#### **Front View**

suspend/resume button latch indicator lights LCD contrast control keyboard brightness control speaker power button microphone audio input and output touchpad volume buttons diskette control touchpad drive hard disk drive compartment

Video RAM

1MB DRAM supports resolutions up to 640 X 480 in 256 colors on LCD and up to 1024 X 768 in 256 colors or 800 x 600 in 64K colors on external monitor

Cache

16KB internal write-back cache; 256KB external; both can be enabled/

disabled in Setup

Clock/calendar

Real-time clock, calendar, and CMOS RAM; backed up by internal battery

#### **Controllers**

Video

Chips and Technology® 65545 video controller; 32-bit local bus interface to the microprocessor; supports enhanced video modes on an external monitor; supports resolutions from 640 X 480 in 256 colors on the LCD and up to 1024 X 768 in 256 colors on an external monitor; automatic external monitor detection; simultaneous display with LCD screen using Fn F10 command or software

Diskette drive

Built-in super I/O controller for one internal 3.5-inch diskette drive; supports

720KB and 1.44MB formats

Hard disk

Built-in super I/O controller has interface to one 2.5-inch, IDE internal hard disk drive; automatically recognizes and configures drives up to 19 mm high that support the IDE or

EIDE interface

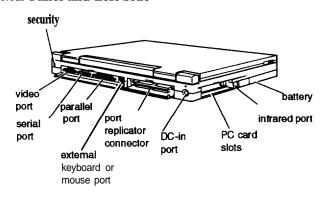
PC Card

Built-in Vadem® VG-468 controller for two stacked slots; supports two Type I or II cards, or one Type III; PCMCIA version 2.01 and JEIDA 4.1 compatible; supports low power and suspend modes; supports hot insertion (including

ExCA® standards); register compatible

with Intel® 82365SL

#### Rear Panel and Left Side



## Notebook Specifications

## **CPU and Memory**

CPU 5x86 QFP CPU on L2 cache

daughterboard; CPU includes 16KB of write-back unified data and instruction cache and integrated math coprocessor

System speed Fast and slow speed selectable in Setup

Memory 8MB RAM soldered on the system

board; expandable up to 24MB using a 4, 8, or 16MB memory expansion module.

ROM 128KB Flash ROM device containing the

system and video BIOS and Setup program code. The BIOS is shadowed in

DRAM for faster access

#### Interfaces

External VGA Auto-sensing, 15-pin, D-sub, female

> connector for analog monitor; supports simultaneous display with LCD using Fn F10 hot-key sequence or software

command

Parallel Centronics® compatible; 25-pin,

> D-sub, female connector; bidirectional 8-bit parallel; autodetects ECP or EPP devices when connected and turned on

at system start-up

Serial RS-232C, programmable, asynchronous,

9-pin, D-sub male connector, 16C550C-

compatible

External

Auto-sensing, 6-pin, mini-DIN connector for a PS/2type external keyboard/mouse

keyboard, keypad, or pointing device

Infrared IrDA-compliant interface; up to

> 115.2 kbits/second to a distance of 3.3 feet (1 meter) within a 30° viewing angle; can use COM1(3F8h) or COM2 (2F8h)

Internal; automatically disabled when Speaker

line-out is used

Audio input and

output

Connectors for stereo line-in and lineout and for monaural microphone

Port replicator Connector for optional ActionPort™

Replicator

**Security** Connector for optional Kensington®

security device

85 keys; optional 101-key keyboard **Keyboard** 

compatible; embedded numeric keypad;

Fn key for hot key commands

**ActionPoint Touchpad** 

Built-in touchpad pointing device with two buttons compatible with standard

PS/2 mouse driver software; can be

disabled in Setup

Volume Control

Knob adjusts sound volume of internal

speaker and audio output

#### Mass Storage

Hard disk drive

One removable internal IDE hard disk drive. 2.5-inch form factor: maximum height 19 mm; BIOS automatically recognizes and configures drives that support IDE or EIDE interface; parameters for the supported drives are as follows:

Parameters	MK1926 FVC	MK2720 FC
Heads	16	16
Cyl	1579	2633
Sect	63	63
WP Com	0	0
LZ	1579	2633
Capacity (millions of bytes)	815	1350

Diskette drive

Internal 3.5-inch diskette drive; 720KB or 1.44MB format

Setup Program

Stored in ROM; accessible by pressing F8 at system startup; includes power management utilities and password protection

Software

One-time choice of MS-DOS and Microsoft Windows™ or Window® 95; Also pre-installed: Lotus® Smart Suite,® NetCom<sup>™</sup> NetCruiser,<sup>™</sup> trial versions of CompuServe.® PRODIGY.® America Online,® and OAG® FlightDisk®; as well as ARK Workspace®, Puma TranXit infrared utility; SystemSoft drivers and utilities for PC card slots; utilities for video system, sound card, infrared port, and touchpad. Online version of User's Guide and other manuals also installed on the hard disk drive; refer to About Your Software card for details on EPSON's support policy

## LCD Screen

Screen type	Backlit   Passive color
Resolutions and colors	640 x 480,   256 colors
Diagonal measurement, active area	10.4 inches

AN900-3 10/21/95

### Infrared Specifications

Specification	Operating	
Compatibility	IrDA <sup>™</sup> -compliant	
СОМ	COM1 COM2 (default)	
Operating Range	30° radius	
Operating Distance	3.3 ft (1m)	
Speed	Up to 115.2 Kbps	

#### LED Panel

con	Name	Meaning
Ö	Power	Green-Computer is on Flashing green-Very low battery; system is about lo power down
Ф	Suspend	Green-Standby mode; press any key to return to full power Flashing green-Suspend mode; press Suspend/Resume button to return to full power
	Charge	Orange-battery is charging normally Green-battery is fully charged Flashing orange-battery is not installed correctly or is damaged
	Diskette drive	Computer is accessing the diskette drive
	Hard disk drive	Computer is accessing the hard disk drive
<b>\$</b>	PCMCIA	PC card is inserted
1	Num Lock	<b>Num Lock</b> is on, which activates the embedded numeric keypad
Α	Caps Lock	Caps Lock is on
1	Scroll Lock	Scroll Lock is on

#### **Power Sources**

AC Power Adapters

Specification	Pocket AC power adapter (A882051)	International AC power adapter (A882101)
AC connection	2 folding connectors	6 ft (1.8 meters) cable
DC cable	6 ft (1.8 meters)	6 ft (1.8 meters)
Input voltage	100 VAC to 240 VAC	100 VAC to 240 VAC
Input frequency	50/60 Hz	50/60 Hz
Output voltage	19 VDC, 1.23 Amp maximum	19 VDC, 1.5 Amp maximum
Size		
Length	3.4" (86 mm)	4.7" (120 mm)
Width	2.2" (56 mm)	2.04" (60 mm)
Height	1.1" (28 mm)	1.5" (37 mm)
Weight	7.8 oz (220 g)	9 oz (255 g)

**Battery** 

Rechargeable 12 Volt NiMH battery; current regulation by thermistor; battery life with power savings, 4-6 hours.

#### Caution

Use only the adapters and replacement batteries designed for use with the ActionNote 900 series (lightweight AC adapter A882051, international AC adapter A882101, auto adapter A882241. and battery A882291).

#### **Environmental Requirements**

Condition	Operating	Non-operating
Temperature	42° to 95° F (5° to 35° C)	-4° to 140° F (-20° to 60° C)
Humidity (non- condensing)	30% to 90%	5% to 95%
Altitude	-200 to 12,000 ft (-67 to 4,000 m)	-200 to 30,000 ft (-67 to 9,000 m)
Acoustical noise	35 dB at 1 meter (maximum)	N/A

#### Caution

When traveling by airplane, take the computer into the passenger compartment to prevent it from being stored in an unpressurized storage compartment. Avoid exposing the computer to extreme changes in temperature.

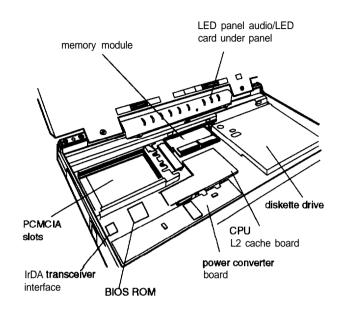
## Physical Dimensions

	Depth		Width		Height		Weight	
Size	in.	mm	in.	mm	in.	mm	lb	kg
	8.8	220	11.7	292	1.7	43	6	2.5

#### Optional Equipment

- I 4 MB, 8MB or 16MB snap-in memory expansion module
- I 1.2 GB user-removable hard disk drive
- I Additional NiMH batteries
- I Extra AC adapter or international AC adapter
- I Adapter for an automobile cigarette lighter
- I External battery charger
- I External keyboard
- I External numeric keypad
- I PCMCIA Type I, II, and III cards including flash RAM, SRAM, modem, fax/modem, LAN, and hard drive cards
- I ActionPort Replicator
- I Portable CD-ROM player
- I Kensington MicroSaver Security Lock
- I Carrying cases

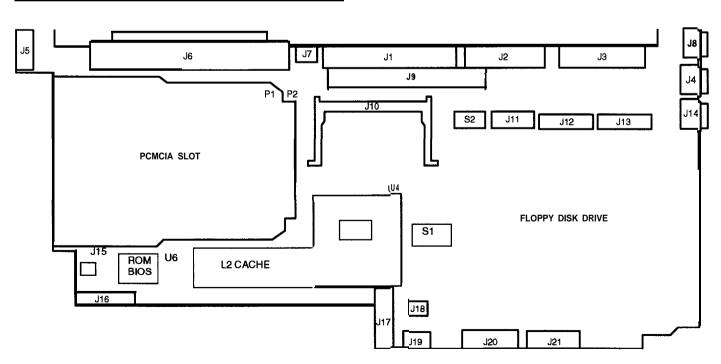
## Major Subassemblies



### Memory Module Installation

The computer comes with 8MB of memory soldered on the system board. It includes a single memory module socket in which you can install an additional 4, 8 or 16MB memory module. Run the Setup program to check the amount of memory installed.

## System Board Components



AN900-5 10/21/95

## System board components

U4	Microprocessor and L2 cache connector	
U6	ROM BIOS	
J1	Parallel port connector	
J2	Serial port connector	
J3	VGA connector for external monitor	
J4	Audio-In connector	
J5	AC adapter connector	
J6	Port replicator connector	
J7	External keyboard/mouse connector	
J8	Microphone connector	
J9	LED and audio card connector	
J10	Memory module connector	
J11, J12, J13	LCD connectors	
J14	Audio-Out connector	
J15	IrDA connector	
J16, J17	Main board connectors to power converter	
J18	Speaker connector	
J19	Touchpad connector	
J20, J21	Internal keyboard connectors	
J22	Diskette drive connector	
J23	Hard disk drive connector	
P1, P2	PCMCIA connectors	
S1	Processor switch	
S2	Speed selection switch	

# Connector Pin Assignments

Parallel port connector (J1)

Pin No.	Signal Name	Pin No.	Signal Name
1	NC	14	AUTO FEED XT
2	Do	15	ERROR
3	D1	16	INIT
4	D2	17	SLCT IN
5	D3	18	GND
6	D4	19	GND
7	D5	20	GND
8	D6	21	GND
9	D7	22	GND
10	ACK	23	GND
11	BUSY	24	GND
12	PE	25	PRT SEL
13	SLCT		

## Serial port connector (J2)

Pin	Signal	Pin	Signal	Pin	Signal
1	Carder Detect	4	Data Terminal Ready	7	Request to Send
2	Receive Data	5	Signal Ground	8	Clear to Send
3	Transmit Data	6	Data Set Ready	9	Ring indicator

### VGA connectorfor an external monitor (J3)

Pin	Signal	Pin	Signal	Pin	Signal	
1	Red	6	Ground	11	NC	
2	Green	7	Ground	12	NC	
3	Blue	8	Ground	13	Horizontal Sync	
4	NC	9	NC	14	Vertical Sync	
5	Ground	10	Ground	15	NC	

## Power converter board connector (22-pin male) (J17')

Pin No.	Signal Name	Description
1 to 4	GND	Ground
5	PSW	Indicates the power switch
6	GND	Ground
7	DOCKON	Indicates port replicator status
8	SUSHDD	HIGH (active) when system is entering suspend to hard disk mode
9	SUSCH	HIGH (active) when system is entering suspend to DRAM mode
10	DOCKSW	HIGH (active) when port replicator is installed
11	INVPWR	For the inverter power source
12 to 14	+5 V	For the system operating voltage
15	+3 V	For the system operating voltage
16	+12 V	For the flash ROM, etc.
17	+3 V	Same as pin 15
18	CHGLED	An output pin to drive the green LED
19	INVPWR	Same as pin 11
20 to 22	VA	A constant voltage from AC adapter

### Power converter board connector (14-pin male) (J16)

Pin No.	Signal Name	Description
1 to 4	VA	Constant voltage from AC adapter
5	CHGLED	Output pin to drive the orange LED
6	SWITCH	To power on DC/DC converter
7	PWRON	Reserved
8	NC	No connection
9	NC	No connection
10	PWROFF	To power off DC/DC converter
11 to 14	GND	Ground

### External keyboard/mouse connector (J7)

	Pin	Signal	Pin	Signal	Pin	Signal
	1	AUX-DATA	3	GND	5	AUX-CLK
•	2	NC	4	+5 v	6	NC

## Microphone connector (J8)

Pin	Signal	Pin	Signal	Pin	Signal
1	AGND	3	BMIC	5	MICIN
2	MICIN	4	BMIC		+

### lrDA connector (J15)

Pin No.	Signal	Pin No.	Signal
1	TRIS	12	GND
2	GND	13	DSR2
3	PTS2	14	VCC5
4	VCC5	15	SPK
5	DCD2	16	MIC
6	SOUT2	17	SPK
7	DTR2	18	GND
8	SIN2	19	GND
9	PI2	20	GND
10	GND	21	Ī.T
11	CTS2	22	NC

### Speaker connector (J18)

Pin	Signal	Pin	Signal
1	GND	2	SPK

#### FDD connector (J22)

Pin No.	Signal Name	l Pin No.	Signal Name
1	VCC5	11	GND
2	INDEX	12	WDATA
3	VCC5	13	GND
4	DR0	14	WGATE
5	VCC5	15	GND
6	DSKCHG	16	TRK0
7	MEDIA0	17	GND
8	MTR0	18	WRTPRT
9	DIR	19	RDATA
10	STEP	20	HDSEL

#### **HDD IDE** connector (J23)

Pin No.	Signal Name	Pin No.	Signal Name
1	RESET DRV	21	GND
2	GND	22	IOWR
3	IDE D7	23	GND
4	GND	24	IORD
5	SD8	25	GND
6	SD6	26	IOCHRDY
7	SD9	27	IRQ14
8	SD5	28	IOCS16
9	SD10	29	SA1
10	SD4	30	GND
11	SD11	31	GND
12	SD3	32	SA0
13	SD12	33	SA2
14	SD2	34	HCS0
15	SD13	35	HCS1
16	SD1	36	HDDLED
17	SD14	37	VCC5
18	SD0	38	VCC5
19	SD15	39	GND
20	GND	40	VCC5

## Memory module connector (J10)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	19	MA10	37	MD16	55	NC
2	MD0	20	NC '	38	MD17	56	MD24
3	MD1	21	MD8	39	GND	57	MD25
4	MD2	22	MD9	40	CAS0	58	MD26
5	MD3	23	MD10	41	CAS2	59	MD28
6	MD4	24	MD11	42	CAS3	60	MD27
7	MD5	25	MD12	43	CAS1	61	vcc
8	MD6	26	MD13	44	RAS0	62	MD29
9	MD7	27	MD14	45	RAS1	63	MD30
10	vcc	28	MA7	46	MA12	64	MD31
11	PD1	29	MA11	47	WE	65	NC
12	MA0	30	vcc	48	MA13	66	PD2
13	MA1	31	MA8	49	MD18	67	PD3
14	MA2	32	MA9	50	MD19	68	PD4
15	МАЗ	33	RAS3	51	MD20	69	PD5
16	MA4	34	RAS2	52	MD21	70	PD6
17	MA5	35	MD15	53	MD22	71	PD7
18	MA6	36	NC	54	MD23	72	GND

AN900-7 10/21/95

### PCMCIA connector (P1 and P2)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	18	VPP1	35	GND	52	VPP2
2	D3	19	A16	36	CD1	53	A22
3	D4	20	A15	37	D11	54	A23
4	D5	21	A12	38	D12	55	A24
5	D6	22	A7	39	D13	56	A25
6	D7	23	A6	40	D14	57	RFU
7	CE1	24	A5	41	D15	58	RESET
8	A10	25	A4	42	CE2	59	WAIT
9	ŌĒ	26	A3	43	RFSH	60	INPACK
10	A11	27	A2	44	IORD	61	REG
11	A9	28	A1	45	IOWR	62	BVD2
12	A8	29	A0	46	A17	63	BVD1
13	A13	30	D0	47	A18	64	D8
14	A14	31	D1	48	A19	65	D9
15	WE/PGM	32	D2	49	A20	66	D10
16	RDY/BSY	33	WP	50	A21	67	CD2
17	VCCX	34	GND	51	vccx	68	GND

### LED card and audio card connector (J9)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	NUM	16	SA0	31	IOWR	46	LIN1I
2	PCMLED	17	SD2	32	SA8	47	12 V
3	SCR	18	SA1	33	DRQ0	48	AGND
4	PRON/BL	19	SD3	34	SA9	49	IRQ5
5	CAPS	20	SA2	35	DACK0	50	LOUT0
6	PMU	21	SD4	36	DRQ3	51	IRQ7
7	HDDLED	22	SA3	37	DRQ1	52	LOUT1
8	CHAR ID	23	SD5	38	DACK3	53	IRQ9
9	DR0	24	SA4	39	DACK1	54	AGND
10	VCC5	25	SD6	40	RESETDRV	55	IRQ10
11	CHAR ID	26	SA5	41	14M	56	BMIC
12	BAT1	27	SD7	42	AGND	57	VCC5
13	SD0	28	SA6	43	GND	58	MICIN
14	488ENA	29	IORD	44	LINOI	59	GND
15	SD1	30	SA7	45	AEN	60	AGND

### Audio in connector (J4)

Pin	Signal	Pin	Signal	Pin	Signal
1	AGND	3	AGND	5	LIN0
2	LIN1	4	AGND		·

### Audio out connector (J14)

Pin	Signal	Pin	Signal	Pin	Signal
1	AGND	3	SPK	5	LOUT0
2	LOUT1	4	SPK		

## LCD connector (J11,10-pin)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	4	BPLD2	7	BPLD8	9	BPLD12
2	LCD ON	5	BPLD4	8	BPLD10	10	BPLD14
3	BPLD0	6	BPLD6				

### LCD connector (J12,15-pin)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	5	BPLD1	9	BPLD9	13	BSCP
2	BPLD7	6	BPLD15	10	BLP	14	FPVCC
3	BPLD5	7	BPLD13	11	вғм	15	GND
4	BPLD3	8	BPLD11	12	BFP		

## LCD connector (J13,12-pin)

Pin	Signai	Pin	Signal	Pin	Signal	Pin	Signal
1	ADPR	4	BL ON	7	MANUSW	10	SW1
2	ADPR	6	LCD ON	8	COVERSW	11	SW2
3	LCD1	6	LCD2	9	VCC3	12	GND

### Processor switch (S1)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	INTCY	3	STPGNT	S-8	GND	4	3.6 V
2	M1SC	4	DACZ				

### Speed selection switch (S2)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	3	SPDSEL2	5	GND	7	SPDSEL0
2	GND	4	VCC3	6	VCC3	8	GND

### Main board connector to power converter (J16)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	DOCK PR	5	CHARID	9	GND	13	GND
2	DOCK PR	6	SW2	10	PWOF	14	GND
3	DOCK PR	7	PWRON	11	GND		
4	DOCK PR	8	NC	12	GND	1	

Main board connector to power converter (J17)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	7	DOCKON	13	VCC5	19	ADPR
2	GND	8	SUSHDD	14	VCC5	20	DOCK PR
3	GND	9	CLKOFF	15	VCC3	21	DOCK PR
4	GND	10	DOCKPLG	16	12V	22	DCCK PR
5	SWON	11	ADPTR	17	VCC3		
6	GND	12	VCC5	18	CHAR ID		

## Touchpad connector (J19)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	TBDIS	5	MCLK	9	TBDIS	13	MCLK
2	Z8PO0	6	NC	10	Z8PO0	14	NC
3	Z8PO1	7	GND	11	Z8PO1	15	GND
4	VCC5	8	MDATA	12	VCC5	18	MDATA

### Internal keyboard connector (J20)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	P37	4	P34	7	Z8PO1	10	P31
2	P36	5	P33	8	GND	11	P30
3	P35	6	Z8PO0	9	P32		

### Internal keyboard connector (J21)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	P16	5	P12	9	P06	13	P02
2	P15	6	P11	10	P05	14	P01
3	P14	7	P10	11	P04	15	P00
4	P13	8	P07	12	P03		+

## Daughterboard connector (JP1)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	SPDSEL0	4	NC	7	SPDSEL2	10	TKA3B
2	DAC2	5	TURBO	8	MA10	11	RESVGA
3	NC	6	TKA3B	9	NC		

#### Daughterboard connector (JP2)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	MA2	6	MA7	10	DTYWE	14	KRMWEA
2	MA3	7	MA8	11	KTOE	15	KRMWEB
3	MA4	8	MA9	12	KRMOEA	16	CLKOFF
4	MA5	9	DIRTY	13	KRMOEB	17	TKA3A
5	MA6						

### Port Replicator connector (J6)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	26	DACK3	51	PD3	76	VCC5
2	PWR OFF	27	BUSY	52	GND	77	SA1
3	GND	28	GND	53	SD12	78	DRQ3
4	GND	29	SD6	54	IRQ5	79	EXKBCLK
5	SD0	30	BALE	55	PD4	80	VCC5
6	AEN	31	PE	56	DOCK ON	81	SA2
7	STROB	32	LOUT0	57	SD13	82	DACK0
8	MICIN	33	SD7	58	IRQ6	83	MCLK
9	SD1	34	zws	59	PD5	84	VCC5
10	RSRDRV	35	SLCT	60	EXTSPK	85	SA3
11	AUTOFD	36	GND	61	SD14	86	DACK5
12	GND	37	SD8	62	IRQ7	87	MDATA
13	SD2	38	IOCHCK	63	PD6	88	NC
14	REFRESH	39	PD0	64	NC	89	SA4
15	ERROR	40	LOUT1	65	SD15	90	DACK6
16	LINO	41	SD9	66	GND	91	GND
17	SD3	42	IRQ9	67	PD7	92	VCC3
18	DACK1	43	PD1	68	NC	93	SA5
19	INIT	44	EXTPCM	69	GND	94	DACK7
20	GND	45	SD10	70	DRQ1	95	HSYNCOUT
21	SD4	46	IRQ3	71	GND	96	VCC3
22	DACK2	47	PD2	72	NONSUSP	97	SA6
23	ACK	48	GMCS	73	SA0	98	SBHE
24	LIN1	49	SD11	74	DRQ2	99	VSYNCOUT
25	SD5	50	IRQ4	75	EXKBDATA	100	NC
101	SA7	126	DRQ0	151	DSKCHG	176	XDTR1
102	MEMR	127	DTR2	152	12 V	177	ĪΤ
103	BLU	128	CTS2	153	SA20	178	XRII
104	NC	129	SA14	154	IRQ14	179	TRKO
105	SAB	130	DRQ5	155	MEDIA1	180	NC
106	MEMW	131	DCD2	156	SA22	181	TPIS
107	GRN	132	SIN2	157	SA21	182	NC
108	NC	133	SA15	158	IRQ15	183	WRTPRT
109	SA9	134	DRQ6	159	MTP1	184	DOCK PR
110	GND	135	DSR2	160	IOCHRDY	185	SYSCLK
111	RED	136	HDDLED	161	SLCTIN	186	DOCK PR
112	NC	137	SA16	162	GND	187	RDATA
113	SA10	138	RI2	163	DIR	188	DOCK PR
114	MASTER	139	PWRCTRL	164	XDCD1	189	osc
115	GND	140	NC	165	SA23	190	DOCK PR
116	NC	141	SA17	166	XDSR1	191	HDSEL
117	SA11	142	IRQ10	167	STEP	192	DOCK PR
118	MCS16	143	INDEX	168	XSINI	193	TC
119	RTS2	144	12 V	169	IOPD	194	DOCK PR
120	NC	145	SA18	170	XRTS1	195	GND

AN900-9 10/21/95

### Port Replicator connector (J6) (continued)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
121	SA12	146	IRQ11	171	WDATA	196	NC
122	IOCS16	147	DR1	172	XSOUT 1	197	GND
123	SOUT2	148	12 V	173	<b>IOWR</b>	198	NC
124	NC	149	SA19	174	XCTS1	199	PWR OFF
125	SA13	150	IRQ12	175	WGATE	200	GND

# Hardware Interrupts

Interrupt	Function
IRQ0	Timer
IRQ1	Keyboard
IRQ2	Cascade
IRQ3	COM2 (2F8H) (IrDA )
IRQ4	COM1 (3F8H)
IRQ5	LPT2
IRQ6	Diskette Controller
IRQ7	LPT1
IRQ8	Clock/Calendar
IRQ9	Audio
IRQ10	Available
IRQ11	Available
IRQ12	Touchpad
IRQ13	Reserved for Coprocessor
IRQ14	Hard Disk Drive Controller
IRQ15	Available

# **CPU Configuration Information**

Switch	Setting	Description
S1 CPU Type Cyrix 5x86 QFP daughterboard	1, ON 2, OFF 3, OFF 4, ON	settings for 5x86 QFP
Cyrix 5x86 PGA	1, ON 2, ON 3, OFF 4, ON	settings for 5x86 PGA
S2 Speed (Motherboard speed)	left center right	40MHz 33MHz 25MHz
DC board voltage (on DC board)	left center right	4V 3.45V 3.3V

# System Memory Map

00000Н	640KB base memory
0A0000H	128KB reserved for graphics display area
0C0000H	Reserved
0D0000H	Reserved
0E0000H	48KB for VGA BIOS
0EA000H	Power Management Utility
0F0000H	64KB for system BIOS
100000H	Extended memory
FFE000H	Duplicated code assignment at address 0F0000
FFFFFFH	

# DMA Assignments

Channel	Devi ce
DMA0	Available
DMA1	Sound Card
DMA2	Diskette Controller
DMA3	ECP
DMA4	Cascade for DMA CTRL #1
DMA5	Available
DMA6	Available
DMA7	Available

## System I/O Address Map

Hexadecimal Address	Device
000-01F	DMA Controller 1
020-03F	interrupt Controller
040-05F	Timer/Counter
060-06F	Keyboard Controller
070-07F	RTC NMI
080-09F	DMA Page Register
0A0-0BF	Interrupt Controller 2
0C0-0DF	DMA Controller 2
0F0	Clear Math Coprocessor Busy
0F1	Reset Math Coprocessor
0F8-0FF	Math Coprocessor
100-1EF	Available
1F0-1F8	Hard Disk Drive
200-207	Game Port
208-277	Sound Card
278-27F	Parallel Port 2
2F6-2FF	Serial Port 2
300-31 F	Prototype Card
360-36F	Reserved
378-37F	Parallel Port 1
380-38F	SDLC Bisynohronous 2
3A0-3AF	Bisynchronous 1
3B0-3BF	Mono Display Printer Adapter
3C0-3CF	Reserved
3D0-3DF	Color/Graphics Monitor Adapter
3E0-3EF	PCMCIA Controller
3F0-3F7	Diskette Drive Controller
3F8-3FF	Serial Port 1
2F8-2FF	IrDA Port

## Installation/Support Tips

#### Using Low Battery Save to HDD and Instant On

- The ActionNote 900 series hard disk drive is partitioned at the factory so that these options can be used. A 26MB area is set aside for the saved data; this ensures that there is enough space for all memory configurations.
- To prepare the hard disk drive, run the PHDISK utility, located in the C:\PM directory. You also need to run this utility if you upgrade your system memory. Type the following command at the DOS prompt and press **Enter:**

#### PHDISk/CREATE

- If you install a new hard disk drive and want to use the Low Battery Save to HDD or Instant On options, you need to leave sufficient space on the disk unpartitioned. The amount of space should equal the system memory plus 2MB. After you run FDISK to partition the drive, you need to run the PHDISK utility to configure the storage space on the drive.
- In Windows 3.1, when the computer is turned on after using the Low Battery Save to HDD or Instant On options, the PCMCIA services are not reinitialized. The computer recognizes SRAM PC cards, but does not recognize most other PC cards. You must reboot to reinitialize the services.

#### Using an External Monitor

When you connect an external monitor, make sure you turn it on before you turn on the computer. The ActionNote automatically detects the external monitor and displays data on its screen. Press **Fn F10** to switch your display from the monitor to the LCD screen or to display on both screens simultaneously. Resolutions up to  $1024 \times 768$  in 256 colors supported.

#### Using the ActionPoint Touchpad

If you use an external pointing device connected to the mouse port, the touchpad is automatically disabled. If you want to use the touchpad, turn the computer off and then on, and touch the ActionPoint first

#### Using a Serial Mouse

If you connect a serial mouse, you must use the Setup program to disable the built-in touchpad.

#### Using the IrDA Port

When communicating with another IrDA-equipped device, such as a printer or computer, ensure that the IrDA ports are within 3 feet, with no more than a 30-degree angle in a direct line of sight with no obstructions. See the User's Guide for details.

AN900-11 10/21/95

## Information Reference List

## **Engineering Change Notices**

None

## **Technical Information Bulletins**

None

## **Product Support Bulletins**

None

TM-AN900T

#### Related Documentation

400521900 EPSON ActionNote 900 Series User's Guide
 400526900 About Your Software
 400527000 Choosing Your Operating System
 PL-AN900S EPSON ActionNote 900 Series Parts Price List

EPSON ActionNote 900 Series Service Manual

AN900-13 10/21/95