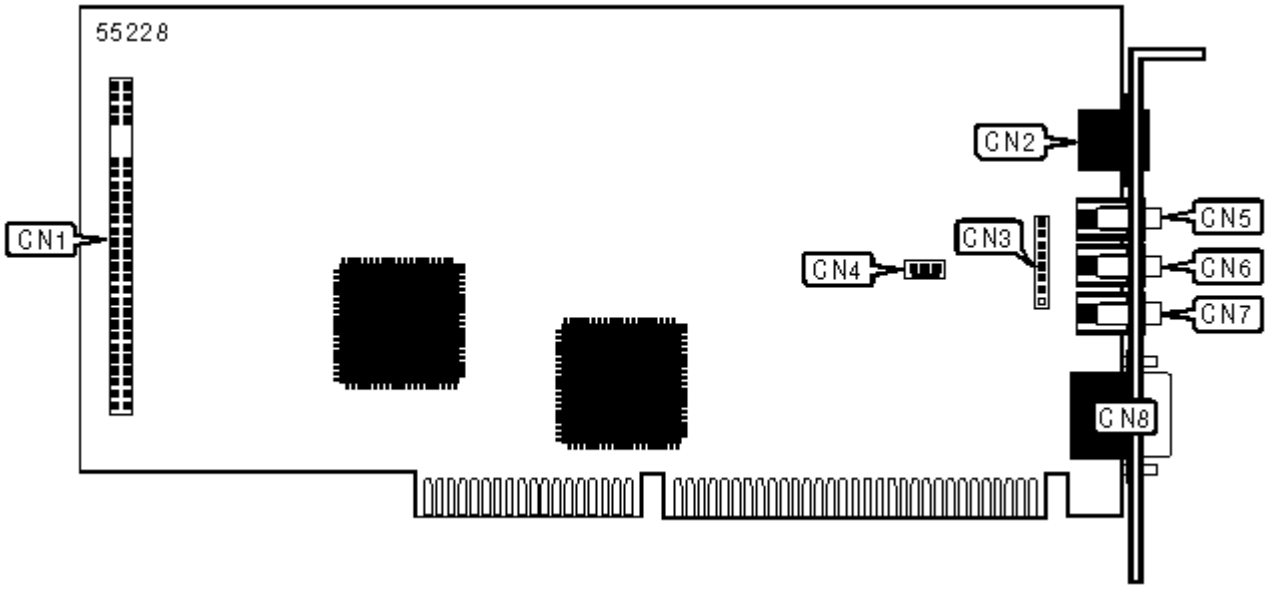
MIRO COMPUTER PRODUCTS, INC.

MIROMEDIA ONLINE PNP

Card Type	Modem/Communication Adapter card
Chip Set	Unidentified
I/O Options:	Analog telephone port (RJ-11), microphone in, audio in, audio out, game/MIDI port, TV/audio in, IDE interface
Maximum Modem Rate	33.6Kbps
Maximum Fax Rate	14.4Kbps
Data Modulation Protocol	Bell 103/212 ITU-T V.22, V.22bis, V.32, V.32bis, V.34
Fax Modulation Protocol	ITU-T V.17, V.27ter, V.29
Error Correction/Compression	MNP5, V.42, V.42bis
Fax Class	Class I & II
Data Bus	16-bit ISA



CONNECTIONS

Function	Label	Function	Label
Miromedia radio connector	CN1	Microphone in	CN5
Line in (RJ-11)	CN2	Audio in	CN6
Internal telephone connector	CN3/pins 1-5	Audio out	CN7
Microphone connector	CN3/pins 6-8	MIDI/game port	CN8
TV/audio in	CN4		

SUPPORTED COMMAND SET

Basic AT Commands

AT, ■+++■, A/

A, B, E, F, M, P, Q, T, V, X, Y

&E, &V, &W, &Z

Extended AT Commands

\B \L, \V

%E

Special Commands

"H, "N

+MS

S Registers

S0, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S25, S30, S32, S33

Note: See MHI Help File for full command documentation.

PROPRIETARY AT COMMAND SET

COMMUNICATIONS MODE

Type: Configuration

Format: AT [cmds] &M*n* [cmds]

Description: Selects communications mode

Command	Mode
&M0	Asynchronous mode

COMMUNICATIONS MODE

Type: Configuration

Format: AT [cmds] &Q*n* [cmds]

Description: Selects communications mode options

Command	Mode
&Q0	Asynchronous mode, serial port speed follows connect speed.

DATA SET READY (DSR)

Type: Configuration

Format: AT [cmds] &S*n* [cmds]

Description: Selects DSR options

Command	Function
&S0	DSR forced high
&S1	DSR high only while modem is handshaking or connected

DATA TERMINAL READY (DTR)

Type: Configuration

Format: AT [cmds] &D*n* [cmds]

Description: Selects modem response to DTR

Command	Function
&D0	DTR override
&D1	DTR toggle causes online command mode
&D2	DTR toggle causes modem to go on-hook
&D3	Loads profile as specified in &Y

DIAL

Type: Immediate

Format: AT [cmds] D<#> [cmds]

Description: Dials telephone number according to any modifiers included in the string

Note: Any combination of modifiers can be used to produce the desired dial functions in sequence.

Command	Function
DP	Pulse dialing enabled
DR	Answer mode enabled; originate mode disabled following handshake initiation.
DS=n	Dial stored telephone number *n*
DT	Tone dialing enabled/Pulse dialing disabled

DW	Dialing resumed following dial tone detection
D,	Dialing paused for amount of time specified in S8 register
D!	Flash function initiated. Modem commanded to go off-hook for specified time before returning on-hook.
D@	Wait for Quite Answer function enabled. Modem waits until a "quiet answer," a ring-back signal followed by silence up to the time specified in S7, is received prior to executing the rest of the dial string.
D;	Modem returned to idle state after dialing. The semicolon can only be placed at the end of the dial command

FLOW CONTROL

Type: Configuration

Format: AT [cmds] &K*n* [cmds]

Description: Enables flow control options

Command	Function
&K0	Flow control disabled
&K1	RTS/CTS flow control enabled
&K3	RTS/CTS flow control enabled
&K4	XON/XOFF flow control enabled
&K5	Transparent XON/XOFF flow control enabled

FORCE SPEED MODE

Type: Configuration

Format: AT [cmds] &N*n* [cmds]

Description: Selects force speed option in V.32/V.32bis mode

Command	Mode
&N0	Support maximum allowable rate
&N1	Selects maximum allowable rate as specified by register S28

GUARD TONE

Type: Configuration

Format: AT [cmds] &G*n* [cmds]

Description: Commands the modem to transmit a guard tone in V.22/V.22bis

Command	Function
&G0	Guard tone disabled
&G2	1800Hz guard tone enabled

HOOK CONTROL

Type: Immediate

Format: AT [cmds] H*n* [cmds]

Description: Selects whether the modem is on-hook or off-hook

Command	Function
H0	Modem commanded to go on-hook (hang-up)

LINE TYPE

Type: Configuration

Format: AT [cmds] &L*n* [cmds]

Description: Command nonfunctional

Command	Line Type
&L0	Selects switched-network line mode

ON-LINE

Type: Immediate

Format: AT [cmds] O*n* [cmds]

Description: Controls on-line command (data transmission) state options.

Note: The O command must be placed at the end of the command string.

Command	Function
O0	On-line command mode with no retraining enabled

PULSE DIALING RATIO

Type: Configuration

Format: AT [cmds] &P*n* [cmds]

Description: Selects pulse dial make/break ratio.

Note: For compatibility purposes only; command nonfunctional

Command	Function
&P0	Returns OK
&P1	Returns OK

REPORT INFORMATION

Type: Immediate

Format: AT [cmds] I*n* [cmds]

Description: Displays information requested

Command	Function
I0	Reports modem version
I1	Reports OK
I2	Tests and reports ROM checksum
I3	Reports version number of installed modem files
I4	Reports modem capabilities string GENERIC Mwave

RESTORE PROFILE ON POWER-UP

Type: Configuration

Format: AT [cmds] &Y*n* [cmds]

Description: Restores a selected profile into the active profile on power-up (hard reset)

Command	Function
&Y0	Restore profile 0 on power-up
&Y1	Restore profile 1 on power-up
&Y2	Restore factory defaults on power-up

SOFT RESET

Type: Immediate

Format: AT [cmds] Z*n* [cmds]

Description: Restores modem profiles previously saved in non-volatile RAM using the &W command.

Command	Function
Z0	Restore setting 0
Z1	Restore setting 1
Z2	Restore factory defaults

SPEAKER VOLUME

Type: Configuration

Format: AT [cmds] L*n* [cmds]

Description: Controls speaker volume

Command	Function
L0	Minimum volume setting
L1	Low volume setting
L2	Medium volume setting
L3	Highest volume setting

TRANSMIT CARRIER

Type: Configuration

Format: AT [cmds] C*n* [cmds]

Description: Controls the transmit carrier switching

Command	Function
C1	Transmit carrier enabled

TRELLIS CODING

Type: Configuration

Format: AT [cmds] &U*n* [cmds]

Description: Enables/disables trellis coding

Command	Function
&U0	V.32 trellis coding enabled
&U1	V.32 trellis coding disabled

EXTENDED AT COMMANDS

BREAK TYPE

Type: Configuration

Format: AT [cmds] \K*n* [cmds]

Description: Configures action of break signal

Command	Break from DTE	Break received from remote modem
\K0	Online command mode enabled, send no break to remote modem	Buffers cleared, break sent to DTE
\K1	Break sent to remote modem and buffered cleared	Buffers cleared, break sent to DTE
\K2	Online command mode enabled, send no break to remote modem	Break sent immediately to DTE
■ \K3	Send break to remote modem immediately	Break sent immediately to DTE

COMPRESSION

Type: Configuration

Format: AT [cmds] %C*n* [cmds]

Description: Selects data compression

Command	Function
%C0	Data compression disabled
%C1	MNP5 enabled

INACTIVITY TIMER

Type: Configuration

Format: AT [cmds] \T*n* [cmds]

Range: 0-90

Unit: 1minute

Description: Sets the length of time that the modem does not receive information before it disconnects. \T0 disables timer

MAXIMUM BLOCK SIZE FOR TRANSMISSION

Type: Configuration

Format: AT [cmds] \A*n* [cmds]

Description: Sets the maximum transmittable block size

Command	Function
\A0	MNP block size is 64 characters
\A1	MNP block size is 128 characters
\A2	MNP block size is 192 characters
\A3	MNP block size is 256 characters
\A4	Variable block size

SPECIAL COMMANDS

DSVD MODE

Type: Configuration

Format: AT [cmds] -SSE=*n* [cmds]

Description: Select whether the modem will use DSVD mode.

Command	Function
■ -SSE=0	DSVD mode disabled.
-SSE=1	DSVD mode enabled.

UNIDENTIFIED

Type: Configuration

Format: AT [cmds] %TT6*r*, *s*, *c*, *p* [cmds]

Description: Unidentified

Command	Function
r=0	2400 (if ***s***=0)
r=1	4800bps
r=2	7200bps
r=3	9600bps
r=4	1200bps
r=5	14.4Kbps
r=6	16.8Kbps
r=7	19.2Kbps
r=8	21.6Kbps
r=9	24.0Kbps (if ***s***■ 0)
r=A	26.4Kbps (if ***s***■ 0)
r=B	28.8Kbps (if ***s***■ 0)
s=7	2400 symbols per second
s=8	3000 symbols per second
s=9	3200 symbols per second
c=0	V.34 low carrier
c>0	V.34 high carrier

V.42bis - MAXIMUM STRING LENGTH

Type: Immediate

Format: AT [cmds] "O*n* [cmds]

Range: 6-250

Unit: Characters

Description: Selects string size for V.42bis compression

S(status) -REGISTERS

BIT-MAPPED REGISTER S49

Format AT [cmds] S49=*n* [cmds]

Range: 0-255

Unit: Bit-mapped

Description: Selects call indicator, V.8, and V.34 protocol. Bits are additive

Bit	Value	Function
0	0	Not used
1	0	Call indicator enabled
	1	Call indicator disabled
2	0	V.8 protocol enabled
	1	V.8 protocol disabled
3	0	V.34 protocol enabled
	1	V.34 protocol disabled

BIT-MAPPED REGISTER S50

Format AT [cmds] S50=*n* [cmds]

Range: 0-255

Unit: Bit-mapped

Description: Selects baud rates that the V.34 modem will request for reception

Bit	Value	Function
0	0	2400 baud receive symbol rate enabled
	1	2400 baud receive symbol rate disabled
1	0	2743 baud receive symbol rate enabled
	1	2743 baud receive symbol rate disabled
2	0	2800 baud receive symbol rate enabled
	1	2800 baud receive symbol rate disabled
3	0	3000 baud receive symbol rate enabled
	1	3000 baud receive symbol rate disabled
4	0	3200 baud receive symbol rate enabled
	1	3200 baud receive symbol rate disabled

5	0	3429 baud receive symbol rate enabled
	1	3429 baud receive symbol rate disabled
6	0	Asymmetric symbol rates enabled
	1	Asymmetric symbol rates disabled
7	0	Not used

BIT-MAPPED REGISTER S52

Format AT [cmds] S52=*n* [cmds]

Range: 0-255

Unit: Bit-mapped

Description: Controls the various features of the V.34 data pump

Bit	Value	Function
0	0	Asymmetric data rates enabled
	1	Asymmetric data rates disabled
1	0	Auxiliary channel enabled
	1	Auxiliary channel disabled
2-7	0	Not used

BIT-MAPPED REGISTER S53

Format AT [cmds] S53=*n* [cmds]

Range: 0-255

Unit: Bit-mapped

Description: Controls request options for: pre-emphasis, constellation warping, constellation shaping, and precoding

Bit	Value	Function
0	0	Not used
1	0	Pre-emphasis requests disabled
	1	Pre-emphasis requests enabled
2	0	Constellation warping requests disabled
	1	Constellation warping requests enabled

3	0	Constellation shaping requests disabled
	1	Constellation shaping requests enabled
4	0	Precoding requests disabled
	1	Precoding requests enabled
5-7	0	Not used

CALLING TONE

Type: Register

Format AT [cmds] S24=*n* [cmds]

Description: Enables/disables calling tone

Command	Function
S24=0	Calling tone disabled.
S24=1	Calling tone enabled.

DCE LINE SPEED

Type: Register

Format AT [cmds] S28=*n* [cmds]

Description: Sets the maximum allowable data exchange rate attempted during handshake process.

Command	Function
S28=0	Speed of last connection
S28=1	50bps
S28=2	75bps
S28=3	110bps
S28=4	134.5bps
S28=5	150bps
S28=6	300bps
S28=8	1200bps
S28=9	2400bps

S28=10	4800bps
S28=11	7200bps
S28=12	9600bps
S28=13	12.0Kbps
S28=14	14.4Kbps