XEROX

Dove IOP Board

Technical Reference Manual

Version 1.2
July 1987

Dove IOP Board Technical Reference Manual

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Information contained in this manual is subject to change without notice.

For this printing, speaker information was added. A revision history at the back of this publication lists all pages changed since the First Edition.

The last page of this publication is a Reader Comment form. Comments are welcome and become the property of Xerox Corporation.

This publication was produced using ViewPoint on a 6085 Professional Computer System, printed on a Xerox 8040 RAVEN laser printer, and reproduced on a Xerox 9900 High Speed Copier.

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Printed in the United States of America.

Preface

P.1 Purpose

The IOP Technical Reference Manual describes the hardware on the Dove IOP board. The manual describes the theory of operation of the components, and presents information important for programmer interface.

P.2 Audience

The following groups are expected to refer to this publication:

Engineers
System designers
Microprogrammers
Field Service personnel

P.3 Organization

After a brief overview, each major part of the IOP board is discussed in a separate section. Components are described as to hardware, theory of operations, and programmer interface.

Hardware describes pins and signals of the component.

Theory of Operations describes system operating modes, which may include timing.

Programmer Interface describes register assignments and timing.

An addendum describes the speaker.

Appendices contain supplementary information about the board and components. Because this manual corresponds to B2 and later builds of machines, earlier machines will have some differences. Appendix C lists the documentation that describes the various issued IOPs found in the Dove machines. Appendix D, reprinted in a separate volume, contains a representative set of schematics.

P.4 References

The following documents contain supplementary information.

AMD 2942 Specification Sheet, Bipolar Microprocessor Logic and Interface 1985 Data Book, Advanced Micro Devices, Sunnyvale, CA

Application Note 8-A Single/Double Density Floppy Disk Controller using the PD765, NEC Microcomputers, Inc.

Daisy System Requirements Specification, Xerox Office Systems Division, 1983.

Data Catalog- Specification sheet on the FDC 9229 chip, Standard Microsystems Corporation.

LAN Components User's Manual, Intel Corporation-1984.

MCC Manchester Code Converter 8023A Data Sheet, Seeq Technology Incorporated, 1985.

Memory Components, 512 x 9 BiPort Parallel In-Out FIFO, United Technologies Mostek.

Microsystems Component Handbook Volumes I and II, Intel Corporation -1984.

Specification sheet on the 8x305 microcontroller, Signetics Corporation.

TABLE OF CONTENTS

1. IOP Board

1.1 Overview 1-1

1.2 Hardware 1-3

1.2.1 Printed wiring board assemblies (PWBA) 1-3

1.2.2 Interfaces to backplane 1-6

1.2.3 Power 1-8

2. I/O Processor and Related Components

2.1 Hardware 2-2

2.1.1 Chip and chip socket 2-2

2.1.2 Pin assignments and description 2-3

2.2 Theory of Operations 2-7

2.2.1 Execution unit 2-7

2.2.2 Integrated DMA unit 2-8

2.2.3 Integrated timer unit 2-9

2.2.4 Integrated interrupt controller 2-10

2.2.5 Clock generator 2-10

2.2.6 Chip select unit 2-10

2.2.7 Integrated peripheral accessing 2-11

2.3 Programmer Interface 2-12

2.3.1 Processor reset and initialization 2-12

2.3.1.1 Local bus controller and reset 2-12

2.3.1.2 Chip select/ready logic and reset 2-13

2.3.1.3 DMA channels and reset 2-13

2.3.1.4 Interrupt controller and reset 2-13

2.3.1.5 Timers and reset 2-13

2.3.2 Chip select address and register bit maps 2-14

3. IOP Memory and Interrupt Controllers

3.1 IOP Memory 3-1
3.1.1 Memory addressing 3-1
3.1.2 Memory mapping 3-2
3.2 Interrupts 3-2
3.2.1 Hardware 3-2
3.2.2. Theory of operations 3-4
3.2.2.1 Master interrupt controller 3-4
3.2.2.2 Slave interrupt controllers 3-5
3.2.3 Programmer interface 3-7
3.2.3.1 Registers 3-7
3.2.3.2 Timing 3-11

4. Bus Arbiter and Mode Control

4.1 Hardware 4-2
4.2 Theory of Operations 4-3
4.2.1 Ethernet and rigid disk combinations 4-4
4.2.2 IOP, PCE, Ethernet, and rigid disk combinations 4-9
4.2.3 Arbiter flow diagrams 4-15

5. Rigid Disk Subsystem

Subsystem architecture 5-1
Subsystem programming overview 5-2
5.1 Rigid Disk Drive 5-7
5.1.1 Hardware 5-7
5.1.2 Theory/Programmer interface 5-7
5.2 Rigid Disk Controller 5-8
5.2.1 Hardware 5-9
5.2.2. Theory of operations 5-11
5.2.2.1 Command/status registers 5-12
5.2.2.2 Scratch pad and local memory 5-12
5.2.2.3 Drive status and drive control registers 5-12
5.2.2.4 Microcontroller data paths 5-12
5.2.2.5 Write logic data path 5-13
5.2.2.6 Read logic data path 5-14
5.2.2.7 Reading and writing the DMA and FIFO 5-15

5.2.3 Programmer interface 5-16
5.2.3.1 Registers 5-16
5.2.3.2 Timing 5-19
5.3 DMA Controller 5-21
5.3.1 Hardware 5-22
5.3.1.1 DMA signals 5-22
5.3.1.2 DMA as a peripheral for IOP 80186 5-24
5.3.2 Theory of operations 5-25
5.3.2.1 DMA state machine 5-25
5.3.2.2 States of the state machine 5-26
5.3.2.3 Operating sequence 5-29
5.3.2.4 State machine timing 5-31
5.3.2.5 Wait states for slower memories 5-41
5.3.3 Programmer interface 5-45
5.3.3.1 Address register 5-46
5.3.3.2 Word count 5-47
5.3.3.3 Control register on AM2942 chip 5-47
5.3.3.4 DMA command register 5-48
5.3.3.5 DMA status register 5-48
5.3.3.6 Programming DMA transfers 5-49
5.4 Rigid Disk FIFO 5-51
5.4.1 Hardware 5-52
5.4.2 Theory of operations 5-52
5.4.3 Programmer interface 5-53

6. Ethernet Controller

6.1 Overview 6-1
6.1.1 Controller functional blocks 6-2
6.1.2 Controller relationship to standards 6-3
6.2 Hardware 6-3
6.3 Theory of Operations 6-9
6.3.1 Interfaces 6-9
6.3.1.1 Communicating with the transceiver 6-9
6.3.1.2 Communicating with the SIA and DLC 6-10
6.3.1.3 Communicating with the IOP 6-11
6.3.1.4 Communicating with the IOP bus 6-12

6.3.2 Processes leading to data transmission and reception 6-14
6.3.2.1 Initialization 6-14
6.3.2.2 Successful boot 6-15
6.3.3 Data transmission and net management 6-15
6.3.3.1 Transmission 6-16
6.3.3.2 Network management 6-17
6.3.4 Data reception 6-19
6.3.4.1 Initializing 6-19
6.3.4.2 Receiving a frame 6-19
6.3.5 Diagnostics 6-21
6.3.5.1 Hardware diagnostics 6-22
6.3.5.2 Software diagnostics 6-22

7. Floppy Disk Subsystem

7.1 Hardware 7-2
7.1.1 Floppy disk drives 7-2
7.1.2 Diskettes 7-2
7.1.3 Floppy disk controller 7-3
7.1.3.1 Controller interface 7-3
7.1.3.2 Data separator 7-6
7.2 Theory of Operations 7-8
7.2.1 Floppy disk controller 7-9
7.2.2 Data separator 7-9
7.2.3 80186 processor (DMA and timer) 7-9
7.2.4 Interrupt controllers 7-10
7.2.5 Control register 7-10
7.2.6 Buses 7-10
7.3 Programmer Interface 7-10
7.3.1 Registers 7-10
7.3.1.1 Floppy disk controller registers 7-11
7.3.1.2 DMA registers 7-13
7.3.1.3 Timer registers 7-14
7.3.1.4 IOP control registers 7-14
7.3.2 Interrupts 7-16
7.3.3 Reset 7-16
7.3.4 Diskette format 7-16

7.3.4.1 Preambles and postambles 7-17
7.3.4.2 Sectors 7-18

8. RS232C Controller

8.1 Hardware 8-1
8.1.1 Serial controller 8-1
8.1.1.1 Controller 8-2
8.1.1.2 Timer 8-4
8.1.2 Interfaces 8-6
8.1.2.1 System interface signals 8-6
8.1.2.2 8274 interface ports 8-7
8.1.2.3 Interface connectors 8-9
8.1.3 Serial channels 8-10
8.2 Theory of Operations 8-11
8.3 Programmer Interface: Registers 8-12
8.3.1 External registers 8-12
8.3.2 8274 serial controller registers 8-13
8.3.2.1 Write registers 8-13
8.3.2.2 Read registers 8-17
8.3.3 8254 timer registers 8-18

9. Keyboard/Mouse Controller and Maintenance Panel

9.1 Hardware 9-1
9.2 Theory of Operations/Programmer Interface 9-2
9.2.1 Keyboard and mouse interface 9-2
9.2.2 Registers 9-3
9.2.2.1 Command registers 9-3
9.2.2.2 Status registers 9-5
9.2.3 Maintenance panel 9-6
9.2.3.1 Normal commands 9-7
9.2.3.2 Special commands 9-7

10. Debugger Interface

10.1 Hardware 10-1
10.1.1 Interface connector 10-3
10.1.2 Programmable peripheral interface (PPI) 10-4
10.1.3 Line drivers 10-4

10.1.4 Line receivers 10-5
10.2 Theory of Operations 10-5
10.2.1 Sending and receiving data 10-5
10.2.2 Handshaking 10-6
10.3 Programmer Interface 10-7
10.3.1 Addressing the debugger interface 10-7
10.3.2 Programming the PPI 10-7
10.3.2.1 Operational descriptions and configurations 10-7
10.3.2.2 Initialization 10-7
10.3.2.3 Sending a byte 10-8
10.3.2.4 Receiving a byte 10-8
10.3.2.5 Sending boot (Reset) signal to debuggee machine 10-8
10.3.2.6 Sending an NMI signal 10-9
10.3.3 Timing 10-9

Addendum: Speaker

Appendices

Appendix A Rigid Disk Subsystem Supplemental Information
Appendix B Floppy Disk Controller Command Instruction Set
Appendix C Documentation
Appendix D Representative Schematics for the IOP Board (separate document)

LIST OF FIGURES

Section 1	1.1	Dove workstation block diagram	1-2
	1.2	Locations of PWBAs on the backplane	1-3
	1.3	IOP board layout	1-4
Section 2	2.1	I/O subsystem block diagram	2-1
	2.2	80186 chip (top view)	2-2
	2.3	80186 socket pin-outs (top view)	2-3
	2.4	80186 pins and signals	2-4
	2.5	80186 block diagram	2-7
	2.6	80186 registers	2-8
	2.7	Integrated DMA unit	2-9
	2.8	Timer unit block diagram	2-9
	2.9	Integrated interrupt controller	2-10
	2.10	80186 integrated peripheral control block	2-11
Section 3	3.1	IOP address space	3-1
	3.2	IOP memory address space bit assignment	3-2
	3.3	IOP interrupts	3-4
	3.4	Interrupt pointer table	3-6
	3.5	Content of first interrupt vector byte	3-8
	3.6	Content of second interrupt vector byte	3-8
	3.7	Content of third interrupt vector byte	3-8
	3.8	Content of interrupt vector byte for iAPX 86 system mode	3-8
	3.9	Initialization command word format	3-9
	3.10	Operation command word format	3-10
	3.11	Interrupt controller INTA' cycle	3-11
Section 4	4.1	Arbitration and mode control block diagram	4-1
	4.2-6	Arbiter flow diagrams	4-15

Section 5

5.1	Rigid disk subsystem	5-1
5.2	Data transfer path between main memory and the rigid disk	5-3
5.3	Rigid disk format	5-7
5.4	8x305 microcontroller pin-out	5-9
5.5	Rigid disk controller block diagram	5-11
5.6	RDC microcontroller data paths	5-13
5.7	RDC write logic data path	5-14
5.8	RDC read logic data path	5-15
5.9	RDC command register	5-16
5.10	RDC status register	5-17
5.11	8x305 timing	5-19
5.12	Timing for read data, data separator, and address mark detection	5-20
5.13	DMA controller block diagram	5-21
5.14	Block diagram of DMA state machine	5-25
5.15	DMA states: I - Transfer initiation	5-26
5.16	DMA states: II. Bus cycles	5-27
5.17	DMA states: III. Transfer conclusion	5-28
5.18	DMA timing: No wait states	5-32
5.19	DMA timing: One wait state	5-33
5.20	DMA timing: Two wait states	5-34
5.21	DMA timing: Starting DMA operation	5-35
5.22	DMA timing: Interrupt- originated Drop Disk Hold request	5-36
5.23	DMA timing: Continuing DMA operation after suspension	5-37
5.24	DMA timing: FIFOOB Drop Disk Hold request	5-38
5.25	DMA timing: FIFOOB continuing DMA operation	5-39
5.26	DMA timing: Ending DMA operation	5-40
5.27	IOPARDY timing: Daybreak, Alt. I: One wait state	5-42
5.28	IOPARDY timing: Daybreak, Alt. II. One wait state	5-42
5.29	IOPARDY timing: Daybreak, Alt I: Five wait states	5-43
5.30	IOPARDY timing: Daybreak, Alt II: Five wait states	5-43
5.31	IOPARDY timing: A chip: One wait state	5-44
5.32	IOPARDY timing: A chip: Five wait states	5-44
5.33	Starting address register	5-46

	5.34	DMA command register	5-48
	5.35	DMA status register	5-48
	5.36	FIFO block diagram	5-51
	5.37	Reset timing	5-54
	5.38	Asynchronous read/write timing	5-54
	5.39	Full flag from last write to first read	5-55
	5.40	Empty flag from last read to first write	5-55
Section 6	6.1	Ethernet controller block diagram	6-2
	6.2	Terminating resistor network for transceiver cable	6-4
	6.3	Ethernet controller and interface pins and signals	6-5
Section 7	7.1	Floppy disk subsystem block diagram	7-1
	7.2	Diskettes	7-2
	7.3	8272 floppy disk controller pins and signals	7-4
	7.4	8272 floppy disk controller interface pins and signals	7-5
	7.5	9229 data separator pins and signals	7-7
	7.6	System interface	7-8
	7.7	FDC status register	7-11
	7.8	IOP control register	7-14
	7.9	Floppy disk format	7-17
Section 8	8.1	RS232C block diagram	8-1
	8.2	8274 serial controller pins and signals	8-2
	8.3	8254 timer pins and signals	8-5
	8.4	RS232C system interface pins and signals	8-6
	8.5	RS232C channel A DTE port	8-8
	8.6	RS232C channel B DCE port	8-9
	8.7	RS232C controller data paths	8-11
	8.8	Timing for 8274 interrupt acknowledge	8-12
Section 9	9.1	8251A keyboard controller	9-1
	9.2	8251A initialization	9-3
	9.3	Command register during mode initialization	9-4

	9.4	Command register during normal operation	9-4
	9.5	Status register	9-5
Section 10	10.1	Debugger boards in a typical debugging system	10-1
	10.2	Debugger interface PWB assembly	10-2
	10.3	Debugger interface block diagram	10-3
	10.4	Intel PPI pins and signals	10-4
	10.5	Line driver circuits	10-4
	10.6	Line receiver circuits	10-5
	10.7	Flow diagram of sending and receiving a byte	10-5
	10.8	Transmission cable flow	10-6
	10.9	Timing diagram for read and write	10-10
Addendum		Speaker logic	Ad-1
Appendix B	B.1	Command phase	B-9
	B.2	Execution phase (read and write instructions)	B-10
	B.3	Result phase (read or write instructions)	B-11
	B.4	Seek, recalibrate, sense interrupt status, and invalid instructions	B-12

LIST OF TABLES

Section 1	1.1	IOP backplane pin assignment (front view)	1-6
	1.2	IOP expansion channel pin assignment	1-7
Section 2	2.1	80186 pin assignment	2-4
	2.2	80186 initial register state after reset	2-12
	2.3	IOP I/O controller addresses: PCS0, PCS1, PCS4	2-14
	2.4	Register bit maps	2-15
Section 3	3.1	Master interrupt controller pin description	3-3
	3.2	Description of possible interrupts	3-3
Section 4	4.1	Major arbiter logic signals	4-2
	4.2	Arbiter flow sequence: Ethernet requests service	4-4
	4.3	Arbiter flow sequence: RDC requests service	4-5
	4.4	RDC requests service then Ethernet requests service	4-6
	4.5	RDC and Ethernet request service	4-6
	4.6	RDC and Ethernet request service at the same time	4-7
	4.7	Ethernet and RDC request service	4-8
	4.8	IOP executes AllowPCCmd'	4-9
	4.9	IOP requests service	4-9
	4.10	IOP-PCE: (PCE executes I/O Rd' or Wr')	4-10
	4.11	IOP, PCE, and RDC request service	4-11
	4.12	IOP, PCE, and Ethernet request service	4-12
	4.13	IOP, PCE, RDC, and Ethernet request service	4-13
	4.14	IOP, PCE, RDC request service (interrupt occurs)	4-14
Section 5	5.1	8x305 pin description	5-10
	5.2	Disk commands and RDC operations	5-16
	5.3	Normal register sequence	5-18
	5.4	Error recovery sequence	5-19
	5.5	DMA signal description	5-23

	5.6	80186 bus control interface pin description	5-23
	5.7	80186 data bus interface pin description	5-24
	5.8	80186 DMA program signals description	5-24
	5.9	Data transfer operating sequence	5-30
	5.10	I/O addresses	5-46
	5.11	Word count examples	5-47
Section 6	6.1	Data link controller pin assignments	6-6
	6.2	Serial interface pin assignments	6-8
	6.3	DLC error reporting capabilities	6-21
Section 7	7.1	Characteristics of formatted diskettes	7-3
	7.2	8272 pin assignments	7-4
	7.3	8272 interface pin assignments	7-5
	7.4	9229 pin assignments	7-7
	7.5	Registers and addresses	7-11
	7.6	DMA registers	7-13
	7.7	Timer registers	7-14
Section 8	8.1	8274 serial controller pin assignments	8-2
	8.2	Baud rate constants	8-4
	8.3	8254 timer pin assignments	8-5
	8.4	System interface pin assignments	8-7
	8.5	Interface signals	8-10
	8.6	Serial controller registers	8-13
	8.7	Write register 0 (WR0)	8-14
	8.8	Write register 1 (WR1)	8-14
	8.9	Write register 2 (WR2): Channel A	8-15
	8.10	Write register 2 (WR2): Channel B	8-15
	8.11	Write register 3 (WR3): Channel B	8-15
	8.12	Write register 4 (WR4)	8-16
	8.13	Write register 5 (WR5)	8-16
	8.14	Write register 6 (WR6)	8-16
	8.15	Write register 7 (WR7)	8-17

	8.16	Read register 0 (RR0)	8-18
	8.17	Read register 1 (RR1)	8-17
	8.18	Read register 2 (RR2)	8-18
	8.19	8254 timer read/write operations	8-18
Section 9	9.1	8251A pins and signals	9-2
	9.2	8257A registers	9-3
	9.3	Maintenance panel code message	9-6
	9.4	Command instruction set	9-8
Section 10	10.1	20-pin connector description	10-3
	10.2	Handshaking procedure	10-6
	10.3	Basic operations of the debugger interface (PPI)	10-7
	10.4	Configuration of the Intel 8255-A in the debugger interface	10-8
	10.5	Timing characteristics	10-9
Appendix A	A.1	Disk operations	A-1
	A.2	Header and label layout in scratchpad and FIFO	A-2
	A.3	Error codes	A-5
	A.4	States of the state machine: PROM contents	A-8
Appendix B	B.1	Read Data instruction set	B-2
	B.2	Read Deleted Data instruction set	B-2
	B.3	Write Data instruction set	B-3
	B.4	Write Deleted Data instruction set	B-3
	B.5	Read a Track instruction set	B-4
	B.6	Read ID instruction set	B-4
	B.7	Format a Track instruction set	B-5
	B.8	Scan Equal instruction set	B-5
	B.9	Scan Low or Equal instruction set	B-6
	B.10	Scan High or Equal instruction set	B-7
	B.11	Recalibrate instruction set	B-7
	B.12	Sense Interrupt Status instruction set	B-7
	B.13	Specify instruction set	B-8

B.14	Sense Drive Status instruction set	B-8
B.15	Seek instruction set	B-8
B.16	Invalid instruction set	B-8