

PCI Bus Motion Controllers

Galil offers both single and multi-axis controller cards that install directly into the commonly used PCI bus. The DMC-18x6 Accelera Series are Galil's newest generation of motion controllers. Incorporating a 32-bit RISC-based microcomputer, the DMC-18x6 controllers offer ultra high-speed performance and processing power. The DMC-18x6 Accelera Series are full-featured PCI bus controllers for one through eight axes, which include optically isolated digital inputs and uncommitted analog inputs. The DMC-18x2 Econo

Series are lower-cost models for one through four axes and do not include optical isolation, analog inputs or dual encoder inputs. The DMC-1417 is a single-axis PCI bus motion controller.

Complete specifications are included in the following pages.

PCI Bus, 1-8 axes, DMC-18x6 Accelera Series, Pages 13–19

PCI Bus, 1-4 axes, DMC-18x2 Econo Series, Pages 20–25

PCI Bus, 1 axis, DMC-1417, Page 82–85

PCI Product Comparison Chart

	DMC-18x6	DMC-18x2	DMC-1417
Communication interface	PCI	PCI	PCI
Form factor	card	card	card
Number of axes	x=1,2,3,4,5,6,7,8	x=1,2,3,4	1
Connector type	100-pin SCSI	100-pin SCSI	37-pin D
Mating interconnect module	ICM-1900/-2900	ICM-1900/-2900	ICM-1460
Maximum encoder input rate	22 MHz	12 MHz	8 MHz
Maximum stepper output rate	6 MHz	3 MHz	2 MHz
Minimum servo update time	1-2 axes: 62 µsec 7-8 axes: 187 µsec	1-2 axes: 250 µsec N/A	1 axis: 375 µsec N/A
Optoisolated digital inputs	yes	no	no (yes with ICM-1460-OPTO)
Number of uncommitted digital inputs	1-4 axes: 8 5-8 axes: 24	8	7
Number of uncommitted digital outputs	1-4 axes: 8 5-8 axes: 16	8	3
Number of analog inputs	8	0	0
I/O expansion	64 with DB-14064	64 with DB-14064	no
Dual encoder for each axis	yes	no	yes
Program memory size (lines x chr)	2000 x 80	1000 x 80	250 x 40
Array size (number of elements)	16000	8000	1000
Number of variables	510	254	126
Number of tasks for multitasking	8	8	2
Command execution speed	40 µsec	400 µsec	400 µsec
Drive options from Galil	AMP-19520 AMP-19540	AMP-19520 AMP-19540	external
Price: qty 1	DMC-1846: \$2195	DMC-1842: \$1195	DMC-1417: \$595
Price: qty 100	DMC-1846: \$ 995	DMC-1842: \$ 795	DMC-1417: \$395