



Features:

- Built-in 86Duino IDE for C/C++ programming with library support
- Dedicated core for real-time EtherCAT MDevice communication
- HDMI display (1280 x 720 x 256) with graphical library support
- 16-channel isolated digital input and 16-channel isolated digital output
- Operating temperature: -20°C to +70°C (optional -40°C to +85°C)
- Supports EtherCAT, Giga LAN, USB, COM, HDMI, Rotary switch, and RUN/STOP switch

Specifications

Hardware			
CPU	DM&P Vortex86EX2 Processor, Master 533MHz/Slave 400MHz		
Memory	512MB/1GB DDRIII Onboard		
Storage	32MB SPI Flash/2GB SLC eMMC		
Display	HDMI 2.0 (Resolution: 1280 x 720 x 256)		
LAN	1Gbps Ethernet RJ45 x1, 10/100Mbps Ethernet RJ45 x2 for EtherCAT		
I/O Connector	Power DC Input/Output Connector x1 USB (Type-C) x1 (Upload/Debug only) Rotary switch (Max. 16 modes) x1	32-channel isolated GPIO (Option) COM port for RS232/485 x1 Run/Stop switch x1	HDMI port x1 USB 2.0 x1 LAN x3
Digital I/O	Digital Input	Digital Output	
Channels	16 (Isolated)	16 (Isolated)	
Input Type	Sink (Supports both NPN and PNP configurations)		
Frequency	Safe Operating Frequency: ≤3000 Hz Rise Time (tr): 6 μs, Fall Time (tf): 6 μs	Operating Frequency: 1000Hz Turn-On Time: 0.25 ms, Turn-Off Time: 20 μs	
Load Voltage	+24V (Options: 24V or 48V)	+60Vdc	
Load Current	-	Typ. 500mA (peak 1000mA)	
Isolation Protection	2500 Vrms	1500 Vrms	
Serial Port			
Interface Mode	RS232/RS485 (D-Sub 9-pin)		
Data transfer rate (bps)	2400,4800,9600,14400,19200,38400,57600,115200		
Data width (bit)	5/6/7/8		
Hardware Flow Control	CTS/RTS		
General			
Protocol	EtherCAT, Ethernet, Modbus, etc.		
EtherCAT Cycle Time	125 μs (min.)		
Power Connector	4-pin Power Input/Output & 2-pin FGND		
Power Requirement	+19 to +50VDC Power Input (Typ. +24VDC)		
Power Consumption	6W		
Operating Temperature	-20 to +70°C/-40 to +85°C (Option)		
Dimension	107.45 x 49 x 77.31 mm		
LED Indicator	PWR, RUN, LINK, Digital status		
Weight	370 g		
Mounting	DIN-Rail		
Internal Monitoring	Temperature, Voltage, Current, Start up time		
Software Support	86Duino Coding IDE 501+		

Ordering Information

QEC-M-02-DFF	EtherCAT MDevice/16-channel Digital Input and Output/HDMI/COM
QEC-M-02P-DT0	EtherCAT MDevice/PoE/32-channel Digital Input/HDMI/COM
QEC-M-02P-D0T	EtherCAT MDevice/PoE/32-channel Digital Output/HDMI/COM

* For detailed ordering information, please contact our sales staff or view the user manual.

Dimension

