High-Precision Real-Time Motion Control on IPC

WMX Real-Time Motion Control Stack

*Physical AI Ready: ROS 2-based **real-time motion stack for AI-driven robotics***

WMX Real-Time Motion Control Stack is a software-defined motion control platform optimized for Intel® architecture IPCs, including Intel® Core™ Ultra 3 Series processors. Leveraging Intel® TCC and Intel® ECI technologies for deterministic compute and communication, WMX delivers industrial-grade real-time performance with microsecond synchronization and stable low-latency execution—without dedicated motion-control hardware.

Integrated with Intel's Open Edge Platform and Robotics AI Suite, WMX enables AI perception, planning, and precision motion control on a single Intel-based IPC. This unified architecture maximizes Intel's heterogeneous compute across CPU, GPU, and NPU while ensuring deterministic control at the actuation layer.

With native EtherCAT support and ROS 2 compatibility, WMX serves as the real-time execution layer powering scalable Physical AI systems in robotics, semiconductor tools, and advanced manufacturing.

Key Intel-Enabled Features

- Microsecond Sync
- IPC-Native Control
- Real-Time OS Support
- Physical AI-Ready

Optimized for Intel® Core™ Ultra 3 Series processors and Intel Atom® IPCs, WMX Real-Time Motion Control Stack:

- Enables parallel motion workloads
- Replaces dedicated motion hardware
- Supports unified system execution of AI workloads and real-time motion control

Intel Products and Technologies

- Intel® Core™ Ultra Series 3 Processors
- Open Edge Platform
- Robotics AI Suite 4
- Intel® Edge Controls for Industrial (Intel® ECI)
- Intel® Time Coordinated Computing (Intel® TCC)

Ordering Guidance:

- WMX Download

Country/Geo: Worldwide

Edge Verticals/ Industry: Manufacturing & Robotics

Edge Use Cases: Operational Efficiency; Robotics; Process Optimization; Vision Guided Robots

Learn more:

- WMX Solution Web Page

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