JetBox 3300-w

Embedded Compact 2 LAN & 2 Serial Linux Computer

- Atmel ARM Processor with low power consumption for reliable performance
- Embedded Linux ready for easy maintenance
- Linux SDK for quick time-to-market
- 2 LAN ports for Daisy-Chain Controller
- 2 USB for data storage
- 2 RS232/422/485 and 8DI & 8DO for device and signal control
- One microSD card slot for customized configurations
- Fan-less, ruggedized industrial design for anti-vibration/shock and -40~80°C wide operating temperature

CE FC RoHS

2 RS 232/ 422/485	DIO	USB	micor SD Card
Linux SDK	Modbus	-40~80°C	

Overview

JetBox 3300-w is a compact-sized embedded Linux computer with low power consumption, designed to fit in small front-end controller system applications. With 16DIO channels in addition to the dual Ethernet, dual USB and dual serial ports, the embedded computers help users to extend the dataset to provide more flexible connection configurations for versatile control applications.

Combined with IP31 rugged enclosure, fan-less, anti-vibration/shock design and -40~80°C wide operating temperature range, the JetBox 3300-w ensures the reliability and high performance of front-end controller applications under harsh industrial environments.

Embedded Linux Ready

Korenix is devoted to the Linux computing and benefits customers by providing the JetBox series with embedded Linux ready system and easy-to-use interface. Compared to general purpose Linux system, embedded Linux is performance-optimized for front-end industrial control.

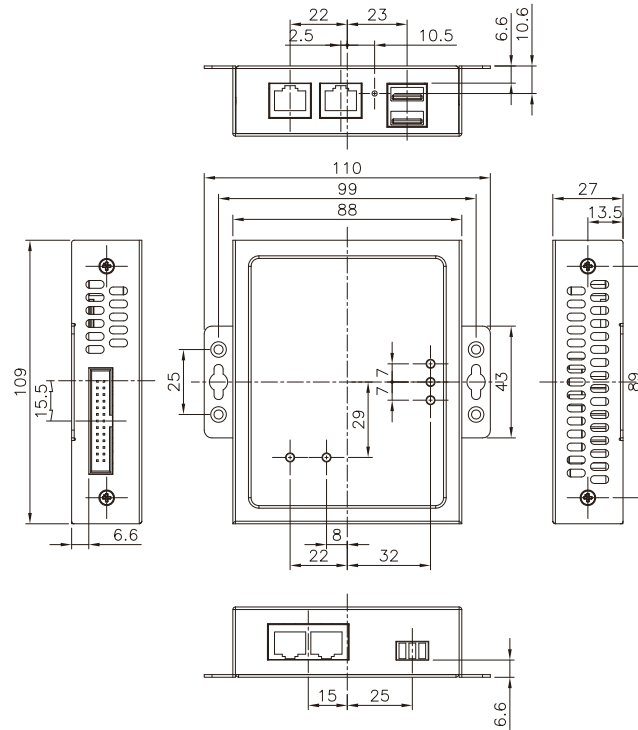**RISC-Based Computer with low power consumption**

The JetBox 3300 is a RISC-based computer with lower power consumption and is stable and reliable.

The JetBox 3300 carries 2 LAN ports, 2 USB ports, 2 Serial ports, and 16 Digital IOs to be the best solution in industrial control.

Digital Input & Output

Digital inputs and outputs are widely used in industrial applications such as indicators, alarms, reed switches, or sensors. The compact JetBox carries as many as 16 DIO channels and work as a front-end control agent.

JETBOX

Dimensions (Unit = mm)

Hardware Specifications

System
Processor:
Atmel ARM AT91RM9200 180 MHz
System memory: 64MB SDRAM
System flash: 16MB ROM
Ethernet: 10/100 Based-Tx RJ-45 connector x2
Storage:
microSD card slot x1
Serial port: RS232/422/485 x2 (RJ45 connector)
USB: USB 2.0 full speed x2 (Host)
Supporting devices: USB flash, wireless dongle
Digital IO: DI x8, DO x8
LED on Ethernet port:
Link/ Activity (Green on/ blinking)
Fdx/Col status (Yellow on/ blinking)
LED per unit:
Power on/off x1 (Green on/off)
Ethernet Link/ Activity (Green on/ Green blinking) x2
Serial Tx only(Green),Rx only(Red),Both (Orange) x2
Reset button x1
HW Watchdog timer:
Generates a time-out system reset, 1sec

Power Supply: DC 12~48V
Power Consumption: 7.2W
OS support: Embedded Linux 2.6.21

Mechanical
Construction: Sheet metal case
Color: Silver
Mounting: Wall mount/DIN rail
Dimension: 109(H) x 88(W) x 27(D) mm
Net weight: 0.5kg

Environment
Operating Temp:
-40 ~ 176°F(-40 ~ 80°C), 5 to 95% RH
Storage Temp: -40 ~ 176°C(-40 ~ 80°C), 5 to 95% RH
Regulation: FCC class A, CE
EN55022 class A, EN55024, EN61000-3-2, 3
EN61000-4-2, 3, 4, 5, 6, 8, 11
Shock: IEC60068-2-27 (50g peak acceleration)
Vibration: IEC60068-2-6 (5g/10~150Hz/operating)
MTBF: Greater than 200,000 hours@25°C
Warranty: 5 years

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Linux Specifications

Embedded Linux (JetOS93 lite)

Bootloader: JetBox bootloader

Linux Kernel: 2.6.21

Shell: GNU ash

File system: jffs2, NFS, Ext2, Ext3, VFAT, FAT

Device drivers: microSD card, USB, Watchdog timer, UART, Ethernet

Protocol: ARP, PPP, CHAP, IPv4, PAP, ICMP, TCP, UDP, NFS

Software packages: busybox (telnetd, inetd, udhcp, syslogd), diocfg, lrzsz, minicom, microcom, , ncurses, ser2net, setserial, bridge-utils, ethtool, goahead web server, iptables, net-snmp, ntp, openssh, openssl, pppd, ftpd, rp-pppoe, smtpclient, wireless-tools

Korenix Linux auto-run function

Customized configuration

Process monitoring

Serial Interface

Serial service modes: TCP server

LAN Interface

Ethernet: 10/100 Based-Tx RJ-45 connector x2, auto MDI/MDI-X

Management & Security

Security HTTPS, SSH

SNMP: MIB and traps

NTP for time management

SDK

Linux tool chain: Gcc (C/C++ PC cross compiler), uClibc, libstdc++

Linux sample code

Ordering Information

JetBox 3300-w Embedded Compact 2 LAN & 2 Serial Linux Computer

Includes:

- JetBox 3300-w x1
- Serial cable (RJ45 to DB9 male, 150cm) x2
- Attached 3-pin power terminal block
- DIN rail kits
- Quick installation guide
- Documentation and software CD-ROM

Optional Accessories

- Additional applications on micro-SD card: micro-SD card capacity is 1G/2G

    mSD1G-LM   mSD 1G, Modbus gateway for Linux

    mSD2G-LM   mSD 2G, Modbus gateway for Linux

- DIO module DIO Module
- DIO cable DIO Cable, Flat cable 40cm 20-pin

Industrial
Intelligent
NMS

Rackmount
PoE Plus
Switch

Industrial
PoE Plus
Switch

Industrial
12-24V
PoE Switch

Industrial
PoE Switch

Rackmount
L3/L2 Switch

Gigabit
Managed
Switch

Managed
Ethernet
Switch

Entry-level
Switch

Wireless
Outdoor AP

**Embedded
PoE/Router
Computer
(LINUX)**

Industrial
Communication
Computer
(WIN/LINUX)

Ethernet/PoE/
Serial Board

Ethernet
I/O Server

Media
Converter

Serial Device
Server

SFP Module

Din Rail
Power Supply