

► **Trio Motion Technology** ◀



Motion Control with USB

Breathing Life Into Machines

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Trio Motion Technology

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- ActiveX software designed specifically for the USB daughter board for easy integration
- 12Mbit/sec high-speed communications to Trio controllers
- Eliminates the need for noise-prone breakout terminal blocks
- Works with Visual Basic, Visual C and Delphi
- 1 to 16 axes of motion control

Producing efficient, and dependable motion control systems based on standard PCs has typically required a PC-bus based control card.

High-speed real time control is available without the PC but now straightforward with the new ActiveX software component from Trio Motion Technology USB.

The ActiveX software designed specifically for use Trio's high-performance USB daughter board allows designers to execute commands in Trio motion controllers just as if the relevant programming functions were resident in the PC itself. Trio's USB communications card eliminates the need for costly and unreliable breakout ribbon cables and terminal blocks required when using PC-bus controller boards.

The new package provides easy integration with existing software, and allows designers to work in the software environment of their choice. The functions it provides can be accessed by any of the high-level languages that provide support for Windows ActiveX components. These include Visual C, Visual Basic and Delphi; language that are the most popular choices for programmers today.

The ActiveX component and USB daughter board can be used in conjunction with Trio Motion Technology MC216, MC204 and MC Euro205 multi-axis motion controllers. The MC216 provides control for between 1 and 16 axes, and has the capability of running up to 15 control programs simultaneously, while the MC204 offers control for 1 to 4 axes, and can run 5 control programs simultaneously. The economical MC Euro205 provides 4-axis control in a single 3U Eurocard, and is primarily intended for larger OEM applications.

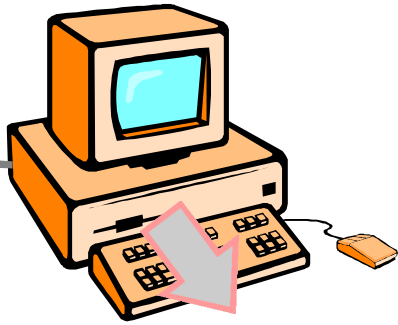
For all models of controller, the ActiveX component and USB daughter board provide rapid response to commands, with the USB link operating at 12 Mbits/s. Use of the USB system eliminates the need to bring potentially noisy interface signals into the PC.

Trio Motion Technology's new ActiveX component (for Windows 98 and 2000), together with full documentation in Adobe Acrobat format, can be downloaded from the website: www.triomotion.com. The website also provides comprehensive information on Trio's full range of innovative motion control products.





Trio's ActiveX Motion Control Library for USB



Development Environment
(Visual Basic)

TrioPC toolbox
ActiveX Software

TrioPC.OCX

Visual Basic Example

```
on = 1
off = 0

REM Start a move then wait for it to end
TrioPC1.MoveRel(1, dist, axis)
While mtype <> 0
    TrioPC1.GetVariable("MTYPE", mtype)
Wend

REM Turn on output 8
TrioPC1.Op(8, on)

REM Start a Datum Sequence on axis 2
TrioPC1.Datum(3, 2)

REM Read a VR() variable from the Trio
Dim value As Double
TrioPC1.GetVr(23, value)
```

12Mbit/sec USB Serial
Communications



MC204 / 216 Multi-Tasking Programs

Task #1 Level 14 (high priority)
REMOTE_PC
Runs the USB link

Task #2 Level 13 (high priority)
Local BASIC program
e.g. monitor ESTOP

Task #3 Level 1 (low priority)
Local BASIC program
e.g. PLC Logic functions

MC204 / MC216 Motion Coordinator

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