

JetBox 8152

Industrial Communication Computer with CANbus



High Performance Multimedia Processor

- VIA Eden V4 1GHz, 128K L2 cache
- Multimedia processor CX700M
- DDR2 1GB (200-pin SoDIMM)
- Max. 128MB VGA memory
- High resolution audio

Sophisticated Enclosure for Demanding Operation

- Fan-less, aluminum heat-sink frame housing to enhance heat dispersion
- Industrial design for anti-vibration & anti-shock

Abundant Interfaces to Integrate Connectivity

- Dual Ethernet, 1 COM, 1 CAN, 2 USB
- 1 CompactFlash Card Type I/II Socket
- 1 SATA (2.5" HD option)
- 2 Audio connectors (Mic/ Line-in & Line-out)

Ready-to-use

- Windows XP embedded with system development kit
- XPe CANbus (Optional)
- Linux Fedora10 with VPN
- Linux CANbus (Optional)

Overview

The JetBox 8152 is a VIA Eden V4 1GHz based computer with system memory 1GB DDRII RAM and built in media processor for multimedia performance enhancement. Volume and performance of the JetBox 8152 is utilized as a perfect front end device: compact design, DIN-rail type mouting, and carrying all major interfaces, such as two USB2.0 ports, one RS-232/422/485 port, one CANbus port, VGA, and high resolution audio. In addition, it is equipped with two RJ-45 ports and supports web server services to accommodate to the network communication environment today.

Windows Embedded ready

The advantage of adopting Korenix JetBox series is ready-to-use. Korenix is devoted to improve the usability of embedded computer in industrial domain. Korenix integrates device drivers, protocol stacks, system utilities, supporting services for Windows XP embedded in a CompactFlash card or in a 2.5" HD installed in the JetBox 8152 to let users experience JetBox 8152 in a simple way.

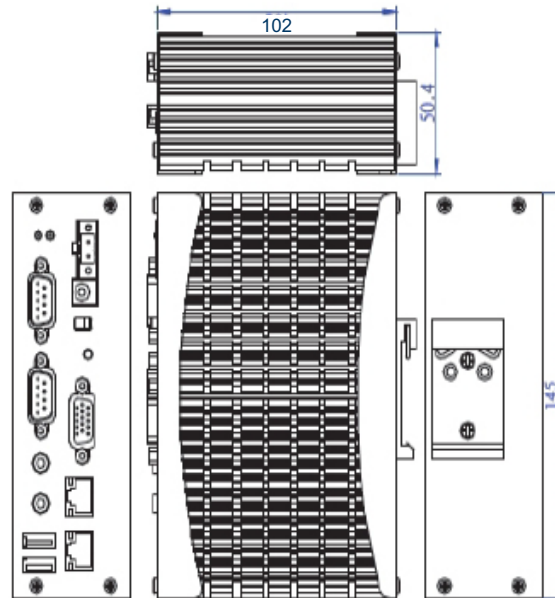
Linux Fedora with VPN ready

The standard Fedora 10 targets general users; therefore it includes office tools, a lot of fonts and games which is not necessary for industrial applications. Korenix remove these commercial tools and add popular SW modules such as openVPN and openSWAN to compress the Fedora 10 size to 2.7G and stored in a CF card. A CF card is much reliable than a hard drive when a device is installed in a hash or vibrational environment. Hence, the JetBox 8152 with pre-installed Linux CF card is a ready-to-use solution. It is easier and more convenient for customers.

CANbus supported (Optional)

The JetBox 8152 supports the CANbus control in XPe and Linux as well. With CANbus, the JetBox 8152 is suitable for industrial applications with many nodes, the transmission distance within 10 km and more security required.

Dimensions (Unit = mm)



Hardware Specification

System

Processor:

VIA Eden V4 1GHz (128KB L2 cache inside)
Low power CPU, fanless

System memory: 1GB DDR2 RAM

SSD: Type II CompactFlash slot x1

HD: SATA slot x1 (for 2.5" HD)

Ethernet: 10/100 Based-TxRJ-45 connector x2

Serial Port: RS-232/422/485x1

CANbus Port x1

Audio: Ear-phone/line-in and MIC-in

USB: USB2.0 x2

System control: Power on/off switch x1, reset button x1

Power Supply: DC input 12~24V (2-pin terminal block or power jack)

Power Consumption: 1.26A maximum (0.82A typical) with DC 19V input.

LED per Ethernet port (on the port):

Link/Activity (Green on/Green blinking)

Full Duplex/Collision (Yellow on/ Yellow blinking)

LED per unit:

Power on/activity x1 (on/ blinking)

HDD on/activity x1 (on/ blinking)

HW Watchdog timer:

Generates a time-out system reset; the time-out period can be programmed to be set from 1 to 255 seconds

Operating System

Verified OS: Windows 2000/XP, WinCE.NET, XPembedded, Linux

OS supported by Korenix (optional): XP embedded, Linux Fedora 10

Mechanical

Construction:

Rugged Aluminum Alloy Chassis, IP31 protection

Color: Silver

Mounting: DIN-rail

Dimension: 145(H) x 50 (W) x 102 (D) mm

Net weight: 0.7kg

Environment

Operating Temp: 5 ~ 158°F (-15 ~ 70°C), 5 to 95% RH

Storage Temp: -4 ~ 176°F (-20 ~ 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

IEC 60950

Shock: IEC60068-2-27 (50g peak acceleration)

Vibration: IEC60068-2-6 (5g/0~150Hz/operating)

MTBF: 76,493 hours MIL-HDBK-217F (MILITARY HANDBOOK) standard

Warranty: 5 years

Industrial
PoE Switch

IP67/68
Ethernet Switch

Rackmount
Managed
Switch

Gigabit Switch

Redundant
Switch

Entry-Level
Switch

Networking
Computer

Communication
Computer

Ethernet
I/O Server

Serial Device
Server

Media
Converter

Multiport
Serial Card

SFP Module

Din Rail
Power Supply

Windows XP Embedded Specification

Protocol Stacks: DHCP, IPv4, DNS, IPsec, HTTP, TCP, UDP, ICMP, IGMP, ARP, TAPI, TSP, SNMP, NTP, ICS, PPP, CHAP, EAP, SNTTP, Telnet, SNTTP, FTP, SMTP, PPPoE, PPTP, NetBIOS

System Utilities: Windows command shell, telnet, FTP, web-based administration manager, wireless zero configuration

Supporting Services: Telnet server, FTP server, IIS Web server, dial-up networking service, COM+, disk management service, remote registry service

Application Development Environment

- * Microsoft .netFramework 2.0 with service pack 2
- * Active directory service interface (ADSI) core
- * Active Template Library (ATL)
- * Certificate request client & certificate autoenrollment
- * COM APIs

- * Common control libraries
 - * Common file dialogs
 - * Direct3D, DirectPlay, DirectShow, DirectShow filters
 - * Distributed transaction coordinator (MSDTC)
 - * File-based write filter (FBWF)
 - * Event log
 - * Internet explorer
 - * Mapi32 libraries
 - * Message queuing (MSMQ) core
 - * Microsoft visual C++ run time libraries
 - * Registry Editor
 - * RPC
 - * Smart card cryptographic service providers
 - * Windows API, Media Player 10, Windows script engines
- Device Drivers:** Audio, LAN, VGA, Watchdog timer

Linux Specification

Distribution: Fedora 10

Bootloader: Grub

Linux Kernel: 2.6.27

Shell: GNU bash

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

Device drivers: CF card, USB, Watchdog timer, UART, Ethernet, VGA, Audio

Protocol: ARP, PPP, CHAP, IPv4, IPv6, PAP, ICMP, TCP, UDP, NFS, IPsec, OpenVPN

Software packages: e2fsprongs, dosfstools, minicom, pciutils, rpm, yum, ethtool, iptables, net-snmp, ntp, openssh, openssl, openVPN, openSWAN, pppd, samba, wireless-tools, openjdk, apache web server, MySQL

Ordering Information

JetBox 8152 VIA Eden V4 1GHz, 12~24VDC, 1GB DDR2 RAM, CANbus x1

Includes:

- JetBox 8152 x1
- Attached 2-pin power terminal block
- Frame kits to fix one SATA 2.5"HD on board
- Quick installation guide
- Documentation and software CD-ROM

Optional Accessories

System on CF card (capacity 4G), industrial CF card (capacity 2G), or HD (SATA interface, capacity 250G)

- CF4G-L Linux Fedora10
- CF4G-LC Linux Fedora 10 with CANbus SW
- ICF2G-P Windows XP embedded
- ICF2G-PC Windows XP embedded with CANbus SW
- HD250G-P Windows XP embedded
- HD250G-PC Windows XP embedded with CANbus SW