

# CHASE PS4 • PS4+ • PS8 • PS16

THE INTELLIGENT I/O FAMILY  
FOR MICRO CHANNEL ARCHITECTURE



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RESEARCH

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# CHASE

The Chase PS4/PS4+/PS8/PS16 are a family of intelligent serial I/O controller boards for the IBM PS/2 range of

**PS4 • PS4+ • PS8 • PS16**

computers. The Chase I/O family has been designed and engineered to transform the powerful IBM PS/2 computers into effective multi-user systems. The PS/2 range of computers feature the new IBM Micro Channel Architecture bus which is based on successful concepts used in larger IBM systems and permits peripheral devices to communicate efficiently with the central processor. The MCA bus has been designed to support 'intelligent' expansion boards and the Chase I/O boards with their on-board 80186 microprocessor take full advantage of all the MCA features.

#### The PS/2 Multi-user Solution

With literally millions of personal computers installed in industry and commerce today, the emerging requirement of individual users is to share data, applications and peripheral devices within a specific work group. The availability of multi-user operating systems such as SCO Xenix and AIX from IBM transforms the PS/2 into a powerful multi-user and multi-tasking system, enabling work groups to efficiently share data, applications and peripherals. The Chase PS range of intelligent I/O controllers extends the connectivity of the IBM PS/2 up to 64 users, meeting the communications requirements of both small and large work groups. The Chase PS solution to work group connectivity provides both high performance and excellent price performance when compared to the cost of a mini-computer system or a local area network.

#### Intelligent I/O

The Chase I/O family provides a full range of serial I/O controllers from the entry level four user

CHASE PS4 to the 16 user CHASE PS16. Chase I/O controllers use a dedicated 80186 microprocessor to

manage the serial ports. Unlike normal "dumb" PC input/output boards, which can drain a staggering 60% of available processor time on multi-user systems, the Chase boards off-load the input/output overhead to their own processor. Data transfers to and from the central processor are through a Dual Ported shared memory interface, a unique feature of the Chase I/O family. Each port is independently configurable for speed (from 45 to 38,400 baud) parity and word length. The controllers also support downloadable code allowing a great deal of flexibility in the operating systems and devices supported. The Chase PS4+/PS8/PS16 boards are supplied with distribution boxes containing a standard RS232 interface, an RS422 distribution box is available as an option. The Chase I/O family has been designed for expansion and any combination of up to four boards may be inserted in a PS/2 allowing up to 64 users to join the system.

#### UNIX/XENIX/AIX Compatibility

The Chase I/O family was specifically designed to improve the I/O performance of Unix/Xenix/AIX running on the IBM PS/2. By moving character translation, line editing, echoing and buffering from the central processor to the I/O processor, near single user performance can be maintained even with 16 users connected.

SCO Xenix - A device driver for SCO Xenix is supplied as standard. The availability of VP/ix under SCO Xenix allows the Unix user to run industry standard DOS packages.

IBM AIX - A device driver for the IBM AIX PS/2 version of Unix will be available shortly after the general release of AIX PS/2.

#### CHASE PS4

Cost effective, entry level, four port board. 80186 processor. RS232 interface with RJ11 (telephone jack style) connectors.

#### CHASE PS4+

Very high performance four port board. 80186 processor. RS232 or RS422 distribution box with four DB25 connectors.

#### CHASE PS8

High performance eight port board. 80186 processor. RS232 or RS422 distribution box with eight DB25 connectors.

#### CHASE PS16

High performance sixteen port board. 80186 processor. RS232 or RS422 distribution box with sixteen DB25 connectors.

#### TECHNICAL SPECIFICATION

	CHASE PS4	CHASE PS4+	CHASE PS8	CHASE PS16
Channels	4	4	8	16
80186 speed (Wait States)	8MHz (2)	8MHz (0)	12.5MHz (0)	12.5MHz (0)
On-board ROM	64Kb	64Kb	64Kb	64Kb
On-board RAM	32Kb	128Kb	128Kb	128Kb
Down loadable code option	No	Yes	Yes	Yes
UART's	2 × 681	2 × 681	4 × 681	8 × 681
SPEED RANGE	45 to 38,400 BAUD	45 to 38,400 BAUD	19,200	19,200
Sustained o/p rate (BAUD)	9,600	38,400	SG, TD, RD	SG, TD, RD
Serial Interface RS232	SG, TD, RD, CTS, DTR	SG, TD, RD, CTS, DTR, RTS, DCD, DSR, RI	SG, TD, RD CTS, DTR	SG, TD, RD CTS, DTR
RS422 Option	No	Yes	Yes	Yes
Output connector	4 × RJ11	37 way D 4 × DB25	37 way D 8 × DB25	78 way D 16 × DB25
Distribution box	—	7/8 bit ASCII Terminals	HAYES	HAYES
Terminals supported	HAYES	DUMB/HAYES	HAYES	HAYES
Modems supported	—	IBM Micro Channel Architecture	—	—
Host Interface	—	—	—	—

#### CHASE RESEARCH LTD

Chase Research is a UK company specialising in high performance communications. They design, manufacture and market a range of intelligent I/O cards used extensively by end users and OEM's alike. Chase Research also specialise in customising their standard product range to meet the precise requirements of OEM's and computer manufacturers.

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