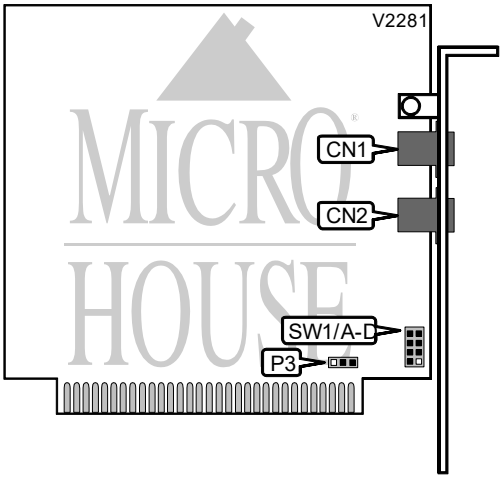
CARDINAL TECHNOLOGIES,INC.
2400MNP (INTERNAL), 2450MNP (INTERNAL)

Card Type	Modem (asynchronous)
Chip Set	Unidentified
Maximum Data Rate	2400bps
Data Bus	8-bit ISA
Data Modulation Protocol	Bell 103/212A ITU-T V.21, V.22, V.22bis
Error Correction/Compression	MNP5, V.42, V.42bis



CONNECTIONS			
Function	Label	Function	Label
Line out/in	CN1	Line in/out	CN2

SERIAL PORT ADDRESS					
Setting	IRQ	SW1/A	SW1/B	SW1/C	SW1/D
COM1 (3F8h)	4	Closed	Closed	Closed	Open
COM2 (2F8h)	3	Open	Closed	Open	Closed
COM3 (3E8h)	4	Closed	Open	Closed	Open
COM4 (2E8h)	3	Open	Open	Open	Closed

INTERRUPT SELECTION	
Setting	P3
2	Pins 2 & 3 closed
5	Pins 1 & 2 closed
Disabled IRQ2 & IRQ5	Open

Proprietary AT Command Set

ACCEPT RELIABLE MODE	
Type:	Immediate
Format:	AT [cmds] \U [cmds]
Description:	Accept remote modem's request for reliable mode

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AUTO-RELIABLE FALLBACK CHARACTER	
Type:	Configuration
Format:	AT [cmds] %A*n* [cmds]
Default:	Unidentified
Range:	0-127
Unit:	ASCII
Description:	Sets the character used as the auto-reliable fallback character
Note:	AT%A0 will disable this function.

AUTO-RELIABLE TIME BUFFER CONFIGURATION	
Type:	Configuration
Format:	AT [cmds] \C*n* [cmds]
Description:	Controls the handling of incoming data during auto-reliable time period
Command	Function
í \C0	Data is discarded
\C1	Data is buffered
\C2	Data is discarded; modem returns to normal mode on receiving auto-reliable fallback character.

BIT MAPPED REGISTERS	
Register	Default
S14	Unidentified
S21	Unidentified
S22	Unidentified
S23	Unidentified
S27	Unidentified

BREAK SEND	
Type:	Configuration
Format:	AT [cmds] \B*n* [cmds]
Default:	3
Range:	3-9
Unit:	.1 second
Description:	Sends break to modem

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BREAK TYPE				
Type:	Configuration			
Format:	AT [cmds] \K*n* [cmds]			
Description:	Configures action of break signal			
Command	Break from DTE Reliable/Normal mode	Break from DTE Direct mode	Break received from remote modem	Modem receives \B
\K0	Online command mode enabled, send no break to remote modem	Online command mode enabled, send break to remote modem immediately	Buffers cleared, break sent to DTE	Break sent to remote modem and buffers cleared
\K1	Break sent to remote modem and buffers cleared	Send break to remote modem immediately	Buffers cleared, break sent to DTE	Break sent to remote modem and buffers cleared
\K2	Online command mode enabled, send no break to remote modem	Online command mode enabled, send break to remote modem immediately	Break sent immediately to DTE	Send break to remote modem immediately
\K3	Send break to remote modem immediately	Send break to remote modem immediately	Break sent immediately to DTE	Send break to remote modem immediately
\K4	Online command mode enabled, send no break to remote modem	Online command mode enabled, send break to remote modem immediately	Break sent with received data to the DTE	Send break with transmitted data
í \K5	Send break with transmitted data	Send break to remote modem immediately	Break sent with received data to the DTE	Send break with transmitted data

COMPRESSION	
Type:	Configuration
Format:	AT [cmds] %C*n* [cmds]
Description:	Selects data compression
Command	Function
%C0	Data compression disabled
í %C1	MNP5 enabled

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CONNECT MODE	
Type:	Configuration
Format:	AT [cmds] \N*n* [cmds]
Description:	Controls the type of connection the modem will operate in

Command	Function
\N0	Normal mode enabled
í \N1	Direct mode enabled
\N2	MNP reliable mode enabled
\N3	Auto-reliable mode enabled

CONVERT TO RELIABLE MODE	
Type:	Immediate
Format:	AT [cmds] \Y [cmds]
Description:	Converts to reliable mode from normal or direct mode

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.

Modifier	Function
P	Pulse dialing enabled
R	Answer mode enabled, originate mode disabled following handshake initiation
Sn	Dial stored telephone number *n*
T	Tone dialing enabled
W	Dialing resumed following dial tone detection
,	Dialing paused for amount of time specified in S8 register
!	Modem commanded to go off-hook for specified time before returning on-hook
@	Wait for quiet answer
;	Modem returned to command state after dialing

DISPLAY CONFIGURATION	
Type:	Immediate
Format:	AT [cmds] \S [cmds]
Description:	Displays current modem settings

EXTENDED RESULT CODES	
Type:	Configuration
Format:	AT [cmds] \V*n* [cmds]
Description:	Select standard or extended result codes

Command	Function
\V0	Standard result codes enabled
\V1	Extended result codes enabled

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FLOW CONTROL	
Type:	Configuration
Format:	AT [cmds] \G*n* [cmds]
Description:	Selects modem port flow control
Command	Function
í \G0	Flow control disabled
\G1	Flow control enabled

FLOW CONTROL TYPE	
Type:	Configuration
Format:	AT [cmds] \Q*n* [cmds]
Description:	Sets type of flow control used by modem
Command	Function
í \Q0	Flow control disabled
\Q1	XON/XOFF flow control enabled
\Q2	CTS flow control by DCE enabled
\Q3	RTS/CTS flow control enabled

INACTIVITY TIMER	
Type:	Configuration
Format:	AT [cmds] \T*n* [cmds]
Default:	0
Range:	0-90
Unit:	1 minute
Description:	Sets the length of time that the modem does not receive information before it disconnects.
Note:	AT\T0 will disable timer.

INITIATE RELIABLE MODE	
Type:	Immediate
Format:	AT [cmds] \O [cmds]
Description:	Initiates reliable mode from normal or direct mode

LINE SIGNAL QUALITY	
Type:	Register
Format:	AT [cmds] S100 [cmds]
Description:	Returns a value which indicates line signal quality

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LINE SPEED	
Type:	Configuration
Format:	AT [cmds] %N*n* [cmds]
Description:	Controls maximum DCE line speed
Command	**Function**
í %N0	Enable maximum DCE speed
%N1	Maximum DCE speed set to 300bps
%N2	Maximum DCE speed set to 300bps
%N3	Maximum DCE speed set to 300bps
%N5	Maximum DCE speed set to 1200bps
%N6	Maximum DCE speed set to 2400bps

LOCK SERIAL PORT	
Type:	Configuration
Format:	AT [cmds] \J*n* [cmds]
Description:	Sets operation of serial port speed
Command	Function
\J0	Serial speed locked
í \J1	Serial speed follows connect speed

MAXIMUM BLOCK SIZE FOR TRANSMISSION	
Type:	Configuration
Format:	AT [cmds] \A*n* [cmds]
Description:	Sets the maximum transmittable block size
Command	Function
\A0	MNP block size is 64 characters
\A1	MNP block size is 128 characters
\A2	MNP block size is 192 characters
í \A3	MNP block size is 256 characters

MNP - STREAM/BLOCK MODE	
Type:	Configuration
Format:	AT [cmds] \L*n* [cmds]
Description:	Selects the transfer mode for MNP link
Command	Function
í \L0	Stream mode for MNP enabled
\L1	Block mode for MNP enabled

REPORT INFORMATION	
Type:	Immediate
Format:	AT [cmds] I*n* [cmds]
Description:	Displays information requested
Command	Function
I0	Reports modem code
I1	Reports ROM checksum
I2	Tests and reports ROM checksum
I3	Reports version information

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SWITCH TO NORMAL MODE	
Type:	Immediate
Format:	AT [cmds] \Z [cmds]
Description:	Switches to normal mode from MNP mode

TEST MODES		
Type:		Register
Format:		AT [cmds] S16=*n* [cmds]
Default:		0
Range:		0-125
Unit:		Bit-mapped
Description:		Controls loopback tests, analog, digital, remote digital, and self tests.
Bit	Value	Function
0	í 0	Local analog loopback not in progress
	1	Local analog loopback in progress
1	í 0	Not used
2	í 0	Local digital loopback not in progress
	1	Local digital loopback in progress
3	í 0	Modem not in remote digital loopback
	1	Remote digital loopback in progress
4	í 0	Remote digital loopback not requested
	1	Remote digital loopback requested
5	í 0	Remote digital loopback w/ self-test not in progress
	1	Remote digital loopback w/ self-test in progress
6	í 0	Local analog loopback w/ self-test not in progress
	1	Local analog loopback w/ self-test in progress

XON/XOFF PASS-THROUGH	
Type:	Configuration
Format:	AT [cmds] \X*n* [cmds]
Description:	Selects whether XON/XOFF signals are sent to remote modem
Command	Function
\X0	XON/XOFF signals trapped by local modem
\X1	XON/XOFF passed through local modem