APPENDIX A

BPX Peripherals Specifications

Introduction

This appendix provide details on the specifications for peripherals used with the BPX.

Network Management Terminal

A StrataView Plus workstation is recommended for managing a BPX network. Refer to the *StrataView Plus Operation Manual* and *StrataView Plus Installation Manual* for setup instructions and specifications for the StrataCom Network Management Terminal, one of which is required to provide network alarm, control, and statistics monitoring for IPX, IGX, and BPX nodes.

Control Terminal Port

The control terminal connected to the CONTROL port can be used on BPX nodes for local configuration and monitoring as long as there is at least one StrataView Plus workstation attached to a node in the network. Local control is especially useful during installation, initial power-up, and configuration. See Table A-1 for configuration data.

Table A-1 Control Port Parameters for StrataView Plus

Parameter	Setting
BPX Port Used:	Serial CONTROL port, located on the LM-BCC card, is used for the local control terminal.
Code:	Standard 7 or 8-bit ASCII; 1 or 2 stop-bits; even, odd or no parity.
Interface:	RS-232 DCE.
Data Rate:	All standard asynchronous data rates from 300 to 19200 bps, independently software-selectable.
Supported Terminals:	Any terminal compatible with DEC VT-100.
Cable Required:	Straight-through RS-232 cable.

Printer

The standard maintenance printer that is currently being shipped with the BPX is the Okidata Model 184 dot matrix printer. This printer may be connected to any node. Refer toTable A-2 and Table A-3 for printer configuration requirements. Note that this is not the same as the printer that may be provided with the StrataView Plus NMS terminal but in addition to it.

Table A-2 Auxiliary Port Parameters for OkiData 184 Printer

Parameter	Setting
BPX Port Used:	Serial AUXILIARY port, located on the LM-BCC card, is used for the maintenance printer.
Code:	Standard 8-bit ASCII; 8 data bits, 1 stop-bit, odd parity.
Interface:	RS-232 DCE.
Data Rate:	9600 baud.
Supported Printer:	Okidata 184.
Cable Required:	Straight-through RS-232 cable

DIP Switch Settings for Okidata 184

DIP Switch A is an 8-section DIP switch located on the printer's main circuit board. Access to the configuration switches is made by sliding back the switch cover at the top, rear of the printer case. Set Switch A as indicated in Table A-3.

Table A-3 Switch A Settings—Okidata 184 Printer

Switch A	Setting	Description
1	Off	ASCII with
2	Off	non-slashed
3	Off	zero.
4	Off	11-inch
5	On	paper.
6	Off	No Auto Line Feed.
7	On	8- bit data.
8	Off	Enables front panel.

The High Speed Serial Interface DIP Switch consists of two DIP switches, SW1 and SW2, located on a serial-board that is attached to the printer's main board. Set switches 1 and 2 as indicated in Table A-4 and Table A-5.

Table A-4 Switch 1 Settings—Okidata 184 Printer

Switch 1	Setting	Description
1	On	Odd parity.
2	On	No parity.
3	On	8 data bits.
4	On	Ready/busy protocol.
5	On	Test select circuit.
6	On	Print mode.
7	On	Busy line selection.
8	On	DTR pin 2 enabled.

Table A-5 Switch 2 Settings—Okidata 184 Printer

Switch 2	Setting	Description
1	Off	Transmission
2	On	Speed = 9600 baud.
3	On	Speed = 9600 baud.
4	On	DSR active.
5	On	Buffer = 32 bytes.
6	On	Timing = 200 ms.
7	On	Space after power on.
8	Don’t care	Not used.

Modems

StrataCom ISC uses modems for diagnosing and correcting customer problems with installed BPX systems. The modem that is currently recommended for use with the BPX is the Codex Model V.34R.

In general, a dial-out connection to a modem uses the AUX port of the BPX. A dial-in connection from a modem uses the CONTROL port of the BPX. Refer to Table A-6 for interface requirements.

Table A-6 Modem Interface Requirements

Parameter	Requirement
BPX Port Used:	CONTROL port on SCC card is used for auto-answer modem. AUX PORT on SCC card is used for auto-dial modem.
Code:	Standard 8-bit ASCII, 1 stop-bit, no parity.
Interface:	RS-232 DCE.
Cable:	Null modem cable.
Phone Lines:	Dedicated, dial-up business telephone line for ISC-to-BPX modem and auto-dial-to-ISC modem.
Data Rate:	All standard asynchronous data rates from 300 to 19200 bps, independently software-selectable.
Supported Modems:	Motorola V.34R modem.

Motorola V.34R BPX Dial-In Configuration

BPX Auto-Answer

This is a setup for StrataCom ISC to dial up the customer's BPX. Using the **cnfterm** command, set the BPX CONTROL port speed to 9600 bps. Using the **cnftermfunc** command, set the terminal type to VT100/StrataView. To program the modem, temporarily attach a terminal to the modem using a null modem cable. The modem EIA port will automatically match the 9600 bps setting of the terminal. Enter the commands listed in Table A-7 to set up the modem for proper operation.

Connect the modem to the BPX CONTROL PORT. Ask StrataCom ISC to assist in testing the operation of the modem setup

Table A-7 Setting Up the Motorola Modem for Auto-Answer mode

Step	Command	Function
1.	AT&F&W	Reset to factory default and save.
2.	ATSØ=1	Enables Auto-Answer Mode (answer on first ring).
3.	ATL1	Modem speaker at low volume.
4.	AT*SM3	Enables automatic MNP error correction.
5	AT*DC0	Disables data compression.
6.	AT*FL0	Disables XON/XOFF flow control.
7.	AT&S1	Sets DSR to "normal".
8.	ATEØ	Disables local character echo.
9.	ATQ1	Disables result codes. (Modem will appear "dead.)
10.	AT&W	Saves current configuration settings in non-volatile memory.

Modem Cables

Note Call StrataCom ISC for latest modem information.