Product Selection Guide

Product Family	Multi Flex		DCX							DC2	
Series	**MultiFlex PCI Series**		**DCX 300 Series**			**DCX 200 Series**		**DCX 100 Series**		**DC2 Series**	
Part Number	MFX-PCI 1440	MFX-PCI 1040	DCX-PCI 300	DCX-AT 300	DCX-VM 300	DCX-AT 200	DCX-VM 200	DCX-PCI 100	DCX-PC 100	DC2-PC100	DC2-STN100
Distinguishing Characteristics	4 analog axes plus 4 pulse axes	4 pulse axes	High-performance up to 16 axes	High-performance	High-performance	Value performance	Value performance	Direct-drive for small servo motors	Low cost up to 8 axes	Low cost 2+2 axes	Stand-alone 2+2 axes
Form-Factor	PCI short-card	PCI short-card	PCI	ISA	VME	ISA	VME	PCI	ISA	ISA	Stand-Alone
Servo Control	Yes	Pulse only	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Stepper Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Indexing only	Indexing only
Total Number of Axes	8	4	1-16	1-6	1-6	1-6	1-6	1-8	1-8	4	4
Analog Command (Servo) Axes	4	-	1-16	1-6	1-6	1-6	1-6	1-8	1-8	2	2
Pulse Command (Stepper or Servo) Axes	4	4	1-16	1-6	1-6	1-6	1-6	0	1-8	2 (Indexer)	2 (Indexer)
Number of Closed-Loop Axes	4 or 8 (option)	4 (option)	1-16	1-6	1-6	1-6	1-6	1-8	1-8	2	2
Servo Loop Rate (each axis)	4 KHz PID-FF	1 KHz PID-FF	8 KHz PID-FF	8 KHz PID-FF	8 KHz PID-FF	2 KHz PID-FF	2 KHz PID-FF	3.3 KHz PID-FF	3.3 KHz PID-FF	1 KHz PID-FF	1 KHz PID-FF
Encoder Frequency Limit	20 MHz	20 MHz	10 MHz	10 MHz	10 MHz	1 MHz	1 MHz	1 MHz	1 MHz	1 MHz	1.25 MHz
Pulse (stepping) Frequency Limit	5 MHz	5 MHz	5 MHz	5 MHz	5 MHz	1.25 MHz	1.25 MHz	N/A	1.25 MHz	30 KHz	30 KHz
Multi-Axis Coordinated Motion	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes
Modes of Motion	Point-to-point Linear/Circular Velocity/Torque Gearing/Slaving Continuous Path	Point-to-point Linear/Circular Velocity Gearing/Slaving Continuous Path	Point-to-point Linear/Circular Velocity/Torque Gearing/Slaving Continuous Path	Point-to-point Linear/Circular Velocity/Torque Gearing/Slaving Continuous Path	Point-to-point Linear/Circular Velocity/Torque Gearing/Slaving Continuous Path	Point-to-point Linear/Circular Velocity/Torque Gearing/Slaving Continuous Path	Point-to-point Linear/Circular Velocity/Torque Gearing/Slaving Continuous Path	Point-to-point Velocity/Torque	Point-to-point Velocity/Torque	Point-to-point Linear/Circular Velocity/Torque Gearing/Slaving Continuous Path	Point-to-point Velocity/Torque Linear Gearing/Slaving Camming
Motion Profiles	Trapezoidal, Parabolic S-Curve	Trapezoidal, Parabolic S-Curve	Trapezoidal, Parabolic S-Curve	Trapezoidal, Parabolic S-Curve	Trapezoidal, Parabolic S-Curve	Trapezoidal, Parabolic S-Curve	Trapezoidal, Parabolic S-Curve	Trapezoidal	Trapezoidal	Trapezoidal	Trapezoidal
On-Board Program Multi-tasking	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes
Direct-Drive of Small DC Servos	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	-
AC Brushless Sine Commutation	-	-	Yes	Yes	Yes	-	-	-	-	-	-
Closed-Loop Stepper	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	-	-	-
Axis I/O (limits, home, amp enable, etc.)	Yes (optoisolated)	Yes (optoisolated)	Yes (optoisolated)	Yes (optoisolated)	Yes (optoisolated)	Yes	Yes	Yes	Yes	Yes	Yes (optoisolated)
General-Purpose I/O	32 Digital I/O (16 in/16 out)	32 Digital I/O (16 in/16 out)	16 Digital I/O 8 in, 8 out	16 Digital I/O configurable	-	16 Digital I/O configurable, 4 Analog in	-	16 Digital I/O 8 in, 8 out	16 Digital I/O configurable, 4 Analog in	16 Digital I/O 4 Analog in	16 Digital I/O 8 in, 8 out 4 Analog in
Optional General-Purpose I/O	8 Analog in 14 bit	8 Analog in 14 bit	Digital - 128 I/O Analog 12 bit 32 in, 32 out	Digital 96 I/O Analog 12 bit 24 in, 24 out	Digital 96 I/O Analog 12 bit 24 in, 24 out	Digital 96 I/O Analog 12 bit 24 in, 24 out	Digital 96 I/O Analog 12 bit 24 in, 24 out	Digital - 128 I/O Analog 12 bit 32 in, 32 out	Digital - 128 I/O Analog 12 bit 32 in, 32 out	-	-
Interconnection & Cabling	High-density shielded cables for all signals	High-density shielded cables for all signals	High-density shielded cable or ribbon cable	Ribbon Cable	Ribbon Cable	Ribbon Cable	Ribbon Cable	Ribbon Cable	Ribbon Cable	15 pin D-Sub	15 pin D-Sub
Programming Libraries & Utilities for C/C++, Visual Basic, Delphi, LabVIEW	Yes	Yes	Yes	Yes	-	Yes	-	Yes	Yes	Yes	Yes
Operating System Support Win 98/NT/2000/XP	Yes	Yes	Yes	Yes	-	Yes	-	Yes	Yes	Yes	Yes

This chart represents only a limited sample of the features supported by our motion controllers.
For complete product specifications, see our individual product data sheets in the Products section of our web site - www.pmccorp.com