EZL-70
(Embedded Serial Ethernet Converter)

VOLTAGE 5V | **MODULE** | **ETHERNET** NETWORK INTERFACE | **TTL** SERIAL INTERFACE | **RS232-C** SERIAL INTERFACE | **RS-422** SERIAL INTERFACE | **RS-485** SERIAL INTERFACE | **FIRMWARE Download** TFTP(LAN) | **ezConfig** SERIAL | **ID**entification **MAC** | **RoHS** Compliant

RS422/RS485
ISP
RS232
POWER LED
TTL(5V)
INTERFACE SELECTOR
STATUS/TX
LINK/RX
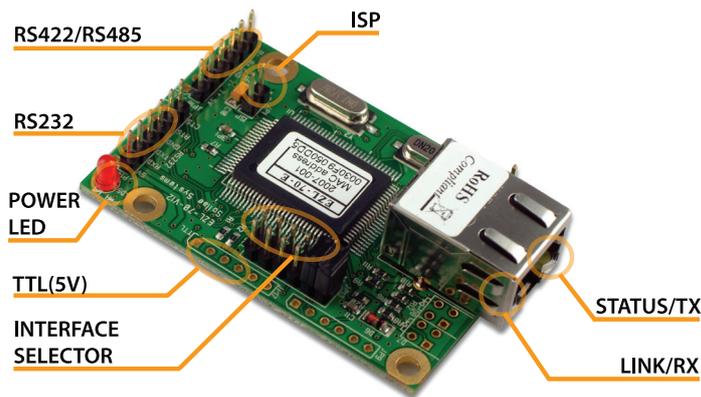
Overview

EZL-70 is a board for manufacturers who want to quickly and easily embed Ethernet connectivity in their products.

This compact board helps your devices get network connectivity with just serial connection.

Applying this board, not only you can reduce cost and risk, but also you can shorten development time to add the network capability.

Because EZL-70 allows to extend the distance of your serial communication system, you are able to remotely control and monitor the serial devices over the Internet anywhere you are.

Since EZL-70 has 4 types of serial communication (TTL, RS232, RS422 and RS485), it can be simply applied to various environments.

Highlights

- Serial to Ethernet Converter
- Board type with a built-in RJ45 connector for Ethernet interface
- 10Base-T Ethernet
- UART x 1 (5V-TTL, RS232, RS422 or RS485 communication (Maximum data rate: 115,200bps)
- Compact size, 64.4mm x 40mm x 17mm
- Access Restriction : IP filtering, Password
- DHCP and PPPoE
- Flexible configuration and network communication by 'AT Commands' (patent)
- 4 Communication modes (TCP server, TCP client, AT Command and UDP)
- Firmware upgrade through Network
- Powerful configuration software for Windows OS (ezConfig)
- Virtual COM Port Redirector for Windows OS (ezVSP)
- Environmentally-friendly RoHS compliant

Applications

Security Access Control System

Access Control Unit
DATA
HUB
Biometric Reader
DATA
Intergrated Security Server

Building Access Control
Time and Attendance System
Elevator Control
Biometric Readers
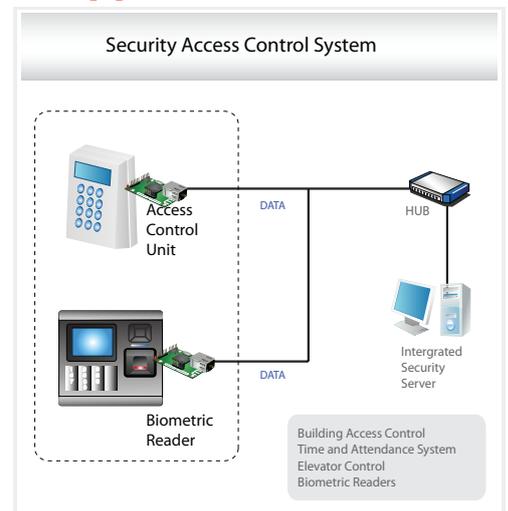
Specifications

*Serial Interface
RS232-RXD, TXD, RTS, CTS
5V-TTL UART - RXD, TXD, RTS, CTS
RS422 - TX+, TX-, RX+, RX- (full duplex)
RS485 - TRX+, TRX- (half duplex)
Interface type selection: by a jumper

Connector
2.54mm pitch header

*Serial Port Property

Data Rate
1200 bps ～ 115200 bps

Data Bits
5, 6, 7, 8 bits

Parity
None, Even, Odd, Mark, Space

Stop Bit
1 or 2

Flow Control
RTS/CTS Hardware (RS232, 5V-TTL)
Xon/Xoff Software

* Network Physical Interface Ethernet
RJ45
10Base-T

* Software Functions

Protocols
TCP, UDP, IP, ICMP, ARP, Ethernet,
TFTP, DHCP, PPPoE

Security
IP filtering - Restrict host
Password for Configuring

Communication Mode
TCP server (T2S)
TCP client (COD)
TCP server/client with AT command (ATC)
UDP mode (U2S)

Additional Functions
Sending MAC address Option

* Indicators(LEDs)

Power
Red

LAN Link/LAN RXD
Green

Status/LAN TXD
Yellow

* Processors

CPU
Atmel AVR

ROM
64K bytes Flash Memory

RAM
4K bytes SRAM

* Management

ezConfig
Configuration and Monitoring Tool through Ethernet

AT Command
Configuring in ATC mode

* Supplementary Software

ezConfig
Configuration Tool for Windows

ezConfig Library
The Library of ezConfig for VC++, VB, Java, and Linux

ezVSP
Serial to Network Virtual Driver for Windows

ezTerm
Simple TCP/IP Communication Test Tool

hotflash
Firmware Upgrade Utility for Windows

* Dimension

Size
60mm x 40mm x 17mm

Body Netweight
about 20g

* Operating Environment

Input Voltage
DC 5±0.25V

Power Consumption
64mA typical

Operating Temperature
0 ℃ ～ 55℃

Storage Temperature
-40 ℃ ～ 85℃

System Diagram

Network Application

Micro Processor — SERIAL(TTL) — EZL-70 — ETHERNET TCP/IP

SERIAL DEVICE — RS232 RS422 RS485 — EZL-70 — ETHERNET TCP/IP — HUB

INTERNET — ETHERNET TCP/IP — LAN — PC

Serial Tunnelling

Client — Server
LAN
EZL-70 TCP Client Mode — EZL-70 TCP Server Mode
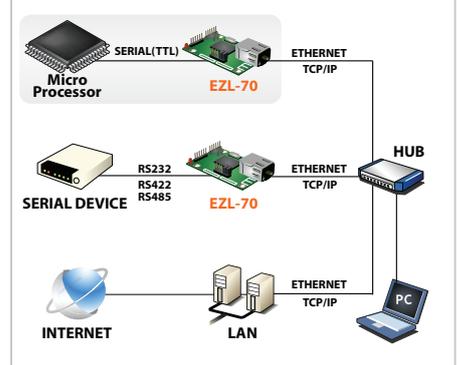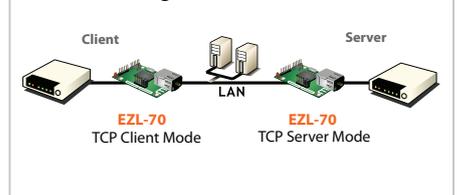
Serial Device Server (for RS232/422/485)

SERIAL DEVICE — RS232/422/485 — EZL-70 — ETHERNET TCP/IP — INTERNET — HUB

ETHERNET TCP/IP — LAN