

- Yields a 90% increase in the MFM formatted capacity
- 9 megabit/second data transfer rate
- 56 bit enhanced error checking and correction (ECC)
- Supports ST506/412HP Winchester hard disk drives
- Supports up to 2,048 cylinders and 15 read/write heads
- Supports two 5¼ or 3½ inch floppy disk drives
- Compatible with IBM[®] PC AT, 286-, or 386-based systems
- Compatible with MS-DOS[®] and PC-DOS[®]

The PS180-16F Controller expands the factory-rated storage capacity by 90% on high-performance ST506/412HP Winchester hard disk drives. It increases the system performance by 10 - 110%.

Accurate data transfer rates of 9 megabits per second are achieved through Perstor's proprietary Advanced Data Recording Technology (ADRT™) and enhanced error checking and correction techniques. ADRT eliminates overstress of the media by writing data to the hard drive within the design specifications of the drive.

The PS180-16F Controller is IBM[®] PC AT compatible and is designed for the 16-bit bus of 80286- and 80386-based machines. It is compatible with MS-DOS[®] and PC-DOS[®] operating systems.

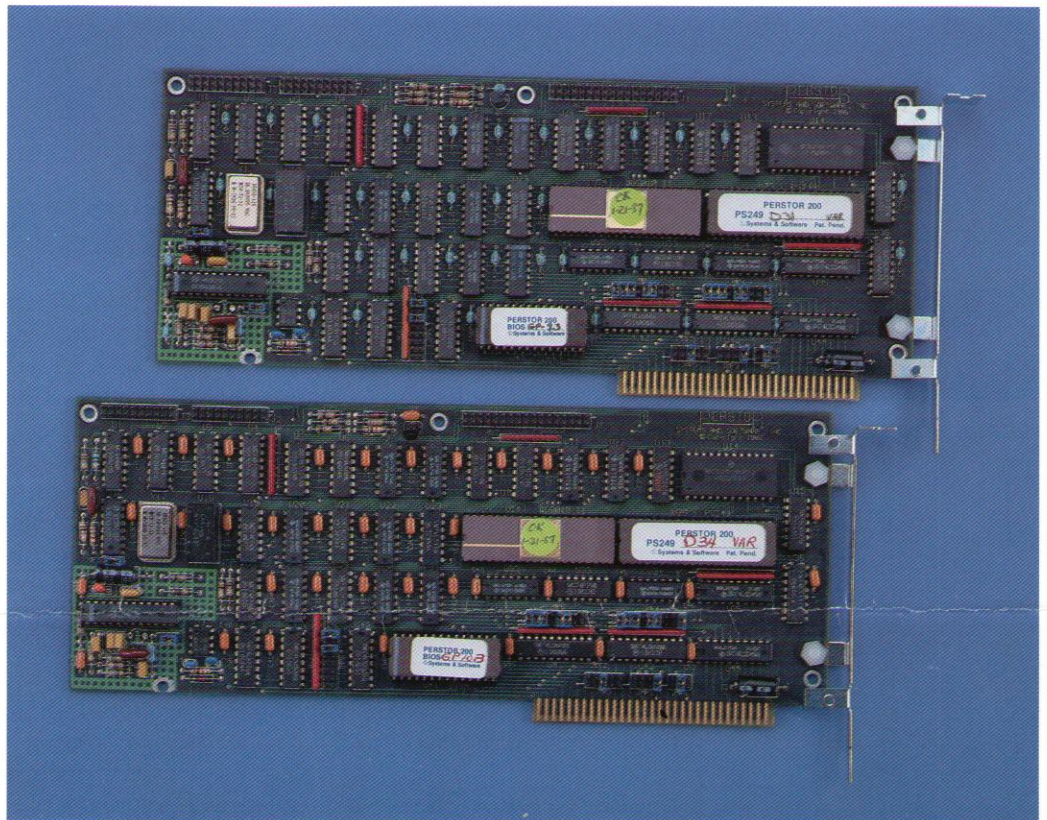
The PS180-16F supports MFM (modified frequency modulation) and RLL (run length limited) approved drives with oxide or plated media. It provides full support for either 5.25 inch or 3.5 inch floppy disk drives in both double and quad density formats. It supports up to 1,024 tracks on floppy disks and is capable of concurrent operations of one hard disk and one floppy disk.

PERSTOR 200 SERIES HARD DISK CONTROLLER SPECIFICATIONS MODEL PS180-16F

PHYSICAL		DC POWER REQUIREMENTS	
Length	13.10 in. 33.3 cm.	+5V DC ± 5%	
Length w/bracket	13.85 in. 35.2 cm.	POWER DISSIPATION	
Width	4.50 in. 11.4 cm.	Maximum	8 watts
Weight	7.50 oz. 212.7 g.	ERROR RATES*	
ENVIRONMENTAL LIMITS		Seek Errors	1 per 10 ⁶ seeks
Ambient Temperatures		Soft Read Errors	1 per 10 ¹⁰ bits transferred
Operating	50° to 113°F (10° to 45°C)	Hard Read Errors	1 per 10 ¹² bits transferred
Non-Operating	-40° to 140°F (-40° to 60°C)	RELIABILITY	
Relative Humidity		MTBF	25,000 POH
Operating	8% to 80%	PM	NONE
Non-Operating	8% to 80%	MTTR	30 minutes
*System Level		Design Life	5 years

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PERSTOR
200
SERIES



Introducing the PERSTOR 200 Series Advanced RLL Controllers.

The PERSTOR 200 Series Advanced RLL Controllers DOUBLE the factory-rated storage capacity of Winchester hard disk drives. By operating at higher data transfer rates, the PERSTOR 200 Series Advanced RLL Controllers allow twice the information to be put onto your hard disk. This means better performance for your disk, and greater productivity for you.

Perstor Systems Inc.
7825 E. Redfield Road
Scottsdale, AZ 85260
(602) 991-5451 FAX (602) 948-3413

PERSTOR[®] *Sensible solutions to your hard disk problems.*



**PERSTOR
200
SERIES**

The PERSTOR 200 Series Controllers include two models, PS180 and PS200.

And both models utilize the Advanced Run Length Limited 2,7 encoding method. The PS180 Controller has a data transfer rate of 9 megabits per second to increase hard disk capacity by at least 90% and provides 31 sectors per track. The PS200 Controller has a data transfer rate of 10 megabits per second to increase hard disk capacity by at least 100% and provides 34 sectors per track. Both controllers are ROM residence selectable and port address switchable to allow you to have more than one Bios ROM controller. In addition, PS180 and PS200 are multi-layer controllers, reducing electronic noise in the circuitry.

The PERSTOR 200 Series Controllers will work with virtually any high quality Winchester hard disk drive compatible with the IEEE specifications for the ST506/412 interface. We have conducted successful qualification tests on most of the popular fixed disk drives in the market today, including Miniscribe, Seagate, Maxtor, Newbury Data, CDC, LaPine, Rodime and other models.

The PS180 Controller works with MFM and RLL approved drives, plated and oxide media, and the PS200 controller works best with RLL approved, plated media drives, whether installed in a PC, XT, or AT or any of their compatibles. Both controllers use a standard IBM compatible Bios, so they are compatible with MSDOS, PC DOS, UNIX, XENIX, and CPM, as well as Novell Netware.

Both the PS200 Controller and the PS180 Controller are capable of supporting drives with 15 heads or less and 2,048 cylinders or less. They come with an Advanced Error Checking and Correction capability using a 56 bit code to allow twice the bit drop-out factor of normal controllers. In addition to this 56 bit ECC, both models have a 25 megabit data recovery circuit, and on both controllers is a sector buffering RAM chip to overcome speed differences between the drive and controller.

On both models, you have your choice of mounting hard disk drives internally or externally, and using the controller as a primary, co-resident, or multiple controller. Plus, you have the option of setting up the controller for Bios or non-Bios use, and can have either Direct Memory Access or programmed input/output.

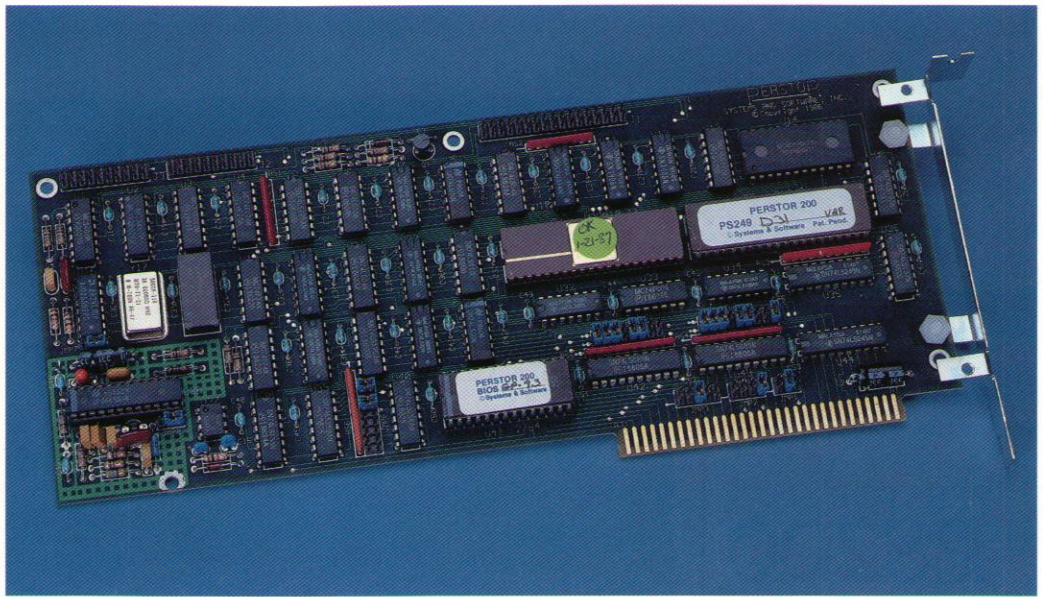
DiskExpander, a compaction software program packaged with the PERSTOR 200 Series Controllers as a no-cost option, provides another 50% increase in capacity above the doubling provided by the controller. DiskExpander is enhanced by a cache access method that lowers the average access time to about 15ms when used. However, this compaction software program needs a DOS 3.1 or higher environment.

Getting twice the storage capacity out of your hard disk is easy and cost effective with the PERSTOR 200 Series Advanced RLL Controllers. You get the benefits of full compatibility with your system, increased capacity, improved performance, and more.

PERSTOR[®] *Sensible solutions to your hard disk problems.*



PERSTOR PS180



Introducing the PERSTOR 200 Series PS180 Controller.

The PS180 Controller nearly **DOUBLES** electronically the factory-rated storage capacity of Winchester hard disk drives, and coupled with DiskExpander compaction software, it can more than double the capacity! PS180 utilizes the Advanced Run Length Limited 2,7 encoding method, giving it a data transfer rate of 9 megabits per second to increase hard disk capacity by at least 90%. It provides 31 sectors per track and is ROM residence selectable and port address switchable to allow you to have more than one controller.

The PS180 Controller works with virtually any quality Winchester hard disk drive compatible with the IEEE specifications for the ST506/412 interface. We have conducted qualification tests on most of the popular fixed disk drives in the market today, including Miniscribe, Seagate, Maxtor, Newbury Data, CDC, LaPine, Rodime and other models. PS180 works with both MFM and RLL approved drives, plated and oxide media, in a PC, XT, or AT or any of their compatibles! Plus, PS180 uses a standard IBM compatible Bios, so it is compatible with MS DOS, PC DOS, UNIX, XENIX, and CPM, as well as Novell Netware.

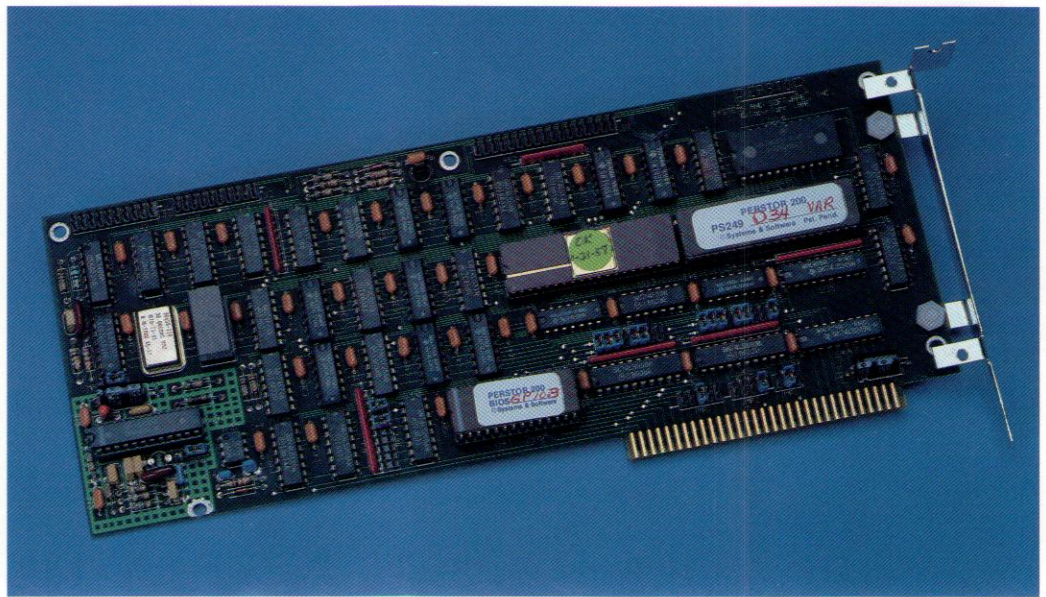
The PS180 Controller is capable of supporting drives with 15 heads or less and 2,048 cylinders or less. PS180 has an Advanced Error Checking and Correction capability using a 56 bit code to allow twice the bit drop-out factor of normal controllers. In addition to this 56 bit ECC, there is a sector buffering RAM chip on the board itself to overcome speed differences with the drive, and it has a 25 megabit data recovery circuit.

DiskExpander, the compaction software program packaged with the PS180 Controller as a no-cost option, provides a data dependent 50% increase in capacity above the 90% increase of PS180. DiskExpander is enhanced by a cache access method that lowers the average access time to about 15ms when used. However, this compaction software program needs a DOS 3.1 or higher environment.

Getting more than twice the storage capacity out of your hard disk is easy and cost effective with the PS180 Controller and DiskExpander. You get the benefits of full compatibility with your system, increased capacity, decreased access time, error correction, and more.

PERSTOR[®] *Sensible solutions to your hard disk problems.*

PERSTOR PS200



Introducing the PERSTOR 200 Series PS200 Controller.

The PS200 Controller is a high performance controller that electronically **DOUBLES** the factory-rated storage capacity of Winchester hard disk drives. PS200 utilizes the Advanced Run Length Limited 2,7 encoding method, giving it a data transfer rate of 10 megabits per second to increase hard disk capacity by at least 100%. It provides 34 sectors per track and is ROM residence selectable and port address switchable to allow you to have more than one controller.

The PS200 Controller works with high quality Winchester hard disk drives compatible with the IEEE specifications for the ST506/412 interface, but it works best with RLL approved, plated media drives, whether installed in a PC, XT, or AT or any of their compatibles. PS200 uses a standard IBM compatible Bios, so it is compatible with MS DOS, PC DOS, UNIX, XENIX, and CPM, as well as Novell Netware. It is capable of supporting drives with 15 heads or less and 2,048 cylinders or less.

The PS200 Controller has an Advanced Error Checking and Correction capability using a 56 bit ECC code to allow twice the bit drop-out factor of normal controllers. In addition to this 56 bit ECC, there is a sector buffering RAM chip on the board itself to overcome speed differences with the drive, and it has a 25 megabit data recovery circuit.

With the PS200 Controller, you have your choice of mounting hard disk drives internally or externally, and using the controller as a primary, co-resident, or multiple controller. Plus, you have the option of setting up the controller for Bios or non-Bios use, and can have either Direct Memory Access or programmed input/output.

Getting twice the storage capacity out of your hard disk is easy and cost effective with the PS200 Controller. You get the benefits of full compatibility with your system, increased capacity, error correction, and more.

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