



Heavy-duty Industrial Solutions

Industrial Barebone Systems
Ruggedized Embedded Systems





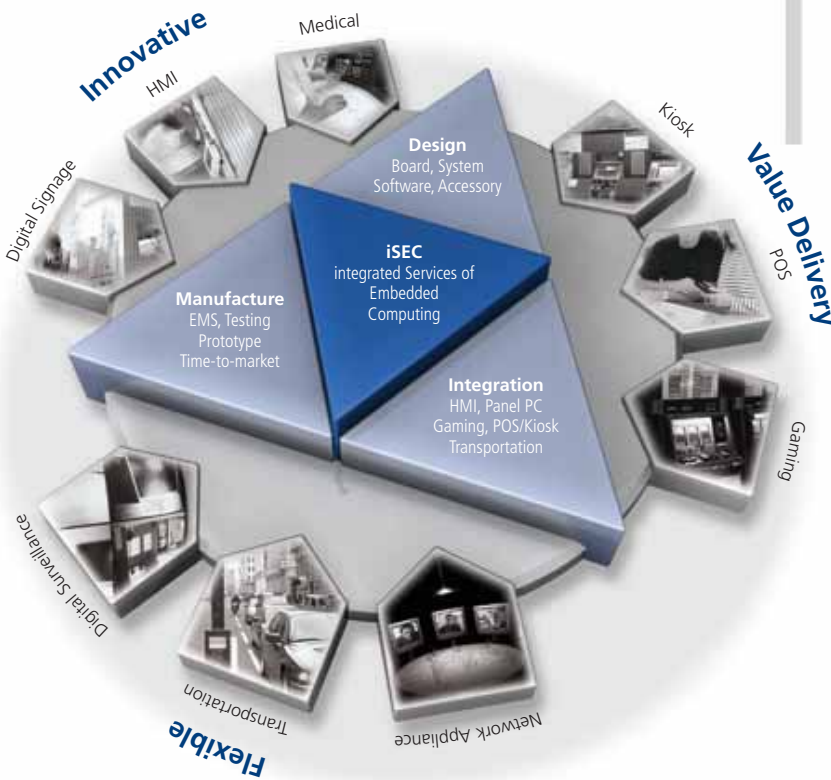
Heavy Duty Industrial Computing Systems

As a leading supplier of applied computing platforms, AXIOMTEK has been devoted over fifteen years to providing comprehensive yet highly integrated industrial computing systems that deliver advanced features like flexible CPU type (onboard or socket type), powerful computing power, low power consumption, fanless design, friendly mechanism, great expansion capability, SATA HDD support, wide temperature operating range, and fast time-to-market. Based on our ample experience, we have developed a series of industrial box computers that match customer dynamic needs for various applications, including complete range of rackmount systems (IPC series) with ATX / Micro ATX motherboards and fanless operation & extended temperature embedded systems (eBOX series).

Highly Flexible iSEC (integrated Services of Embedded Computing)

AXIOMTEK's creative concept of iSEC (integrated Services of Embedded Computing) is to deliver trusted and valuable system integration and service from board-level design to system-level design for vertical domains of gaming, POS, kiosk, panel computer, network security, DSA and more. Through the integrated services, such as EE, ME, EOS, LCD BIOS, I/F, I/O and DC-DC power integration, and certifications like CE, AXIOMTEK presents the excellent capabilities of field application engineering and system development. Meanwhile, with the solid competence of design, manufacture and integration, AXIOMTEK offers innovative, flexible, value-added, and time-to-market solutions.

AXIOMTEK's complete expertise of hardware, software design, manufacturing capability, global service and quality assurance cater for today's critical and extreme application-specific market. The comprehensive solutions enable customers to enjoy innovation and fast time-to-market through integrated service.





Embedded Software Service

To optimize system resource demand, reduce TCO (Total Cost of Ownership), and improve system reliability and system design TTM (Time-to-Market), AXIOMTEK has established the embedded OS service force since 1999. AXIOMTEK's embedded OS solutions offer a wide range of Microsoft® Windows®, Embedded Linux and QNX family-based products and services, which include:

- * Windows® CE/CE 5.0
- * Embedded Linux
- * Windows® XP embedded
- * QNX Neutrino RTOS



Time-to-Market

▶ Giving customers the newest embedded technology, increasing flexibility and speeding up time-to-market response, AXIOMTEK offers a wide range of customizable industrial chassis, form factors, and peripherals, which speed up the time-to-market of any OEM or ODM projects.



Quality and Reliability

▶ AXIOMTEK offers reliable and solid products compliant with Management System Standards: ISO9001-2000, ISO14001 and TUV Certifications. AXIOMTEK's ISO9001-2000, ISO14001 and TUV certificates keep us focused on our quality objectives of management and environmental production. Typically, most of industrial computing systems are installed in harsh environments such as corrosion and extreme temperatures, making safety certification and long MTBF a must. To ensure the products are reliable enough to keep long MTBF (mean time between failures), AXIOMTEK has processed a set of rigorous tests that guarantees the highest quality.



Two-Year Warranty

▶ AXIOMTEK is committed in delivering quality products and customer satisfaction through excellent service and support. All AXIOMTEK's industrial box computers come with two-year warranty. An Extended Warranty can be made anytime within 60 days after purchase date.



Global Support

▶ AXIOMTEK's global network of subsidiaries and distributors over 40 countries makes this brand well-known in the world. The worldwide technical support and sales service among the 16 offices located in Taiwan, America, Europe, Japan and China ensure prompt service to customers. Through our global network of international subsidiaries, customers gain fast service and the best pricing.



Go Green

▶ Within this environment, we understand the need for environmentally-friendly business practices, demonstrated through our long-standing commitment to the health of the environment. AXIOMTEK will continue to work closely together with vendors/ suppliers to reduce hazardous substances in the manufacturing process and components to ensure that we can provide our customers with fully RoHS compliant products.



Industrial Barebone Systems (IPC Series)

AXIOMTEK has a full range of 19" rackmount systems with ATX / Micro ATX motherboards. AXIOMTEK's industrial rackmount barebones deliver powerful computing performance, expansibility, high storage capacity, reliability and cost-effective, and feature solid designs. Available in certificates of entire system, additionally, the IPC series provides the most popular interfaces, such as Ethernet ports, USB ports, PCI expansion slots, PS/2 ports and COM ports.



Super Slim but Expandable





Lead Technology

- ▶ AXIOMTEK's industrial systems are designed with the latest technologies like Core™2 Duo processors, PCI express technology, dual channel DDR2 memory, and SATA II HDD, which ensures our customers' solutions are always ranked in the top among competitors.



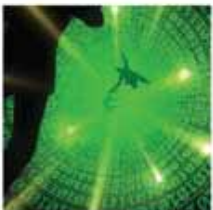
Barebone System Ready

- ▶ All platforms are ready-to-work. ATX and Micro ATX motherboard-type form factors are available according to specific customer needs. A whole set of platform comes with a powerful computing system board, various front/rear I/O, different power supply options, plenty expansion slots and cooling systems. Additionally, each IPC system is CE approved.



First-rate Mechanism Design

- ▶ These industrial grade rackmount computers designed with industrial features including a front accessible I/O interface, lockable front doors to protect the unit from unauthorized users, rich power supply options, and a front LED indicator to alert power status and HDD activity.



Expansion-Rich Capability

- ▶ Packed with the most popular I/O interfaces including 10/100 Base-T or 10/100/1000 Ethernet, multiple RS-232/422/485 serial ports, Audio, PCI slots, and USB rear or front accessible ports, the industrial rackmount barebones can connect to diverse devices and equipment. AXIOMTEK also offers a series of rackmount peripheral products such as rackmount keyboard, rackmount LCD display, and industrial add-on cards, to complete the rackmount server solution.



Cost-effective Solution

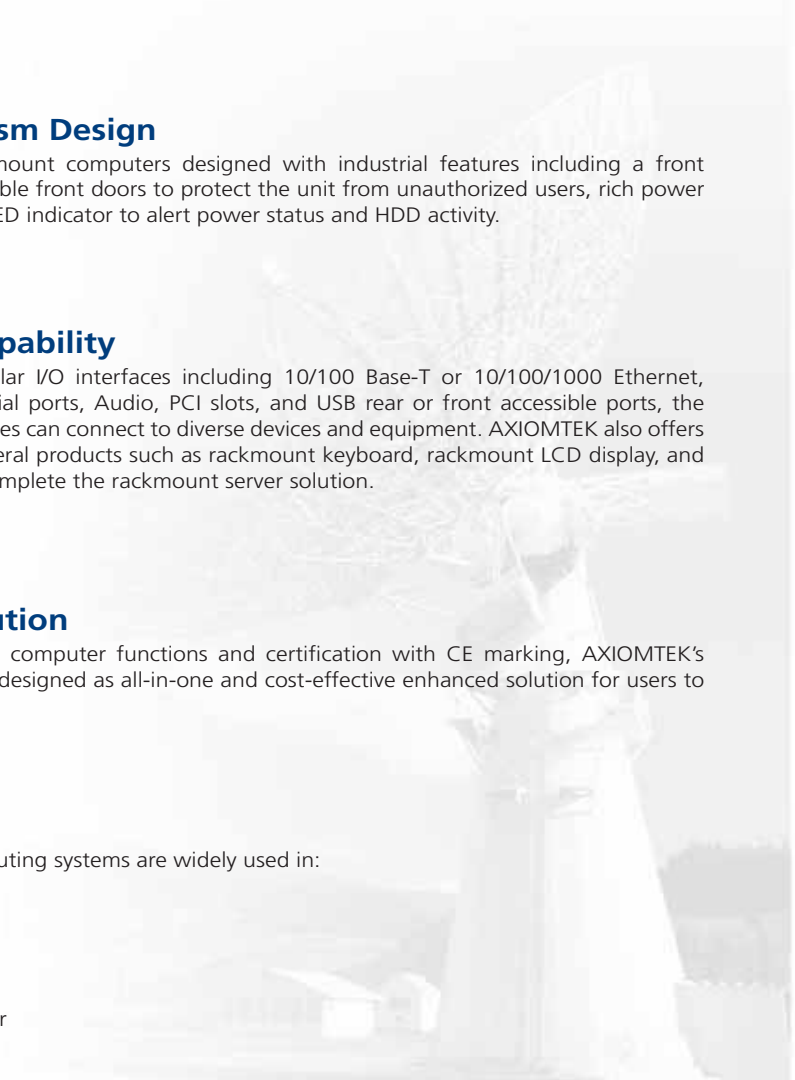
- ▶ Integration with all standard computer functions and certification with CE marking, AXIOMTEK's industrial box computers are designed as all-in-one and cost-effective enhanced solution for users to get to market fast and easy.



Various Solutions

AXIOMTEK's Industrial Computing systems are widely used in:

- ▶
 - Storage
 - Automation
 - Digital Surveillance
 - Telecommunications
 - Network Security System
 - ISP/ Web Server/ Mail Server





Industrial Barebone Systems (IPC Series)



Super Slim



High Performance



Expandable

Model Name		IPC120	IPC121	IPC220
Form Factor		1U	1U	2U
Processor System	CPU	Intel® E6400/E4300/E2160 Core™2 Duo	Intel® E6400/E4300/E2160 Core™2 Duo	Intel® E6400/E4300/E2160 Core™2 Duo
	Max. Speed	2.13 GHz	2.13 GHz	2.13 GHz
	Front Side Bus	533/800/1066 MHz	533/800/1066 MHz	533/800/1066 MHz
	L2 Cache	2 MB or 1 MB	2 MB or 1 MB	2 MB or 1 MB
	Chipset	Intel® Q965+ICH8DO	Intel® Q965+ICH8DO	Intel® Q965+ICH8DO
Expansion Slot (via riser card)	AGP 8X	-	-	-
	ISA	-	-	-
	PCI	1 x Full-Height / Half-Length 32-bit PCI	1 x Full-Height / Half-Length 32-bit PCI	2 x Full-Height / Half-Length 32-bit PCI
	PCIe	-	-	-
Memory	Technology	Dual Channel DDR2 533/667/800 MHz	Dual Channel DDR2 533/667/800 MHz	Dual Channel DDR2 533/667/800 MHz
	Max. Capacity	Up to 8 GB	Up to 8 GB	Up to 8 GB
	Socket	4 (240-pin)	4 (240-pin)	4 (240-pin)
Graphic	Controller	Integrated in Intel® Q965 GMCH	Integrated in Intel® Q965 GMCH	Integrated in Intel® Q965 GMCH
	VRAM	Max. up to 256MB frame buffer sharing system memory	Max. up to 256MB frame buffer sharing system memory	Max. up to 256MB frame buffer sharing system memory
Storage	Driver Capacity	2 x Internal 3.5" SATA II HDD	2 x External 3.5" SATA II HDD (Hot Swappable)	4 x Internal 3.5" SATA II HDD
Ethernet	Interface	10/100/1000Base-T	10/100/1000Base-T	10/100/1000Base-T
	Controller	Realtek RTL8111B	Realtek RTL8111B	Realtek RTL8111B
	Connector	2 x RJ-45	2 x RJ-45	2 x RJ-45
I/O Connectors	Serial Port	1	1	1
	Parallel Port	1	1	1
	Audio	Line-out, MIC-in	Line-out, MIC-in	Line-out, MIC-in
	RJ-45	2	2	2
	USB	4 x USB 2.0 ports (Real Panel)	4 x USB 2.0 ports (Real Panel)	6 x USB 2.0 ports (2 x Front, 4 x Real)
	VGA	1	1	1
	PS/2 Keyboard	1	1	1
PS/2 Mouse	1	1	1	
Power Supply		ATX 270W	ATX 270W	ATX 300W
Operating Temperature		0°C to 40°C	0°C to 40°C	0°C to 45°C
Dimensions (W x D x H)		482 x 430 x 44mm (19" x 16.93" x 1.73")	482 x 430 x 44mm (19" x 16.93" x 1.73")	482 x 450 x 88.9mm (19" x 17.7" x 3.5")
Certification		CE	CE	CE
RoHS Compliance		Yes	Yes	Yes



Front I/O Access



Cost-effective



High Quality

Model Name		IPC221	IPC421	IPC423
Form Factor		2U	4U	4U
Processor System	CPU	Intel® E6400/E4300/E2160 Core™2 Duo	Intel® E6400/E4300/E2160 Core™2 Duo	Intel® E6400/E4300/E2160 Core™2 Duo
	Max. Speed	2.13 GHz	2.13 GHz	2.13 GHz
	Front Side Bus	533/800/1066 MHz	533/800/1066 MHz	533/800/1066 MHz
	L2 Cache	2 MB or 1 MB	2 MB or 1 MB	2 MB or 1 MB
	Chipset	Intel® Q965+ICH8DO	Intel® Q965+ICH8DO	Intel® Q965+ICH8DO
Expansion Slot (via riser card)	AGP 8X	-	-	-
	ISA	-	-	-
	PCI	2 x Full-Height / Half-Length 32-bit PCI	4 x Full-Height / Half-Length 32-bit PCI	4 x Full-Height / Half-Length 32-bit PCI
	PCIe	-	1 PCIe x16 & 2 PCIe x1	1 PCIe x16 & 2 PCIe x1
Memory	Technology	Dual Channel DDR2 533/667/800 MHz	Dual Channel DDR2 533/667/800 MHz	Dual Channel DDR2 533/667/800 MHz
	Max. Capacity	Up to 8 GB	Up to 8 GB	Up to 8 GB
	Socket	4 (240-pin)	4 (240-pin)	4 (240-pin)
Graphic	Controller	Integrated in Intel® Q965 GMCH	Integrated in Intel® Q965 GMCH	Integrated in Intel® Q965 GMCH
	VRAM	Max. up to 256 MB frame buffer sharing system memory	Max. up to 256 MB frame buffer sharing system memory	Max. up to 256 MB frame buffer sharing system memory
Storage	Driver Capacity	2 x Internal 3.5" SATA II HDD; 1 x Slim CD-ROM	Exposed 3 x 5.25" and 1 x 3.5" drives; internal 1 x 3.5" drives	Exposed 3 x 5.25" and 1 x 3.5" drives
Ethernet	Interface	10/100/1000Base-T	10/100/1000Base-T	10/100/1000Base-T
	Controller	Realtek RTL8111B	Realtek RTL8111B	Realtek RTL8111B
	Connector	2 x RJ-45 (Front Panel)	2 x RJ-45	2 x RJ-45
I/O Connectors	Serial Port	1 (Front Panel)	1	1
	Parallel Port	1 (Front Panel)	1	1
	Audio	Line-out, MIC-in (Front Panel)	Line-out, MIC-in	Line-out, MIC-in
	RJ-45	2 (Front Panel)	2	2
	USB	6 x USB 2.0 ports (Front Panel)	6 x USB 2.0 ports (2 x Front, 4 x Real)	5 x USB 2.0 ports (1 x Front, 4 x Real)
	VGA	1 (Front Panel)	1	1
	PS/2 Keyboard	1 (Front Panel)	1	1
	PS/2 Mouse	1 (Front Panel)	1	1
Power Supply	ATX 300W	ATX 300W	ATX 300W	
Operating Temperature	0°C to 45°C	0°C to 45°C	0°C to 45°C	
Dimensions (W x D x H)	482 x 450 x 88.9mm (19" x 17.7" x 3.5")	482 x 450 x 177mm (19" x 17.7" x 7")	482 x 537.6 x 176.7mm (19" x 21.16" x 6.96")	
Certification	CE	CE	CE	
RoHS Compliance	Yes	Yes	Yes	



Fanless Operation and Extended Temperature Embedded Systems (eBOX Series)

AXIOMTEK has developed a series of fanless and extended temperature embedded systems, the eBOX series. The fanless design and excellent system thermal solution support the highly reliable eBOX series to operate without noise and in critical environments at temperature from -10°C to +50°C or above (-20°C to +60°C). AXIOMTEK's eBOX series is suitable for a wide range of industrial applications in the market, such as POS, kiosk, ATM, Thin Servers, building automation, project screens for department stores and supermarkets, tour bus displays, gaming, and more.

Performance

- (BGA/Socket CPU)
- eBOX630-830-FL
 - eBOX630-821-FL
 - eBOX738-FL
 - eBOX748-FL



Fanless Embedded Systems



Expandible

- (PCI, PCIe Expansion)
- eBOX638-FL
 - eBOX639-822-FL
 - eBOX830-831-FL
 - eBOX830-822-FL



All AXIOMTEK's eBOX system products furnish customers with all users' needs like powerful computing capability, fanless operation, wide temperature operating range, low power use, extreme reliability and ruggedness, scalability, flexible I/O configuration and long product life support.

Cost-effective

- eBOX600-FL
- eBOX646-FL500
- eBOX647-FL
- eBOX745-FL500
- eBOX746A-FL



Flexible CPU Type Solution

- ▶ Socket type and BGA onboard type CPU are supported; from low voltage Intel® Celeron® M to the latest Intel® Core™2 Duo processors. Users can opt for the CPU type based on a performance-oriented purpose or cost concern.



Wide Operation Temperature Range

- ▶ AXIOMTEK's outstanding embedded solutions, with an extended temperature advantage, work with a wide range of applications under extreme environmental conditions like in high or low temperatures or thermal shock, high humidity or startups in low temperature. The embedded eBOX systems, noiseless and highly reliable, can operate in critical environments at temperature from -10°C to +50°C or above (-20°C to +60°C).



Unique Anti-vibration Mechanism Design

- ▶ AXIOMTEK's embedded computing systems are equipped with a unique anti-vibration design (2Grms with CompactFlash™ card and 1Grms with HDD) to endure heavy vibration, jolt and sudden shake.



Flexible I/O Configuration

- ▶ All fanless and extended temperature products offer rich I/O features like COM ports, USB 2.0, DVI, VGA, Fast/Gigabit Ethernet, PS/2 and audio for different applications which make embedded solutions easier than ever.



Reliability for Critical Demands

- ▶ All fanless and extended temperature products pass various chamber and lab tests, including shock/vibration tests and thermal tests, to ensure the systems can work reliably and stably in rugged environments. To enhance system reliability for critical demands, each eBOX supports Watchdog Timer function which will automatically reset the system to reduce the need for maintenance.



Various Applications

- ▶ AXIOMTEK's fanless and extended temperature embedded products are suitable for a wide range of applications in the market, including industrial automation, intelligent transportation system, digital video recorder (DVR), digital signage appliance (DSA), medical, security, gaming, POS, POI, and kiosk.



Application Story



CNC Machine

Today, CNC (computer numerical control) machines are found almost everywhere, from small job shops to large manufacturing firms. The CNC machine is an automatic, accurate, and consistent motion control mechanism. With CNC machines, the consistency and quality have been achieved and the frequency of errors are reduced. CNC automation also enhances the flexibility of the manufacturing process and saves time from changing the machine while producing different components.

Our Solution

The CNC adopts an embedded computer platform as a control server to run software, download complex CNC programs and do calculations. To support such a high performance and multi-tasking machine, an embedded system with expansion capability, fanless, powerful functions, good performance, small size, and high integration, just like AXIOMTEK's eBOX638-FL, eBOX639-822-FL or eBOX830-831-FL, is the best choice. AXIOMTEK's eBOX embedded systems also incorporate ample I/O interface for connection to a variety of devices such as printers, CD/DVD drives for data backup, and network connections for internet access and file transfer. Such a machine can save cost, shorten production time, and increase quality rate.

An easy hole-drilling job can be an example to show you the embedded system playing a key role in a CNC controller. Before the manufacturing moves into CNC stage, even drilling a hole is a troublesome matter, for everything must be done manually, including installing a proper drill, tightening the drill chuck, selecting rotation speed, pulling on/off the level to drill a hole, etc. All these jobs need experienced users. Now, a CNC machine makes everything much easier. Users can use CNC software to execute complicated commands, and CNC controller will transfer signals through multi-axis motion control card to control motor. The motor can adjust the x-axis, y-axis and z-axis of cutter or drill, to drill a hole or cut material automatically. Some type of CNC machine can select and change drill or cutter automatically by CNC controller.

Customer Requirements

- Must be ruggedized to ensure safety and stability
- As small as possible to fit into CNC machine
- Fanless system to prevent from dust or vibration
- Supports 1 or 2 PCI expansion slots for motion cards
- Supports panel or touch panel

Best Buy

eBOX638-FL / eBOX639-822-FL / eBOX830-831-FL

- Fanless Operation
- Compact-size
- High Performance
- Expansion Capability
- Low Power Consumption
- Rich I/O Interface



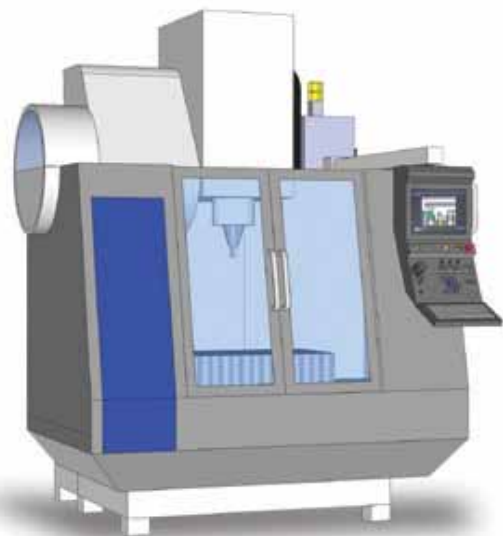
eBOX638-FL



eBOX639-822-FL



eBOX830-831-FL





Application Story



Rugged Car PC

With the quick growth of GPS (Global Positioning System), and furthermore, mature technology of wireless/GSM/GPRS/3G, more and more vehicle applications are being adapted, not only the personal car PC but also the enterprise grade applications such as GPS Fleet Management Systems for logistics, mass transit and cargo shipping.

One of AXIOMTEK's customers could be a good reference. This customer is a software company which has a good capability in GPS, GIS and GSM/GPRS communication. The customer would like to adopt an x86 architecture system with various I/O. Beside internal pre-installed modules, they also need a LCD power-out connector, GSM/GPRS antenna, WIFI antenna, SIM card slot, CompactFlash™ slot, audio, video, customized LED display I/O, and more.

The client side system includes three parts:

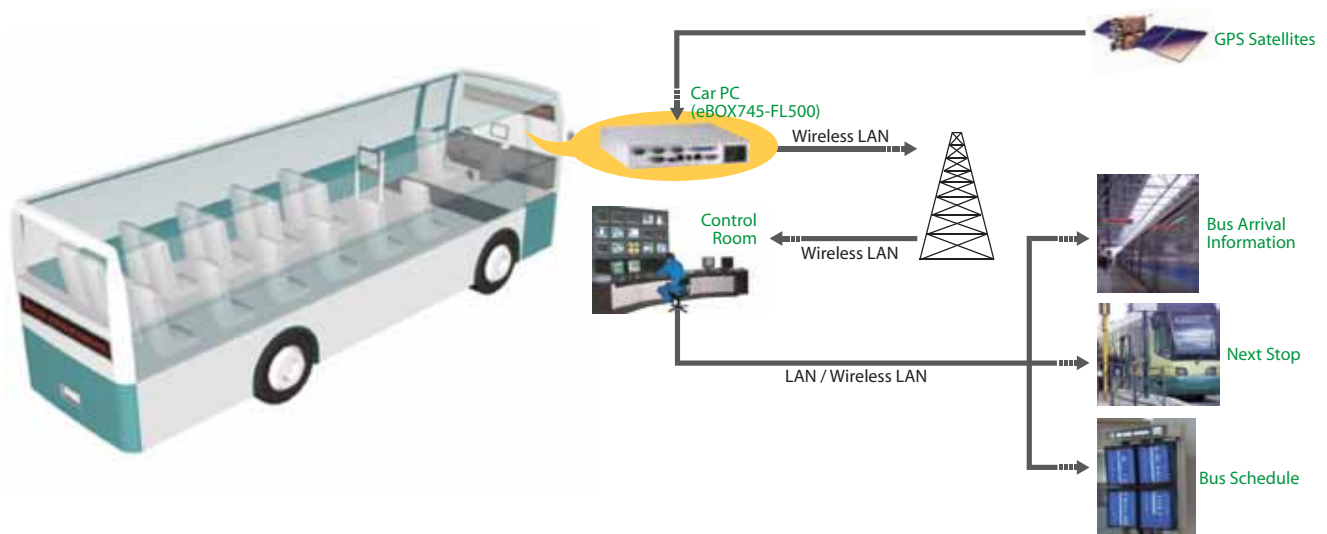
1. System Hardware: Car PC- embedded system (build-in GPS module and GSM/GPRS module), antenna and LCD panel
2. Navigation Software: GIS, GPS
3. Communication Software: GSM/GPRS for telematics

How the system works?

When Car PC in the bus is power-on, the system receives the GPS signal immediately. After compare with internal data, it displays current position of bus on LED display, and broadcast to passengers when parking or leaving. The Car PC also uploads information to control center via GSM/GPRS, and then, control center could position the bus location and display onto the map to estimate vehicle arrivals, which enhance whole bus management performance. Furthermore, predictions are also made available on the World Wide Web and to wireless devices including signs at bus stops, internet capable cell phones, and other Personal Digital Assistants (PDAs).

Our Solution

The challenge is how to shorten the sample lead time, and to offer a compact size embedded system with advantages like low power, fanless, rich I/O, full function, anti-vibration, wide range power-in. AXIOMTEK provides a customized eBOX745-FL500 as a Car PC solution. This customized Car PC includes a made to order wide range vehicle power, pre-installed WIFI card, antennas, GPS module (customer designated), and wide range temperature support. To improve MTBF, AXIOMTEK adopts low power consumption and fanless design to prevent from any damage of heat and dust. The Car PC also has past wide range of simulated temperature test to provide well quality when system being placed in a sealed car and exposed to the sun or operated in low temperature environments.





Fanless Embedded Systems (eBOX Series)



Model Name	eBOX600-FL	eBOX630-830-FL	eBOX630-821-FL	eBOX638-FL
Main Board	EP811	EP830	EP821	SBC83810
CPU	Intel® Celeron® M 600 MHz Intel® Celeron® M 1.0 GHz	ULV Intel® Celeron® M 1.06 GHz/1MB Intel® Core™2 Duo/ Core™ Duo/Core™ Solo/Celeron® M	ULV Intel® Celeron® M 600 MHz/512KB Intel® Pentium® M/Celeron® M	Intel® Celeron® M 600 MHz Intel® Celeron® M 1.0 GHz Intel® Pentium® M 1.1 GHz Intel® Pentium® M 1.4 GHz
System Memory	1 x 200-pin DDR SODIMM max. up to 1GB	1 x 200-pin DDR2 SODIMM max. up to 2GB	1 x 200-pin DDR2 SODIMM max. up to 1GB	1 x 184-pin DDR DIMM max. up to 1GB
COM Port	2	4	4	4
VGA Port	1	0	1	1
DVI Port	N/A	1 (optional 2)	0 (optional 1)	N/A
Parallel Port	1	0	0	1
PS/2 Connector	1	1	1	1
LAN Port	1	2	2	1
USB Port	4 (one optional for wifi)	4	4	4
CompactFlash™	1	1	1	1
2.5" HDD Drive Bay	1	1	1	1
PCI104	Yes	N/A	N/A	Yes
Watchdog Timer	Yes	Yes	Yes	Yes
Power Supply	12V _{dc} @ 2A and 5V _{dc} @ 4A	12V _{dc} 60W	12V _{dc} 60W	12V _{dc} /24V _{dc} ATX100W
Operating Temperature	-10°C to 50°C (with W.T. CF/HDD)	0°C to 50°C (with W.T. HDD)	0°C to 50°C (with W.T. HDD)	-10°C to 50°C (with W.T. CF/HDD)
Extended Temperature	N/A	N/A	N/A	Yes
Wall Mount	Yes	Yes	Yes	Yes
DIN Rail	N/A	N/A	N/A	N/A
Dimensions (W x D x H)	250 x 150 x 61mm (9.84" x 5.9" x 2.4")	280 x 150 x 67mm (11.02" x 5.91" x 2.64")	280 x 150 x 67mm (11.02" x 5.91" x 2.64")	180 x 230 x 126.2mm (7.09" x 9.06" x 4.98")
EOS Support	XPE, WinCE, Linux	XPE, WinCE, Linux	XPE, WinCE, Linux	XPE, WinCE, Linux
Certification	CE	CE	CE	CE
RoHS Compliance	Yes	Yes	Yes	Yes



Model Name	eBOX639-822-FL	eBOX646-FL500-4COM	eBOX647-FL	eBOX738-FL
Main Board	SBC86822	SBC84620	SBC84710	SBC83810
CPU	Intel® Celeron® M 1.0 GHz Intel® Pentium® M/Celeron® M	AMD LX800 500 MHz	VIA C7 1.5GHz	Intel® Celeron® M 600 MHz Intel® Celeron® M 1.5 GHz Intel® Celeron® M 1.0 GHz Intel® Pentium® M 1.1 GHz Intel® Pentium® M 1.4 GHz
System Memory	2 x 200-pin DDR2 DIMM max. up to 4GB	1 x 200-pin DDR SODIMM max. up to 1GB	1 x 200-pin DDR2 SODIMM max. up to 1GB	1 x 184-pin DDR DIMM max. up to 1GB
COM Port	6	4	4	4
VGA Port	1	1	1	1
DVI Port	N/A	N/A	N/A	N/A
Parallel Port	1	0 (optional 1)	1	1
PS/2 Connector	1	1	1	1
LAN Port	2	2	1	2
USB Port	6	3	2	2
CompactFlash™	N/A	1	1	1
2.5" HDD Drive Bay	1	N/A	N/A	1
PCI104	N/A	N/A	N/A	Yes
Watchdog Timer	Yes	Yes	Yes	Yes
Power Supply	15~30V _{DC} ATX160W	5V _{DC} 20W	12V _{DC} ATX60W	100W AC-in or DC-in
Operating Temperature	-10°C to 50°C (with W.T. CF/HDD)	-10°C to 50°C (with W.T. CF/HDD)	0°C to 50°C	-20°C to 50°C (with W.T. CF, AC P/S) -20°C to 50°C (with W.T. HDD, AC P/S)
Extended Temperature	N/A	N/A	N/A	Yes
Wall Mount	Yes	Yes	Yes	Yes
DIN Rail	N/A	N/A	Yes	N/A
Dimensions (W x D x H)	182 x 230 x 130.8mm (7.17" x 9.06" x 5.15")	200 x 150 x 44mm (7.8" x 5.9" x 1.73")	200 x 150 x 52.8mm (7.87" x 5.90" x 2.07")	225 x 275 x 90mm (8.86" x 10.83" x 3.54")
EOS Support	XPE, WinCE, Linux	XPE, WinCE, Linux	XPE, WinCE, Linux	XPE, WinCE, Linux
Certification	CE	CE	CE	CE
RoHS Compliance	Yes	Yes	Yes	Yes



Model Name	eBOX748-FL	eBOX748-820-FL	eBOX745-FL500	eBOX746A-FL
Main Board	SBC84810	SBC84820	SBC84620	SBC84710
CPU	Intel® Celeron® M 600 MHz Intel® Celeron® M 1.0 GHz Intel® Pentium® M 1.1 GHz Intel® Pentium® M 1.4 GHz	Intel® Celeron® M 1.0 GHz	AMD LX800 500 MHz	VIA Eden 1 GHz VIA C7 1.5 GHz
System Memory	1 x 200-pin DDR SODIMM max. up to 1GB	1 x 200-pin DDR2 SODIMM max. up to 2GB	1 x 200-pin DDR SODIMM max. up to 1GB	1 x 200-pin DDR2 SODIMM max. up to 1GB
COM Port	2 (optional, 4~8 COM)	2 (optional for More)	4	4
VGA Port	1	1	1	1
DVI Port	0 (optional 1)	0 (optional 1)	N/A	N/A
Parallel Port	1	1	1	1
PS/2 Connector	1	1	1	1
LAN Port	1	1	2	1 (optional 2)
USB Port	4	4	1	3
CompactFlash™	1	1	1	1
2.5" HDD Drive Bay	1	1	1	1
PCI104	N/A	N/A	N/A	N/A
Watchdog Timer	Yes	Yes	Yes	Yes
Power Supply	80W AC-in or 70W DC-in	80W AC-in or 70W DC-in	70W AC-in or DC-in	70W AC-in or DC-in
Operating Temperature	-10°C to 50°C (with W.T. CF, AC P/S) -10°C to 50°C (with W.T. HDD, AC P/S)	-10°C to 50°C (with W.T. CF, AC P/S) -10°C to 50°C (with W.T. HDD, AC P/S)	-20°C to 50°C (with W.T. CF, AC P/S)	-5°C to 50°C (with W.T. CF, AC P/S) -5°C to 50°C (with W.T. HDD, AC P/S)
Extended Temperature	Yes	N/A	Yes	N/A
Wall Mount	N/A	N/A	Yes	Yes
DIN Rail	N/A	N/A	Yes	Yes
Dimensions (W x D x H)	205 x 250 x 56mm (8.07" x 9.84" x 2.2")	205 x 250 x 56mm (8.07" x 9.84" x 2.2")	225 x 225 x 51mm (8.86" x 8.86" x 2.01")	225 x 225 x 63mm (8.86" x 8.86" x 2.48")
EOS Support	XPE, WinCE, Linux	XPE, WinCE, Linux	XPE, WinCE, Linux	XPE, WinCE, Linux
Certification	CE	CE	CE	CE
RoHS Compliance	Yes	Yes	Yes	Yes



eBOX830-831-FL	eBOX830-822-FL	eBOX830-831	eBOX832-831	eBOX832-840
SBC86831	SBC86822	SBC86831	SBC86831	SBC86840
Intel® Celeron® M/ Intel® Core™2 Duo (L7400)	Intel® Pentium® M/Celeron® M	Intel® Core™2 Duo/ Core™ Duo/ Core™ Solo/ Celeron® M	Intel® Core™2 Duo/ Core™ Duo/ Core™ Solo/ Celeron® M	Intel® Core™2 Duo/ Celeron® M
2 x 240-pin DDR2 DIMM max. up to 4GB	2 x 240-pin DDR2 DIMM max. up to 2GB	2 x 240-pin DDR2 DIMM max. up to 4GB	2 x 240-pin DDR2 DIMM max. up to 4GB	2 x 240-pin DDR2 DIMM max. up to 4GB
4	6	4	4	4
1	1	1	1	1
0 (optional 1)	0 (optional 1)	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
2	2	2	2	2
2	2	2	2	2
6	6	6	6	6
0	0	0	0	0
1	1	1	1	1
N/A	N/A	N/A	N/A	N/A
Yes	Yes	Yes	Yes	Yes
100W AC90~264V	100W AC90~264V	250W AC90~264V	250W AC90~264V	250W AC90~264V
0°C to 45°C (with W.T. HDD)	0°C to 45°C (with W.T. HDD)	0°C to 45°C (with W.T. HDD)	0°C to 45°C (with W.T. HDD)	0°C to 45°C (with W.T. HDD)
N/A	N/A	N/A	N/A	N/A
Yes	Yes	Yes	Yes	Yes
N/A	N/A	N/A	N/A	N/A
300 x 210 x 104.5mm (11.81" x 8.27" x 4.11")	300 x 210 x 104.5mm (11.81" x 8.27" x 4.11")	300 x 210 x 104.5mm (11.81" x 8.27" x 4.11")	300 x 210 x 104.5mm (11.81" x 8.27" x 4.11")	300 x 210 x 104.5mm (11.81" x 8.27" x 4.11")
XPE, WinCE, Linux	XPE, WinCE, Linux	XPE, WinCE, Linux	XPE, WinCE, Linux	XPE, WinCE, Linux
CE	CE	CE	CE	CE
Yes	Yes	Yes	Yes	Yes