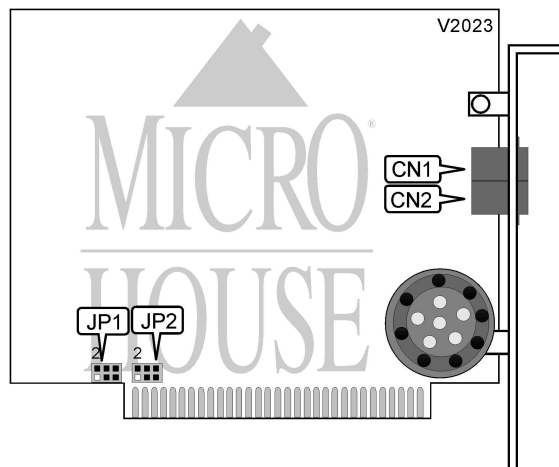


ZOOM TELEPHONICS, INC.

14400BPS FAXMODEM (INTERNAL)

Card Type	Fax, Modem (asynchronous)
Chip Set	Unidentified
Maximum Data Rate	14.4Kbps
Maximum Fax Rate	14.4Kbps
Data Bus	8-bit ISA
Fax Class	Class I & II
Data Modulation Protocol	Bell 103/212A
Fax Modulation Protocol	ITU-T V.21, V.22A/B, V.22bis, V.23, V.32, V.32bis
Error Correction/Compression	ITU-T V.17, V.21CH2, V.27ter, V.29
	MNP5, V.42, V.42bis



CONNECTIONS			
Function	Label	Function	Label
Line in	CN1	Line out	CN2

SERIAL PORT ADDRESS/INTERRUPT SELECTION			
Setting	IRQ	JP1	JP2
COM1 (3F8h)	4	Pins 3 & 5, 4 & 6 closed	Pins 1 & 3 closed
COM2 (2F8h)	3	Pins 2 & 4, 3 & 5 closed	Pins 2 & 4 closed
COM3 (3E8h)	4	Pins 1 & 3, 4 & 6 closed	Pins 1 & 3 closed
COM4 (2E8h)	3	Pins 1 & 3, 2 & 4 closed	Pins 2 & 4 closed
COM5 (3E8h)	2	Pins 1 & 3, 4 & 6 closed	Pins 4 & 6 closed
COM6 (2E8h)	2	Pins 1 & 3, 2 & 4 closed	Pins 4 & 6 closed
COM7 (3E8h)	5	Pins 1 & 3, 4 & 6 closed	Pins 3 & 5 closed
COM8 (2E8h)	5	Pins 1 & 3, 2 & 4 closed	Pins 3 & 5 closed

Continued on next page . . .

ZOOM TELEPHONICS, INC.
14400BPS FAXMODEM (INTERNAL)

. . . continued from previous page

Proprietary AT Command Set

AUTO-RETRAIN - AUTO-FALLBACK/FALL-FORWARD	
Type:	Configuration
Format:	AT [cmds] %En [cmds]
Description:	Controls auto-retrain mode and fallback/fall-forward
Command	Function
i %E0	Auto-retrain disabled
%E1	Auto-retrain enabled
%E2	Auto-fallback/fall-forward enabled
%E3	Auto-fallback/fall-forward with fast hang-up enabled

BIT MAPPED REGISTERS	
Register	Default
S14	Unidentified
S16	Unidentified
S21	Unidentified
S22	Unidentified
S23	Unidentified
S27	Unidentified
S28	Unidentified
S31	Unidentified
S40	Unidentified
S41	Unidentified

BREAK SEND	
Type:	Configuration
Format:	AT [cmds] \Bn [cmds]
Default:	3
Range:	1-9
Unit:	.1 second
Description:	Sends break to modem

BREAK TYPE	
Type:	Configuration
Format:	AT [cmds] \Kn [cmds]
Default:	Unidentified
Range:	Unidentified
Description:	Configures action of break signal

Continued on next page . . .

ZOOM TELEPHONICS, INC.

14400BPS FAXMODEM (INTERNAL)

. . . continued from previous page

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.
Modifier	Function
L	Re-dial last number
P	Pulse dialing enabled
R	Command accepted, not acted upon.
S=n	Dial stored telephone number <i>n</i> (<i>n</i> =0-3)
T	Tone dialing enabled
W	Dialing resumed following dial tone detection
,	Dialing paused for amount of time specified in S8 register
@	Wait for 5 seconds of silence
;	Modem returned to command state after dialing
!	Modem commanded to go off-hook for specified time before returning on-hook.
^	Calling tone enabled

COMPRESSION	
Type:	Configuration
Format:	AT [cmds] %C <i>n</i> [cmds]
Description:	Selects data compression
Command	Function
%C0	Data compression disabled
%C1	MNP5 enabled
%C2	V.42bis enabled
í %C3	MNP5 and V.42bis enabled

CONNECT MODE	
Type:	Configuration
Format:	AT [cmds] \N <i>n</i> [cmds]
Description:	Controls the type of connection the modem will operate in
Command	Function
\N0	Normal mode enabled
\N1	Direct mode enabled
\N2	Reliable mode enabled
í \N3	Auto-reliable mode enabled
\N4	V.42 reliable mode enabled
\N5	MNP reliable mode enabled

Continued on next page . . .

ZOOM TELEPHONICS, INC.

14400BPS FAXMODEM (INTERNAL)

. . . continued from previous page

FLASH DIAL MODIFIER TIME	
Type:	Register
Format:	AT [cmds] S29= <i>n</i> [cmds]
Default:	0
Range:	0-255
Unit:	.01 second
Description:	Time the modem will go on-hook upon receiving the ! dial modifier in dial string. S29=0 will disable.

FLOW CONTROL	
Type:	Configuration
Format:	AT [cmds] \G <i>n</i> [cmds]
Description:	Selects modem port flow control
Command	Function
í \G0	Flow control disabled
\G1	Flow control enabled

FLOW CONTROL	
Type:	Read-only Register
Format:	AT [cmds] S39? [cmds]
Description:	Displays the current flow control
Value	Meaning
0	Flow control disabled
í 3	RTS/CTS flow control enabled
4	XON/XOFF flow control enabled
5	Transparent XON flow control enabled
6	Transparent XON/XOFF flow control enabled

FLOW CONTROL CHARACTER - XOFF	
Type:	Register
Format:	AT [cmds] S33= <i>n</i> [cmds]
Default:	19
Range:	0-255
Unit:	ASCII
Description:	Sets the character used to represent XOFF

FLOW CONTROL CHARACTER - XON	
Type:	Register
Format:	AT [cmds] S32= <i>n</i> [cmds]
Default:	17
Range:	0-255
Unit:	ASCII
Description:	Sets the character used to represent XON

Continued on next page . . .

ZOOM TELEPHONICS, INC.

14400BPS FAXMODEM (INTERNAL)

. . . continued from previous page

INACTIVITY TIMER	
Type:	Register
Format:	AT [cmds] S30= <i>n</i> [cmds]
Default:	0
Range:	0-255
Unit:	10 seconds
Description:	Sets the length of time that the modem does not receive information before it disconnects. S30=0 will disable timer.

LINE SIGNAL LEVEL	
Type:	Immediate
Format:	AT [cmds] %L [cmds]
Description:	Returns a value which indicates the received line signal level (-dBm)

LINE SIGNAL QUALITY	
Type:	Immediate
Format:	AT [cmds] %Q [cmds]
Description:	Returns a value which indicates line signal quality

MAXIMUM BLOCK SIZE FOR TRANSMISSION	
Type:	Configuration
Format:	AT [cmds] \A <i>n</i> [cmds]
Description:	Sets the maximum transmittable block size
Command	Function
\A0	MNP block size is 64 characters
í \A1	MNP block size is 128 characters
\A2	MNP block size is 192 characters
\A3	MNP block size is 256 characters

MNP - STREAM/BLOCK MODE	
Type:	Configuration
Format:	AT [cmds] \L <i>n</i> [cmds]
Description:	Selects the transfer mode for MNP link
Command	Function
í \L0	Stream mode for MNP enabled
\L1	Block mode for MNP enabled

Continued on next page . . .

ZOOM TELEPHONICS, INC.
14400BPS FAXMODEM (INTERNAL)

. . . continued from previous page

REPORT INFORMATION	
Type:	Immediate
Format:	AT [cmds] ln [cmds]
Description:	Displays information requested
Command	Function
I0	Reports 3-digit product code
I1	Reports ROM checksum
I2	Tests and reports ROM checksum
I3	Reports firmware revision code
I4	Reports faxmodem identifier string
I5	Reports country code
I6	Reports data pump model and revision code

SLEEP TIMER	
Type:	Register
Format	AT [cmds] S24= <i>n</i> [cmds]
Default:	0
Range:	0-255
Unit:	1 second
Description:	Maximum duration of DTE and DCE inactivity allowed prior to initiating low-power sleep mode.