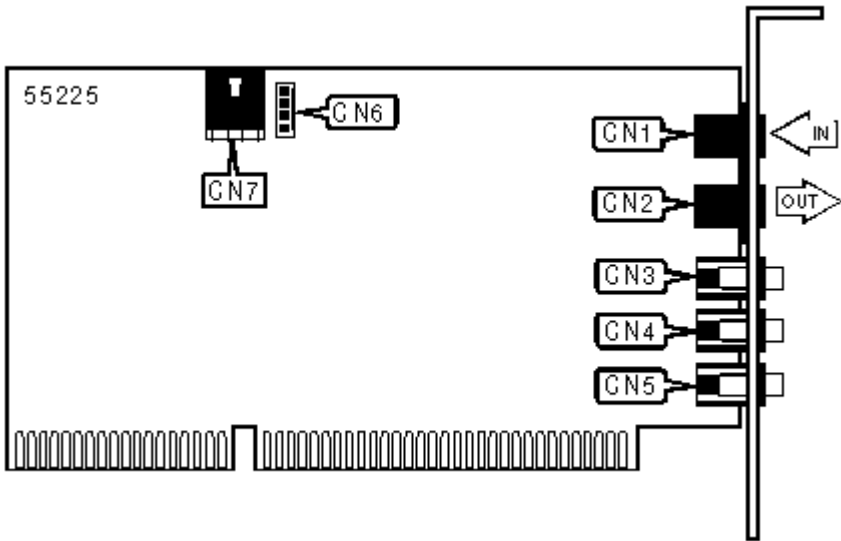


AC-5618 (REV. 1.0)

Card Type	Modem
Chipset	Unidentified
I/O Options	Audio in - CD-ROM, speaker connector, line in, line out, audio in, audio out, microphone in
Maximum Modem Rate	56.0Kbps
Maximum Fax Rate	14.4Kbps
Fax Class	Class I
Modem Modulation Protocol	Bell 103/212A
	ITU-T V.22bis,V.32, V.32bis, V.34, V.34bis, V.90
Fax Modulation Protocol	ITU-T V.17
Error Correction/Compression	MNP5, V.42, V.42bis
Data Bus	16-bit ISA



CONNECTIONS

Function	Label	Function	Label
Line in	CN1	Audio out	CN5
Line out	CN2	Audio in - CD-ROM	CN6
Microphone in	CN3	Audio in - CD-ROM	CN7
Audio in	CN4		

SUPPORTED COMMAND SET

Basic AT Commands

AT, ■+++■, A/

A, E, H, M, O, P, Q, T, V

&C, &P, &V, &W, &Z

Extended AT Commands

VA, VB, VN

%C, %E

S Registers

S0, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12

Special Commands

+MS, #CID

Voice Commands

#TL, #VBT, #VRA, #VRX, #VSD, #VSP, #VSS, #VTD, #VTS, #VTX, #SPK

Note: See MHI Help File for full command documentation. Further information on S-registers is currently unavailable

Proprietary AT Command Set

AUTO-MODE DETECTION

Type:	Configuration
Format:	AT [cmds] Nn [cmds]
Description:	Selects various options for the automatic detection and negotiation of protocols during the handshake process if the modem is communicating with a remote modem of dissimilar speed.

Command	Function
N0	Auto-mode detection disabled. Handshake begins at line speed designated by the S32 register
■ N1	Auto-mode detection enabled. Handshake conducted according to the automode algorithm supported by the modem

COMMUNICATION PROTOCOLS

Type:	Configuration
Format:	AT [cmds] Bn [cmds]
Description:	Selects the communication protocol for data calls

Command	Protocol
B0	ITU-T V.22 at 1200bps

COMPRESSION

Type: Configuration

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

Description: Selects data compression

Command	Function
&K0	Data compression disabled
&K1	MNP5 enabled
&K2	V.42bis enabled
&K3	MNP5 and V.42bis; or data compression and correction enabled

CONNECT MESSAGE SPEED SOURCE

Type: Configuration

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

Description: Selects source for speed field in CONNECT message

Command	Function
■ &E0	DCE speed field
&E1	DTE speed field

CONNECT MESSAGES

Type: Configuration

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

Description: Selects the format of CONNECT messages

Command	Function
■ &A0	CONNECT only
&A1	Modulation indicator added to CONNECT message
&A2	Error detection and data compression indicators added to CONNECT message
&A3	Modulation, error detection and data compression indicators added to CONNECT message

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 forced high
&D1	DTR toggle causes online command mode
&D2	Normal DTR operations
&D3	Resets on receipt of DTR

DEFAULT CONFIGURATION

Type: Configuration

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

Description: Selects the default user defined configuration

Note: Does not load configuration

Command	Function
Y0	Select user template 0
Y1	Select user template 1
■ Y2	Select factory setting 0
Y3	Select factory setting 1

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
DS= <i>n</i>	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@	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!	Flash function initiated. Modem commanded to go off-hook for specified time before returning on-hook.
D;	Modem returned to idle state after dialing. The semicolon can only be placed at the end of the dial command.

FACTORY DEFAULT PROFILE

Type:	Configuration
Format:	AT [cmds] &F <i>n</i> [cmds]
Description:	Sets values in active profile to values found in the default profile

Command	Function
■ &F0	Restore factory configuration 0
&F1	Restore factory configuration 1

FLOW CONTROL

Type:	Configuration
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Format: AT [cmds] &H*n* [cmds]

Description: Enables/disables flow control

Command	Function
&H0	Flow control disabled
■ &H1	RTS to CTS flow control enabled

REPORT INFORMATION

Type: Immediate

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

Description: Displays information requested

Command	Function
I1	Reports manufacturer and model name
I2	Reports software version and provider
I3	Reports vendor/chip ID
I4	Reports stored and active profile
I5	Reports stored and active profile
I6	Reports stored and active profile
I7	Reports stored telephone numbers

RTS/CTS

Type: Configuration

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

Description: Selects RTS/CTS options

Command	Function
&R0	RTS is ignored
&R1	Modem recieves data only on RTS

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; result codes 0 - 5 & 9 - 1212 enabled.
X2	Busy tone detection disabled, dial tone detection enabled; result codes 0 - 6 & 9 - 1212 enabled.
X3	Busy tone detection enabled, dial tone detection disabled; result codes 0 - 5, 7 - 1212 enabled.
X4	Busy and dial tone detection enabled; result codes 0 - 1212 enabled.

SOFT RESET

Type: Immediate

Format: AT [cmds] *Zn* [cmds]

Description: Restores modem profiles previously saved in non-volatile RAM

Command	Function
Z0	Restore default user template as defined by <i>Yn</i>
Z1	Restore user template 0
Z2	Restore user template 1
Z3	Restore factory setting 0
Z4	Restore factory setting 1

SPEAKER VOLUME

Type: Configuration

Format: AT [cmds] *Ln* [cmds]

Description: Controls speaker volume

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

TEST MODES

Type:	Immediate
Format:	AT [cmds] &T <i>n</i>
Description:	Selects test options

Command	Function
■ &T0	TBD
&T1	TBD
&T2	TBD
&T3	TBD

EXTENDED AT COMMAND SET

BREAK TYPE

Type:	Configuration
Format:	AT [cmds] \K <i>n</i> [cmds]
Description:	Configures action of break signal

Command	Function
\K0	Online command mode enabled, send no break to remote modem
\K1	Break sent to remote modem and buffered cleared
\K2	Online command mode enabled, send no break to remote modem
\K3	Send break to remote modem immediately
\K4	Online command mode enabled, send no break to remote modem

VOICE COMMANDS

INACTIVITY TIMER

Type:	Configuration
Format:	AT [cmds] #VIT= <i>n</i> [cmds]
Range:	0-255
Unit:	.1ms
Description:	Maximum duration of voice inactivity allowed prior to initiating hang-up process.

MODE SELECTION

Type:	Immediate
Format:	AT [cmds] #CLS= <i>n</i> [cmds]
Description:	Selects which mode the modem will operate in.

Command	Function
#CLS=0	Modem will operate in data mode.
#CLS=1	Modem will operate in fax class I mode.
#CLS=8	Modem will operate in voice mode.

RECORD GAIN

Type:	Configuration
Format:	AT [cmds] #RG= <i>hhhh</i> [cmds]
Range:	0000 - 7FFF
Unit:	Unidentified (hexadecimal)
Description:	Sets the record gain. #RG? queries value

VOICE - LOCAL SERIAL PORT SPEED

Type:	Configuration
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Format:	AT [cmds] #BDR= <i>n</i> [cmds]
Range:	0-48
Unit:	2400bps
Description:	Sets the speed of the local serial port when in voice mode.

VOICE DEVICE

Type:	Configuration
Format:	AT [cmds] #VLS= <i>n</i> [cmds]
Description:	Selects the I/O device for the DSP chip.
Note:	VLS? Queries current setting. #VLS=? Command will display the available options.

Command	Function
■ #VLS=0	Telephone line and handset used for voice I/O.
#VLS=2	Internal speaker only used for voice I/O.
#VLS=3	External microphone only used for voice I/O.
#VLS=4	Telephone line and handset used for voice I/O; internal speaker enabled.
#VLS=6	Speakerphone used for voice I/O.

VOICE PARAMETERS

Type:	Configuration
Format:	AT [cmds] #VIP [cmds]
Description:	Initializes voice parameters

VOICE RING DETECT TIME

Type:	Configuration
Format:	AT [cmds] #VRN= <i>n</i> [cmds]
Default:	Unidentified
Range:	0-255

Unit: .1ms

Description: Sets the maximum time the modem will wait for the remote station to ring before it assumes that it went off-hook before it rang.

VOICE SAMPLE QUALITY

Type: Configuration

Format: AT [cmds] #VBS=*n* [cmds]

Description: Selects the number of bits per sample that the modem records.

Note: This modem may not support all options listed below. The #VBS? Command will display the available options.

Command	Function
#VBS=2	Modem records 2 bits per sample in ADPCM encoding.
#VBS=4	Modem records 4 bits per sample in ADPCM encoding.
#VBS=8	Modem records 8 bits per sample in PCM encoding.
#VBS=16	Modem records 16 bits per sample in PCM encoding.

VOICE SAMPLING RATE

Type: Configuration

Format: AT [cmds] #VSR=*n* [cmds]

Description: Sets the sampling rate used when recording voice signals. #VSR? queries settings

Command	Function
#VSR=7200	Selects a sampling rate of 7.2KHz.
#VSR=8000	Selects a sampling rate of 8.0KHz.

VOICE TIMING MARK

Type: Configuration

Format: AT [cmds] #VTM=*n* [cmds]

Range: 1-10

Unit: 1ms

Description: Configures timing mark placement.

VOICE VOLUME LEVEL

Type:	Configuration
Format:	AT [cmds] #VGT= <i>n</i> [cmds]
Range:	0-255
Description:	Sets the volume level when playing back audio signals.