

14.4 Kbps Data/Fax Modem PC Card with Voice Capabilities

FEATURES

- *PCMCIA Version 2.1 Type II Compatible*
- *Plug and Play Capabilities under DOS and Windows 3.1*
- *Ultrasonically Welded Package*
- *V.32bis (14,400 bps) Data*
- *V.17 (14,400 bps) Group 3 Class 1 Fax*
- *Data/Fax Software included*
- *Card and Socket Services included*
- *Five Year Warranty*

GENERAL DESCRIPTION

The STI-FAX/14.4CL is a data/fax modem PC Card with voice capabilities. The card conforms to PCMCIA version 2.1 standards. The thickness of the card conforms to PCMCIA Type II standards. The card features up to 14,400 bps for data or fax, and voice capabilities that allow a computer to be used as an answering machine.

The card enables notebooks and laptops with standard PCMCIA sockets to connect to bulletin boards, fax machines, and other computers via the phone network. The credit-card size and rugged enclosure of the card allows for easy installation and removal. This makes the card ideal for use in more than one computer. The low power usage of the card results in longer battery life in notebooks and laptops.

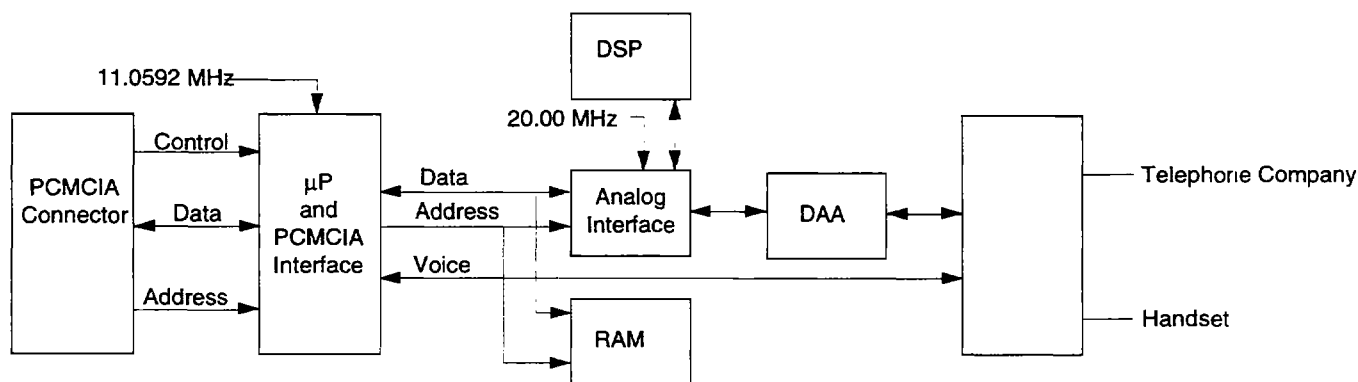
RELATED DOCUMENTS

	Part Number
Installation Guide	61000-00104-xxx
Reference Guide	61000-00085-xxx

SPECIFICATIONS

Form Factor	PCMCIA Type II	Diagnostics	Power-on self test Local digital loop test Local analog loop and analog loop self test Remote digital loop and digital loop self test
Data Rates	CCITT V.32bis (14400bps) CCITT V.32 (9600bps) CCITT V.22bis (2400bps) CCITT V.21 (300bps) Bell 212A (1200bps) Bell 103 (0-300bps)	Power Consumption	Active mode (off-hook): 600mW Standby mode (on-hook): 500mW Sleep mode: 20mW
Fax Rates	CCITT V.17 (14400bps) CCITT V.29 (9600bps) CCITT V.27ter (4800bps) CCITT V.21 (300bps, Channel 2)	Software Features	Operates on systems with: • PC DOS 5.0 or higher • MS-DOS 5.0 or higher • IBM OS/2 2.1 or higher • MS-DOS Windows 3.1 Operates on any system with Card and Socket Services conforming to PCMCIA Card and Socket Services Release 2.0 or higher.
Data Compression	CCITT V.42bis (up to 4:1 compression ratio) MNP 5 (up to 2:1 compression ratio)	16550 UART	Enhanced UART interface provides buffering of data. This feature is essential in providing reliable high speed communication, when used in multitasking environments like OS/2 or Windows.
Error Correction	CCITT V.42 MNP 2-4		
Data Command Set	Enhanced AT command set		
Fax Command Set	CCITT Group 3 Class 1 (EIA-578)		
Voice Features	The voice capabilities of the modem allows you to use your computer as an answering machine		

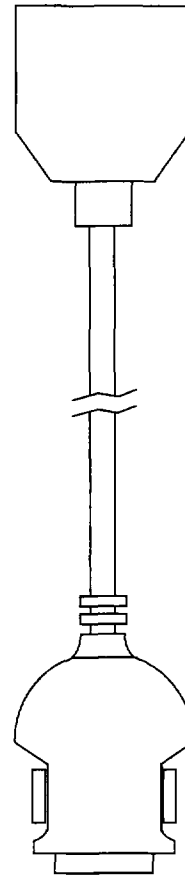
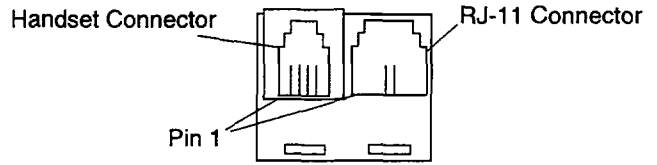
FUNCTIONAL BLOCK DIAGRAM



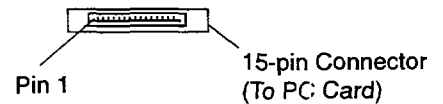
0131M

LINE ACCESS CABLE

15-Pin	Signal	Handset	RJ-11
1	MIC-	2	
2	MIC+	5	
3	SPKR-	3	
4	SPKR+	4	
5	NC		
6	NC		
7	NC		
8	NC		
9	NC		
10	NC		
11	NC		
12	NC		
13	NC		
14	TIP		3
15	RING		4



0109



PC CARD PINOUT INFORMATION

This card conforms to the 68-pin electrical interface as specified by the PCMCIA PC Card Specifications Version 2.1. This card uses the 8 bit I/O card interface.

CIRRUS LOGIC MD1414ECP CHIPSET

This modem is designed around the Cirrus Logic MD1414ECP chipset. The chipset consists of a microprocessor with an integrated PCMCIA interface, an analog interface, and a DSP. The PROM/CIS memory containing the operating code for the modem and the CIS (Card Information Services) file for use by Card and Socket Services is contained in the microprocessor. The DAA interfaces the phone line to the modem, providing isolation and protection of the user from the potentially hazardous voltages on the phone line.

SOFTWARE SPECIFICATIONS

Card and Socket Services

The Card and Socket Services included are drivers that will support any PCMCIA Release 2.1 compliant card from any vendor. The Card and Socket Services allow for plug and play (removal or insertion of the card with the power on). If the computer already has Release 2.1 of Card and Socket Services installed, do not reinstall Card and Socket Services.

Data/Fax Communication and Voice Software

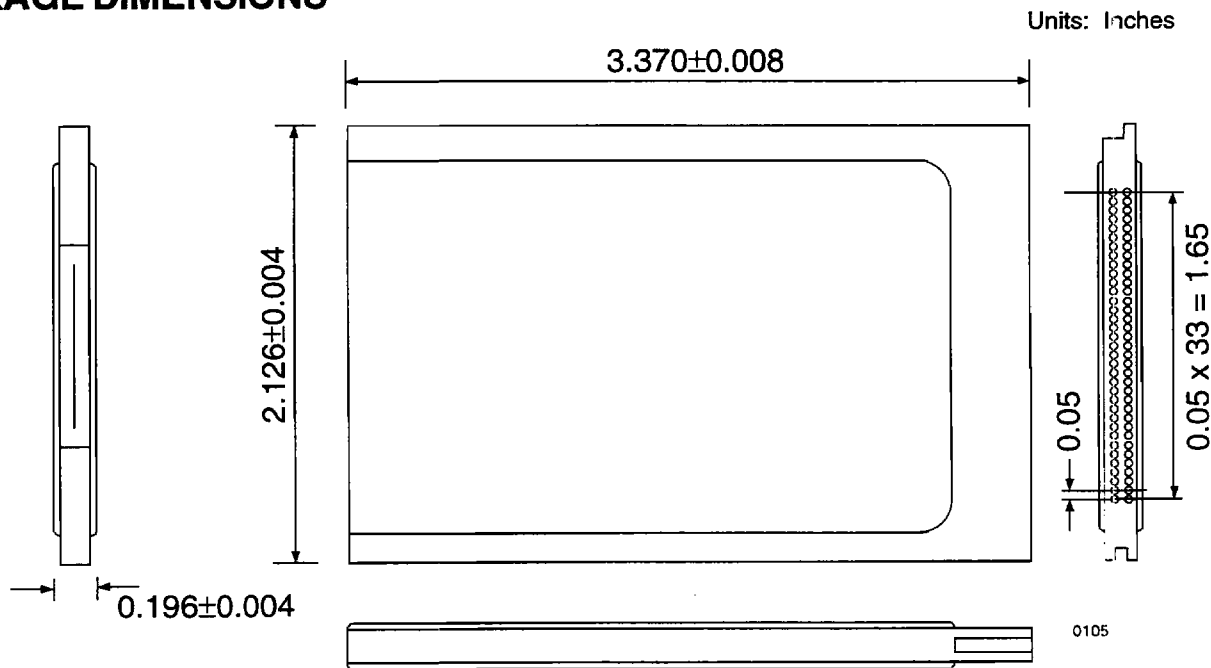
Included with the card is data/fax communication software. This software provides the user interface to send and receive data and fax. Also, the software supports the voice features of the card. The voice features permit the computer to be used as an answering machine, and also permit fax-on-demand, forwarding-to-pagers, etc.

TESTING PROCEDURE

Simple Technology tests each STI-FAX/14.4CL PC Card as follows:

1. After manufacturing the board, the board is visually inspected for errors.
2. Each board is tested to verify no power supply shorts.
3. Next, the board is inserted into the testing shell and automatically tested for originate and answer data modes and fax transmission.
4. CIS is programmed and the unit is restored to factory defaults.
5. Unit is sealed in final packaging and retested per Step 3.
6. If the card passes the above tests, the card is packed for shipping.

PACKAGE DIMENSIONS



TOLERANCES: ± 0.005 UNLESS OTHERWISE SPECIFIED

CARD INFORMATION STRUCTURE (CIS)

Tuple CISTPL_DEVICE (01), length 1 (01) at offset 0

Device type is FUNCSPEC
 Device speed is 250ns
 Write protect switch is in control
 Device size is 512 bytes

Tuple CISTPL_VERS_1 (15), length 38 (26) at offset 3

Major version 4, minor version 1
 Product Information:
 Manufacturer: "CIRRUS LOGIC"
 Product name: "FAX MODEM"
 Add. product information (lot no.): "MD144ECP"
 Add. product information: "0-0"

Tuple CISTPL_CONFIG (1A), length 5 (05) at offset 2B

Last valid configuration index is 35
 Configuration Register Base Address is 100
 Configuration Registers Present:
 Configuration Option Register at 100
 Card Configuration and Status Register at 102

Tuple CISTPL_CFTABLE_ENTRY (1B), length 19 (13) at offset 32

Configuration Table Index is 20 (default)
 Interface type is I/O
 BVDs not active, WP not active, RdyBsy not active
 Wait signal support required
 Vcc Power Description:
 Static I = 100.0 mA
 Peak I = 135.0 mA
 PDwn I = 5.0 mA
 Timing Information:
 Max Wait = 12.0 us
 Decode 10 I/O lines, bus size 8
 I/O block at 03F8, length 8
 IRQ may not be shared, level mode interrupts are supported
 Interrupts in mask 86B8 are supported
 Miscellaneous Features:
 Max Twins 0, +Audio, -ReadOnly, +PowerDown

Tuple CISTPL_CFTABLE_ENTRY (1B), length 7 (07) at offset 47

Configuration Table Index is 21
 Decode 10 I/O lines, bus size 8
 I/O block at 02F8, length 8

Tuple CISTPL_CFTABLE_ENTRY (1B), length 7 (07) at offset 50

Configuration Table Index is 22
 Decode 10 I/O lines, bus size 8
 I/O block at 03E8, length 8

Tuple CISTPL_CFTABLE_ENTRY (1B), length 7 (07) at offset 59

Configuration Table Index is 23
 Decode 10 I/O lines, bus size 8
 I/O block at 02E8, length 8

Tuple CISTPL_FUNCID (21), length 2 (02) at offset 62

Function code 02 (Serial Port), system init 00

Tuple CISTPL_END (FF) at offset 66