

intelligence  
**CARTES PC**

**m o t i o n**  
*la force de la gamme !*



**transtechnik**  
servomécanismes

**Accessories:**

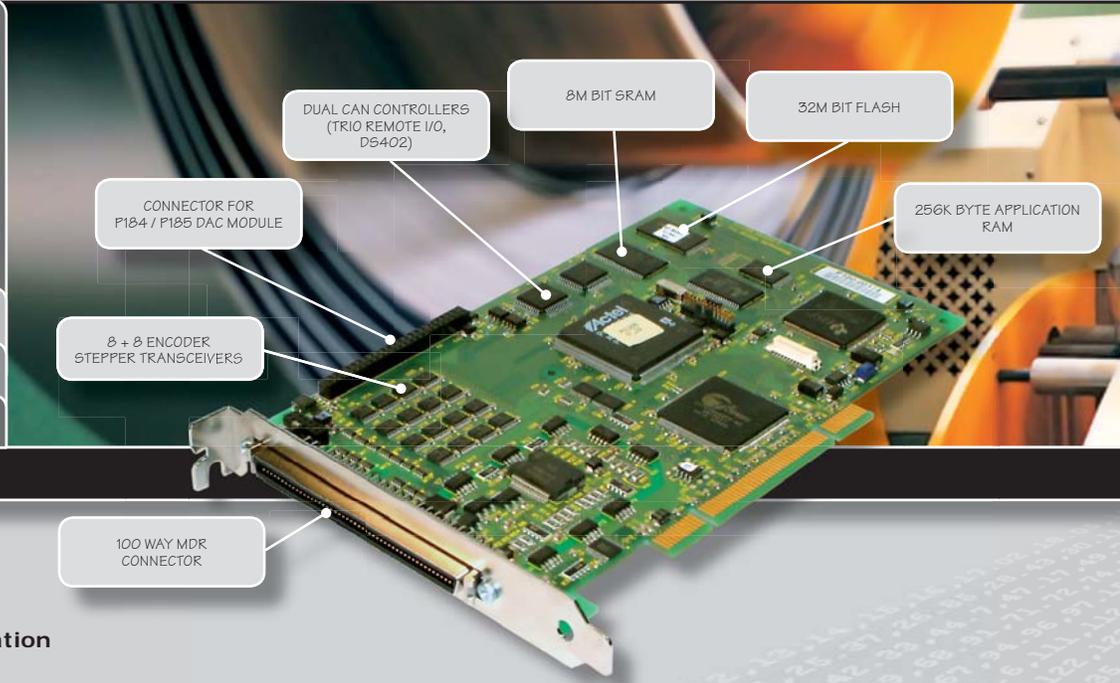
- P181 Breakout Module
- P182 Additional Stepper Axis
- P183 Additional Servo Axis
- P184 4 Axis DAC Module
- P185 8 Axis DAC Module
- P187 100 Way Cable 2.5m
- P315 CAN 16-I/O
- P325 CAN 8 Analogue Inputs

**MOTION COORDINATOR**

**PCI BUS**

**PRODUCT CODE: P180**

**PCI 208**



The PCI 208 is based on a 120Mhz 32-bit floating point Digital Signal Processor. High speed communication over the PCI bus is provided by a 128k bit dual port RAM. A large FPGA provides up to 8 stepper axes, or 8 axes with encoder feedback, or mixtures of the two. For servo drives two optional DAC mezzanine boards provide 16 bit resolution +/- 10V outputs. A DIN rail mounting break-out board eases the wiring interconnections for low-volume applications.

The PCI 208 is designed for motion control applications centred around a PC. Application programs written on the PC can access its facilities easily using an ActiveX component. It is also possible to run application programs on the PCI 208 in Trio's multi-tasking BASIC language or to use both programming techniques. Trio's *Motion Perfect* application development software can be used to monitor the execution of programs, I/O and motion. Complex motion such as cams, gears, linked axes, and interpolation is made easy with Trio's comprehensive BASIC command set. The PCI 208 has 20 opto-isolated digital 24V inputs and 10 opto-isolated outputs. The inputs can be used as high-speed hardware registration inputs where accurate product placement in applications such as printing and packaging is required.

The I/O count can be expanded using Trio's remote I/O system with both digital and analogue modules. The PCI 208 has 2 built-in CAN channels for I/O and axis control.

The base PCI 208 has 2 stepper axes and the axis count can be increased in single axis steps up to 8. A P184 or P185 DAC board is required for analogue output servo operation.

**Feature Enable Codes**

The PCI 208 is supplied as standard with axis 0 and axis 1 enabled (servo or stepper). Software "Feature Enable Codes" can be purchased and then entered using *Motion Perfect* to enable axes 2 to 7 for either servo, stepper, CAN\* or encoder operation. If you purchase servo codes, you will require either the 4 or 8 analogue output mezzanine option board.

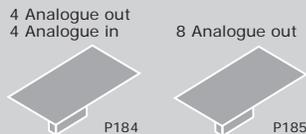
\*CAN FEC's: P701, P702, P704

**Axis Configuration**

- Axis 0** stepper / servo / encoder / CAN
- Axis 1** stepper / servo / encoder / CAN
- Axis 2** stepper / servo / encoder / CAN
- Axis 3** stepper / servo / encoder / CAN
- Axis 4** stepper / servo / encoder / CAN
- Axis 5** stepper / servo / encoder / CAN
- Axis 6** stepper / servo / encoder / CAN
- Axis 7** stepper / servo / encoder / CAN

Any unused axis can be used as a virtual axis

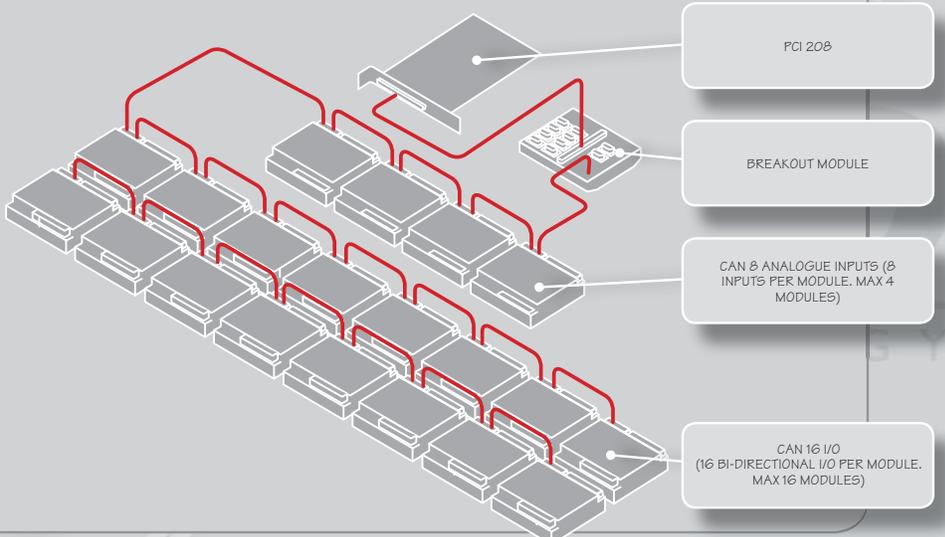
**Optional DAC Modules**



**Fieldbus Communication Options**

**CAN** Trio remote I/O, DeviceNet slave CANopen I/O, or user programmable

**Example of an 8 Axis Servo System with 256 expansion I/O and 32 analogue inputs**



**I/O Capability**

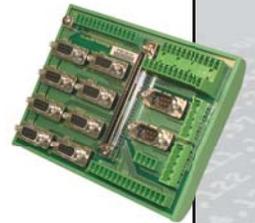
- 20 Inputs and 10 output channels
- Expandable to 256 bi-directional channels and 32 analogue inputs.

Part Number	P180
Size	106mm x 180mm x 21mm
Weight	90g
Temperature Range	0-45 degrees Celsius
Power Consumption	3.3V or 5V Supplied Via PCI Bus
Maximum Number Of Axes	8
Built In Encoder Inputs	8 bi-directional line driver encoder input/stepper output RS422P
Built In Stepper	8 @ 6MHz (Encoder) or 2MHz (Stepper)
Built In Analogue Outputs	None - Use 4 or 8 Axis Option Board (P184 OR P185)
Servo Cycle Time	1000us, 500us, or 250us
Built In Inputs	20 x 24V Opto-Isolated
Built In Outputs	10 x 24V Opto-Isolated
Built In Bi-directional I/O	None
Built in Analogue Inputs	None. Use P184-to provide 4 @ +/-10V, 12 bit
Inputs Functions	Forward Limit / Reverse Limit / Datum / F Hold
Watchdog Relay	1 Solid State - 24V @ 100mA max Current
Serial Ports	None
CAN Ports	2 @ 1MBAUD max
Daughter board Slots	None
User Memory	256kbytes
Table Memory	32000 values
Multi-tasking	2 Fast Tasks + 5 Normal Tasks
EMC Compliance	BS EN61000-6-2 : 1999 generic noise immunity standard for industrial environment BS EN61000-6-4 : 2001 generic emission standard for light industrial environment



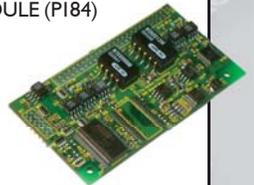
#### PCI 208 BREAKOUT MODULE (P181)

Din rail mounted module to convert PCI 208 100 way High Density connector to 8 x 9 pin sub D style encoder connectors and screw terminal disconnects for I/O and analogue outputs. Requires P187 connecting cable.



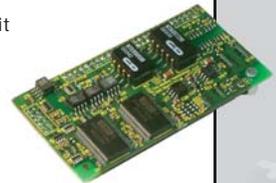
#### PCI 208 4 AXIS DAC MODULE (P184)

Provides 4 +/-10V, 16 Bit outputs for the P180 (PCI 208). Includes 4 x 0-10V analogue inputs 12 Bit.



#### PCI 208 8 AXIS DAC MODULE (P184)

Provides 8 +/-10V 12 Bit outputs for the P180 (PCI 208).

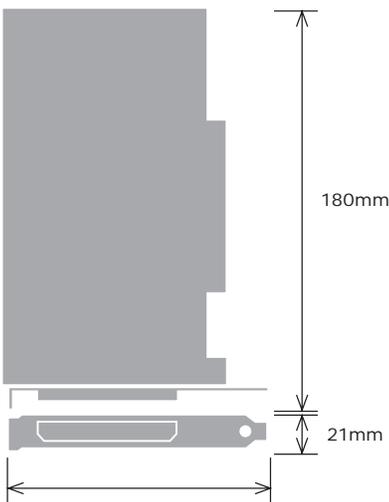


#### PCI 100WAY CABLE 2.5M (P187)

100 way to 100 way High Density cable for connecting PCI 208 to PCI 208 Breakout Module.



#### Overall Dimensions



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