

# MAC4000P4E-GTP/GTP8

Expandable Motion Controller for  
Coordinated Application



## Main Features

- Dedicated motion control DI/O for every single axis
- 32 channels digital inputs and 32 channels digital outputs
- Support E-CAM, E-Gear, PT and PVT control
- Support Standalone Procedure Access up to 32 tasks
- 2 x USB3.0 & 2 x USB2.0
- 4 x Intel® GbE LAN Ports
- 1 x CFast socket
- Triple individual display
- Support +24VDC power input
- 2 x RS232/422/485 with Auto Flow Control
- One PCIe4, two PCI expansion slots (MAC4000P4E-GTP only)

## Product Overview

MAC4000P4E-GTP series is a coordinated motion controller, featuring T/S-Curve, PT (Position-Time profiling), E-Gear and E-CAM functions for machine automation applications requiring more accuracy and excellent performance. Equipped with uncommitted DI/O up to 32 channels DI and 32 channels DO in total, MAC4000P4E-GTP series reduces the number of add-on cards and thus reduces the controller size. When working on machine vision applications, data from industrial cameras can be transmitted via GbE LAN ports, USB3.0 ports or add-on cards depending on the interfaces of the camera. MAC4000P4E-GTP series is designed for modern machine automation applications and ensures the shortest integration and development period.

## Specifications

### System

- CPU:
  - Support 3rd generation Intel® Core™ i5-3610ME (2.7 GHz, 3M Cache)
  - Support 3rd generation Intel® Core™ i3-3120ME (2.4 GHz, 3M Cache)
- Up to 8GB DDR3 1333 un-buffered and non-ECC SDRAM
- 4 x Intel® GbE LAN ports
- 2 x USB2.0 ports & 2 x USB3.0 ports
- 2 x RS232/422/485 with Auto Flow Control
- 1 x VGA & 1 x DVI-I, triple independent display supported
- 1 x PS/2 connector
- 1 x Speaker-out and 1 x Mic-in
- ATX power on/off switch & remote power on/off switch

### Motion Control

- ±10V 16-bit control output with 4 x AB phase encoder input
- Dedicated HOME, LIMITs and ALARM for every single axis
- Dedicated SVON and Clear for every single axis
- Intelligent look-ahead trajectory planning
- Support PID plus feed forward gain control (PID+Vff+Aff)
- Support E-CAM, E-Gear, PT and PVT control
- Support Standalone Procedure Access up to 32 tasks

### General I/O

- System: Uncommitted DI/O up to 16-channel DI and 16-channel DO
- Terminal board: Uncommitted DI/O up to 16-channel DI and 16-channel DO
- Optional remote I/O
  - Digital I/O modules: AXE-9200

### Power Requirements

- DC input range: +24VDC input

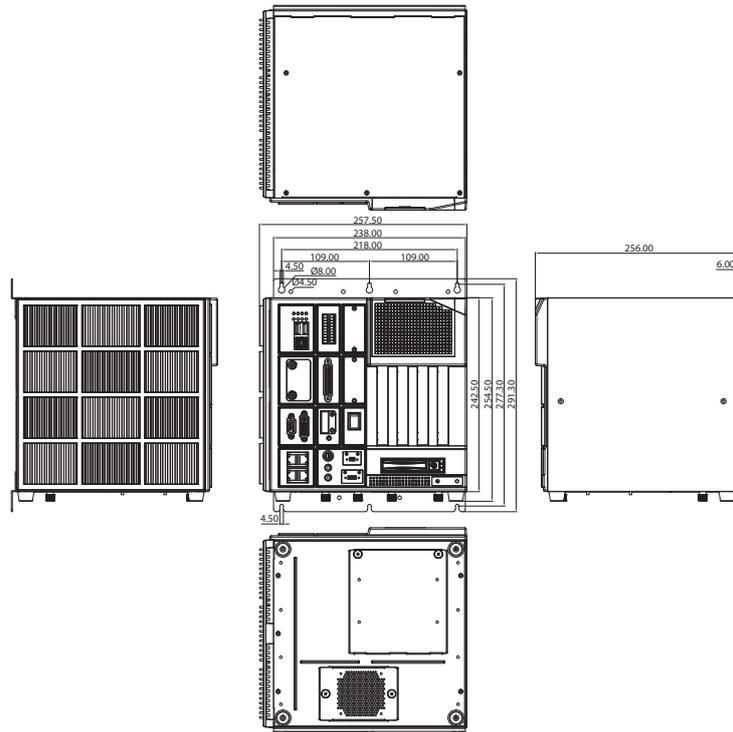
### Environment

- Operating temperature:
  - Ambient with air flow: 0°C to 55°C (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
- Random: 0.5Grms @ 5 ~ 500 Hz according to IEC68-2-64
- Sinusoidal: 0.5 Grms @ 5~500 Hz according to IEC68-2-6

### Certifications

- CE
- FCC Class A

## Dimension Drawing



## Ordering Information

### Motion Controller

- MAC4000P4E-GTP (P/N:10J30400003X0)**  
 Expandable 4-axis motion controller for coordinated application, with 3rd generation Intel® Core™ processor family, Please note that 1 PCI slot is occupied by the motion controller
- MAC4000P4E-GTP8 (P/N:10J30400004X0)**  
 Expandable 8-axis motion controller for coordinated application, with 3rd generation Intel® Core™ processor family, Please note that 2 PCI slots are occupied by the motion controller

### Optional Accessory

- AXE-9200 (P/N: 10J40920000X0)**  
 Remote I/O module with 16-CH digital input and 16-CH digital output