MQTT (Sparkplug), ODBC for Database (via Advantech CODESYS package)				
	EtherCAT I/O Connections	No I/O Points Limitation				
HMI	Virtualization	N/A	Target Visualization (TV, Local HMI) & Web Visualization (WV, Web Browser).			
	Tags	N/A	Unlimited tags			
Softmotion	EtherCAT Servo Connections	N/A		No Axes Limitation in EtherCAT Servo Drive connections.		
CNC & Robotics	CNC Interpolator	N/A			No axes interpolation limitations.	

Note 1: WV = Web Visualization; TV = Target Visualization

Note 2: SM = Softmotion

Linux CODESYS runtime for x86 (CODESYS Control V3 High) Function Table

Part Number		310TCLXH0000A1	310TCLXHW000A1	310TCLXHWS00A1	310TCLXHWC00A1
Product Description		Control V3 High	Control V3 High WV	Control V3 High WV SM	Control V3 High WV SM CNC + Robotics
Basic Functions	Runtime	CODESYS Linux Control V3 SP20			
	OT Network	EtherCAT MainDevice, PROFINET IO-Controller, Ethernet I/P Scanner (Master), CANopen Manager			
	IT Network	Modbus/TCP Client and Server, Modbus/RTU Client, OPC UA Server			
	EtherCAT I/O Connections	No I/O Points Limitation			
HMI	Virtualization	N/A	Web Visualization (WV, Web Browser)		
	Tags	N/A	Unlimited tags		
Softmotion	EtherCAT Servo Connections	N/A	N/A	No Axes Limitation in EtherCAT Servo Drive connections.	
CNC & Robotics	CNC Interpolator	N/A	N/A	N/A	No axes interpolation limitations.

Note 1: WV = Web Visualization

Note 2: SM = Softmotion

Note 3: Multicore license part number: 310TCLXHMC40A1. Please order this part number with the one of the above part numbers together. For example, if you want to have Control V3 High WV with Multicore feature, please order 310TCLXHW000A1 plus 310TCLXHMC40A1

Ordering Information

Windows CODESYS for x86_64

- **360TCDSWRTE0A1** Control RTE
- **360TCDSWRTEVA1** Control RTE WV, TV
- **360TCDSW00SMA1** Control RTE WV, TV, SM
- **360TCDSW0CNCA1** Control RTE WV, TV, SM, CNC + Robotics
- **360TCDSWREDNA0** Control RTE Upgrade License CPU Redundancy (Add-on)

Linux CODESYS for x86_64

- **310TCLXH0000A1** Control V3 High
- **310TCLXHW000A1** Control V3 High WV
- **310TCLXHWS00A1** Control V3 High WV SM
- **310TCLXHWC00A1** Control V3 High WV SM CNC + Robotics
- **310TCLXHMC40A1** Multicore support (Add-on)