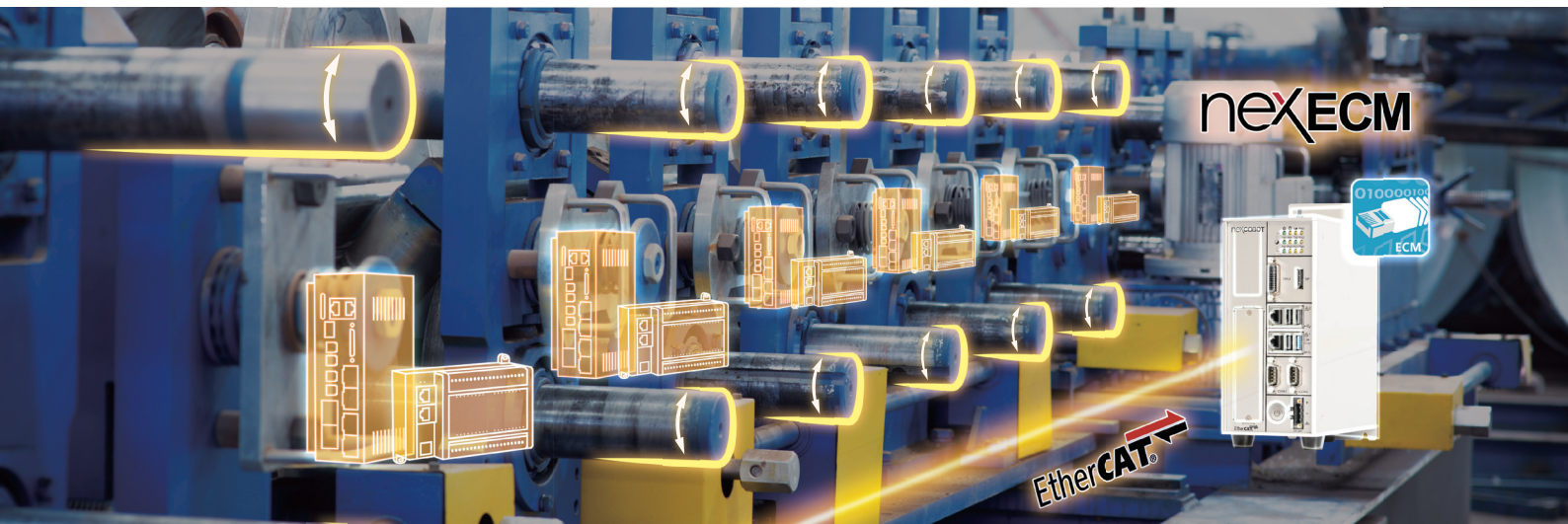


# ECM x86 Real-time Windows EtherCAT Master Controller



EtherCAT, a fast, scalable, flexible yet reliable real-time EtherCAT protocol, has been widely adopted by most networked industrial systems. NexCOBOT offers a comprehensive line of EtherCAT controllers by integrating its EtherCAT master software, NexECM. The APIs for CiA 402 profile and built-in EtherCAT configuration tool, NexECM Studio, **speeds up development time for users to create customized motion controls for different automation applications**. Based on open architecture, NexCOBOT's controllers also **ensure max convenience for users to integrate with third party hardware and software on Microsoft® Windows**.

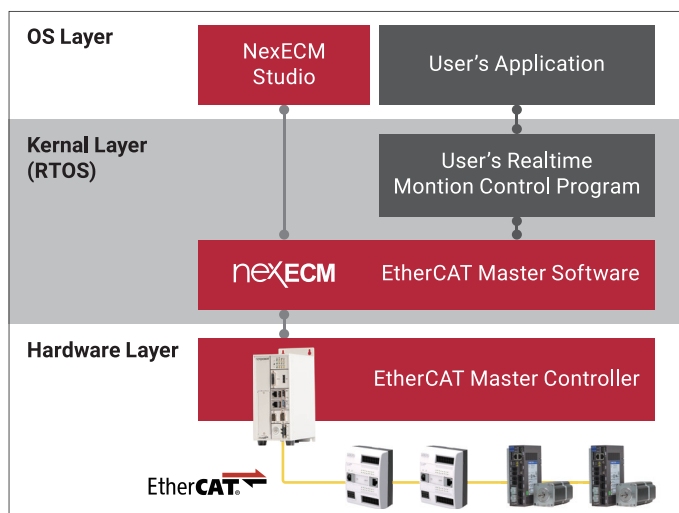
◆ **Standard EtherCAT Protocol**

- Support 3rd-party EtherCAT slave modules
- Support up to 64 slave modules
- Low latency: EtherCAT communication cycle up to 250 μs
- Supports DC / PDO / SDO / CiA402 / CoE / FoE / ESI / ENI

◆ **Open Architecture**

- Real time OS based
- Windows API ready

◆ **Software Architecture**

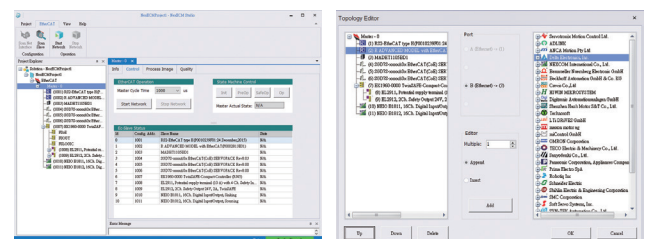


- Real time API ready (to work with real-time SDK)

◆ **EtherCAT Software Functions**

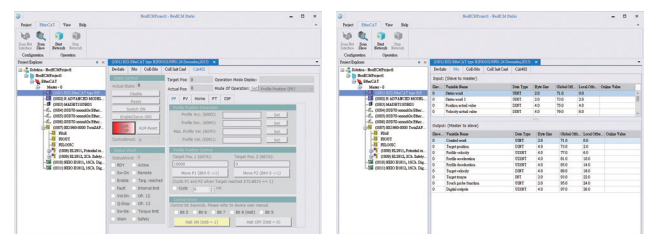
- Import ESI files
- Export ENI files
- Edit PDO objects
- Edit CoE initial commands
- Edit EtherCAT topology (Online/ Offline)
- Test EtherCAT communication
- Test EtherCAT slave controller operation

◆ **EtherCAT Config Tool: NexECM Studio**



▲ User-friendly GUI

▲ Off-line Network Topology Edit



▲ CiA402 Slave Module Test

▲ PDO Parameter Edit

## Specifications



HW SPEC	ECM-F200	ECM-F300	ECM-M100
<b>CPU Support</b>	Intel® Celeron® J1900	Intel® 6th Gen. Core™ i and Celeron socket(35W)	Intel® 6th / 7th Gen. Core™ i and Celeron socket (35W)
<b>Main Features</b>	Edge I/O : - 1 x DVI-I, 1 x DP - 1 x USB 3.0, 4 x USB2.0, 2 x DB9 - 2 x GbE LAN port - 1 x 3pin Terminal block for DC24V in	Edge I/O : - 1 x DVI-D, 1 x HDMI - 4x USB 3.0, 4 x USB2.0, 2 x DB9 - 3 x GbE LAN port - 1x 3pin Terminal block for DC24V in	Edge I/O : - 1 x VGA, 1 x HDMI - 2x USB 3.0, 4 x USB2.0, 2 x DB9 - 4 x GbE LAN port - 1x 3pin Terminal block for DC24V in  Front I/O: - 1 x Power switch, 1 x Reset switch - 2 x USB2.0 Double deck, - 1 x DB25 for GPIO
<b>Software</b>	Windows 7/10 (64bit) With NexECM bundle Intime 6 runtime		
<b>Ordering Information</b>	ECM-F200 (P/N: A0ECMF20001XF)	ECM-F300 (P/N: A0ECMF30001XF)	ECM-M100 (P/N: A0ECMM10001XF)



HW SPEC	ECM-E355	ECM-N650	ECM-R100
<b>CPU Support</b>	Intel® Celeron® J1900	Intel® Celeron® J1900	Intel® 6th / 7th Gen. Core™ i and Celeron socket
<b>Main Features</b>	Edge I/O : - 1 x VGA, 1 x HDMI - 4 x USB 3.0 - 2 x GbE LAN port  Internal I/O: - 1 x dual channel LVDS - 4 x COM, 2 x SATA 3.0 - 2 x Mini PCIe - 1 x 8bit GPIO	Edge I/O : - 1 x VGA, 1 x HDMI - 1 x PS/2, 2 x USB 3.0, 2 x USB2.0, 2 x COM - 2 x GbE LAN port - 1 x HD Audio jack(Line Out and MIC In)  Internal I/O: - 1 x dual channel LVDS - 2 x COM, 1 x LPT 2 x SATA 3.0 - 2 x USB3.0, 2 x USB2.0 - 1 x PCIe1, 2 x Mini PCIe - 1 x 8bit GPIO	Edge I/O : - 1 x HDMI - 2x USB 3.0, 4 x USB2.0, 1 x DB9 - 2 x GbE LAN port  Internal I/O: - 1 x VGA - 2 x GbE LAN - 2 x USB2.0, 1 x COM, 1 x SATA 3.0 - 1 x PCIe16, 1 x Mini PCIe - 1 x DB25 for GPIO
<b>Software</b>	Windows 7/10 (64bit) With NexECM bundle Intime 6 runtime		
<b>Ordering Information</b>	ECM-E355 (P/N: A0ECM355B01XF)	ECM-N650 (P/N: A0ECM650B01XF)	ECM-M100 (P/N: A0ECM100B01XF)

### ◆ NexECM Online Manuals

- EtherCAT Master User Manuals



- CiA402 Servo control User Manuals

