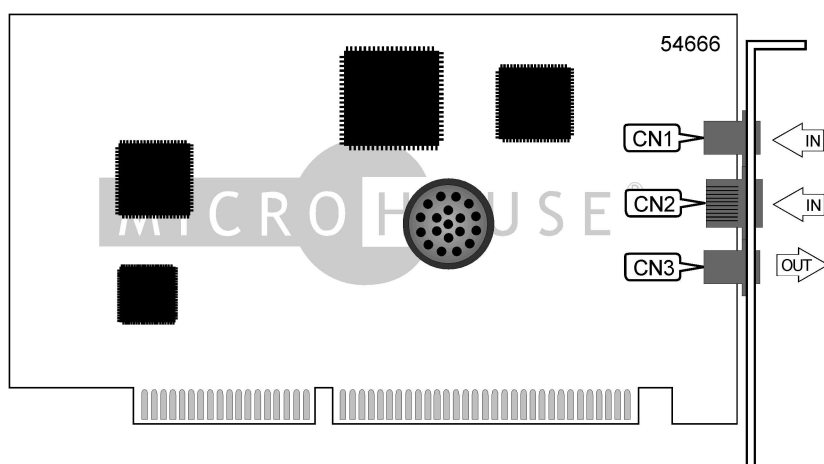


ZOOM TELEPHONICS, INC.

ISDN/V.34

Card Type	ISDN, Modem, Fax
Chip Set	Unidentified
I/O Options	Line in(RJ-11), ISDN line in (RJ-45), line out, speaker
ISDN Data Rate	128.0Kbps
Maximum Modem Rate	33.6Kbps
Maximum Fax Rate	14.4Kbps
ISDN Modulation Protocol	V.110, V.120, PPP, MLPPP
Data Modulation Protocol	Bell 103A/212A, ITU-T V.21, V.22, V.22bis,V.23, V.32, V.32bis, V.34
Fax Modulation Protocol	V.17, V.21, CH2, V.27ter, V.29, V.33
Error Correction/Compression	MNP2-4, V.42, V.42bis
Fax Class	Class I & II
Data Bus	16-bit ISA
Card Size	Half-length



CONNECTIONS			
Function	Label	Function	Label
RJ-11 Line in	CN1	Handset out (RJ-14)	CN2
RJ-45 ISDN line in	CN2		

SUPPORTED COMMAND SET	
Basic AT Commands	
AT, A/	
A, E, H, M, V, W	
&C, &Z	
S Registers	
S Registers are unidentified	
Note: See MHI Help File for full command documentation.	

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PROPRIETARY AT COMMAND SET

COMMUNICATIONS MODE	
Type:	Configuration
Format:	AT [cmds] &Qn [cmds]
Description:	Selects communications mode options
Command	Mode
&Q0	Asynchronous mode, serial port speed follows connect speed.
&Q1	Asynchronous off-line command mode and synchronous connect mode.

CONFIGURATION PROFILES	
Type:	Immediate
Format:	AT [cmds] &V [cmds]
Description:	Displays active and stored configuration profiles
&V0	Displays active configuration, stored profiles 0 and 1, and directory numbers and the first 3 stored phone numbers
&V1	Displays stored profiles 2 and 3 as well as the first 4 stored phone numbers
&V2	Displays stored profiles and directory numbers as well as the first 5 stored phone numbers

DATA SET READY (DSR)	
Type:	Configuration
Format:	AT [cmds] &Sn [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] &Dn [cmds]
Description:	Selects modem response to DTR
Command	Function
&D0	DTR override
&D1	DTR toggle causes online command mode
&D2	Normal DTR operations
&D3	Resets on receipt of DTR

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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
DL	Re-dial last number
DP	Pulse dialing enabled
DR	Answer mode enabled; originate mode disabled following handshake initiation.
DS=n	Dial stored telephone number <i>n</i>
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=	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 Quiet 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&	Dialing paused for 5seconds before modem dials the digits following modifier
D^	Calling tone disabled
D/	Delays 125 ms. Before proceeding with dial string
DV	Voice mode enabled
D;	Modem returned to idle state after dialing. The semicolon can only be placed at the end of the dial command.
DI	ISDN data communication enabled (overrides value set by %O)
DM	Modem over voice ISDN data communication enabled (overrides value set by %O)

FACTORY DEFAULT PROFILE	
Type:	Configuration
Format:	AT [cmds] &F [cmds]
Description:	Sets values in active profile to values found in the default profile
Command	Function
&F0	Restore factory configuration profile 0
&F1	Restore factory configuration profile 1
&F2	Restore factory configuration profile 2

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REPORT INFORMATION	
Type:	Immediate
Format:	AT [cmds] In [cmds]
Description:	Displays information requested
Command	Function
I0	Reports ISDN/V.34 code
I1	Performs a ROM checksum
I2	Reports ROM checksum and compares results against stored value
I3	Sends ROM part number and revision levels
I4	Sends ASCII string test
I5	Reports data pump chipset revision
I6	Reports the supported central office
I7	Sends platform specific information
I8	Reports country code
I9	Reports modem number

RESTORE PROFILE ON POWER-UP	
Type:	Configuration
Format:	AT [cmds] &Yn [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 profile 2 on power-up
&Y3	Restore profile 3 on power-up

RESULT CODES	
Type:	Configuration
Format:	AT [cmds] Qn [cmds]
Description:	Enables modem to send result codes to the DTE
Command	Function
Q0	Result code sending enabled
Q1	Result code sending disabled
Q2	Result code sending only in originate mode

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SELECT CALL PROGRESS RESULT CODES	
Type:	Configuration
Format:	AT [cmds] Xn [cmds]
Description:	Enables selection of tone detection and associated result code format options
Command	Function
X0	Busy and dial tone detection disabled; result codes 0 - 4 enabled.
X1	Busy and dial tone detection disabled; extended result codes enabled.
X2	Busy tone detection disabled, dial tone detection enabled; extended result codes enabled.
X3	Busy tone detection enabled, dial tone detection disabled; extended result codes enabled.
X4	Busy and dial tone detection enabled; extended result codes enabled.
X5	Ringing is reported, dial tone detection disabled
X6	Adaptive dialing enabled

SOFT RESET	
Type:	Immediate
Format:	AT [cmds] Zn [cmds]
Description:	Restores modem profiles previously saved in non-volatile RAM using the &W command.
Command	Function
Z0	Restore setting NVRAM profile 0
Z1	Restore setting NVRAM profile 1
Z2	Restore setting NVRAM profile 2
Z3	Restore setting NVRAM profile 3

STORE ACTIVE PROFILE	
Type:	Configuration
Format:	AT [cmds] &Wn [cmds]
Description:	Writes the values for the active profile into the non-volatile RAM
Command	Function
&W0	Write the active profile to stored profile 0
&W1	Write the active profile to stored profile 1
&W2	Write the active profile to stored profile 2
&W3	Write the active profile to stored profile 3

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TEST MODES	
Type:	Immediate

Format:	AT [cmds] &Tn	
Description:	Selects test options	
Command		Function
&T0	End current test	
&T1	Begin local analog loopback test	
&T3	Begin local digital loopback	
&T4	Grant remote digital loopback request	
&T5	Deny remote digital loopback request	
&T6	Request remote digital loopback	
&T7	Request remote digital loopback and self-test	
&T8	Begin local analog loopback and self-test	
&T9	Grant EIA loopback test	
&T10	Reject EIA loopback test	

TRANSMIT DATA FLOW CONTROL		
Type:	Configuration	
Format:	AT [cmds] &Kn [cmds]	
Description:	Enables TD flow control options	
Command		Function
&K0	Flow control disabled	
&K3	RTS/CTS flow control enabled	
&K4	Local XON/XOFF flow control enabled	
&K8	Unidirectional software flow control enabled	
&K12	Transparent XON/XOFF flow control enabled	
&K16	Internal XON/XOFF flow control enabled	
&K20	Internal and local XON/XOFF flow control enabled	

EXTENDED AT COMMAND SET

CALL ROUTER		
Type:	Configuration	
Format:	AT [cmds] %J [cmds]	
Description:	Routes calls over analog or ISDN	
Command		Function
%J0	Routes calls over ISDN if available; otherwise calls are routed over analog	
%J1	Routes calls over ISDN only	
%J2	Routes calls over ISDN only	

COMMAND SET		
Type:	Immediate	
Format:	AT [cmds] %V0 [cmds]	
Description:	Enables AT command set	

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FLASH SOFTWARE UPGRADE		
Type:	Immediate	
Format:	AT [cmds] %FAPPS [cmds]	

Description:	Enables flash software upgrade
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ISDN AT COMMAND SET

CALL APPEARANCE	
Type:	Immediate
Format:	AT [cmds] *P= <i>n</i> [cmds]
Description:	Determines call appearance
Command	Function
*P1	Call appearance 1 number
*P2	Call appearance 2 numbers

GLOBAL RESET	
Type:	Immediate
Format:	AT [cmds] %Z1 [cmds]
Description:	Global reset to registers specified by power-up profile and by ! registers. Same as power-up reset

VOICE ANSWER	
Type:	Immediate
Format:	AT [cmds] *An [cmds]
Description:	Answers a voice call

VOICE CALL ACCEPTANCE	
Type:	Configuration
Format:	AT [cmds] *En [cmds]
Description:	Determines the type of voice call accepted
Command	Function
*E0	Voice call will be accepted only if incoming call has the SPEECH capability set.
*E1	Voice call will be accepted only if the incoming call has the 3.1kHz capability set.
*E2	Voice call will be accepted only if the incoming call has the SPEECH or 3.1kHz capability set.

VOICE DIALING	
Type:	Configuration
Format:	AT [cmds] *D <i>n</i> [cmds]
Description:	Dials a voice call
Command	Function
*Ds= <i>n</i>	Dial a voice call, where <i>n</i> represents a dial string stored in location <i>n</i> of &Z

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VOICE HANG UP	
Type:	Configuration
Format:	AT [cmds] *H <i>n</i> [cmds]
Description:	Instructs modem to hang up current voice call, or <i>n</i> if specified

VOICE INFORMATION COMPATABILITY	
Type:	Configuration
Format:	AT [cmds] *B <i>n</i> [cmds]
Description:	Determines voice information capability
Command	Function
*B0	Sets voice information capability to SPEECH
*B1	Sets voice information capability to 3.1kHz