

High-Speed 2 Axis Motor Control Board SMC-2P(PCI)



API function library attachment [API-PAC(W32)]

- FEATURES**
- The board supports a stepping motor or servo motor (pulse train input type)
 - The board can store up to 1000 frames each of which carries the information required for a single positioning sequence, such as the speed, acceleration/deceleration rates, and target location
 - The board can control multiple axes (up to 32 axes) in synchronization

SPECIFICATIONS

| | |
|-----------------------|-------------------------------------------------------------------------|
| Channels | 2 axis |
| Pulse output type | Open collector output(Software selectable logic, positive or negative) |
| Signal format | CW/CCW or pulse/direction |
| Pulse rate | 0.1-1,000,000PPS |
| Encoder Input | |
| Input signal type | single-phase Input (UP/DOWNZ), Phase input (A/BZ) |
| Signal type | High-speed opto-Isolated input |
| Response frequency | 1MHz |
| Input resistance | A.B:220Ω/Z:510Ω |
| Limit signal | |
| Signal channels | 3 signals/ch (ORG, +LIM, -LIM) |
| Signal type | Opto-Isolated input (12-24VDC) |
| Input resistance | 3kΩ |
| General Purpose Input | |
| Signal channels | 7 signals/ch |
| Signal type | Opto-Isolated input (12-24VDC) |
| Input resistance | IN1, IN3-IN7: 3KΩ, IN2:1.8KΩ |

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|--------------------------|------------------------------------------------|
| General Purpose Output | |
| Signal channels | 3 signals/ch |
| Signal type | Open collector output |
| Output rating | +35VDC 100mA |
| Controller chip | PCL5014 [NPM] |
| Interrupt | - |
| I/O address | Any 16-byte boundary |
| Power consumption (Max.) | +5VDC 800mA |
| Connector | PCR-E96LMD [HONDA Tsushin Kogyo] or equivalent |
| PCI bus/ | 32bit, 33MHz, 5V/ |
| Dimension (mm) | 176.41(L)x106.68(H) |
| Option | |
| Software | - |
| Accessories | CCB-SMC1* |
| Cables/ Connector | PCA96P, PCB96P, PCA96PS, PCB96PS, CN5-H96F |

*1.Option cable of PCB96P or PCB96PS is required.

High-Speed 4 Axis Motor Control Board SMC-4P(PCI)



API function library attachment [API-PAC(W32)]

- FEATURES**
- The board supports a stepping motor or servo motor (pulse train input type)
 - The board can store up to 1000 frames each of which carries the information required for a single positioning sequence, such as the speed, acceleration/deceleration rates, and target location
 - The board can control multiple axes (up to 64 axes) in synchronization

SPECIFICATIONS

| | |
|-----------------------|-------------------------------------------------------------------------|
| Channels | 4 axis |
| Pulse output type | Open collector output(Software selectable logic, positive or negative) |
| Signal format | CW/CCW or pulse/direction |
| Pulse rate | 0.1-1,000,000PPS |
| Encoder Input | |
| Input signal type | single-phase Input (UP/DOWNZ), Phase input (A/BZ) |
| Signal type | High-speed opto-Isolated input |
| Response frequency | 1MHz |
| Input resistance | A.B:220Ω/Z:510Ω |
| Limit signal | |
| Signal channels | 3 signals/ch (ORG, +LIM, -LIM) |
| Signal type | Opto-Isolated input (12-24VDC) |
| Input resistance | 3kΩ |
| General Purpose Input | |
| Signal channels | 7 signals/ch |
| Signal type | Opto-Isolated input (12-24VDC) |
| Input resistance | IN1, IN3-IN7: 3KΩ, IN2:1.8KΩ |

| | |
|--------------------------|------------------------------------------------|
| General Purpose Output | |
| Signal channels | 3 signals/ch |
| Signal type | Open collector output |
| Output rating | +35VDC 100mA |
| Controller chip | PCL5014 [NPM] |
| Interrupt | - |
| I/O address | Any 16-byte boundary |
| Power consumption (Max.) | +5VDC 900mA |
| Connector | PCR-E96LMD [HONDA Tsushin Kogyo] or equivalent |
| PCI bus/ | 32bit, 33MHz, 5V/ |
| Dimension (mm) | 176.41(L)x106.68(H) |
| Option | |
| Software | - |
| Accessories | CCB-SMC1* |
| Cables/ Connector | PCA96PS, PCB96PS, PCA96P, PCB96P, CN5-H96F |

*1.Option cable of PCB96P or PCB96PS is required.

3 Axis Stepper Motor Controller SMC-3(PC)



API function library attachment [API-PAC(W32)]

- FEATURE**
- Three LSI MPG 1020 pulse generator chips from MYCOM provide output speeds up to 6M pps.
 - Four internal interrupt request channels available, one for each MPG when pulse output is completed and one channel for all three MPGs
 - All channels, besides the pulse output channels, are opto-isolated from the outside source

SPECIFICATIONS

| | |
|-----------------------|------------------------------------------------------------------------------|
| Channels | 3ch |
| Pulse output type | Open collector output(Software selectable logic, positive or negative) |
| Output signal | CW/CCW or pulse/direction |
| Pulse rate [pps] | 92-6Mpps |
| Limit signal | |
| Signal | 4 signals/ch (ORG, +LIM, -LIM, Slow-Down) |
| Signal type | Opto-isolated input : 12-24VDC |
| Input resistance | 3.3KΩ |
| General Purpose Input | |
| Signal | 2 inputs per MPG Emergency stop option (jumper selectable) 2 outputs per MPG |
| Signal type | Opto-isolated input : 12-24VDC |
| Input resistance | 3.3KΩ |

| | |
|--------------------------|-------------------------------------|
| General Purpose Output | |
| Signal | 2 channels/ch |
| Signal type | Opto-Isolated Open Collector Output |
| Output rating | +35VDC, 200mA(Max.) |
| Controller chip | MPG1020x3(MYCOM) |
| Interrupt | IRQ 3-7, 9-12, 14 and 15 |
| I/O address | 4 port occupation |
| Power consumption (Max.) | +5VDC 600mA |
| Connector | 37-pin female D-type |
| Bus/ Dimension (mm) | AT Bus /163.0(L)x122.0(H) |
| Option | |
| Software | API-PAC(W32) |
| Accessories | DTP-3(PC), DTP-4(PC), EPD-37** |
| Cables/ Connector | PCA37P, PCB37P, PCA37PS, PCB37PS |

*1.Option cable of PCB37P or PCB37PS is required.