EKI-1121L EKI-1122L

1-port RISC-based Industrial **Communication Controller** 2-port RISC-based Industrial **Communication Controller**



Features

- ARM7 32-bit 80MHz processor
- 8MB Flash ROM on board
- 16MB SDRAM
- 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- 1 or 2 software selectable RS-232/422/485 serial ports
- 50 bps to 921.6 kbps baud rate
- Built-in real-time clock (RTC)
- Class I, Division 2 certification
- Pre-installed Linux Kernel 2.4 platform

Introduction

EKI-1121L and EKI-1122L are RISC-based embedded communication controllers which provide dual auto-sensing 10/100 Mbps Ethernet ports for network redundancy and one or two software-selectable RS-232/422/485 serial ports. The EKI-1121L and EKI-1122L use the ARM7 RISC CPU which is a powerful computing engine to fulfill data compression or protocol conversion requirements. The built-in 8 MB flash ROM and 16 MB SDRAM provide user enough storage to run their specific applications.

Specifications

System

CPU ARM7 32-bit RISC CPU, 80 MHz

Flash 8 MR SDRAM 16 MB OS (pre-installed) uClinux

Console Port RS-232, 3-wire (Tx, Rx, GND) pin-header

Other RTC, watchdog timer

Ethernet Interface

- LAN 2 x auto-sensing 10/100 Mbps ports

Connector

Protection 1.5 kV magnetic isolation protection

Serial Interface

 Serial Standards Software selectable RS-232/422/485 ports

Connectors D-sub 9 male

Protection 15 kV ESD protection for all signals

Serial Parameters

Data Bits 5, 6, 7, 8 Stop Bits 1, 1.5, 2

None, Even, Odd, Space, Mark Parity

 Flow Control RTS/CTS, XON/XOFF, automatic RS-485 data flow

 Baud Rate 50 bps to 921.6 kbps

Serial Signals

RS-232 TxD, RxD, DTR, DSR, RTS, CTS, DCD, RI, GND RS-422 TxD+, TxD-, RxD+, RxD-, GND

RS-485 Data+, Data-, GND

LEDs

OS ready, power 1 and power 2 ready System

LAN Speed (10/100 Mbps), link/active (on connector)

TxD, RxD Serial

Mechanics

Dimensions 37 x 140 x 95 mm (W x H x D)

Housing Metal Weight DIN-rail, wall Mounting

Power Requirements

Input Voltage 12 ~ 48 V_{DC}, redundant dual inputs

Power Consumption

Software (uClinux)

Kernel Version 2.4.31

Protocol Stack TCP, UDP, IPv4, ICMP, ARP, SNMP V1, HTTP, DHCP, NTP, NFS, SMTP, Telnet, FTP, PPP, PPPoE

File System ROMFS/JFFS2

System Utility busybox, telnet, ftp, sash, tftp Daemon pppd, snmpd, telnetd, inted, ftpd, boa **Linux Tool Chain** Arm-elf-gcc: C/C++ PC Cross Compiler

uClibc POSIX Standard Library

Environmental Limits

Operating Temperature $0 \sim 60^{\circ} \text{ C} (32 \sim 140^{\circ} \text{ F})$ -20 ~ 80° C (-4 ~ 176° F) **Storage Temperature**

Operating Humidity 5 ~ 95 % RH

Regulatory Approvals

CE, FCC Part 15 Subpart B (Class A)

 Hazardous Location UL/cUL Class I. Division 2

Ordering Information

EKI-1121L 1-port RISC-based Communication Controller 2-port RISC-based Communication Controller EKI-1122L