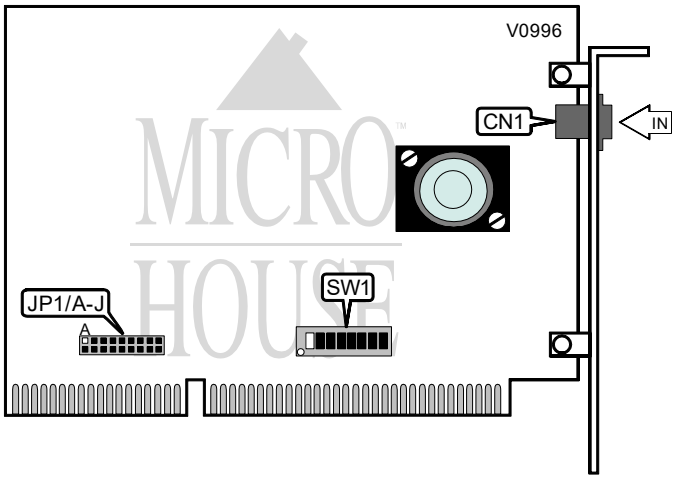
MULTITECH SYSTEMS, INC.
MT1932ZPX

Modem Type	Data (synchronous/asynchronous)/Fax
Maximum Data Rate	19.2Kbps
Maximum Fax Rate	14.4Kbps
Data Bus	16-bit ISA
Fax Class	Class I & II
Data Modulation Protocol	Bell 103A/212A ITU-T V.21, V.22, V.22bis, V.23, V.32, V.32bis AT&T V.32terbo
Fax Modulation Protocol	ITU-T V.17, V.21CH2, V.27ter, V.29
Error Correction/Compression	MNP2-5, V.42, V.42bis



CONNECTIONS	
Purpose	**Location**
Line in	CN1

INTERRUPT SELECTION

IRQ	JP1/A	JP1/B	JP1/C	JP1/D	JP1/E	JP1/F	JP1/G	JP1/H	JP1/I	JP1/J
í3	Closed	Open	Open	Open	Open	Open	Open	Open	Open	Open
4	Open	Closed	Open	Open	Open	Open	Open	Open	Open	Open
5	Open	Open	Closed	Open	Open	Open	Open	Open	Open	Open
7	Open	Open	Open	Closed	Open	Open	Open	Open	Open	Open
2 or 9	Open	Open	Open	Open	Closed	Open	Open	Open	Open	Open
10	Open	Open	Open	Open	Open	Closed	Open	Open	Open	Open
11	Open	Open	Open	Open	Open	Open	Closed	Open	Open	Open
12	Open	Open	Open	Open	Open	Open	Open	Closed	Open	Open
14	Open	Open	Open	Open	Open	Open	Open	Open	Closed	Open
16	Open	Open	Open	Open	Open	Open	Open	Open	Open	Closed

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BASE I/O ADDRESS SELECTION							
Address	**SW1/1**	**SW1/2**	**SW1/3**	**SW1/4**	**SW1/5**	**SW1/6**	**SW1/7**
100h	On	On	On	On	On	Off	On
108h	Off	On	On	On	On	Off	On
110h	On	Off	On	On	On	Off	On
118h	Off	Off	On	On	On	Off	On
120h	On	On	Off	On	On	Off	On
2E8h (COM4:)	Off	On	Off	Off	Off	On	Off
í 2F8h (COM2:)	Off	Off	Off	Off	Off	On	Off
3D8h	Off	Off	On	Off	Off	Off	Off
3E0h	On	On	Off	Off	Off	Off	Off
3E8h (COM3:)	Off	On	Off	Off	Off	Off	Off
3F0h	On	Off	Off	Off	Off	Off	Off
3F8h (COM1:)	Off	Off	Off	Off	Off	Off	Off

Note: A total of 127 memory base I/O address settings are available. The switches are a binary representation of the hexadecimal addresses. Switch SW1/1 is the Least Significant Bit and switch SW1/7 is the Most Significant Bit. The switches have the following decimal values: switch SW1/1=8, SW1/2=16, SW1/3=32, SW1/4=64, SW1/5=128, SW1/6=256, SW1/7=512.Turn off the switches and add the values of the off switches to obtain the correct base I/O address. (on=0, off=1)

FACTORY CONFIGURED - DO NOT ALTER	
Switch	**Position**
SW1/8	On

Proprietary Command Set

AUTO-RELIABLE TIME BUFFER CONFIGURATION	
Type:	Configuration
Format:	AT [cmds] $A*n* [cmds]
Example:	AT **$A1** &W<CR>
Description:	Controls the handling of incoming data during auto-reliable time period.
Command	**Function**
í$A0	Data is discarded.
$A1	Data is buffered.

BIT MODE	
Type:	Configuration
Format:	AT [cmds] $EB*n* [cmds]
Example:	AT **$EB1** E1<CR>
Description:	Selects 10- or 11-bit mode.
Command	**Function**
í $EB0	Sets 10-bit mode.
$EB1	Sets 11-bit mode.

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CARRIER MODE	
Type:	Configuration
Format:	AT [cmds] &C*n* [cmds]
Example:	AT **&C0** A<CR>
Description:	Sets the function of the Carrier Detect (CD) signal.
Command	**Function**
&C0	Forces CD high.
í&C1	CD signal follows carrier.
&C2	Forces CD low for time in S24 when the modem disconnects.
&C4	Resets modem when CD goes low.

COMMAND ESCAPE TYPE	
Type:	Configuration
Format:	AT [cmds] %E*n* [cmds]
Example:	AT **%E3** &W<CR>
Description:	Sets type and response of command escape sequence.
Command	**Function**
%E0	Command escape disabled.
í%E1	TIES escape (+++AT...)
%E2	<BREAK>AT method.
%E3	Both TIES and BREAK methods.
%E4	OK response to command escape disabled.
%E5	OK response to command escape enabled.

COMMAND SET	
Type:	Configuration
Format:	AT &Q*n*
Example:	AT **&Q1**<CR>
Description:	Selects standard Hayes or custom command sets.
Command	**Function**
í&Q0	Multi-Tech custom command set enabled.
&Q1	Standard Hayes command set enabled.

COMPRESSION	
Type:	Configuration
Format:	AT &E*n*
Example:	AT **&E15** #L0<CR>
Description:	Selects data compression.
Command	**Function**
&E14	Data compression disabled.
í &E15	Data compression enabled.

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COMPRESSION MODE	
Type:	Configuration
Format:	AT #L*n*
Example:	AT **#L2** DT555-1212<CR>
Description:	Selects active compression protocols.
Command	**Function**
í#L0	V.42 negotiation enabled.
#L1	MNP negotiation enabled.
#L2	LAP-M negotiation enabled.
#L3	LAP-M enabled, no negotiation.

CTS SIGNAL	
Type:	Configuration
Format:	AT [cmds] &RF*n* [cmds]
Example:	AT **&RF0**<CR>
Description:	Selects the function of the CTS signal.
Command	**Function**
&RF0	CTS is set to RTS.
í&RF1	CTS is independent of RTS.

DIAL STORED PHONE NUMBER	
Type:	Immediate
Format:	AT [cmds] Nn_1 [Nn_2, Nn_3...]
Example:	ATM0 **N1N3N5**<CR>
Description:	Dials stored phone number(s). If the first number is busy, the modem will proceed to the next number in the list.

DSR SIGNAL	
Type:	Configuration
Format:	AT [cmds] &SF*n* [cmds]
Example:	AT **&SF0**<CR>
Description:	Selects the function of the DSR signal.
Command	**Function**
í&SF0	DSR is set to CD.
&SF1	DSR is independent of CD.

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DTR TIMEOUT	
Type:	Register
Format:	AT [cmds] S24=*n* [cmds]
Example:	AT**S24=40**<CR>
Default:	20
Range:	0-255
Unit:	50 ms
Description:	Sets the time to drop the DTR signal to hangup.

ERROR CORRECTION DISABLE ON CONNECT	
Type:	Configuration
Format:	AT [cmds] $F*n* [cmds]
Example:	AT **$F1** DT555-1212<CR>
Description:	Selects whether error correction can be disabled by a <CR> while handshaking.
Command	**Function**
$F0	Error correction handshake interrupt disabled.
í$F1	Error correction handshake interrupt enabled.

ESCAPE SEQUENCE BUFFER SIZE	
Type:	Register
Format:	AT [cmds] S34=*n* [cmds]
Example:	AT**S34=30**<CR>
Default:	10
Range:	0-60
Unit:	1 byte
Description:	Sets the size of the buffer used to store commands during an escape sequence.

ESCAPE SEQUENCE - OUT OF BAND	
Type:	Immediate
Format:	<BREAK> AT [cmds]<CR>
Example:	**<BREAK> AT** #F1**<CR>**
Description:	Puts the modem in Command Mode.
Notes:	Do not precede this command with AT. <BREAK> refers to the hardware modem break signal.

ESCAPE SEQUENCE TIMEOUT	
Type:	Register
Format:	AT [cmds] S32=*n* [cmds]
Example:	AT**S32=30**<CR>
Default:	20
Range:	0-255
Unit:	1 second
Description:	Sets the maximum amount of time the modem will wait for a <CR> while executing an escape sequence.

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FALLBACK MODE	
Type:	Configuration
Format:	AT [cmds] #F*n* [cmds]
Example:	AT **#F1** O<CR>
Description:	Sets direction of fallback.
Command	**Function**
#F0	Fallback disabled.
#F1	Fallback from 19.2Kbps to 4800bps as line quality degrades.
í#F2	Fallback from 4800bps to 19.2Kbps as line quality improves.

FLOW CONTROL NORMAL MODE	
Type:	Configuration
Format:	AT [cmds] &E*n* [cmds]
Example:	AT **&E11** O<CR>
Description:	Selects normal flow control.
Command	**Function**
í&E10	Normal mode disabled.
&E11	Normal mode enabled.

FLOW CONTROL TYPE	
Type:	Configuration
Format:	AT [cmds] &E*n* [cmds]
Example:	AT **&E4** &W<CR>
Description:	Sets type of flow control used by modem.
Command	**Function**
&E3	Flow control disabled.
í&E4	CTS/RTS flow control enabled.
&E5	XON/XOFF flow control enabled.

HANDSHAKE ATTEMPTS	
Type:	Configuration
Format:	AT [cmds] #A*n* [cmds]
Example:	AT **#A1** #L3<CR>
Description:	Configures the initial handshake phase.
Command	**Function**
#A0	Attempts in order: 19.2Kbps, 16.8Kbps, 14.4Kbps, 12Kbps, 9600bps, 4800bps, 2400bps, 1200bps, 300bps.
#A1	Attempts only 14.4Kbps.
#A2	Attempts in order: 28.8Kbps, 24Kbps, 21.6Kbps, 19.2Kbps, 16.8Kbps, 14.4Kbps, 12Kbps, 9600bps, 4800bps.
#A3	Attempts in order: 2400bps, 1200bps, 300bps.

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HELP SCREENS	
Type:	Immediate
Format:	AT $H*n*
Example:	AT **$H1**<CR>
Description:	Shows modem help screens.
Command	**Function**
$H1	Shows help screen 1.
$H2	Shows help screen 2.
$H3	Shows help screen 3.

LIST CONFIGURATION	
Type:	Immediate
Format:	AT L*n*
Example:	AT **L5**<CR>
Description:	Lists modem configuration.
Command	**Function**
L5	Lists all settings.
L6	Lists the values of all S-registers.
L7	Lists extended parameters.
L8	Lists current diagnostics.

LOCAL SERIAL PORT SPEED	
Type:	Configuration
Format:	AT [cmds] $SB*nnn* [cmds]
Example:	AT $MB9600 **$SB19200**<CR>
Description:	Sets serial port speed.
Command	**Function**
$SB300	Sets 300bps speed.
$SB1200	Sets 1200bps speed.
$SB2400	Sets 2400bps speed.
$SB4800	Sets 4800bps speed.
$SB9600	Sets 9600bps speed.
$SB19200	Sets 19.2Kbps speed.
$SB38400	Sets 38.4Kbps speed.
$SB57600	Sets 57.6Kbps speed.
$SB115200	Sets 115.2Kbps speed.

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LOOPBACK	
Type:	Configuration
Format:	AT [cmds] &T*n* [cmds]
Example:	AT **&T5**<CR>
Description:	Enables or disables remote digital loopback response.
Command	**Function**
&T4	Loopback response enabled.
&T5	Loopback response disabled.

MAXIMUM BLOCK SIZE FOR TRANSMISSION	
Type:	Configuration
Format:	AT [cmds] &BS*n* [cmds]
Example:	AT **&BS1** &MB28800<CR>
Description:	Sets the maximum transmittable block size.
Command	**Function**
&BS0	Maximum block size is 64 characters.
í&BS1	Maximum block size is 128 characters for LAP-M, and 256 characters for MNP.

PACING	
Type:	Configuration
Format:	AT [cmds] &E*n* [cmds]
Example:	AT **&E13**<CR>
Description:	Selects ENQ/ACK pacing.
Command	**Function**
&E12	Disables ENQ/ACK pacing.
í&E13	Enables ENQ/ACK pacing.

PACING - ENQ/ACK	
Type:	Configuration
Format:	AT [cmds] &E*n* [cmds]
Example:	AT **&E9**<CR>
Description:	Selects ENQ/ACK pacing.
Command	**Function**
í&E8	Enables ENQ/ACK pacing.
&E9	Disables ENQ/ACK pacing.

REDIAL	
Type:	Immediate
Format:	ATA:
Example:	AT**A:**<CR>
Description:	Redials the last number dialed until it is no longer busy.

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REMOTE CONNECT SPEED	
Type:	Configuration
Format:	AT $MB*nnn*
Example:	AT **$MB9600** $SB19200<CR>
Description:	Sets maximum remote connect speed.
Command	**Function**
$MB300	Sets 300bps connect.
$MB1200	Sets 1200bps connect.
$MB2400	Sets 2400bps connect.
$MB4800	Sets 4800bps connect.
$MB9600	Sets 9600bps connect.
$MB14400	Sets 14.4Kbps connect.
$MB19200	Sets 19.2Kbps connect.

RETRANSMIT FAIL ACTION	
Type:	Configuration
Format:	AT [cmds] $R*n* [cmds]
Example:	AT **$R1**<CR>
Description:	Sets whether the modem gives up on a bad connection.
Command	**Function**
í$R0	Hang up after 12 failed retransmissions.
$R1	Do not hang up after 12 failed retransmissions.

STORE PHONE NUMBER IN NVRAM	
Type:	Configuration
Format:	AT [cmds] D<#>N*n* [dialstring]
Example:	AT**D555-1212N1**<CR>
Description:	Stores a phone number in the modem's memory.

TRELLIS MODULATION	
Type:	Configuration
Format:	AT [cmds] #T*n* [cmds]
Example:	AT **#T1**<CR>
Description:	Controls Trellis Coded Modulation.
Command	**Function**
#T0	Disables TCM.
í#T1	Enables TCM.

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V.42 MODE	
Type:	Configuration
Format:	AT [cmds] &E*n* [cmds]
Example:	AT **&E0** <CR>
Description:	Configures the operation of V.42 mode.
Command	**Function**
&E0	Error correction disabled.
í&E1	V.42 set to auto-reliable.
&E2	V.42 set to reliable.

V.42 LOW SPEED	
Type:	Configuration
Format:	AT [cmds] $E*n* [cmds]
Example:	AT **$E1** <CR>
Description:	Selects whether a V.42 connection will be attempted at 300bps.
Command	**Function**
í$E0	V.42 disabled at 300bps.
$E1	V.42 enabled at 300bps.

XOFF SEND	
Type:	Configuration
Format:	AT [cmds] #X*n* [cmds]
Example:	AT **#X1**<CR>
Description:	Selects how XOFF signal is sent.
Command	**Function**
í#X0	Single XOFF character sent until ready.
#X1	Multiple XOFF characters sent until ready.

XON/XOFF PASS-THROUGH	
Type:	Configuration
Format:	AT [cmds] &E*n* [cmds]
Example:	AT **&E7** O<CR>
Description:	Selects whether XON/XOFF signals are sent to remote modem.
Command	**Function**
í&E6	XON/XOFF signals trapped by local modem.
&E7	XON/XOFF passed through local modem.