

UNIQUE HARDWARE CO., LTD.

VAX 134F

Card Type	Modem (synchronous/asynchronous)
Chipset	Rockwell
I/O Options	Microphone in, speaker out, voice, speakerphone, DSVD
Maximum Data Rate	28.8Kbps
Maximum Fax Rate	14.4Kbps
Data Modulation	Bell 103A, 212A ITU-T V.21, V.22, V.22bis, V.32, V.32bis, V.34 Rockwell V.FC
Fax Modulation	ITU-T V.17, V.21CH2, V.27ter, V.29
Error Correction/Compression	MNP5, V.42, V.42bis
Fax Class	Class I & II
Data Bus	8-bit ISA
Card Size	Unidentified

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SERIAL PORT ADDRESS SELECTION				
Setting	SW1/1	SW1/2	SW1/3	SW1/4
3F8h (COM1:)	Off	On	On	Off
2F8h (COM2:)	Off	On	Off	On
3E8h (COM3:)	On	Off	On	Off
2E8h (COM4:)	On	Off	Off	On

INTERRUPT SELECTION				
Setting	SW1/5	SW1/6	SW1/7	SW1/8
3	On	Off	Off	Off
4	Off	On	Off	Off
5	Off	Off	On	Off
7	Off	Off	Off	On

MISCELLANEOUS TECHNICAL NOTES
Diagram not available.

SUPPORTED STANDARD COMMANDS
Basic AT Commands
+++ , 'comma' , A/
A, B, E, H, L, M, N, O, P, Q, T, V, W, X, Y, Z
&C, &D, &F, &G, &K, &L, &M, &P, &Q, &R, &S, &T, &V, &W, &X, &Y, &Z
Extended AT Commands
\A, \B, \G, \K, \L, \N
%C, %E, %L, %Q
Special AT Commands
#CID, +MS
S-Registers
S0, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S14, S16, S18, S21, S22, S23, S25, S26
S27, S28, S29, S30, S31, S32, S33, S36, S38, S40, S41, S46, S48, S82, S86, S95
Note: See MHI help file for complete information.

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Proprietary AT Command Set

DISPLAY CHIPSET MANUFACTURER	
Type:	Immediate
Format:	AT [cmds] #MFR? [cmds]
Description:	Displays the voice chipset manufacturer's name.

DISPLAY CHIPSET MODEL NAME	
Type:	Immediate
Format:	AT [cmds] #MDL? [cmds]
Description:	Displays the model name of the modem's voice chipset.

DISPLAY CHIPSET REVISION	
Type:	Immediate
Format:	AT [cmds] #REV? [cmds]
Description:	Displays the revision level of the modem's voice chipset.

DSVD MODE	
Type:	Configuration
Format:	AT [cmds] -SSE= <i>n</i> [cmds]
Description:	Select whether the modem will use DSVD mode.
Command	Function
í -SSE=0	DSVD mode disabled.
-SSE=1	DSVD mode enabled.

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 1 mode.
#CLS=2	Modem will operate in fax class 2 mode.
#CLS=8	Modem will operate in voice mode.

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TONE DETECTION		
AT [cmds] #VTD=x,y,z [cmds]		
x,y,z 63		
0 - 63		
Sets which tones the tone detection will report.		
The value of x sets the tone detection modes in voice transmit mode, y sets the voice command mode.		
Value	Function	
0	DTMF tones are not detected.	
í 1	DTMF tones are detected.	
0	V.25 1300Hz calling tone is not detected.	í 1
í 1	V.25 1300Hz calling tone is detected.	0
0	T.30 1100Hz fax tone is not detected.	í 1
í 1	T.30 1100Hz fax tone is detected.	0
0	V.25/T.30 2100Hz answer tone is not detected.	í 1
í 1	V.25/T.30 2100Hz answer tone is detected.	0
0	Bell 2225Hz answer tone is not detected.	í 1
í 1	Bell 2225Hz answer tone is detected.	0
0	Call progress tones are not detected.	í 1
í 1	Call progress tones are detected.	

TONE GENERATOR - DIRECT ENTRY	
Type:	Immediate
Format:	AT [cmds] #VTS=[<i>m</i> , <i>n</i> , <i>x</i>]
Range:	<i>m</i> 200-3000, <i>n</i> 200-3000, <i>x</i> 0-255
Unit:	<i>m</i> 1 Hz, <i>n</i> 1 Hz, <i>x</i> .1 second
Description:	Generates a dual-frequency tone for duration <i>x</i> at frequencies <i>m</i> and <i>n</i> .

TONE GENERATOR - TIMED PHONE KEYS	
Type:	Immediate
Format:	AT [cmds] #VTS={ <i>a</i> , <i>n</i> }
Range:	<i>a</i> 0-9, A-D, #, *; <i>x</i> 0-255
Unit:	<i>x</i> .1 second
Description:	Generates the DTMF tone for duration <i>x</i> for the character <i>a</i> .

TONE GENERATOR - PHONE KEYS	
Type:	Immediate
Format:	AT [cmds] #VTS= <i>a</i>
Range:	0-9, A-D, #, *
Description:	Generates the DTMF tones for the characters in the string for the duration set with +VBT.

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TONE GENERATOR LENGTH	
Format:	AT [cmds] #VBT= <i>n</i> [cmds]
Default:	10
Range:	0 - 40
Unit:	0.1 second
Description:	Sets the length of DTMF tones that are generated.

VOICE BUFFER SPACE	
Type:	Configuration
Format:	AT [cmds] #VSK= <i>n</i> [cmds]
Default:	255
Range:	0 - 255
Unit:	1 byte
Description:	Sets the amount of data the modem can send into the buffer after the XOFF signal is sent.

VOICE DEVICE	
Type:	Configuration
Format:	AT [cmds] #VLS= <i>n</i> [cmds]
Description:	Selects the I/O device for the DSP chip.
Command	Function
i #VLS=0	Telephone line and handset used for voice I/O.
#VLS=1	Telephone 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=5	Headset used for voice I/O.
#VLS=6	Speakerphone used for voice I/O.
#VLS=7	Handset muted by disconnecting handset or speakerphone from telephone line.
#VLS=8	Connects caller ID relay for recording of conversation over handset.
#VLS=9	Connects handset (or speakerphone) to DSP chip for recording or playback.

VOICE - DISPLAY BUFFER SIZE	
Type:	Immediate
Format:	AT [cmds] #VBQ? [cmds]
Description:	Displays the size of the voice buffer.

VOICE - DISPLAY COMPRESSION TYPE	
Type:	Immediate
Format:	AT [cmds] #VCI? [cmds]
Description:	Displays the type of compression currently in use.

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VOICE - LOCAL SERIAL PORT SPEED	
Type:	Configuration
Format:	AT [cmds] #BDR= <i>n</i> [cmds]
Default:	0
Range:	0 - 48
Unit:	2400bps
Description:	Sets the speed of the local serial port when in voice mode. A value of 0 indicates that the modem should auto-detect the correct serial port speed.

VOICE RE-RING DETECT TIME	
Type:	Configuration
Format:	AT [cmds] #VRA= <i>n</i> [cmds]
Default:	70
Range:	0-255
Unit:	10 mS
Description:	Sets the maximum time the modem will wait for the remote station to ring again before it assumes that it has gone off-hook.

VOICE RECEIVE	
Type:	Immediate
Format:	AT [cmds] #VRX
Description:	Commands the modem to begin receiving voice data.

VOICE RING DETECT TIME	
Type:	Configuration
Format:	AT [cmds] #VRN= <i>n</i> [cmds]
Default:	Unidentified
Range:	Unidentified
Unit:	Unidentified
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= <i>n</i> [cmds]
Description:	Selects the number of bits per sample that the modem records.
Command	Function
#VBS=2	Modem records 2 bits per sample in ADPCM encoding.
í #VBS=4	Modem records 4 bits per sample in ADPCM encoding.
#VBS=8	Modem records 8 bits per sample in PCM encoding.

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VOICE SAMPLING RATE	
Type:	Configuration
Format:	AT [cmds] #VSR= <i>n</i> [cmds]
Description:	Sets the sampling rate used when recording voice signals.
Command	Function
i #VSR=7200	Selects a sampling rate of 7.2KHz.
#VSR=11025	Selects a sampling rate of 11.025KHz in PCM encoding only.

VOICE SILENCE DETECTION TIME	
Type:	Configuration
Format:	AT [cmds] #VSP= <i>n</i> [cmds]
Default:	Unidentified
Range:	0 - 255
Unit:	.1 second
Description:	Sets the minimum amount of silence that the modem will detect.

VOICE SILENCE DETECTION THRESHOLD	
Type:	Configuration
Format:	AT [cmds] #VSS= <i>n</i> [cmds]
Description:	Sets the threshold of sensitivity that the modem uses to determine silence detection.
Command	Function
#VSS=0	Silence detection disabled.
#VSS=1	Minimum silence detection sensitivity.
#VSS=2	Standard silence detection sensitivity.
#VSS=3	Maximum silence detection sensitivity.

VOICE TIMING MARK	
Type:	Configuration
Format:	AT [cmds] #VTM= <i>n</i> [cmds]
Description:	Configures timing mark placement.
Command	Function
#VTM=0	Timing marks disabled.
#VTM=10	Timing marks enabled at 1 second intervals.

VOICE TRANSMISSION LEVEL	
Type:	Configuration
Format:	AT [cmds] #TL= <i>hhhh</i> [cmds]
Default:	3F44 for phone line, 7FFF for handset or speaker
Range:	0000 - 7FFF
Unit:	Unidentified (hexadecimal)
Description:	Sets the transmission level for sending audio in voice mode.

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VOICE TRANSMIT	
Type:	Immediate
Format:	AT [cmds] #VTX
Description:	Commands the modem to begin transmitting voice data.

See UNIQUE HARDWARE CO., LTD. DART I34F for a full command summary.