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MVP34ISP

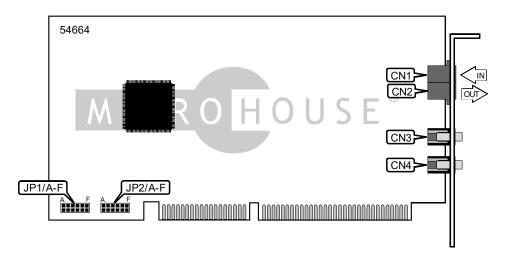|	
Card Type	Modem/Fax card
Chip Set	Unidentified
I/O Options	Line in, line out, microphone jack, speaker jack
Maximum Modem Rate	33.6Kbps
Maximum Fax Rate	14.4Kbps
Data Modulation Protocol	Bell 103/212A
	ITU-T V34, V.32bis, V.32, V.22bis, V.22, V.21
Fax Modulation Protocol	ITU-T V.17, V.27ter, V.29, V.21
Error Correction/Compression	MNP5, V.42, V.42bis
Fax Class	Class I
Data Bus	16-bit ISA

CONNECTIONS			
Function	**Label**	**Function**	**Label**
RJ-11 line in	CN1	Microphone jack	CN3
RJ-11 line out	CN2	Speaker jack	CN4

SERIAL PORT ADDRESS						
Setting	**JP1/A**	**JP1/B**	**JP1/C**	**JP1/D**	**JP1/E**	**JP1/F**
COM1 (3F8h)	Closed	Open	Open	Open	Open	Open
COM2 (2F8h)	Open	Closed	Open	Open	Open	Open
COM3 (3E8h)	Open	Open	Closed	Open	Open	Open
COM4 (2E8h)	Open	Open	Open	Closed	Open	Open
í Plug & Play enabled	Open	Open	Open	Open	Closed	Closed

INTERRUPT						
Setting	**JP2/A**	**JP2/B**	**JP2/C**	**JP2/D**	**JP2/E**	**JP2/F**
IRQ3	Open	Open	Open	Open	Open	Closed
IRQ4	Open	Open	Open	Open	Closed	Open
IRQ5	Open	Open	Open	Closed	Open	Open
IRQ7	Open	Open	Closed	Open	Open	Open
IRQ10	Open	Closed	Open	Open	Open	Open
IRQ11	Closed	Open	Open	Open	Open	Open
í Plug & Play enabled	Open	Open	Open	Open	Open	Open

SUPPORTED COMMAND SET
Basic AT Commands
AT, +++, A/
A, B, E, H, M, O, P, Q, T, V, W, Y, Z
&C, &G, &P, &S, &T, &V, &W, &Y, &Z
Extended AT Commands
\A, \B, \G, \K, \N,
%C, %E, %L, %Q
+MS
#CID
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, S38, S39, S40, S41, S95
Note: See MHI Help File for full command documentation.

PROPRIETARY AT COMMAND SET

AUTO-MODE DETECTION	
Type:	Configuration
Format:	AT [cmds] N*n* [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 S37 register.
í N1	Auto-mode detection enabled

DATA TERMINAL READY (DTR)	
Type:	Configuration
Format:	AT [cmds] &D*n* [cmds]
Description:	Selects modem response to DTR
Command	**Function**
&D0	DTR override
&D1	DTR toggle causes online command mode
í &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
DS=n	Dial stored telephone number *n*
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"WXY"	Optional method of denoting telephone numbers. Letters enclosed in quotes are interpreted as numbers according to the system found on a telephone keypad.
D*	The star digit (touch tone only)
D#	The gate digit (touch tone only)
D!	Flash function initiated. Modem commanded to go off-hook for specified time before returning on-hook.
D@	Wait for Quite 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/	Delays 125 ms. Before proceeding with dial string
D^	Calling tone enable/disable for current call only
D;	Modem returned to idle state after dialing. The semicolon can only be placed at the end of the dial command.
D&	Waiting for AT&T "bong" tone

FLOW CONTROL	
Type:	Configuration
Format:	AT [cmds] &Kn [cmds]
Description:	Enables/disables flow control
Command	**Line Type**
&K0	Flow control disabled
í &K3	Hardware, RTS/CTS flow control enabled
&K4	Software, XON/XOFF flow control enabled
&K5	Transparent software, XON/XOFF flow control enabled
&K6	Software & hardware flow control enabled
Note: Default setting for fax operations is &K6	

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REPORT INFORMATION	
Type:	Immediate
Format:	AT [cmds] I*n* [cmds]
Description:	Displays information requested

Command	Function
I0	Reports four digit product code
I1	Reports firmware checksum
I2	Verify checksum
I3	Reports firmware revision
I4	Reports identifier string
I5	Reports country code
I6	Reports data pump modem and revision

SELECT CALL PROGRESS RESULT CODES	
Type:	Configuration
Format:	AT [cmds] X*n* [cmds]
Description:	Enables selection of tone detection and associated result code format options

Command	Function
X0	Busy and dial tone detection disabled; extended result codes diabled.
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.

SPEAKER VOLUME	
Type:	Configuration
Format:	AT [cmds] L*n* [cmds]
Description:	Controls speaker volume

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

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AT VOICE COMMAND SET

AUDIO MODULATION	
Type:	Configuration
Format:	AT [cmds] -SQS=*x,y* [cmds]
Description:	Selects data speed with audio modulation; enable/disable automode
Command	**Function**
í x=0	V.61 modulation enabled (4800bps)
x=1	V61+ modulation enabled (4800bps - 9600bps)
x=2	V34Q modulation enabled (4800bps - 14.4Kbps)
y=0	Automode disabled
í y=1	Automode enabled

AUDIOSPAN MODE	
Type:	Configuration
Format:	AT [cmds] -SMS=*x,y,z* [cmds]
Description:	Selects audiospan modem; selects voice and data speed
Command	**Function**
í x=0	Audiospan disabled/data only
x=1	Reserved
x=2	Audiospan enabled
y=4800	Minimum voice+data speed set to 4800bps
y=7200	Minimum voice+data speed set to 7200bps
y=9600	Minimum voice+data speed set to 9600bps
y=12000	Minimum voice+data speed set to 12.0Kbps
y=14400	Minimum voice+data speed set to 14.4Kbps
z=4800	Maximum voice+data speed set to 4800bps
z=7200	Maximum voice+data speed set to 7200bps
z=9600	Maximum voice+data speed set to 9600bps
z=12000	Maximum voice+data speed set to 12.0Kbps
z=14400	Maximum voice+data speed set to 14.4Kbps

DATA BURST	
Type:	Configuration
Format:	AT [cmds] -SMC*n* [cmds]
Description:	Data burst enable/disable.
Command	**Function**
SMC0	Data burst disabled; audio channel open at all times during connection
í SMC1	Data burst enabled; audio channel open only when data is detected on network

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DISTINCTIVE RING	
Format:	AT [cmds] -SDR=*n* [cmds]
Default:	Unidentified

Range:	0 - 255	
Description:	Selects which distinctive ring signals the modem will respond to.	

Bit	Value	Function
0	0	Distinctive ring disabled
1	0	Distinctive ring type 1 disabled.
	1	Distinctive ring type 1enabled.
2	0	Distinctive ring type 2disabled
	1	Distinctive ring type 2 enabled.
3	0	Distinctive ring types 1 & 2 disabled.
	1	Distinctive ring types 1 & 2 enabled.
4	0	Distinctive ring type 3 disabled.
	1	Distinctive ring type 3 enabled.
5	0	Distinctive ring types 1 & 3 disabled.
	1	Distinctive ring types 1 & 3 enabled.
6	0	Distinctive ring types 2 & 3 disabled.
	1	Distinctive ring types 2 & 3 enabled.
7	0	Distinctive ring types 1, 2 & 3 disabled.
	1	Distinctive ring types 1, 2 & 3 enabled.

MNP10EC	
Type:	Configuration
Format:	AT [cmds] -SEC*n,* [<tx level>] [cmds]
Range (tx level)	0-30dBm
Description:	Enable/disable MNP10EC

Command	Function
í -SEC0	MNP10EC disabled
-SEC1 [<tx level>]	MNP10EC enabled. The transmission level will be defined by <tx level>

VOICE DEVICE	
Type:	Configuration
Format:	AT [cmds] #VLS=*n* [cmds]
Description:	Selects the I/O device for the DSP chip.

Command	Function
í #VLS=0	Telephone line and handset used for voice I/O.
#VLS=1	Speakerphone used for voice I/O.

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S(STATUS) -REGISTERS

CONNECTION FAILURE CODES	
Type:	Register

Format	AT [cmds] S86? [cmds]
Description:	Reports codes which correspond to the possible causes of a connection failure

Value	Meaning
00	Normal hang up
04	Carrier signal lost
05	V.42 negotiation failed to detect an EC modem
09	No common protocol found
12	No failure - remote modem disconnected normally
13	Remote modem failed to respond after 10 re-transmissions same message
14	Violation of negotiated protocol caused failure

DCE LINE SPEED	
Type:	Register
Format	AT [cmds] S37=n [cmds]
Description:	Sets the maximum allowable data exchange rate attempted during handshake process.

Command	Function
S37=0	Speed of last connection
S37=1	Reserved
S37=2	Reserved
S37=3	300bps
S37=4	Reserved
S37=5	1200bps, V.22
S37=6	2400bps, V.22bis
S37=7	1200/75bps, V.23
S37=8	4800bps, V.32bis/V.32
S37=9	9600bps, V.32bis/V.32
S37=10	12.0Kbps, V.32bis
S37=11	14.4Kbps, V.32bis
S37=12	7200bps, V.32bis

ERROR CORRECTION/COMPRESSION	
Type:	Register
Format:	AT [cmds] S46=n [cmds]
Description:	Selects active error correction and compression protocols

Command	Function
S46=136	LAP-M only, no compression
S46=138	LAP-M with V.42bis data compression

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ERROR CORRECTION NEGOTIATION	
Type:	Register
Format	AT [cmds] S36=n [cmds]
Description:	Selects the action of the modem if it fails to connect with the error-correction protocol set in &Q.

Command	Function

S36=0	Hang up
S36=1	Attempt a direct connection
S36=3	Attempt a buffered connection
S36=4	Attempt a connection at MNP2-4; if that fails, hang up.
S36=5	Attempt a connection at MNP2-4; if that fails, attempt a direct connection.
S36=6	Reserved
S36=7	Attempt a connection at MNP2-4; if that fails, attempt a buffered connection.

FEATURE NEGOTIATION OPTIONS	
Type:	Register
Format:	AT [cmds] S48=*n* [cmds]
Description:	Selects active error correction and compression protocols
Command	**Function**
S48=0	Detection negotiation disabled, XID negotiation disabled
S48=7	Fall-back to options set in S36