

LOW-CODE

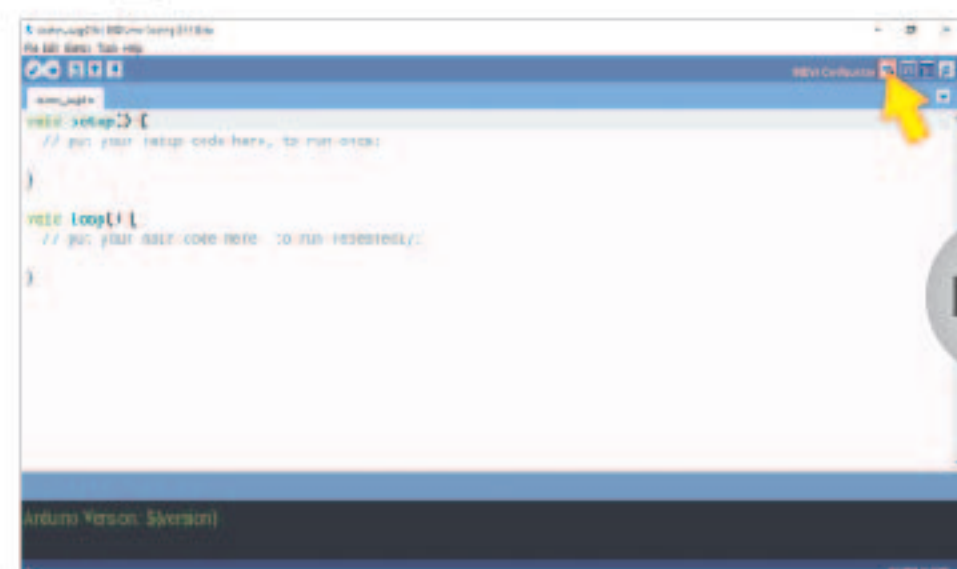
DEVELOPMENT PLATFORM



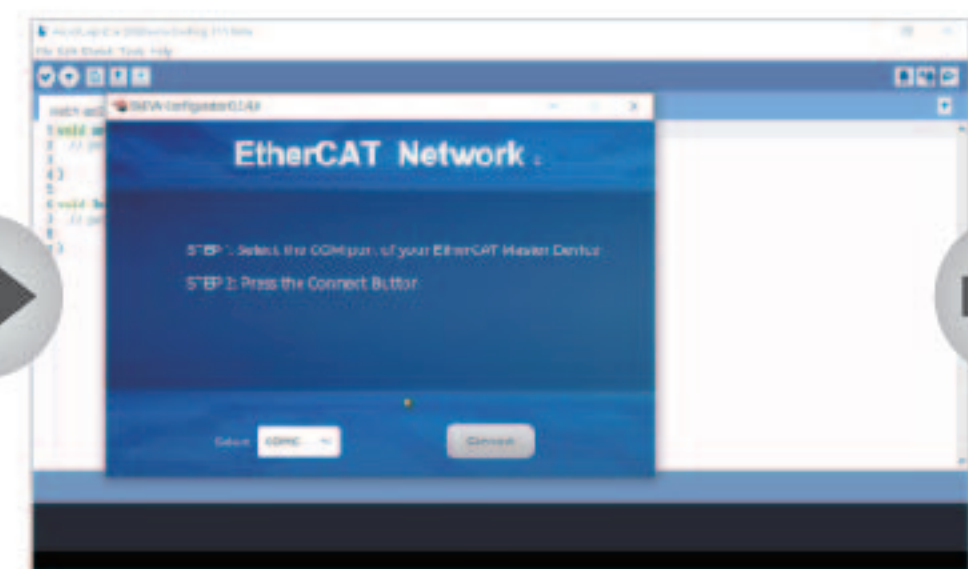
- ArduBlock Tools
- User Interface Tools
- 86EVA (EtherCAT) Configuration Tools

Development Steps

1 86EVA (EtherCAT) Configurator



1. Open 86EVA Configurator



2. Connect QEC Master & Slave



3. 86EVA Setting

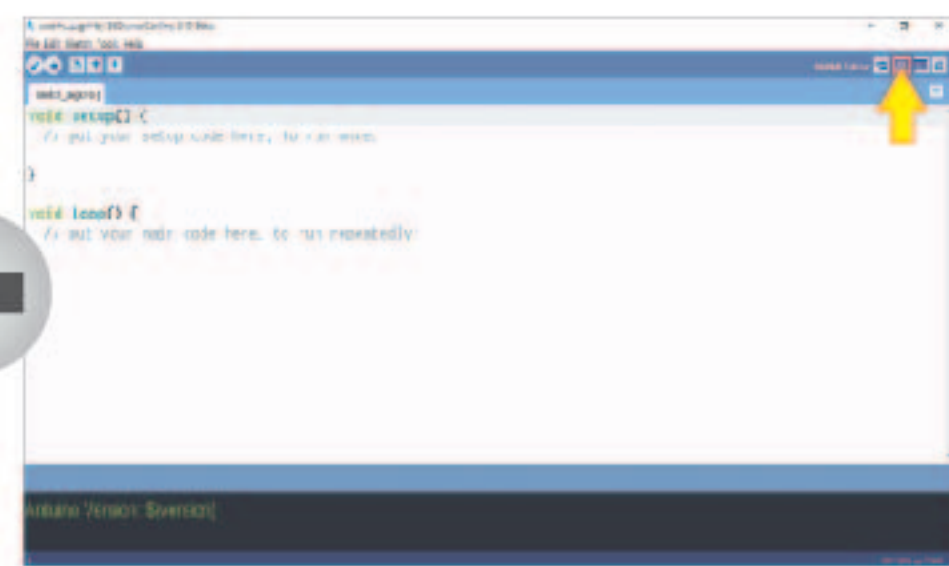
HMI Editor 2



6. User Interface design



5. Select QEC Board



4. Open HMI Editor

3 ArduBlock



7. Open ArduBlock



8. Drag-and-Drop Command Blocks



9. Generate and Complete Instructions

Order Information



EtherCAT Master Controller

Master

- QEC-M-01 (EMC)
- QEC-M-043T (EMC + 4.3" LCD)
- QEC-M-070T (EMC + 7" LCD)
- QEC-M-090T (EMC + 9" LCD)
- QEC-M-150T (EMC + 15" LCD)



EtherCAT Slave Module

I/O

- QEC-RxxD (Digital I/O)
- QEC-RxxA (Analog I/O)
- QEC-RxxHU (HID)
- QEC-RxxR (Relay Output)
- QEC-RxxJT (Junction)



EtherCAT Slave Motor Control Module

Motion

- QEC-RxxMP1-S (Stepper Motor Controller)
- QEC-RxxMP3-S (Stepper Motor Controller)
- QEC-RxxMV1-S (T120 Servo Motor)
- QEC-RxxMV2-S (T600 Servo Motor)
- EtherCAT Converter



ICOP EtherCAT Solutions

QEC EtherCAT

ArduBlock Control for Big Data



EtherCAT
QEC EtherCAT



www.qec.tw
www.icop.com.tw
info@icop.com.tw



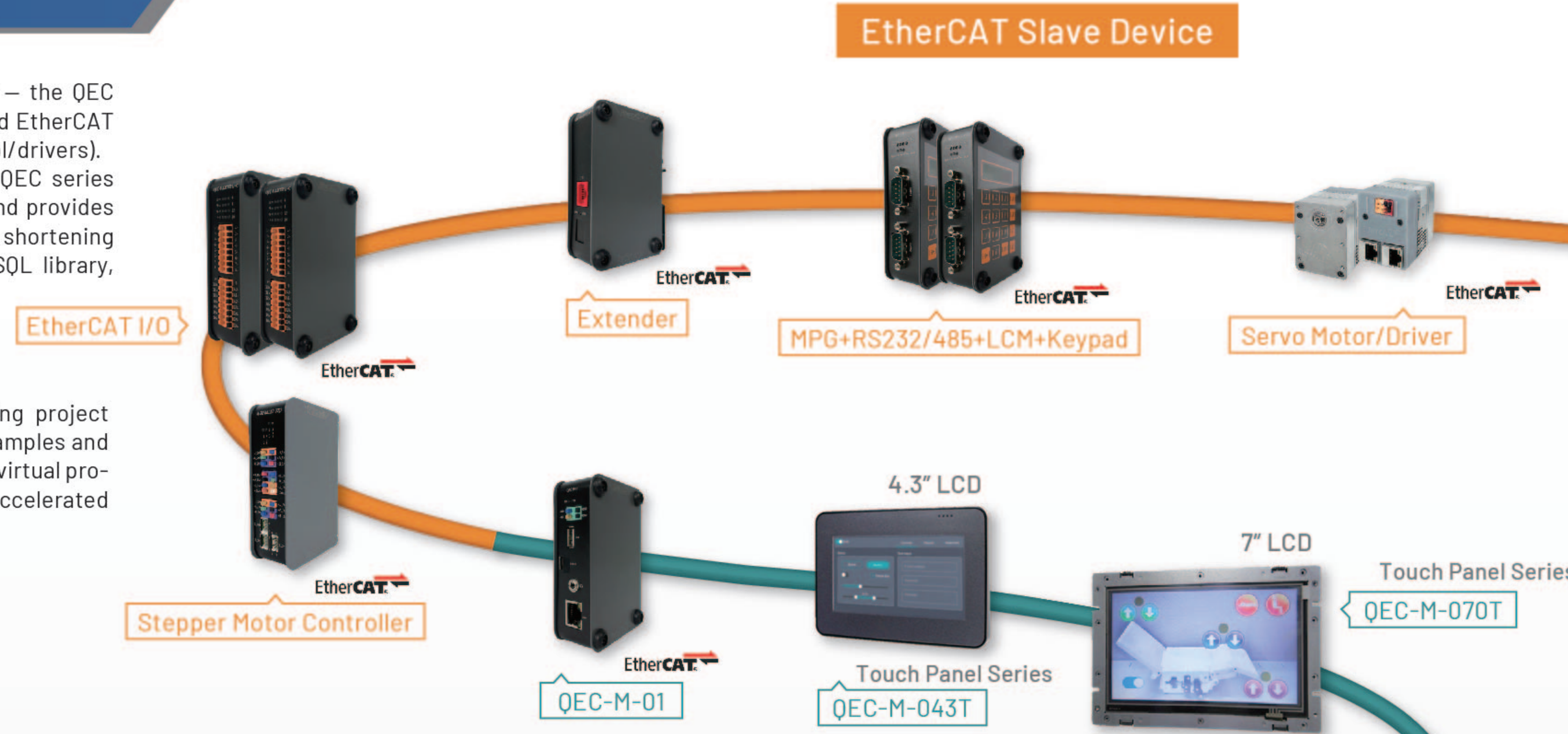
QEC-EtherCAT Solution-v20220804r1
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QEC Series Overview

ICOP Technology provides a complete solution for EtherCAT – the QEC Series, which includes EtherCAT master motion controllers and EtherCAT slave modules (I/O, RS232/485, MPG, converters, motion control/drivers). With highly integrated hardware and software features, the QEC series supports a wide range of industrial automation applications and provides fast, simple, and often used/readily available functions while shortening development cycles. It can also build Database through MySQL library, which helps create smart IIoT technology.

Easily Develop EtherCAT

QEC supports the Arduino development environment, allowing project development processes to be accelerated with rich built-in examples and libraries and making system configuration streamlined through virtual programming tools and database libraries. This results in an easy, accelerated EtherCAT solution.



EtherCAT Master Device



Arduino Development Environment

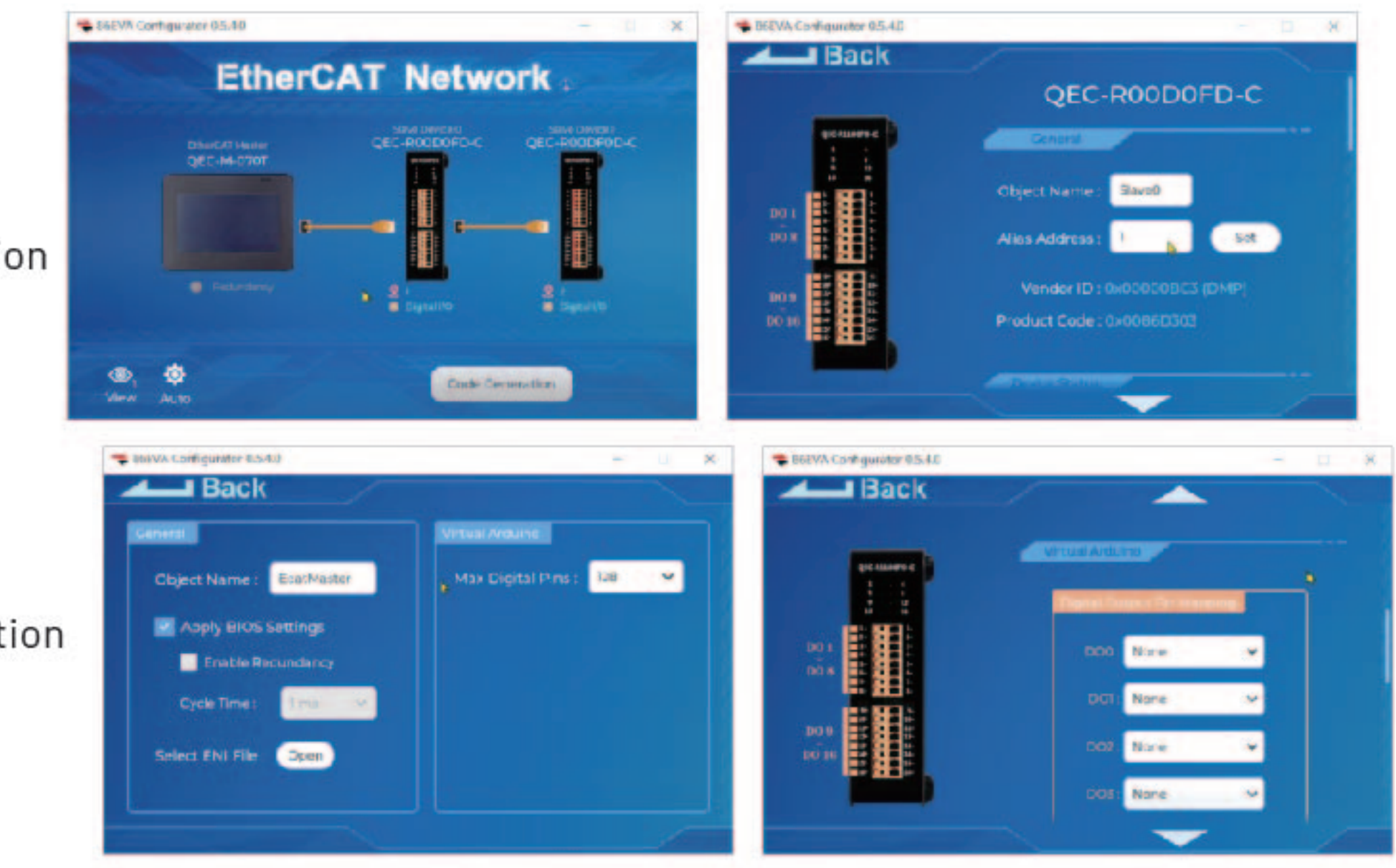


<p>Real-time & Reliability</p> <ul style="list-style-type: none"> Synchronous motion control of up to 32 axes Minimum Communication Cycle 125us Motion Control Environment 	<p>Compatibility</p> <ul style="list-style-type: none"> Support for Third-Party EtherCAT Slaves Offer ESI file
<p>Easy Operation</p> <ul style="list-style-type: none"> Arduino Development Environment HMI Resources & Tools Various Libraries & Examples 	<p>Service</p> <ul style="list-style-type: none"> Professional Support Team HMI Customization Service ArduBlock Tool Collaboration Service

Arduino Development Environment

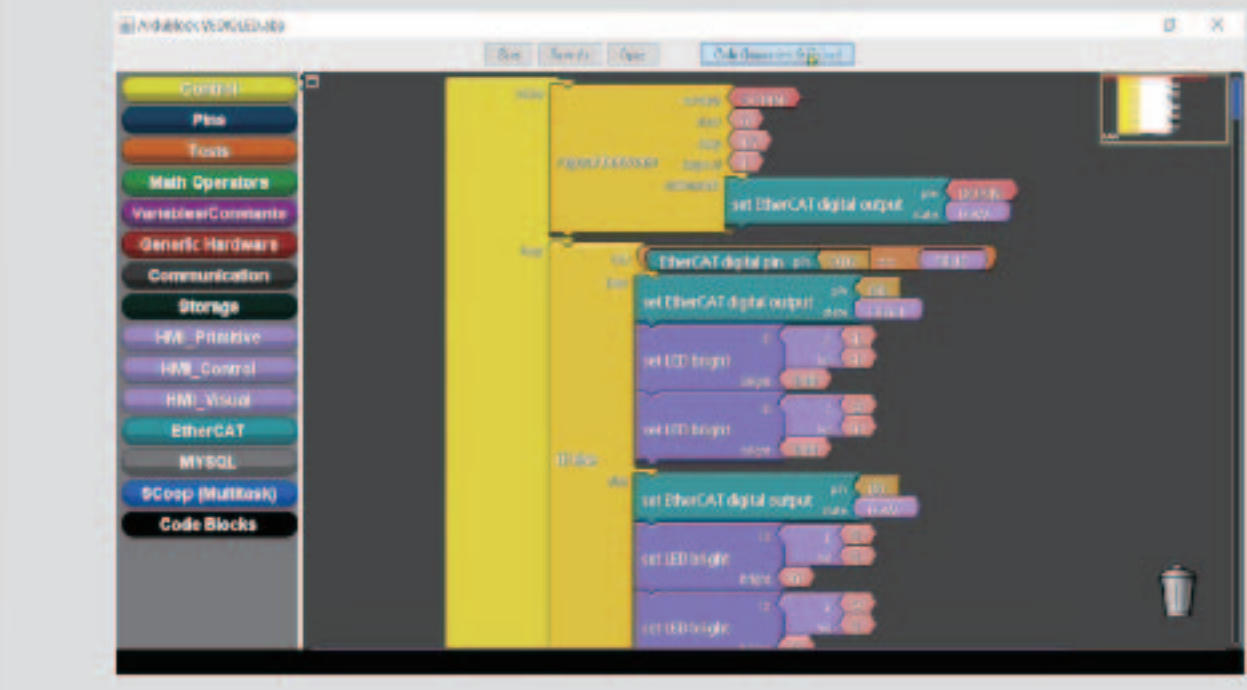
86EVA | EtherCAT Configuration Tools

- EtherCAT-Based Virtual Arduino
- Auto-scans QEC EtherCAT devices
- EtherCAT Master Settings:
 - * Enter EtherCAT master Object Name
 - * Select EtherCAT bus Cycle Time
 - * Select EtherCAT Cable Redundancy Option
 - * Select ENI file
- EtherCAT Slave Settings:
 - * EtherCAT slave object settings
 - * EtherCAT slave Alias settings
 - * EtherCAT slave I/O settings
 - * Display EtherCAT slave General Information
 - * Review internal monitoring information (voltage, current, temperature)



HMI Editor, GUI Design Tools

- Provides more than 20 configuration elements
- Automatically generates to LVGL language library



ArduBlock, Drag-and-Drop Coding Tools (Similar to Scratch)

- Integrated Block Library
- Automatically generates to C++ language
- Straightforward virtual operation



Standard Arduino Window

- Provides ECAT Lib API library
- Build-in CiA402/Modbus/MySQL libraries
- Integration of motion control commands