

# Elite 2864I

E2864I 0197A

**ZyXEL, the leader in modem reliability and interoperability, brings you the industry's first ISDN modem to provide ISDN and V.34 in a single device. The Elite 2864I Digital Modem.**

The Elite 2864I combines advanced ISDN technology with V.34 capabilities and an extensive array of analog features to provide users with a high-performance, multifunctional product.

For unrivaled versatility and connectability with other ISDN devices, the Elite 2864I supports PPP Multilink Protocol, Async to Sync PPP, and Rate Adaption with V.120, V.110, and X.75 protocols. The Elite 2864I operates in a wide range of environments including DOS, Windows '95, Windows NT, Macintosh, UNIX, Novell, Amiga and IBM AS400/RS6000.

## Blazing Speeds

The Elite 2864I digital modem allows ISDN's two 64Kbps B Channels to be combined for 128Kbps. Bandwidth on Demand automatically adds and removes the second B-channel based on data traffic. For even higher throughput speeds, it supports V.42bis and Hi/fn<sup>™</sup> LZS<sup>®</sup> (Stac<sup>®</sup>) data compression over ISDN.

## Applications on Demand

Designed as a universal solution, the Elite 2864I provides the ability to communicate with ISDN devices and analog devices over an ISDN line. The Elite 2864I may also be connected to local analog telephone lines by replacing the included ISDN module with an analog line module (sold separately). A key feature of the Elite 2864I is the ZyXEL Multi-Auto Answer technique. This process automatically switches the Elite 2864I to the correct protocol for incoming data calls, freeing the user from manual configuration.

Traditionally, users had one telephone line that could be used for a single purpose. With the Elite 2864I, users have two B Channels that can be used for simultaneous communications. For example, you can transmit data at 64Kbps using one B Channel and have voice conversation over the other B Channel. This is accomplished by the built-in analog adapter, which allows use of analog devices such as fax machines, analog modems or analog phones over digital ISDN lines.

## Impressive Feature Set

The Elite 2864I incorporates a full range of features along with its core ISDN/V.34 digital modem capabilities. It is fully backward compatible with V.32bis, V.32, and lower speed standards.

The Elite 2864I features built-in G3 fax send and receive functionality. Users may also print incoming faxes directly to a PCL or Postscript compatible printer via the parallel interface. To further enhance standalone fax operation, the Elite allows up to 8 Megabytes of DRAM to be added for storage and retrieval of incoming faxes.

The Elite 2864I's advanced voice capability includes voice AT commands, voice digitization and compression schemes, and DTMF tone detection. These features easily accommodate advanced telephony applications such as interactive voice messaging.

It integrates high speed serial and parallel interfaces with serial DTE speeds up to 460.8Kbps. The parallel interface connects to a bi-directional PC parallel port for greater DTE speeds.

## Upgrades in a Flash

The Elite 2864I's Flash EPROM memory allows the addition of new features by uploading the latest firmware. Kernel Mode is implemented for recovery from failed flash uploads without the need for factory repairs.



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## Unsurpassed Performance

- PPP, V.120, V.110, and X.75 B-channel protocols
- PPP Multilink Protocol for 128Kbps bundled connections
- Supports Hi/fn™ LZS® and V.42bis data compression over ISDN
- Supports AT&T 5ESS and Northern Telecom DMS-100, and Siemens EWSD with either NI-1 or custom protocols, and European 1TR6 and DSS1 switches. \*\*
- Operates in DOS®, Windows® 95/NT, UNIX®, Novell®, Macintosh®, and IBM® AS400/RS6000 environments
- Fast and robust ZyCellular protocol (upgradeable)



## Intelligent Features

- Bandwidth-on-Demand and Call Bumping with BACP
- Parallel port for direct fax printing on HP PCL compatible printers
- Optional 8MB DRAM for standalone fax receive/storage
- Embedded Protocol Analyzer with ANSI color display
- Data Encryption\* with X.75
- Automatic answering of ISDN-data and analog-data calls
- Synchronous mode operation and V.25bis commands (upgradeable)
- Call-back security with password protection
- Built-in Microphone and Speaker jacks for Voice input/output
- Flash EPROM memory with Kernel Recovery Mode
- North American ISDN Ordering Codes: IOC 'S' & EZ-ISDN 1



## Cost-Saving Speed and Connectivity

- B channel speed 56Kbps and 64Kbps
- Combine B Channels for 112Kbps, 128Kbps
- ISDN Rate Adaption: ITU-T V.120, V.110, and X.75
- Modem ITU-T Standards: V.34, V.32bis, V.32, V.23, V.22bis
- DTE serial interface with speeds up to 460.8Kbps
- Analog Error Control: MNP 4/3 and V.42
- Analog Data Compression: MNP 5 and V.42bis
- ISDN Data Compression/Correction: Hi/fn™ LZS®, V.42bis/LAPD

Operating mode	Speed(bps)
ISDN bundled B channels	128,000/112,000
ISDN B channel	64,000/56,000
V.34	28,800~2,400
ZyXEL 19.2Kbps	19,200/16,800/14,400/12,000/9,600/7,200
ZyXEL 16.8Kbps	16,800
V.32bis	14,400/12,000/9,600/7,200
V.32	9,600/4,800
V.26bis	2,400 half duplex
V.22bis	2,400
V.22/Bell 212A	1,200
V.23	1,200/75
V.21/Bell 103	300
G3 FAX	14,400/12,000/9,600/7,200/4,800/2,400

\*ZyXEL does not assume any liability arising out of the application or use of any of the security functions described herein; neither does it convey any license under its patent rights nor the rights of others.

\*\*Prior to purchase, please contact your local dealer/distributor for the correct version to ensure compatibility with the ISDN switches in your area.



## Technical Specifications

- Application control: ISDN AT commands and CAPI 1.1a
- Flow control: Software XON/XOFF or hardware CTS/RTS
- Two toggle switches Data/Voice and Originate/Answer with LED
- 21 LED indicators to show digital modem status
- Configuration Setting: Software programmable with nonvolatile memory for profile storage
- Diagnostics: Self test, digital loopback, and remote digital loopback (with self test)
- Analog Adapter with call progress tone emulation
- Audio Monitor: Programmable volume control
- Line Interface: RJ-45 for S/T or U interface, RJ-11 for built-in analog adapter
- 8Mbit flash EPROM, 2Mbit SRAM



## Fax Compatibility

- EIA Class 1, 2 and 2.0 Fax commands
- ITU-T V.17 G3: up to 14,400bps
- ITU-T V.29 G3: up to 9,600bps
- ITU-T V.27ter G3: up to 4,800bps
- ZyXEL Fax AT commands
- ZFAX Data/Fax/Voice software
- Direct fax printing through built-in parallel port



## Backed by ZyXEL - Communication Experts

- Two-year warranty on parts and labor
- Knowledgeable technical support
- 24-hour BBS technical support line



Model	Description
Elite 2864IU	LED, ISDN (U interface)
Elite 2864I	LED, ISDN (S/T interface)
Elite 2864	LED, 2 wire dial-up/leased line
Elite 2864L	LED, 2 wire dial up, 2/4 wire leased line
Weight	11b-10oz
Dimensions	L-9" x W-7 1/4" x H-17/8"

PC and MAC versions available

US FCC and Canadian IC approved. Specifications are subject to change without notice. All trademarks are the property of their respective owners.



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