NexGMC-32A

32-axis General Motion Control Software

Main Features

- Support 32 axes motion control
- Support 4 groups motion
- Support group line interpolation
- Support group circular interpolation
- Provide simulation operation mode
- Provide 3D View function
- Microsoft Windows API
- Powerful Utility: NexMotion Studio

Product Overview

NexGMC (General Motion Control) is developed by NexCOBOT as a powerful motion control software that integrates NexECM and motion control kernels. It can be used for any general machines that are EtherCAT-based motor driven. The NexGMC provides Microsoft Windows APIs for users to develop their own motion control applications and HMI. NexGMC also provides a powerful integrated development environment "NexMotion Studio", which users can use to easily configure EtherCAT slaves and motion axes or group axes (ex: XY table) parameters.

Specifications

Realtime OS
- INtime

Supported Axis No.
- Up to 32 axes

Supported Group No.
- Up to 4 groups

Single Axis Motion
- PTP, Jog, Halt, Stop, Speed/ACC/DEC override, blending

Group Motion
- PTP, Linear, Circular, Speed/ACC/DEC override, blending

Supported Group Types
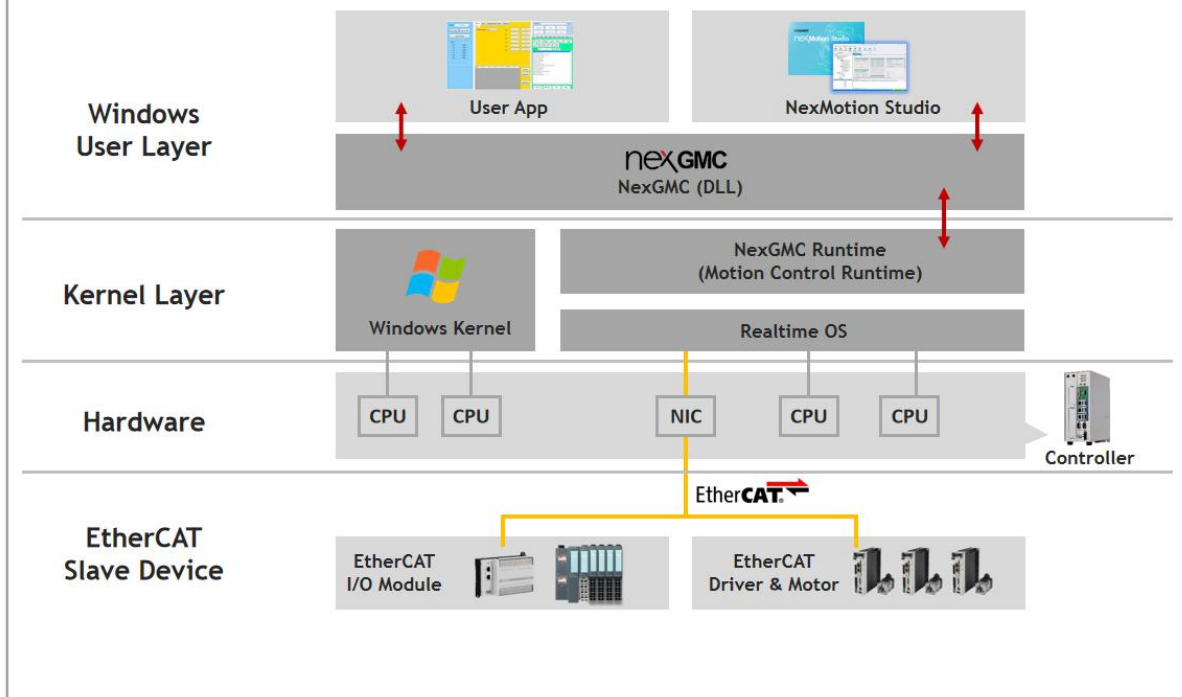- Cartesian coordinates machine (XY, XYZ table, XYZ&θ)

Example
- VC\C#

Powerful Utility
- NexMotion Studio
  EtherCAT devices offline edit and online scan
  EtherCAT master configuration
  PDO mapping edit
  Online SDO edit
  Export ENI
  CiA 402 device operation: PP/PV/PT/CSP
  Single axis edit and operation
  Group axes edit and operation
  I/O mapping edit and operation
  Provide simulation operation mode

Software Architecture

Windows User Layer
- User App
- NexMotion Studio
- NexGMC (DLL)

Kernel Layer
- Windows Kernel
- NexGMC Runtime (Motion Control Runtime)
- Realtime OS

Hardware
- CPU / CPU / NIC / CPU / CPU
- Controller

EtherCAT Slave Device
- EtherCAT I/O Module
- EtherCAT Driver & Motor

EtherCAT

Ordering Information

NexGMC (P/N:98ROBO000005F)
NexGMC-32 Axes Realtime Software