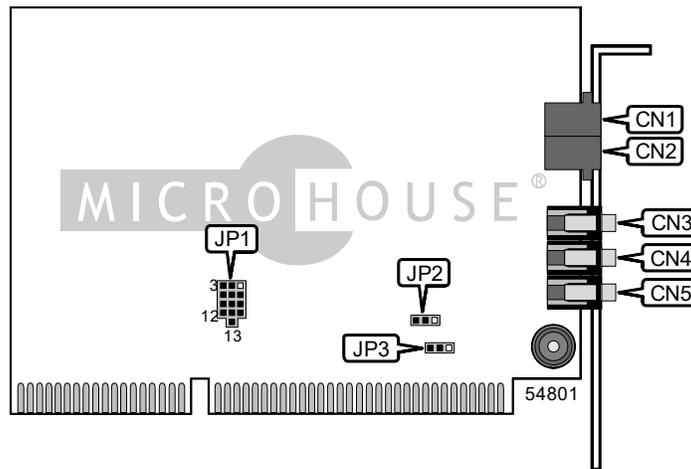


HARMONY MULTIMEDIA

HM 18010, HM 18020-3

Card Type	Modem (asynchronous)
Chip Set	Unidentified
I/O Options	Microphone, headphone, speaker out, line in, line out
Maximum Modem Rate	33.6Kbps
Maximum Fax Rate	14.4Kbps
Data Modulation Protocol	Bell 103/212A
	ITU-T V.22, V.22bis, V.32, V.32bis, V.34, V.34+
Fax Modulation Protocol	ITU-T V.17, V.27ter, V.29
Error Correction/Compression	MNP5, V.42, V.42bis
Fax Class	Class I
Data Bus	16-bit ISA
Card Size	Half-length, full-height card



CONNECTIONS				
Function	Label	Function	Label	
Line in	CN1	Headphone	CN4	
Line out	CN2	Speaker out	CN5	
Microphone	CN3			

SERIAL PORT ADDRESS			
Setting	JP2	JP3	
COM1 (3F8h)	Pins 1 & 2 closed	Pins 1 & 2 closed	
COM2 (2F8h)	Pins 2 & 3 closed	Pins 1 & 2 closed	
COM3 (3E8h)	Pins 1 & 2 closed	Pins 2 & 3 closed	
COM4 (2E8h)	Pins 2 & 3 closed	Pins 2 & 3 closed	

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INTERRUPT	
Setting	JP1
IRQ 3	Pins 2 & 3 closed
IRQ 4	Pins 1 & 2 closed
IRQ 5	Pins 5 & 6 closed
IRQ 7	Pins 4 & 5 closed
IRQ 9	Pins 8 & 9 closed
IRQ 10	Pins 7 & 8 closed
IRQ 11	Pins 11 & 12 closed
IRQ 12	Pins 10 & 11 closed
IRQ 15	Pins 11 & 13 closed

SUPPORTED COMMAND SET	
Basic AT Commands	
AT, A/	
A, B, E, H, L, M, Q, V, W, X, Y, Z	
&C, &G, &P, &T, &V, &W, &Y, &Z	
Extended AT Commands	
\G, \J	
%C, %E, %L, %Q	
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, S37, S38, S39, S40, S41, S46, S48, S82, S86, S90,	
S91, S92, S95, S99	
Note: See MHI Help File for full command documentation.	

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Proprietary AT Command Set

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
DP	Pulse dialing enabled
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!	Flash function initiated. Modem commanded to go off-hook for specified time before returning on-hook.
D^	Disable calling tone transmission for this call only
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;	Modem returned to idle state after dialing. The semicolon can only be placed at the end of the dial command.

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
í N1	Auto-mode detection enabled

DATA TERMINAL READY (DTR)	
Type:	Configuration
Format:	AT [cmds] &Dn [cmds]
Description:	Selects modem response to DTR
Note:	The action each variant of &D causes depends on the setting of &Q
Command	Function
í &D0	Modem does not respond to DTR
&D1	Modem goes to escape mode after DTR goes is off
&D2	Modem goes to command mode and disconnects (hangs up) after DTR goes off; Auto-Answer is disabled.

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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
í &F0	Restore factory profile 0
&F1	Restore factory profile 1

FLOW CONTROL	
Type:	Configuration
Format:	AT [cmds] &Kn [cmds]
Description:	Enables flow control options
Command	Function
&K0	Flow control disabled
í &K3	RTS/CTS flow control enabled
&K4	XON/XOFF flow control enabled
&K5	Transparent XON/XOFF flow control enabled

DATA SET READY (DSR)	
Type:	Configuration
Format:	AT [cmds] &Sn [cmds]
Description:	Selects DSR options
Command	Function
&S0	DSR forced high
í &S1	DSR high only while modem is handshaking or connected

S(status) -REGISTERS

SOFT SWITCH FUNCTION	
Type:	Register
Format:	AT [cmds] S80= <i>n</i> [cmds]
Description:	Controls the soft switch

TRANSMISSION LEVEL - CELLULAR	
Type:	Register
Format:	AT [cmds] S201= <i>n</i> [cmds]
Default:	10
Range:	0-15
Unit:	-1 dBm
Description:	Sets the signal level for transmission while in cellular mode

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REMOTE ACCESS ESCAPE CHARACTER	
Format:	AT [cmds] S202= <i>n</i> [cmds]
Default:	Unidentified
Range:	0-62
Description:	Controls the remote access escape character.