

# JetBox 8150

## Industrial Communication Computer



### 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, 2 COM, 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
- Linux Fedora 10 with VPN

## Overview

The JetBox 8150 is a VIA Eden V4 1GHz based computer with system memory 1GB DDR2 RAM and built in media processor for multimedia performance enhancement. Volume and performance of the JetBox 8150 is utilized as a perfect front end device: compact design, DIN-rail type mounting, and carrying all major interfaces, such as two USB2.0 ports, one RS-232 port, one RS232/422/485 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

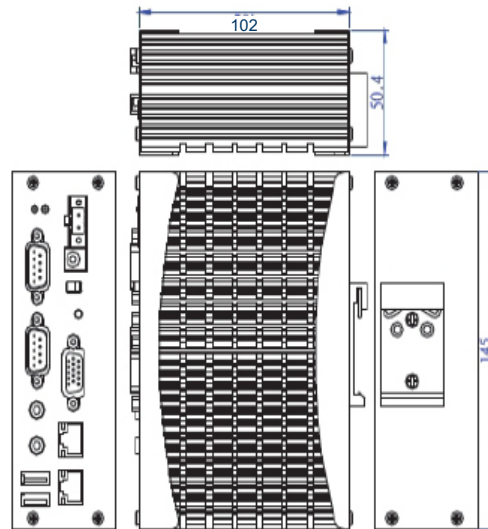
The advantage of adopting Korenix JetBox series is ready-to-use. Korenix is devoted to improve the usability of embedded computer in industrial domain. Korenix integrates device drivers, protocol stacks,

system utilities, supporting services for Windows XP embedded in a CompactFlash card or in a 2.5" HD installed in the JetBox 8150 to let users experience JetBox 8150 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 harsh or vibrational environment. Hence, the JetBox8150 with pre-installed Linux CF card is a ready-to-use solution. It is easier and more convenient for customers.

## Dimensions (Unit = mm)



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

## Hardware Specifications

### 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-Tx RJ-45 connector x2

**Serial Port:** RS-232 x1, RS232/422/485 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, XP embedded, Linux

**OS supported by Korenix:** XP embedded (optional)

### 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/ 10~150Hz/operating)

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

**Warranty:** 5 years

## Windows XP Embedded

**Protocol Stacks:** DHCP, IPv4, DNS, IPsec, HTTP, TCP, UDP, ICMP, IGMP, ARP, TAPI, TSP, SNMP, NTP, ICS, PPP, CHAP, EAP, SNTP, Telnet, SNTP, 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 .net Framework 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

**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:** e2fsprogs, dosfstools, minicom, pciutils, rpm, yum, ethtool, iptables, net-snmp, ntp, openssh, openssl, openVPN, openSWAN, pppd, samba, wireless-tools, openjdk, apache web server, MySQL

**JavaVM**

## Ordering Information

**JetBox 8150 VIA Eden V4 1GHz, 12~24VDC, 1GB DDR2 RAM**

Includes:

- JetBox 8150 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
- ICF2G-P Windows XP embedded
- HD250G-P Windows XP embedded