Card Type Modem (asynchronous/synchronous)

ChipsetRockwellMaximum Data Rate33.6KbpsMaximum Fax Rate14.4KbpsData ModulationBell 103A/212A

ITU-T V.21, V.22, V.22bis, V.23, V.32, V.32bis, V.34

Rockwell V.FC

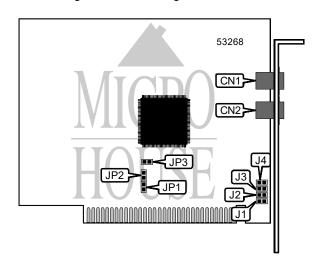
 Fax Modulation
 ITU-T V.17, V.21CH2, V.27ter, V.29

 Error
 MNP5, MNP10, V.42, V.42bis

Correction/Compression

Fax Class II
Data Bus 8-bit ISA

Card Size Full height, one-third length



	CONNE	ECTIONS	
Function	Label	Function	Label
Telephone line	CN1	Telephone line	CN2

	BASE I/O ADDRESS SELECTION	
Setting	J3	J4
3F8h (COM1:)	Closed	Closed
2F8h (COM2:)	Closed	Open
3E8h (COM3:)	Open	Closed
2E8h (COM4:)	Open	Open

		INTERRUPT	SELECTION		
Setting	J1	J2	JP1	JP2	JP3
2	Open	Open	Open	Open	Closed
3	Closed	Open	Open	Open	Open
4	Open	Closed	Open	Open	Open
5	Open	Open	Closed	Open	Open
7	Open	Open	Open	Closed	Open

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SUPPORTED STANDARD COMMANDS		
Basic AT Commands		
+++, 'comma', A/		
A, E, H, L, M, N, O, P, Q, T, V, W, X, Y, Z		
&C, &D, &F, &G, &J, &K, &L, &M, &P, &Q, &R, &S, &T, &V, &W, &X, &Y, &Z		
Extended AT Commands		
\A, \B, \J, \K, \L, \N		
%C, %E, %L, %Q, %TT		
Special AT Commands		
+MS		
S-Registers		
S0, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S14, S16, S18, S21, S22, S23, S24, S25		
S26, S27, S29, S30, S31, S32, S33, S36, S38, S39, S46, S48, S82, S86, S91, S92, S95		
Note: See MHI help file for complete information.		

Proprietary AT Command Set

		AUTOSYNC OPTIONS
Type:		Register
Format		AT [cmds] S19=n [cmds]
Default:		26
Range:		0 - 30
Descripti	ion:	Controls autosync protocol, HDLC address detection, bit coding, and HDLC idle.
Bit	Value	Function
0	0	Not used
1	0	Binary synchronous protocol used.
	í 1	HDLC protocol used.
2	í O	HDLC address detect disabled.
	1	HDLC address detect enabled.
3	0	NRZI bit coding used.
	í 1	NRZ bit coding used.
4	0	HDLC idle sends MARK.
	í 1	HDLC idle sends FLAG or SYNC.

	AUTOSYNC HDLC ADDRESS
Type:	Register
Format:	AT [cmds] S20=n [cmds]
Default:	0
Range:	0-255
Unit:	Unidentified
Description:	Sets the HDLC address and binary synchronous character.

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		BIT-MAPPED REGISTER S28
Format		AT [cmds] S28=n [cmds]
Default:		0
Range:		0 - 31
Descript	ion:	Controls V.23 split speed, transmit/receive speed, half duplex; and pulse dialing, and MNP10 link negotiation.
Bit	Value	Function
0	í O	V.23 split speed operation disabled.
	1	V.23 split speed operation enabled.
1	í O	75bps transmit, 1200bps receive enabled.
	1	1200bps transmit, 75bps receive enabled.
2	0	Not used.
4, 3	í 00	39ms make/61ms break at 10pps.
	01	33ms make/67ms break at 10pps.
	10	39ms make/61ms break at 20pps.
	11	33ms make/67ms break at 20pps.
5	0	Not used.
7, 6	í 00	MNP10 link will be negotiated at highest possible speed.
	01	MNP10 link will be negotiated at 1200bps.
	10	MNP10 link will be negotiated at 4800bps.

		BIT-MAPPED REGISTER S40
Format		AT [cmds] S40=n [cmds]
Default: 107		
Range:		0 - 255
Descripti	ion:	Controls power level and break handling; selects MNP extended services, link
		negotiation, and block size.
Bit	Value	Function
0	0	MNP10 disabled.
	í 1	MNP10 enabled.
1	0	MNP10 at 2400 and 1200bps disabled.
	í 1	MNP10 at 2400 and 1200bps enabled.
2	í O	Power level adjustment enabled.
	1	Power level adjustment disabled.
5 - 3	000	\K0 set.
	001	\K1 set.
	010	\K2 set.
	011	\K3 set.
	100	\K4 set.
	í 101	\K5 set.
7, 6	00	MNP block size is 64 characters.
	í 01	MNP block size is 128 characters.
	10	MNP block size is 192 characters.
	11	MNP block size is 256 characters.

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		BIT-MAPPED REGISTER S41
Format		AT [cmds] S41=n [cmds]
Default: 131		
Range:		128 - 223
Descripti	ion:	Selects compression, auto-retrain, flow control, and MNP mode.
Bit	Value	Function
1, 0	00	Data compression disabled.
	01	MNP5 enabled.
	10	V.42bis enabled.
	í 11	MNP5 and V.42bis enabled.
6, 2	í 00	Auto-retrain disabled.
	01	Auto-retrain enabled.
	10	Auto-fallback/fall-forward enabled.
3	ĺ í 0	Flow control disabled.
	1	Flow control enabled.
4	í O	Stream mode for MNP.
	1	Block mode for MNP.
5	0	Not used.
7	1	Not used.

	COMMUNICATION PROTOCOLS
Type:	Configuration
Format:	AT [cmds] Bn [cmds]
Description:	Selects the communication protocol for low-speed data calls.
Command	Protocol
B0	Modem will use ITU-T V.22 at 1200bps.
í B1	Modem will use Bell 212A at 1200bps.
B15	Modem will use ITU-T V.21 at 300bps.
B16	Modem will use Bell 103A at 300bps.

	DIAL
Type:	Immediate
Format:	AT [cmds] D<#>;[cmds]
Description:	Dials the telephone number indicated according to any modifiers included in the
	string.
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.
DW	Dialing resumed following dial tone detection.

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	DIAL (CON'T)
Command	Function
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^	Enable calling tone for this call.
D;	Modem returned to idle state after dialing. The semicolon can only be placed at the end of the dial command.

DISPLAY INFORMATION	
Type:	Immediate
Format:	AT [cmds] In [cmds]
Description:	Displays information requested about the modem.
Command	Function
10	Displays product identification code.
11	Displays ROM checksum.
12	Tests and displays ROM checksum result.
13	Displays firmware revision.
14	Displays product capabilities.
15	Displays the country code.
16	Displays the data pump model.

	LINE SPEED
Type:	Register
Format	AT [cmds] S37=n [cmds]
Description:	Sets the maximum connect speed attempted during handshake process.
Command	Function
í S37=0	Attempt to connect at speed of last AT command.
S37=1	Attempt to connect at 300bps.
S37=2	Attempt to connect at 300bps.
S37=3	Attempt to connect at 300bps.
S37=5	Attempt to connect at 1200bps.
S37=6	Attempt to connect at 2400bps.
S37=7	Attempt to connect with V.23 at 1200/75bps.
S37=8	Attempt to connect at 4800bps.
S37=9	Attempt to connect at 9600bps.
S37=10	Attempt to connect at 12Kbps.
S37=11	Attempt to connect at 14.4Kbps.
S37=12	Attempt to connect at 7200bps.