JetBox 8193

Industrial Communication Computer with 2GbE & PCI

CE FC 🗑 **RoHS**

1 RS 232/ 422/485	3 RS 232	2 GbE	VGA
1.8 GHz	PCI	SATA	6 USB

High Performance Processor
- Intel Atom D525 1.8GHz, 1MB L2 Cache
- System chipset D525 + ICH8M
- DDR3 2GB (200-pin SoDIMM)

Sophisticated Enclosure for Demanding Operation
- Fan-less, aluminum housing to enhance heat dispersion
- Industrial design for anti-vibration & anti-shock

Abundant Interfaces to Integrate Connectivity
- 2 GbE, 3 RS 232, 1 RS 232/422/485, 6 USB
- 1 PCI extension slot
- 1 CFAST Card Socket, 1 2.5" SATA
- VGA, 3 Audio connectors (Ear-Phone, Line-In And MIC-In)
- miniPCIe slot for wireless module expansion

Ready-to-use
- WES 2009

Overview

The JetBox 8193 is an Intel Atom D525 1.8GHz based computer with system memory 2GB DDRIII RAM. The design of JetBox 8193 is perfect for using as a front-end device: its fanless design includes all the major interfaces, such as two GbE for high-bandwidth data transmission, six USB 2.0 ports for data storage, three RS-232 and one RS-232/422/485 ports for serial connectivity as well as VGA and audio ports. In addition, there is one CFAST card slot that provides faster read/write speed and one SATA slot for 2.5" HD for users to expand storage and apply customized configurations.
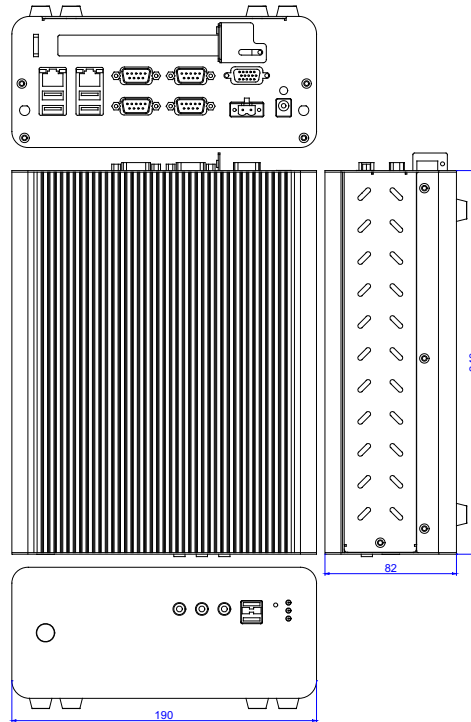
Windows Embedded ready

One of the advantages of adopting Korenix JetBox series is the ready-to-use operating system. 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 Embedded Standard 2009 in a CFAST card or a 2.5" HD installed in the JetBox 8193 to let users experience the advantages of JetBox in a simple way.

PCI slot supported

The JetBox 8193 supports a PCI card slot for users to design an extensible data communication system to fit to their own specific applications. With its extension feature, JetBox 8193 can be used for different purposes, such as public security or vehicle surveillance.

Dimensions (Unit = mm)

Hardware Specifications

System

Processor:
Intel Atom D525 1.8GHz (1MB L2 cache inside)
Fanless design
System Memory: 2GB DDR3 RAM
Storage:
CFAST card slot x1
SATA slot x1 (for 2.5"HD)
Extension Slot: PCI x1
Ethernet: 10/100/1000 Base-Tx RJ-45 connector x2
Serial Port: RS-232 x3, RS-232/422/485 x1
VGA x1
Mobile Slot: mini-PCIe x1
Audio: Ear-phone, MIC-in, Line-in
USB: USB2.0 x6
System Control: Power on/off button x1, reset button x1
Power Supply: DC input 12~24V (2-pin terminal block or power jack)
Power Consumption: Max. 54W
2.88A maximum (1.47A typical) with 19V input voltage (without extension card)
LED Indicator: Power x1, HDD/CFast x1, LAN x2
HW Watchdog timer:
Generate 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 XP, XP embedded, Windows 7
OS supported by Korenix (Optional): WES2009

Mechanical

Construction:
Rugged Aluminum Alloy Chassis, IP31 protection
Color: Silver
Mounting: Desktop
Dimension: 190(W) x 240(D) X 82(H)
Net weight: 2.6 kg

Environment

Operation Temp: 5~140°F (-15~60°C), 5 to 95% RH
Storage Temp: -4~176°F(-20~80°C), 5 to 95% RH
Regulation: FCC class B, CE
EN55022 class B, 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 35,178 hours @ 40 °C
Warranty: 3 years

* Specifications are subject to change without prior notification

Windows Embedded Standard 2009 Specification

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

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

Supporting Services and Daemons: Telnet Server, FTP server, IIS Web Server, Dial-up networking service, COM+ Services, Disk Management Services, Remote Registry Service

Application Development Environment:
- Microsoft .Net Framework 3.5 with service pack 1
- Active Directory Service Interface (ADSI) Core
- Active Template Library (ATL)
- Certificate Request Client & Certificate Autoenrollment
- COM Base
- Common Control Libraries
- Common File Dialogs
- Direct3D
- DirectPlay
- DirectShow
- 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
- Windows Media Player 11
- Windows Script Engines
- WMI

Device Drivers: Audio, LAN, SysChip, VGA, Watchdog timer

Ordering Information

JetBox 8193 Industrial Communication Computer with PCI

Includes:

- JetBox 8193 x1
- Attached 2-pin power terminal block
- Kits to fix one SATA 2.5" HD on case
- Rubber foot
- Quick installation guide
- Documentation and software CD-ROM

Optional Accessories

- System on industrial CFAST card (capacity 4G), or HD (SATA interface, capacity 320G)

  ICFAST4G-WES2009   Windows Embedded Standard 2009

  HD320G-WES2009   Windows Embedded Standard 2009

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