

## **Features:**

- Integrated EtherCAT MDevice on Real-time Dual-Core CPU
- 86Duino Integrated Development Environment (IDE)
- 9" TFT LCD with Resistive Touchscreen (800×480)
- High Reliability SLC eMMC Storage with HDMI Output for HMI
- Industrial Operating Temperature -20 to +70°C
- Rich Interfaces: 3×LAN, 3×USB, RS232/485, CAN, SPI, I2C, Arduino-Compatible GPIO
- Built-in Voltage, Temperature, and System Status Monitoring

## **Specifications**

CPU	DM&P Vortex86EX2 Processor, Master 533MHz/Slave 400MHz
Memory	512MB/1GB DDRIII Onboard
Storage	32MB SPI Flash/2GB SLC eMMC
LCD Display	9-inch TFT 800×480 Resolution LCD with Restive touchscreen
LAN	1Gbps Ethernet RJ45 x1; 10/100Mbps Ethernet RJ45 x2 for EtherCAT
	2.54mm 2-pin header for Power Connector
	1.25mm 4-pin header for EXT I2C TFT Driver
	1.25mm 4-pin wafer for Line-Out
I/O Connector	Power DC Input/Output Connector x1
	USB (Type-C) x1 (Upload/Debug only)
	VGA Connector (10-pin) x1
	USB 2.0 Host x3
	2.54mm 10-pin female header for I2C0, MCM, GPIO
	2.54mm 8-pin female header for MCM, GPIO, COM1 (TTL)
	2.54mm 8-pin female header for Power source
Arduino Compatible	2.54mm 6-pin female header for ADC/GPIO
Connector	2.54mm 6-pin female header for GPIO, VCC and GND
	2.54mm 6-pin female header for CAN0 and CAN1 bus
	2.54mm 10-pin header for SPI, RESET-
	2.54mm 10-pin header for SPI, RESET-, RS485
Protocol	EtherCAT, Modbus, Ethernet, CAN bus, etc.
Ethernet Standard	IEEE 802.3
Control Cycle Time	125 μs (min.)
Power Connector	6-pin Power Input /Output
Power Requirement	+19 to +50VDC Power Input (Typ. +24VDC)
Power Comsumption	8W
Operating Temperature	-20 to +70°C
Dimension	245 x 152.2 x 32.55 mm
Weight	1.07 Kg
Internal Monitoring	Temperature, Voltage, Current, Startup time
Software Support	86Duino Coding IDE 500+



## **Ordering Information**

QEC-M-090T	EtherCAT MDevice with 9-inch LCD
QEC-M-090TP	EtherCAT MDevice with 9-inch LCD/POE

<sup>\*</sup> For detailed ordering information, please contact our sales staff or view the user manual.

## **Dimension**

