

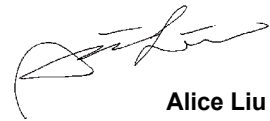
2008

APPLIED  
COMPUTING  
SOLUTIONS

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# About Avalue

Since established in 2000, Avalue has spent much effort providing both customers and employees benefits and satisfactions. We not only expect ourselves to be a leader in this industry, we also create a very good working environment; because I believe a successful enterprise is not just making lots of money or having a big company. It is having a stable company with steady growth, and having an excellent reputation. I hope that Avalue will be like this kind of business.



**Alice Liu**  
President





# Why Avalue

## ❖ Missions

Avalue delivers intelligent embedded solutions and services to satisfy our customers and keep them ahead in their line of business. No matter if it is a modification to an existing standard product or a pure idea from conceptual scratch, our design team is aimed to achieve every need of customer requirements.

We believe strong organization, innovative technologies, and complete manufacturing processes will results in efficiency, cost-savings, and customers' delight.

## ❖ Expertise

With a well integrated hardware and software design team, Avalue provides not only the most outstanding technologies in embedded industry, also customized solutions. Besides, benefiting from organized manufacturing planning and strict process controls and post-sales services, we have built up the long-term relationships with customers.

In the future, we expect ourselves to accurately predict the market trend and learn about the latest technologies to enhance and maximize the benefits to both of our customers and us.





# Board Solutions

**Product Longevity**  
**Revision Control**  
**Embedded OS Support**  
**OEM/ODM Services**

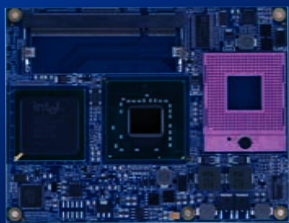
## Board Solution Map

You name it, we make it. Avalue designs and manufactures a full range of "tailored made" single board computers. Our aim is to satisfy various system requirements. Starting with a glance at the board solution map illustrated herein, you can be sure that the Avalue design team is fully prepared to listen to you and fulfill all your custom design needs.

- \* x86 Platform
- \* COM/ETX 30-day Prototyping
- \* Embedded OS Supports
- \* RoHS Compliance

**More tailor-made features upon request**

### Intel® GME965 High Performance



#### ESM-GM965 Intel® Core™ 2 Duo ETXexpress Module

- Intel® GME965 / ICH8-M Chipset
- LVDS, Dual View, HDTV
- GigaLAN
- 4 PCI, 1 PCIe x 16, 3 PCIe x 1
- 2 SATA, 8 USB, 8 GPIO

### AMD LX800 @ 0.9W Low Power Consumption



#### ECM-LX800 AMD Geode LX800 3.5" SBC

- AMD Geode LX800 / CS5536 Chipset
- TFT / LVDS, Dual View
- Dual LAN, 1 PCI-104, CF
- 4 COM, 4 USB, 16 GPIO
- Fanless Operation

### VIA CX700M Power Saving with Multimedia



#### EBM-CX700 VIA Eden CX700M 5.25" SBC

- VIA CX700M Chipset
- CRT, DVI, LVDS, HDTV, 5,1-CH Audio
- LAN, Optional Dual GigaLAN
- 2 COM, 2 SATA, 6 USB, 16 GPIO
- Fanless Operation



# Board Solution Map

## Core™ 2 Duo High Performance

### ETX & ETXe

ESM-GM965, ESM-945GM,  
ESM-945ETX

### 3.5" SBC

ECM-GM965,  
ECM-945GM

### 5.25" SBC

EBM-945GM

### IMB

EMX-965GME, ERX-945G  
EMX-965GME3, EAX-945G  
ERX-965Q  
ERX-965Q2

## Low Power Consumption

### ETX

ESM-2545

### 3.5" SBC

ECM-LX800

### EPIC

EPI-LX800

### 5.25" SBC

EBM-LX800

### PC/104

ETM-LX800

### IMB

EMB-9655

## Multimedia

### PCIe x 16

### ETXe

ESM-965GM, ESM-945GM,  
ESM-2850, ESM-CN896

### 5.25" SBC

EBM-945GM, EBM-LX800

### IMB

ERX-965Q, ERX-945G  
ERX-965Q2, EAX-945G

### MPEG2/4/WMV9

### ETX & ETXe

ESM-CN896, ESM-CN700

### 3.5" SBC

ECM-CX700, ECM-CN700R

### EPIC

EPI-CX700

### 5.25" SBC

EBM-CN896, EBM-CX700

### HDTV

### ETX & ETXe

ESM-GM965, ESM-945GM,  
ESM-2850, ESM-945ETX  
ESM-CN896 ( option )

### 3.5" SBC

ECM-GM965, ECM-945GM,  
ECM-CN700

### EPIC

EPI-CX700

### 5.25" SBC

EBM-945GM, EBM-CX700

## System Solution Map

Avalue has developed a full range of modular-design, barebone systems to offer its customers the major advantages of affordable cost, rapid development, and scalable flexibility in system performance. All enclosures are designed with a high quality cooling mechanism that increases heat transfer efficiency. Avalue offers these fanless designs to ensure high reliability for any space or thermal concerned application.

### Showcase

#### ASM-CX700 ASM-ETX Series



#### EPC-3711 / EPC-CX700 / EPC-945GM



Size	7.2" x 10.1" x 1.0" (182 x 257 x 25 mm)		7" x 4.4" x 2.0" (178 x 112 x 50 mm)	
Fanless	Yes (0-40°C)		Yes (0-40°C)	
System Core	<b>5.25" SBC</b> EBM-CX700 <b>ETX CPU Module</b> ESM-945ETX, ESM-910ETX ESM-2740, ESM-2743, ESM-2545		<b>3.5" SBC</b> ECM-3711: VIA Eden V4 1 GHz ECM-CX700: VIA Eden V4 500 MHz	
			<b>3.5" SBC</b> ECM-945GM: Intel® 945GME Core™ Duo / Core™ 2 Duo CPU	
Multimedia	VGA, 5.1-CH Audio, MPEG2/4 and WMV9 Optional DVI, TV-out, 2 W Amplifier		VGA, 5.1-CH Audio, 2D/3D Graphic Engine, TV-out for EPC-CX700	
Ethernet	LAN, Optional Dual GigaLAN		Dual LAN or Dual GigaLAN	
I/O & Expansion	1 Mini PCI, 4 USB, 1 CF, 1 COM, SATA		1 Mini PCI, 3 USB, 1 CF, 1 COM, SATA	
Installation	Panel Mount (VESA Compliance)		Desktop, Wallmount, DIN Rack Mount, Panel Mount (VESA Compliance)	
Power Requirement	+12V		+5V	



**Faster Time-to-Market**  
**Scalable Performance**  
**High Reliability**  
**Small Footprint**

Showcase

EES-3720 / EES-3723

EES-3000 series



Size	8.89" x 5.94" x 2.91" (226 x 151 x 74 mm)	9.8" x 6.1" x 2.6" (249 x 155 x 67 mm)
Fanless	Yes (0-40°C)	Yes (0-40°C)
System Core	<b>EPIC SBC</b> ECM-3720: Intel® Pentium® 1 GHz ECM-3723: Intel® Celeron® 600 MHz EPI-CX700: VIA Eden V4 CX700M 1 GHz ECM-3721: VIA Eden V4 CN700 1 GHz ECM-LX800: AMD Geode LX800	<b>3.5" SBC</b> ECM-3711: VIA V4 Eden 1 GHz ECM-3512: AMD Geode GX466
Multimedia	VGA, 5.1-CH, Dual View, Optional LVDS	VGA, AC97 Audio
Ethernet	Dual LAN	Dual LAN or Dual GigaLAN
I/O & Expansion	1 COM, 4 USB	2 COM, 2 USB, SATA, 1 CF
Installation	Desktop, Wallmount	Desktop
Power Requirement	+12V	+5V

# Medical Solutions

## Showcase



### MTP-1201

#### Medical Touch Panel PC

- 12" TFT LCD Display, Shatterproof Touch-Screen
- RTL8110S GigaLAN
- 1 External PCI, 1 Internal Mini PCI
- 2 COM, 4 USB 2.0, 1 Type I/II CF



## Showcase



### ZIVO™ MTP-1502

#### Smart Terminal with Touch Screen

- 15.1" Touch Screen
- VoIP Telephony
- Internet Accessible
- SmartCard Security
- Entertainment Selector
- Optional Bluetooth or Wi-Fi



### ZIVO™ OTP-1502

#### Open-frame Touch Panel Computer

- 15.1" XGA TFT
- Intel® Pentium® M CPU
- 5-wire Touch Screen
- Built-in 512 MB DDR SDRAM
- 40 GB 2.5-in HDD
- LAN, Audio, Mini-PCI
- 4 USB, 15 GPIO

## Showcase



### obie™ MTP-1702

#### Slim Touch Panel Computer

- 17" Touch Screen
- Superior Multimedia
- VoIP Telephony
- Optional SmartCard
- Optional Web Camera
- Optional MSR
- Optional Bluetooth (available soon)

One-Stop-Shop  
Quicker Time to Market  
Lower Startup Costs  
Proven Development Expertise

## Medical Solution Map

Leveraging from the best practices and methodology, Avalue provides a full set of product development services from beginning to end in any project. A series of smart touch panel PCs have been developed in response to the current fast-growing demand for instant information access, entertainment, and e-business transactions. These innovative terminals are designed for maximum flexibility and versatility, and can be customized to offer a unique and compelling system using our medical service.

- Industrial Design
- Mechanical Design
- 3D Pro Engineering Preview
- Plastic Molding
- System Thermal Analysis
- Reliability Testing



- |   |  |
|---|--|
| <b>1</b> 1.3 M CMOS Web Camera (optional)       | <b>7</b> Front Panel sealing   |
| <b>2</b> 5 wire resistive touchscreen           | <b>8</b> Intel® Celeron® M Ultra Low power Processor<br>600 MHz or 1 GHz with 512KB cache        |
| <b>3</b> High bright TFT display                | <b>9</b> Intel® Extreme Graphics 2 technology delivers<br>intense, 3D graphics with sharp images |
| <b>4</b> Custom button configurations           | <b>10</b> Docking Ports for optional accessories   |
| <b>5</b> Magnetic Stripe Reader (MSR, optional) | <b>11</b> Removable access panels  |
| <b>6</b> VoIP Telephone (optional)              |  |



# obie™ MTP-1702 17" Terminal

- Multimedia
- VoIP
- Internet
- Smart Card
- Magnetic Stripe Reader
- Touch Screen
- Web Camera
- Wireless
- Fanless Operation

## ID Development

The Avalue team uses computer-based modeling, simulations, and visualization techniques to test different solutions that satisfy functional, aesthetic and ergonomic considerations. The MTP-1702 terminal has a slim-line design and a modern sleek look that is adaptable to a diverse range of environments.

## Modular Configuration

Avalue can also apply modular architecture to maximize system flexibility. The MTP-1702 series is designed to be flexible enough for many custom configurations. Modular features include options for a magnetic strip card reader, SCR, VOIP, Bluetooth, RFID, barcode scanner, and more.

## User-friendly Design

MTP-1702 utilises state-of-the-art touch screen and flat panel display technology to deliver exceptional image quality and accurate interaction with the terminal. Users can use a fingertip, stylus, or credit card for easy and efficient operation.

## Networked Functionality

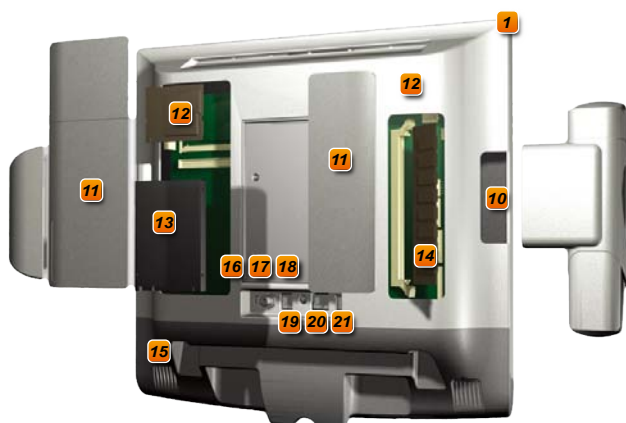
Equipped with the latest LAN chip and mini-PCI slots, MTP-1702 is geared to high-speed LAN connectivity. Bluetooth enabled and RFID options can respond to present and future information distribution and Internet application needs.

## Flexible Expansion

2 USB and a serial port will accommodate a variety of external peripherals available from the front panel of the terminal. The rear panel supports LAN, RJ-11, coax USB 2.0 and video/audio in.

## Versatile Installation

Flexible mounting accessories allow installation of the MTP-1702 terminal in various locations. Options include wall mount brackets, desk stands and articulating arms that interface with the MTP-1702 terminal VESA mounting arrangement on the rear.



- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li><b>12</b> Wireless connectivity options for Bluetooth, RFID and even GSM/GPRS applications</li> <li><b>13</b> Accepts 40GB hard disk drive/IDE disk on Module</li> <li><b>14</b> Access to memory for upgrading</li> <li><b>15</b> Integrated stereo speakers for high-quality audio</li> <li><b>16</b> Mini USB connector custom configured for Video/Audio in</li> <li><b>17</b> Coaxial connector for analog/digital video delivery (optional)</li> </ul> | <ul style="list-style-type: none"> <li><b>18</b> RJ-11 connector for future usage</li> <li><b>19</b> Power provided via AC/DC PSU for increase reliability/maintenance</li> <li><b>20</b> Integrated 10/100 Ethernet provides the speed and bandwidth for LAN communications and Internet access</li> <li><b>21</b> USB 2.0 for connection to optional devices</li> <li><b>22</b> Industry standard VESA mounting for arms, stands and wall brackets</li> <li><b>23</b> Smart Card reader SCR (optional)</li> </ul> | <ul style="list-style-type: none"> <li><b>24</b> Integrated 2D barcode Scanner (optional)</li> <li><b>25</b> Headset port</li> <li><b>26</b> Microphone port</li> <li><b>27</b> Two high-speed USB 2.0 ports</li> <li><b>28</b> 15 way Dsub</li> <li><b>29</b> Air inlet</li> </ul> |
|---|---|---|

# » POS/Kiosk/Signage Solutions

## ahis Series

The Avalue ahis series Panel PC is a versatile and comprehensive system which offers high performance, scalable board options and industrial-grade durability. Slim design and customizable installation options make it easy to integrate the system into virtually any space design. This cost-effective and versatile solution is ideal for today's fast growing widescreen presentation applications such as Kiosk, information terminal and digital signage.

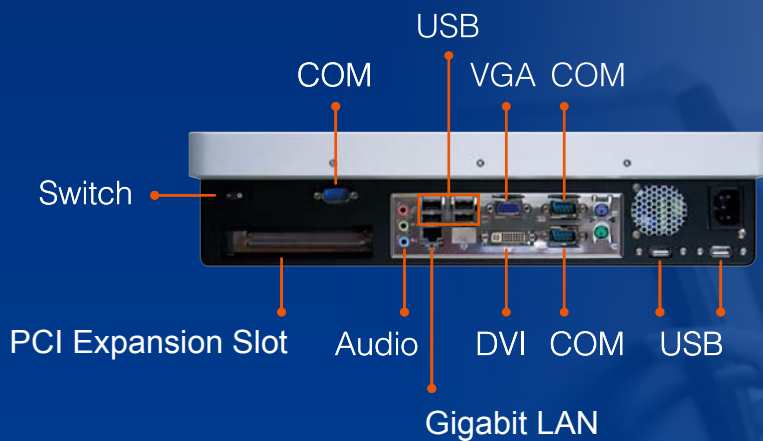


- Applications and solutions with enhanced functionality.
- Conventional 4:3 LCD or Wide Screen 16:9 LCD, Touch function.
- Gigabit LAN, Optional Wireless LAN.
- Multi-media, recording and monitoring powered by Intel CPU and advanced graphics technologies.
- Rich I/O and legacy support for the connection of external devices, wide expansions and system integration.
- Modular design to increase system flexibility, cost-savings, ease of maintenance and speed of prototype delivery.
- Maximizes customers' investment return by offering Windows Embedded for Point of Service (WEPoS) and software support.
- Outstanding hardware designs with VESA compliant, compact size, smart thermal solutions, green materials (RoHS, lead-free) and ID design.



## Fast Prototyping Service

Based on modular design concept, this series products come 80% ready in case design and scalable PC board options. This helps the customer to reduce development time at least by half.



## Taylor-made to your requirement

Avalue designs and manufactures a full range of tailor-made all-in-one boards and all-in-one systems for POS/Kiosk. Our aim is to satisfy various POS/Kiosk application requirements. Starting with a glance at the board solution and System Solution illustrated herein, you can be sure that the Avalue design team is fully prepared to listen to you and fulfill all your custom design needs.

## Modular Configuration

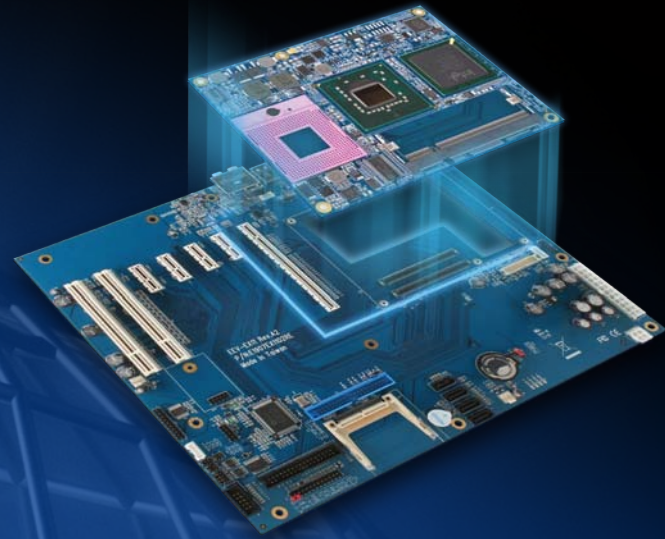
If you are looking for a reliable Panel PC solution that meets your specific requirements within your budget and time constraints, you can count on Avalue's this series products. Avalue Panel PC products offer versatile customization options while significantly reducing development cost.

# » Design Services

## A Team of IPC Experts

### Intelligence, Experience & Excellence

With a wealth of experience in the IPC industry, Avalue's design and development team is capable to quickly transform the customer ideas into viable computing solutions. Our team is skilled in streamlining the development process and develops most products with seamless integration between hardware and software. Customers can therefore focus on their core business, knowing that less time will be spent on prototyping. This integrated service creates an increase in the overall efficiency and time-to-market advantage.



Project Initiation & Evaluation



Specification Development



Quotation & NRE



#### Board Design

- Schematic
- PCB Placement / Layout / Assembly
- Design Qualification by Compatibility Testing
- Environmental Test
- EMI / EMC Test
- Associated Documentations
- Pilot Run



## • 30-day Baseboard Prototyping Service

### 80% Standard, 20% Tailor-made

The ETX Computer on Module (COM) series offers fast customization. We deliver a 30-day prototype with a two-phase design, 80% standard and 20% tailor-made upon request. This saves customers at least 60% in both development time and cost. Avalue's ETX products and baseboard prototyping service (BPS) delivers timely products with more flexibility, scalability and reliability.

- 1 > **Select COM Engine**  
Test different ETX CPU modules to meet your system requirements
- 2 > **Select Function Block**  
Choose interfaces for storage device connection or use them for software compatibility tests  
  
Select expansion slots for extra system functions
- 3 > **Select I/O Connectors**  
Identify various I/O interfaces for external peripheral connections
- 4 > **Draft PCB Placement**
- 5 > **Confirm Specification**
- 6 > **NRE Charges**
- 7 > **30 Working Days**
- 8 > **Complete 3 pieces of Engineering Samples**



# Avalue Design Services



Technical Support



Logistic Service



Manufacturing



Customer Testing & Confirmation



Software Support & Service



## System Design

- Mechanical Design
- Mock-up / Engineer Sample
- Function / Thermal Test
- EMI / EMC Test
- UL Certification
- Tooling
- Pilot-run



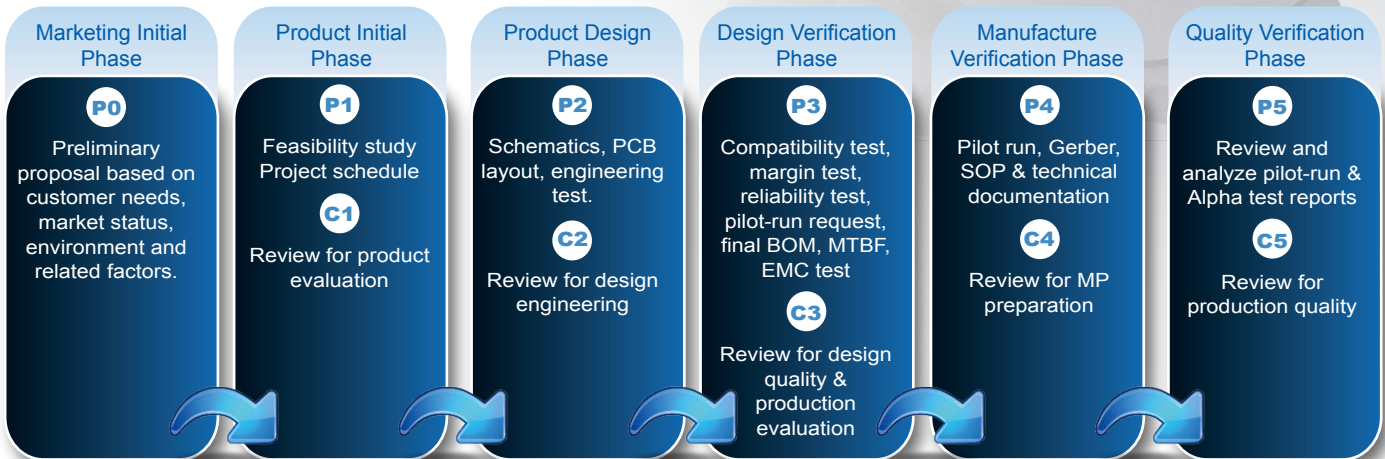
## Industrial Design

- Initial Requirements
- Concept Sketches
- Concept in Renderings
- Design Refinement / CAID
- Color, Texture and Icon Definition
- Mock-up Samples

## • New Product Development Process

### Optimized Design-to-production Process with Quality & Efficiency

Avalue has established the New Product Development Process (NPDP) to optimize project output, and shorten the product development cycle. It is oriented toward customer demands and market opportunities. The NPDP integrates all development capacities and resources throughout the company, including planning, projecting and implementation. The result of this integration is a full optimization of the product design for volume manufacturing and quality fulfillment.



# » Manufacturing

## Green Manufacturing

Avalue conducts its business in a manner that respects, preserves, and improves the environment. The company is committed to total quality management that applies to a full range of manufacturing and design services. Also, Avalue is devoted to approaching green manufacturing aimed at reducing the energy and hazardous material throughout the product life span, starting from original design, component acquisition, manufacturing, all the way through its transport, usage, and disposal.

- Lead (Pb) Free
- RoHS (Restriction of Hazardous Substances )
- Hazardous Substance Control
- Green Products

## Approaches to RoHS Compliance

According to RoHS directive (2002/95/EG), Avalue has initiated a series of action plans to comply with RoHS regulations since 2004. The first RoHS compliance product has been assessed by third party laboratory with successful qualification in August 2005. The report verifies the facts that Avalue is capable to monitor RoHS manufacturing process, and ensures its manufacturing achieves 100% lead-free quality. Check for regular status updates available online at the Avalue website.

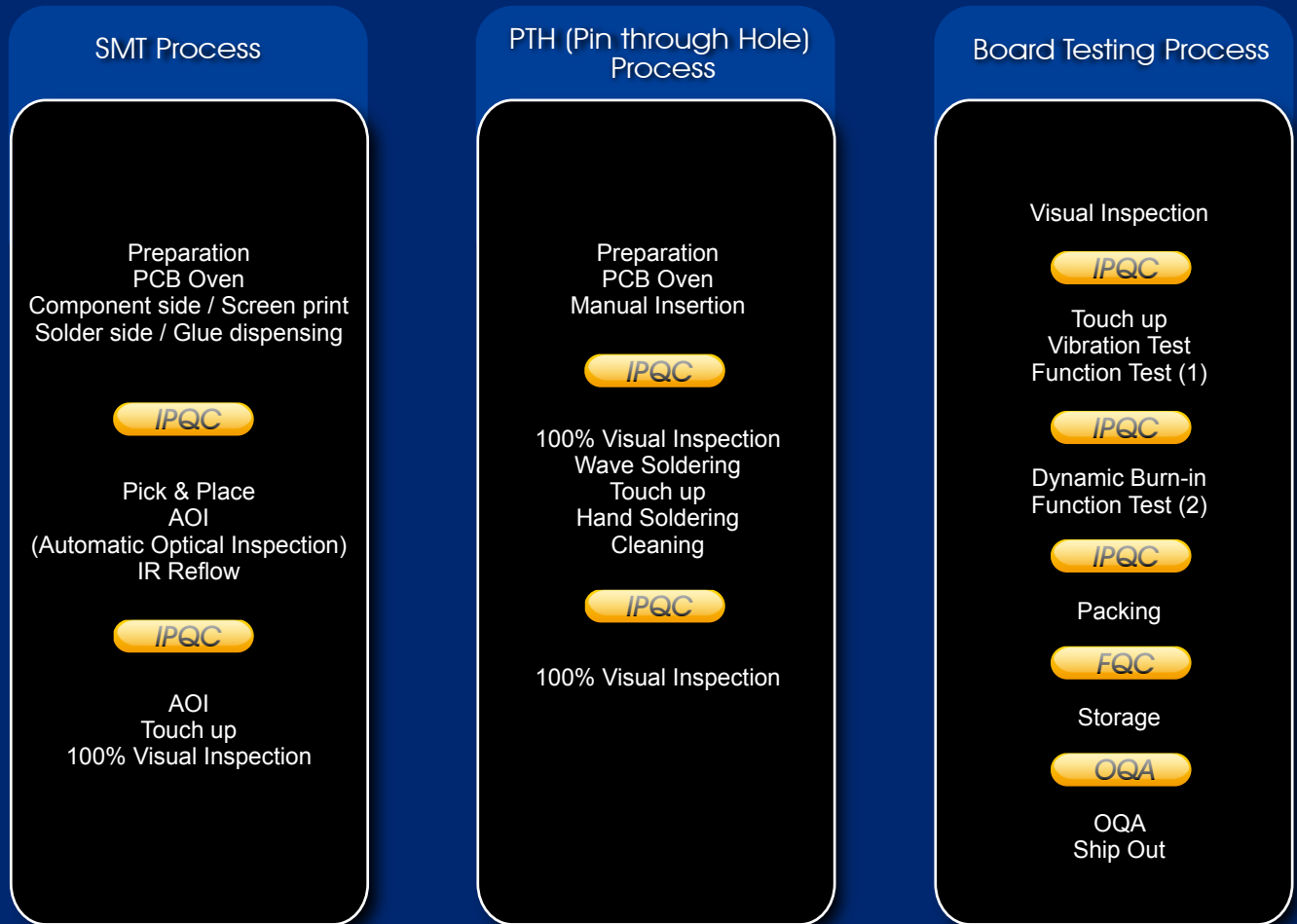


## Component Quality Control

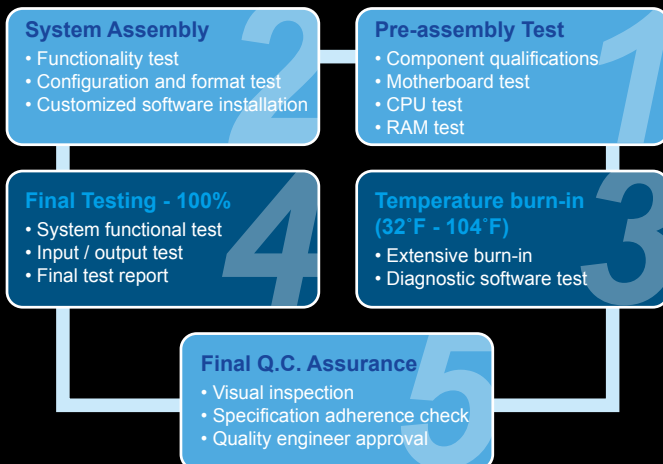
Avalue applies handheld XRF (X-ray fluorescence) analyzer to detect the banned substances from incoming inspection to component release. It becomes a standard procedure to accurately examine alloy grades based on the elemental composition, and therefore ensure all components qualified with RoHS compliance.



# Board Manufacturing & QC Processes



## System QC Processes



## Quality standard set for customer satisfaction

Customer satisfaction and quality management are at the top of Avalue's priority list. Avalue considers customer satisfaction in every aspect of quality control and implements a quality assurance system throughout the entire product life cycle. Every model strictly complies with CE, FCC and other certified standards. All business processes are conducted in accordance with ISO-9001 standards to ensure quality assurance.

Test Item	Test Standard
EMI (Electromagnetic Interface)	EN 50022, class A    EN 61000-3-2 EN 61000-3-3        FCC Part 15, class A
EMS (Electromagnetic Discharge)	EN 55024
MTBF	MIL-HDBK-217F Bellcore Issue 6
Software Compatibility	NSTL System Diagnostics / Benchmark Test Program

# » Support & Services

Support & Services

## Sales Services

### Listen & Respond to Your Needs

Avalue's sales people listen to customer needs, and provide the best-fit advice to the needs with their in-depth experience. A full analysis of system requirements will be carried out from the project study throughout the project implementation. We greatly value the opportunity to respond to customer inquiries, so please do call any of our worldwide branches, or write to us at [sales@avalue.com.tw](mailto:sales@avalue.com.tw). Our sales staff is committed to responding to any of your inquiries within 24 hours during working day.

## Technical Services

### Carefree System Development

Avalue offers a 24/7 technical database service right at your fingertips. Simply click to access our service Web site at [www.avalue.com.tw](http://www.avalue.com.tw). The web site provides the most update information and free download services including BIOS, drivers, utilities, reference manuals, and data sheets.

## e-RMA Service

### Hardware Warranty Support

Avalue provides eRMA (Return of Material Authorization) service that helps the customers to return the defective products with easy and interactive operation. This real-time service allows customer to submit RMA requests and check the status online. Customers may check the online flash user-guide for the complete process demonstration, or write to us at [rma\\_service@avalue.com.tw](mailto:rma_service@avalue.com.tw) if any question.



### Avalue Service

Sales service	<a href="mailto:sales@avalue.com.tw">sales@avalue.com.tw</a>
Technical service	<a href="mailto:service@avalue.com.tw">service@avalue.com.tw</a>
e-RMA service	<a href="mailto:rma_service@avalue.com.tw">rma_service@avalue.com.tw</a>



# Software Services



## Commitment to intensive OS test and support

Extending Avalue's proven expertise for embedded hardware platforms, Avalue has built up a sound capability in embedded OS support. All hardware products are delivered with certified device drivers with optional preinstalled Embedded WinCE.NET or Embedded Linux.

## Microsoft Embedded Windows OS

As a valued Windows Embedded Partner (WEP), Avalue provides Microsoft embedded OS consulting, training, and support. Avalue is authorized with board manufacturer limited distribution right for the latest Windows CE.NET as well as Windows XP/2000/NT Embedded.



## Embedded Linux OS

Nearly all Avalue products will support the Linux operating system. Though Avalue's Linux support is limited to driver availability, Avalue has developed business relationships with system integrators who specialize in developing Linux solutions.

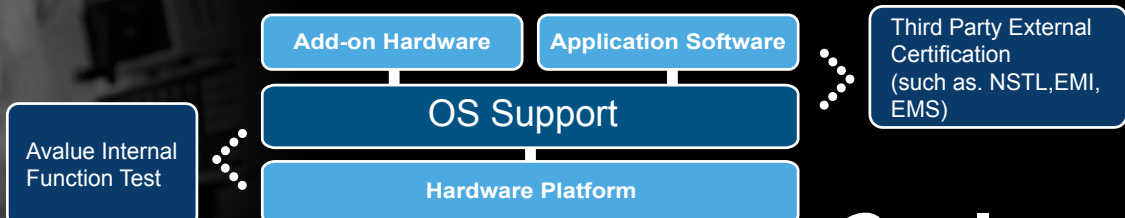


## Avalue Software Services

- OS-Verified with Avalue Products > Microsoft Embedded Windows OS > Open Source Linux OS
- Intensive OS Tests in Design Phase > Internal by QE Department > External by NSTL Verified Test Lab
- Application Software Options > Custom Application Software such as for Set top boxes, Thin servers and so on > Design & Integratio

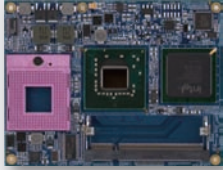


## Avalue OS Test



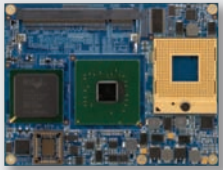


# Computer-On-Module



## ESM-GM965 NEW Intel® GME965 Core™ 2 Duo COM Express Module

- Intel® GME965 / ICH8-M Chipset
- Dual View, 2 -CH LVDS, TV-out, HDTV, HD Audio
- Broadcom BCM5786 GigaLAN
- 4 PCI, 5 PCIe x 1, 1 PCIe x 16
- 3 SATA, 8 USB, 8 GPIO



## ESM-945GM NEW Intel® 945GME Core™ 2 Duo COM Express Module

- Intel® 82945GME / ICH7-M Chipset
- LVDS, Dual View, TV-out, HDTV, HD Audio
- Marvell 88E8053 GigaLAN
- 4 PCI, 1 PCIe x 16, 3 PCIe x 1
- 2 SATA, 8 USB 2.0, 8-bit GPIO



## ESM-CN896 NEW VIA CN896 Eden V4 COM Express Module

- VIA CN896 / VT8251 Chipset
- Dual View, 2-CH LVDS, Optional TV-out  
MPEG-2 Decoder
- Marvell 88E8053 PCIe GigaLAN
- 4 SATA, 8 USB 2.0, 8-bit GPIO
- Fanless Possible Operation



## ESM-945ETX NEW Intel® 945GME Core™ 2 Duo ETX Module

- Intel® 945GME / ICH7-M Chipset
- ETX 3.0
- LVDS, Dual View, AC'97 Audio, LAN
- 4 PCI, 1 ISA
- 2 SATA, 4 USB 2.0, 2 COM



## ESM-910ETX NEW Intel® 910GMLC Celeron® M ETX Module

- Onboard Intel® Celeron® M 600 MHz
- Intel® 910GMLC / ICH6-M
- CRT + LVDS, Dual View
- Realtek ALC203, LAN
- 2 COM, 4 USB 2.0
- Fanless Operation

## COM Express Module

COM Express: 5" x 3.7" (125 mm x 95 mm)	
<b>Model Number</b>	<b>ESM-GM965</b>
<b>Page No.</b>	P. 1-5 <span>NEW</span>
<b>CPU</b>	Supports 65nm Intel® Core™ 2 Duo
<b>System Chipset</b>	Intel® GME965 / ICH8-M
<b>I/O Chip</b>	n/a
<b>System Memory</b>	One SODIMM up to 2 GB DDR2 400/533/667 SDRAM
<b>Display</b>	Intel® GME965, Dual View
<b>LVDS</b>	2 x 18/24-bit
<b>TV-out</b>	Intel® GME965 Integrated, HDTV
<b>Audio (Codec)</b>	n/a
<b>10/100M LAN</b>	n/a
<b>Gigabit LAN</b>	Broadcom BCM5787
<b>Expansion</b>	4 PCI, 5 PCIe x 1, 1 PCIe x 16
<b>HDD Interface</b>	3 SATA, 1 x EIDE
<b>USB</b>	8 x USB 2.0
<b>Serial Port</b>	n/a
<b>DIO</b>	4-bit GPI and 4-bit GPO

## ETX Module

ETX: 4.5" x 3.7" (114 mm x 95 mm)	
<b>Model Number</b>	<b>ESM-945ETX</b>
<b>Page No.</b>	P.1-10 <span>NEW</span>
<b>CPU</b>	Supports 65nm Intel® Core™ Duo / Core™ 2 Duo / Celeron® M CPU
<b>System Chipset</b>	Intel® 945GME / ICH7-M
<b>I/O Chip</b>	Winbond W83627HG-AW
<b>System Memory</b>	One SODIMM up to 2 GB DDR2 400/533/667 SDRAM
<b>Display</b>	Intel® 945GME, Dual View
<b>LVDS</b>	2 x 18/24-bit
<b>TV-out</b>	Intel® 945GME Integrated, HDTV
<b>Audio (Codec)</b>	Intel® 82801GHM ICH7-M
<b>10/100M LAN</b>	Realtek 8101E
<b>Gigabit LAN</b>	n/a
<b>Expansion</b>	4 PCI, 1 ISA
<b>HDD interface</b>	1 x EIDE, 2 x SATA
<b>USB</b>	4 USB 2.0
<b>Serial Port</b>	2 x TTL
<b>DIO</b>	n/a





# Computer-On-Module

## COM Express Carrier Board

COM Express: 5" x 3.7" (125 mm x 95 mm)

ESM-945GM	ESM-CN896	ESM-2850
P. 1-6 <b>NEW</b>	P. 1-7 <b>NEW</b>	P. 1-8
Supports 65nm Intel® Core™ Duo / Core™ 2 Duo / Celeron® M CPU	Onboard VIA Eden V4 500 MHz CPU	Supports 90nm Intel® Pentium® M / Celeron® M CPU
Intel® 945GME GMCH / ICH7-M	VIA CN896 / VT8251	Intel® 915GM GMCH / 82801FBM ICH6-M
n/a	n/a	n/a
One SODIMM up to 1 GB DDR2 400/533/667 SDRAM	One DDR2 SODIMM up to 1 GB DDR2 400/533 SDRAM	One DDR2 SODIMM up to 1 GB DDR2 400/533 SDRAM
Intel® 945GME, Dual View	VIA ProSavage CN896, Dual View	Intel® 915GM GMCH, Dual View
2 x 18/24-bit	2 x 18/24-bit	2 x 18/24-bit
Intel® 945GME Integrated, HDTV	VIA VT1625, HDTV	Intel® 915GM Integrated HDTV
n/a	n/a	n/a
n/a	n/a	n/a
Marvell 88E8053	Marvell 88E8053	Marvell 88E8053
4 PCI, 3 PCIe x 1, 1 PCIe x 16	n/a	4 PCI, 1 PCIe x 16, 3 PCIe x 1
2 SATA, 1 x EIDE	4 SATA, 2 x EIDE	2 SATA, 1 x EIDE
8 x USB 2.0	8 x USB 2.0	8 x USB 2.0
n/a	n/a	n/a
4-bit GPI and 4-bit GPO	4-bit GPI and 4-bit GPO	4-bit GPI and 4-bit GPO

ATX Size: 12" x 7.9" (305 mm x 240 mm)

Model Number	EEV-EX11
Page No.	P. 1-9
CPU Module Socket	COM Express
I/O Chip	Windbond W83627HG-AW
SSD	Type I/II CF
Expansion	2 PCI, 4 PCIe x 1, 1 PCIe x 16, 4 SATA
CardBus	n/a
LVDS Connector	One HIROSE DF13-40DP-1.25 V
TV-out Connector	3 x 2, pitch 2.54 mm header x 1
Audio Connector	Mic in, Line in, Line out audio jacks
External Connector	PS/2 K/B (mini DIN), PS/2 Mouse (mini DIN), 2 double deck USB, RJ-45, LPT 1 (DB-25), COM 1 (DB-9), COM 2 (DB-9), VGA (DB-15), & Mic in, Line in, Line out audio jacks
Power Connector	ATX

ETX: 4.5" x 3.7" (114 mm x 95 mm)

ESM-910ETX	ESM-2740	ESM-2743	ESM-CN700	ESM-2545
P. 1-11 <b>NEW</b>	P. 1-12	P. 1-13	P. 1-14	P. 1-15
Onboard Intel® Celeron® M 600 MHz	Supports 90nm Intel® Pentium® M / Celeron® M CPU	Onboard Intel® Celeron® M 600 MHz with 512K L2 Cache	Onboard VIA Eden V4 1 GHz	Onboard AMD Geode LX800 @ 0.9 W with 128K L2 Cache
Intel® 910GML / ICH6-M	Intel® 82855GME GMCH / 8201DB ICH4	Intel® 82852GM GMCH / 82801DB ICH4	VIA CN700 / VT8237R+	AMD Geode LX800 / CS5536
Winbond W83627HG-AW	Winbond W83627HG	Winbond W83627HG-AW	VIA VT1211	Winbond W83627HG-AW
One SODIMM up to 1 GB DDR2 333/400 SDRAM	One SODIMM up to 1 GB DDR 200/266/333 SDRAM with ECC	One SODIMM up to 1 GB DDR 200/266 SDRAM	One SODIMM up to 1 GB DDR2 400/533 SDRAM	One SODIMM up to 1 GB DDR 333/400 SDRAM
Intel® 910GML, Dual View	Intel® 82855GME, Dual View	Intel® 82852GM, Dual View	VIA CN700, Dual View	AMD Geode LX800
2 x 18/24-bit	2 x 18/24-bit	2 x 18/24-bit	2 x 18/24-bit	1 x 18-bit (Optional 24-bit)
n/a	Chrontel CH7011, NTSC / PAL	Chrontel CH7011, NTSC / PAL	VIA VT1622A, NTSC / PAL	n/a
Realtek ALC203	VIA VT1616, 5.1-CH	VIA VT1616, 5.1-CH	VIA VT1616, 2-CH	Realtek ALC203, 2-CH
Realtek 8101E	Realtek RTL8101L	Realtek RTL8101L	Realtek RTL8101L	Realtek RTL8101L
n/a	n/a	n/a	n/a	n/a
4 PCI, ISA	4 PCI, ISA, SIRQ	4 PCI, ISA, SIRQ	4 PCI, ISA, SIRQ	4 PCI, 4 ISA
1 x EIDE, 2 x SATA	2 x EIDE	2 x EIDE	2 x SATA, 2 x EIDE	1 x EIDE
4 USB 2.0	4 x USB 2.0	4 x USB 2.0	4 x USB 2.0	4 x USB 2.0
2 x TTL	2 x TTL	2 x TTL	2 x TTL	2 x TTL
n/a	n/a	n/a	n/a	n/a

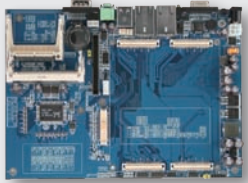
# ETX Carrier Board & EPIC SBC



## EAP-EX95 NEW

Mini ITX Carrier Board for ETX

- Battery Backup 512K x 2 SRAM
- Security IC Protection
- JAMMA Interface
- LAN, AC'97 Audio, 1 CF II
- 4 COM, 4 USB, 64-bit GPIO



## EAP-EX52 NEW

5.25" Slim Carrier Board for ETX

- VGA / LVDS / Audio / TV-out Interface
- LAN, optional 1 GigaLAN
- 2 RS-232, 8-bit GPIO
- 1 Mini PCI, 1 CF, 2 COM, 4 USB



## EPI-CX700 NEW

VIA CX700M Eden V4 EPIC SBC

- VIA CX700M supports MPEG-2/4 / WMV9
- DVI, LVDS, Dual View, HDTV
- Dual LAN, Optional 1 Gigabit LAN
- 1 PCI-104, 1 CF II, 2 SATA, 2 COM, 4 USB
- Optional Touch Screen I/F



## EPI-LX800 NEW

AMD Geode LX800 EPIC SBC

- AMD Geode LX800 / CS5536
- TFT, LVDS, Dual View, 2-CH Audio
- Dual LAN, Optional 1 Gigabit LAN
- 1 PCI-104, 1 CF II, 2 COM, 4 USB 2.0
- 16-bit GPIO
- Optional Touch Screen I/F



## ECM-3723

Intel® 852GM Celeron® M EPIC SBC

- Intel® 82852GM GMCH / 82801DB ICH4
- LVDS, Dual View, 5.1-CH Audio
- Dual LAN
- 1 PCI-104, 1 CF, 1 COM, 4 USB 2.0
- Optional Touch Screen I/F

## ETX Carrier Board

	<b>Mini ITX Form Factor</b> 6.7" x 6.7" (170 mm x 170 mm)
<b>Model Number</b>	EAP-EX95
<b>Page No.</b>	P. 1-16 <span style="float: right;">NEW</span>
<b>CPU Module Socket</b>	ETX
<b>I/O Chip</b>	Winbond W83977EF-AW
<b>SSD</b>	CF Type I/II
<b>Expansion</b>	1 PCI
<b>CardBus</b>	n/a
<b>External Connector</b>	PS/2 K/B & Mouse (mini DIN), Dual double deck USB, RJ-45, COM 1-4 (DB-9 & box header), Mic in, Line in, Line out audio jacks
<b>LVDS Connector</b>	One HIROSE DF13-40DP-1.25V
<b>TV-out Connector</b>	n/a
<b>Audio Connector</b>	Mic in, Line in, Line out
<b>Power Connector</b>	Standard 4P (+5 V, +12 V, GND)

## EPIC SBC

	<b>EPIC : 6.5" x 4.5"</b> (165 mm x 115 mm)
<b>Model Number</b>	EPI-CX700
<b>Page No.</b>	P. 3-2 <span style="float: right;">NEW</span>
<b>CPU</b>	Onboard VIA Eden V4 1 Ghz
<b>System Chipset</b>	VIA CX700M
<b>I/O Chip</b>	Winbond W83697HG
<b>System Memory</b>	One SODIMM up to 1 GB DDR2 400/533 SDRAM
<b>Display</b>	VIA CX700M, MPEG-2/4, WMV9 Video Acceleration
<b>LVDS</b>	2 x 18/24-bit
<b>TV-out</b>	VIA CX700M, HDTV
<b>Audio (Codec)</b>	VIA VT1708A, 7.1-CH
<b>10/100M LAN</b>	Dual Realtek RTL8100C / RTL8101L
<b>Gigabit LAN</b>	Optional one Realtek RTL8110S
<b>SSD</b>	CF Type I/II
<b>Expansion</b>	1 PCI-104
<b>HDD Interface</b>	1 x EIDE, 2 x SATA
<b>Serial port</b>	1 x RS-232, 1 x RS-232/422/485
<b>USB</b>	4 x USB 2.0
<b>DIO</b>	n/a
<b>Touch Screen Interface</b>	Optional, 4/5/8-wire resistive
<b>Power Input</b>	Single +12 V





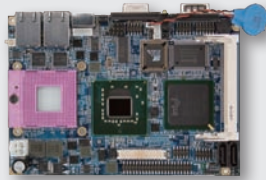
# ETX Carrier Board & EPIC SBC

ATX Form Factor 12" x 7.6" (305 mm x 192 mm)	Special Form Factor 9.21" x 5.51" (234 mm x 140 mm)	Half Size PISA-bus SBC 7.3" x 4.8" (185 mm x 122 mm)	5.25" SBC Form Factor 8" x 5.75" (203 mm x 146 mm)	5.25" SBC Form Factor 8" x 5.75" (203 mm x 146 mm)	3.5" SBC Form Factor 5.7" x 4" (146 mm x 101 mm)
<b>EEV-EX01</b>	<b>EAP-EX92</b>	<b>EAP-EX61</b>	<b>EAP-EX51</b>	<b>EAP-EX52</b>	<b>EAP-EX31</b>
P. 1-17	P. 1-18	P. 1-18	P. 1-19	P. 1-19 <b>NEW</b>	P. 1-20
ETX	ETX	ETX	ETX	ETX	ETX
n/a	Winbond W83977EG-AW	n/a	Winbond W83977EG-AW	n/a	Winbond W83977EG-AW
Type I/II CF, 1 DOC	Type I/II CF	Type I/II CF, 1 DOC	Type I/II CF, 1 DOC	Type I/II CF	Type I/II CF
3 PCI, 2 ISA, 1 PCI / ISA	1 Mini PCI	n/a	1 PCI	1 Mini PCI	1 PCI
n/a	n/a	n/a	RICOH R5C486	n/a	RICOH R5C486
PS/2 K/B (mini DIN), PS/2 Mouse (mini DIN), 2 USB, RJ-45, LPT 1 (DB-25), COM 1 (DB-9), COM 2 (DB-9), VGA (DB-15), Mic in, Line in, Line out audio jacks	PS/2 K/B & Mouse (mini DIN), 6 x USB, 2 x RJ-45, LPT 1 (DB-25), COM 1 (DB-9), COM 2 (DB-9), COM 3 (DB-9), COM 4 (DB-9), VGA (DB-15), TV-out (RCA), DC power jack, Mic in, Line in, Line out audio jacks	PS/2 K/B & Mouse (mini DIN), RJ-45, COM 1 (DB-9), VGA (DB-15)	PS/2 K/B & Mouse (mini DIN), 2 x USB, RJ-45, LPT 1 (DB-25), COM 1 (DB-9), COM 2 (DB-9), COM 3 (DB-9), VGA (DB-15), S-Video, Composite Video jack, Mic in / Line in / Line out audio jacks	PS/2 K/B and Mouse, dual USB, RJ-45, VGA (DB15), COM 1 (DB9), Mic in, Line out, DC power jack	PS/2 K/B and Mouse (mini DIN), dual USB, RJ-45, COM 1/2/3/4 (DB-9), VGA (DB-15)
One HIROSE DF13-40DP-1.25V	One HIROSE DF13-40DP-1.25V	One HIROSE DF13-40DP-1.25V	One HIROSE DF13-40DP-1.25V	One HIROSE DF13-40DP-1.25V	One HIROSE DF13-40DP-1.25V
4 x 2, pitch 2.54 mm header x 1	One RCA jack	One 8 x 2, pitch 2.54 mm header (with Audio)	n/a	n/a	One 3 x 2, pitch 2.0 mm header
Mic in, Line in, Line out audio jacks	Mic in, Line in, Line out audio jacks	One 8 x 2, pitch 2.54 mm header (with TV-out)	n/a	n/a	One 5 x 2, pitch 2.0 mm header
AT / ATX connector	ATX	AT / ATX connector	AT / ATX connector	AT / ATX connector	AT / ATX connector

## EPIC : 6.5" x 4.5" (165 mm x 115 mm)

<b>EPI-LX800</b>	<b>ECM-3721</b>	<b>ECM-3723</b>	<b>ECM-3720A</b>
P. 3-4 <b>NEW</b>	P. 3-5	P. 3-6	P. 3-6
Onboard AMD Geode LX800 @ 0.9 W with 128K L2 Cache	Onboard VIA Eden V4 1 GHz	Onboard Intel® Celeron® M 600 MHz with 512K L2 Cache	Supports 0.13 and 90nm Intel® Pentium® M / Celeron® M CPU
AMD Geode LX800 / CS5536	VIA CN700 / VT8251	Intel® 82852GM GMCH / 82801DB ICH4	Intel® 82852GM GMCH / 82801DB ICH4
Winbond W83627HG-AW	Winbond W83697HG-AW	Winbond W83627HG-AW	Winbond W83627HG-AW
One SODIMM up to 1 GB DDR 266/333/400 SDRAM	One SODIMM up to 1 GB DDR2 400/533 SDRAM	One SODIMM up to 1 GB DDR 200/266 SDRAM	One SODIMM up to 1 GB DDR 200/266 SDRAM
AMD Geode LX800	VIA CN700, Dual View	Intel® 82852GM, Dual View	Intel® 82852GM, Dual View
1 x 18-bit	2 x 18/24-bit	2 x 18/24-bit	2 x 18/24-bit
n/a	n/a	n/a	n/a
Realtek ALC203, 2-CH	VIA VT1616, 5.1-CH	Realtek ALC655D, 5.1-CH	Realtek ALC655D, 5.1-CH
Dual Realtek RTL8100C	n/a	Dual Intel® 82551ER	Dual Intel® 82551ER
Optional one Realtek RTL8110S	Dual Realtek RTL8111B	n/a	n/a
Type I/II CF	Type I/II CF	Type I/II CF	Type I/II CF
1 PCI-104	1 PCI-104	1 PCI-104+	1 PCI-104+
1 x EIDE	1 x EIDE, 4 x SATA	1 x EIDE	1 x EIDE
1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485
4 x USB 2.0	6 x USB 2.0	4 x USB 2.0	4 x USB 2.0
16-bit GPIO	n/a	n/a	n/a
Optional, 4/5/8-wire resistive	Optional, 4/5/8-wire resistive	Optional, 4/5/8-wire resistive	Optional, 4/5/8-wire resistive
Single +12 V	Single +12 V	Single +12 V	Single +12 V

# 3.5" Micro Module



## ECM-GM965 NEW 3.5" Intel® GME965 Core™ 2 Duo SBC

- Intel® GME965 Chipset
- LVDS, Dual View, HDTV
- 5.1-CH / 7.1-CH with S/PDIF
- Dual PCIe Gigabit LAN
- 2 COM, 1 Mini PCI, 1 CF
- 1 EIDE, 2 SATA, 4 USB, 8 GPIO



## ECM-945GM NEW 3.5" Intel® 945GME Core™ 2 Duo SBC

- Intel® 945GME Chipset
- LVDS, Dual View, HDTV
- 5.1-CH / 7.1-CH with S/PDIF
- Dual Gigabit LAN
- 2 COM, 1 Mini PCI, 1 CF
- 1 EIDE, 2 SATA, 4 USB, 8 GPIO



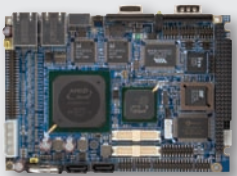
## ECM-910 NEW 3.5" Intel® 910GMLC Celeron® M Micro Module

- Intel® 910GMLC / ICH6-M Chipset9
- Dual View, Dual LVDS
- 2-CH Audio
- Dual Gigabit LAN
- 2 COM, 1 CF
- 1 EIDE, 2 SATA, 8 USB, 16 GPIO



## ECM-CX700 NEW 3.5" VIA CX700M Eden V4 SBC

- VIA CX700M supports MPEG-2/4 / WMV9
- DVI, LVDS, Dual View, HDTV
- 5.1-CH / 7.1-CH with S/PDIF
- Dual LAN
- 2 COM, 1 PCI-104, 1 CF
- 1 EIDE, 2 SATA, 4 USB, 8 GPIO



## ECM-LX800 NEW 3.5" AMD LX800 @ 0.9 W SBC

- AMD Geode LX800 / CS5536 Chipset
- TFT & LVDS, Dual View
- 2-CH Audio, Dual LAN
- 4 COM, 1 PC/104, 1 CF, 4 USB, 16 GPIO
- ITE IT8888G PCI to ISA Bridge
- Fanless Operation

## 3.5" Micro Module

3.5" SBC: 5.7" x 4" (146 mm x 101 mm)	
<b>Model Number</b>	<b>ECM-GM965</b>
<b>Page No.</b>	P. 2-2 <span style="background-color: orange; color: white; padding: 2px;">NEW</span>
<b>CPU</b>	Supports 65nm Intel® Core™ 2 Duo
<b>System Chipset</b>	Intel® GME965 / ICH8-M
<b>I/O Chip</b>	Winbond W83627HG-AW
<b>System Memory</b>	One SODIMM up to 2 GB DDR2 400/533/667 SDRAM
<b>Display</b>	Intel® GME965, Dual View
<b>LVDS</b>	2 x 24-bit
<b>DVI</b>	n/a
<b>TV-out</b>	Intel® GME965 Integrated, HDTV
<b>Audio (Codec)</b>	Realtek ALC883, 5.1-CH / 7.1-CH with S/PDIF
<b>10/100M LAN</b>	n/a
<b>Gigabit LAN</b>	Dual Realtek RTL 8111B
<b>SSD</b>	Type I/II CF
<b>Expansion</b>	1 Mini-PCI
<b>HDD Interface</b>	1 x EIDE, 2 SATA
<b>Serial Port</b>	1 x RS-232, 1 x RS-232/422/485
<b>USB</b>	4 x USB 2.0
<b>DIO</b>	8-bit GPIO
<b>Power Input</b>	Single +12 V

## 3.5" Micro Module

3.5" SBC: 5.7" x 4" (146 mm x 101 mm)	
<b>Model Number</b>	<b>ECM-CX700</b>
<b>Page No.</b>	P. 2-6 <span style="background-color: orange; color: white; padding: 2px;">NEW</span>
<b>CPU</b>	Onboard VIA Eden V4 1 GHz
<b>System Chipset</b>	VIA CX700M
<b>I/O Chip</b>	VIA VT1211
<b>System Memory</b>	One DDR2 SODIMM up to 1 GB DDR2 400/533 SDRAM
<b>Display</b>	VIA CX700M, MPEG-2/4, WMV9 Video Acceleration, AGP 8X, Dual View
<b>LVDS</b>	2 x 18/24-bit
<b>DVI</b>	VIA CX700M DVI interface
<b>TV-out</b>	VIA CX700M SDTV, NTSC / PAL
<b>Audio (Codec)</b>	Realtek ALC883, 5.1-CH / 7.1-CH with SPDIF
<b>10/100M LAN</b>	Dual Realtek RTL8101L
<b>Gigabit LAN</b>	n/a
<b>SSD</b>	Type I/II CF
<b>Expansion</b>	1 PCI-104
<b>HDD Interface</b>	1 x EIDE, 2 x SATA
<b>Serial Port</b>	1 x RS-232, 1 x RS-232/422/485
<b>USB</b>	4 x USB 2.0
<b>DIO</b>	8-bit GPIO
<b>Power Input</b>	+5 V / +12 V





# 3.5" Micro Module

3.5" SBC: 5.7" x 4" (146 mm x 101 mm)

ECM-945GM	ECM-910	ECM-3713	ECM-3710A
P. 2-3 <b>NEW</b>	P. 2-4 <b>NEW</b>	P. 2-5	P. 2-5
Supports 65nm Intel® Core™ Duo / Core™ 2 Duo / Celeron® M	Onboard Intel® Celeron® M CPU	Onboard 90nm Intel® Celeron® M 600 MHz with 512K L2 Cache	Supports 90nm Intel® Pentium® M / Celeron® M
Intel® 82945GME GMCH / 82801GHM ICH7-M	Intel® 910GMLE / ICH6-M Chipset	Intel® 82852GM GMCH / FW82801DB ICH4	Intel® 82852GM GMCH / 82801DB ICH4
Winbond W83627HG-AW	Winbond W83627HG-AW	Winbond W83627HG-AW	Winbond W83627HG-AW
One SODIMM up to 2 GB DDR2 400/533/667 SDRAM	One SODIMM up to 1 GB DDR2 333/400 SDRAM	One SODIMM up to 1 GB DDR 200/266 SDRAM	One SODIMM up to 1 GB DDR 200/266 SDRAM with ECC Supported
Intel® 82945GME, Dual View	Intel® 910GMLE, Dual View	Intel® 82852GM, Dual View	Intel® 82852GME, AGP 4X, Dual View
2 x 18/24-bit	2 x 18/24-bit	2 x 18/24-bit	2 x 18/24-bit
n/a	n/a	Chrontel CH7009B, 165M pixels/sec.	Chrontel CH7009B
Intel® GME945 Integrated, HDTV	n/a	Chrontel CH7009B TV, NTSC / PAL	Chrontel CH7009B TV, NTSC / PAL
Realtek ALC883, 5.1-CH / 7.1-CH with S/PDIF	Realtek ALC883, 5.1-CH / 7.1-CH Audio	Realtek ALC655, 5.1-CH	Realtek ALC655, 5.1-CH
n/a	n/a	Intel® 82551QM / 82551ER	Intel® 82551QM / 82551ER
Dual Realtek RTL8111B	Dual Atheros AR8121 GigaLAN	Optional Intel® 82541EI / 82541ER	Optional Intel® 82541EI / 82541ER
Type I/II CF	Type I/II CF	Type I/II CF	Type I/II CF
1 Mini-PCI	n/a	1 Mini-PCI	1 Mini-PCI
1 x EIDE, 2 SATA	1 x EIDE, 2 SATA	1 x EIDE	1 x EIDE
1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485
4 x USB 2.0	8 x USB 2.0	6 x USB 2.0	6 x USB 2.0
8-bit GPIO	16-bit GPIO	16-bit GPIO	16-bit GPIO
Single +12 V	Single +12 V	Single +12 V	Single +12 V

3.5" SBC: 5.7" x 4" (146 mm x 101 mm)

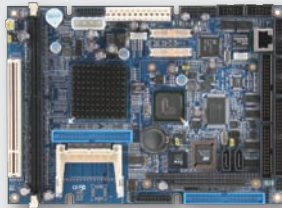
ECM-CN700R	ECM-3711	ECM-LX800	ECM-3512
P. 2-7	P. 2-8	P. 2-9 <b>NEW</b>	P. 2-10
Onboard VIA Eden V4 1 GHz	Onboard VIA Eden V4 1 GHz	Onboard AMD Geode LX800 @ 0.9 W 500 MHz	Onboard AMD Geode GX466 333 MHz
VIA CN700 / VT8237R+	VIA CN700 / VT8251	AMD Geode LX800 / CS5536	AMD Geode GX466 / CS5535
VIA VT1211	VIA VT1211	Winbond W83627HG-AW	Winbond W83627HG-AW
One DDR2 SODIMM up to 1 GB DDR2 400/533 SDRAM	One SODIMM up to 1 GB DDR2 400/533 SDRAM	One SODIMM up to 1 GB DDR 266/333/400 SDRAM	One SODIMM up to 512 MB DDR 200/266 SDRAM
VIA CN700 with integrated 2D / 3D graphic engine	VIA CN700, Dual View	AMD Geode LX800	AMD Geode GX466
2 x 18/24-bit	2 x 18/24-bit	1 x 18/24-bit	1 x 24-bit
n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a
VIA VT1613, 2-CH	VIA VT1616, 5.1-CH	Realtek ALC203, 2-CH	VIA VT1612A
Realtek RTL8101L	n/a	Dual Realtek RTL8101L	Dual Realtek RTL8101L
n/a	Dual Realtek RTL8111B	n/a	n/a
Type I/II CF	Type I/II CF	Type I/II CF	Type I/II CF
1 PCI-104	1 Mini-PCI	1 PC/104	1 PCI-104
1 x EIDE, 2 x SATA	1 x EIDE, 2 x SATA	1 x EIDE, 2 x SATA	1 x EIDE
4 COM with 5 x 2, pitch 2.0 mm pin header, one COM can be set as RS-232/422/485 by BIOS	1 x RS-232, 1 x RS-232/422/485	3 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485
4 x USB 2.0	4 x USB 2.0	4 x USB 2.0	4 x USB 1.1
8-bit GPIO	8-bit GPIO	16-bit GPIO	16-bit GPIO
Single +12 V	+5 V / +12 V	+5 V / +12 V	Single +5 V

# › 5.25" Mini Module



## EBM-945GM NEW 5.25" Intel® 945GM Core™ 2 Duo SBC

- Intel® 82945GME Chipset
- LVDS, HDTV, Dual View, 5.1-CH Audio
- One LAN & One Gigabit LAN
- 2 COM, 8 USB, 1 CF
- 1 PCIe x 16, 1 PCIe x 4, 1 PCI
- 2 SATA, 2 COM, 8 USB



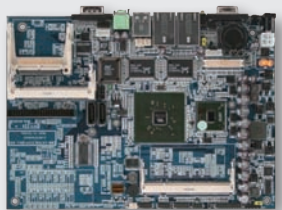
## EBM-LX800 NEW 5.25" AMD Geode LX800 SBC

- AMD Geode LX800 / CS5536 Chipset
- TFT, Optional LVDS
- LAN, AC97 Audio
- 1 PC/104, 1 PCI, 1 CF, 2 SATA, 6 COM, 4 USB
- Fanless Operation



## EBM-CN896 NEW 5.25" VIA CN896 Eden SBC

- VIA VIA CN896 / VT8251CE Chipset
- LVDS, Dual View, 5.1-CH Audio
- Dual LAN, Optional Gigabit LAN
- 8 USB, 4COM, 1 PCI, 1 PC/104, 1 LPT
- 2 IEEE-1394A, 2 SATA, 16-bit GPIO



## EBM-CX700 NEW 5.25" VIA CX700M Slim SBC

- VIA CX700M Chipset
- CRT, DVI, LVDS, TV-out, HDTV
- LAN, Optional one LAN
- 2 SATA, 2 COM, 6 USB
- 1 Mini PCI, 1 CF
- Fanless Operation

## 5.25" Mini Module

5.25" SBC: 8" x 5.75" (203 mm x 146 mm)	
Model Number	EBM-945GM
Page No.	P. 4-2 <span style="background-color: orange; color: white; padding: 2px;">NEW</span>
CPU	Supports 65nm Intel® Core™ Duo / Core™ 2 Duo / Celeron® M CPU
FSB	533/667 MHz
System Chipset	Intel® 82945GME GMCH / 82801GHM ICH7-M
I/O Chip	Winbond W83627HG-AW
System Memory	Two SODIMM up to 2 GB DDR2 667 SDRAM
Display	Intel® 82945GME, Dual View
LVDS	2 x 18/36-bit
DVI	n/a
TV-out	Intel® 82945GME Integrated, HDTV
Audio (Codec)	Realtek ALC655, 5.1-CH
10/100M LAN	Intel® 82562EZ
Gigabit LAN	Intel® 82573L Gigabit LAN
SSD	Type I/II CF
Expansion	1 PCIe x 16 or ADD2, 1 PCIe x 4, 1 PCI
HDD Interface	1 x EIDE, 2 x SATA
Serial Port	1 x RS-232, 1 x RS-232/422/485
USB	8 x USB 2.0
DIO	n/a
IEEE-1394A	n/a
Power Input	AT / ATX

## 5.25" Mini Module

5.25" SBC: 8" x 5.75" (203 mm x 146 mm)	
Model Number	ECM-5718
Page No.	P. 4-6
CPU	Onboard Intel® Celeron® M 600 MHz with 512K L2 Cache CPU
FSB	400 MHz
System Chipset	Intel® 82852GM GMCH / 82801DB ICH4
I/O Chip	Winbond W83627HG-AW
System Memory	One DIMM up to 1 GB DDR 200/266 SDRAM
Display	Intel® 82852GME, Dual View
LVDS	2 x 18/24-bit
DVI	Chrontel CH7009B
TV-out	Chrontel CH7009B, NTSC / PAL
Audio (Codec)	VIA VT1616, 5.1-CH
10/100M LAN	Dual Intel® 82551ER / 82562ET
Gigabit LAN	Optional Intel® 82541ER
SSD	Type I/II CF
Expansion	1 CardBus, 1 PCI
HDD Interface	2 x EIDE
Serial Port	1 x RS-232, 1 x RS-232/422/485
USB	4 x USB 2.0
DIO	n/a
IEEE-1394A	2 x IEEE-1394A
Power Input	ATX



# 5.25" Mini Module

## 5.25" SBC: 8" x 5.75" (203 mm x 146 mm)

EBM-LX800	EBM-CN896	EBM-CX700
P. 4-3 <b>NEW</b>	P. 4-4 <b>NEW</b>	P. 4-5 <b>NEW</b>
Onboard AMD Geode LX800 / LX900 CPU	Onboard VIA V4 Eden 1 GHz	Onboard VIA Eden V4 500 MHz
--	--	--
AMD Geode LX800 / CS5536	VIA CN896 / VT8251CE	VIA CX700M
Winbond W83627HG-AW	VIA VT1211	VIA VT1211
One SODIMM up to 1 GB DDR 333/400 SDRAM	One DIMM up to 2 GB DDR2 400/533/667 SDRAM	One SODIMM up to 1 GB 400/533 SDRAM
AMD Geode LX800 Integrated, AGP 4X	VIA CN896 integrated VIA chromeq HC DX9 GFX	VIA CX700M integrat 2D / 3D graphic engine and MPEG-4 acceleration
18-bit, optional 18/24-bit	2 x 18/24-bit	2 x 18/24-bit
n/a	n/a	Resolution up to UXGA
n/a	n/a	Resolution up to 1920 x 1080
Realtek ALC203, 2-CH	VIA VT1616, 5.1-CH	VIA VT1708A, 5.1-CH
Realtek RTL8101L	Realtek RTL8101E	Realtek RTL8101L
Intel® 82573L Gigabit LAN	Optional RTL8111B Gigabit LAN	Optional RTL8101L / RTL8100S
Type I/II CF	Type I/II CF	Type I/II CF
1 PCI, 1 PC/104	1 PC/104, 1 PCI	1 Mini PCI
2 x EIDE, 2 x SATA	1 x EIDE, 2 x SATA	2 x EIDE, 2 x SATA
5 x RS-232, 1 x RS-232/422/485	4 COM with 40-pin header, one can be set as RS-232/422/485	2 x RS-232
4 x USB 2.0	8 x USB 2.0	6 x USB 2.0
16-bit GPIO	16-bit GPIO	16-bit GPIO
n/a	2 x IEEE-1394A	n/a
AT / ATX	AT / ATX	AT / ATX

## 5.25" SBC: 8" x 5.75" (203 mm x 146 mm)

ECM-5716	ECM-5510
P. 4-7	P. 4-8
Supports 90nm Intel® Pentium® M / Celeron® M CPU	Onboard AMD Geode GX466 333 MHz
400 MHz	n/a
Intel® 82855GME GMCH / 82801DB ICH4	AMD Geode GX466 / CS5535
Winbond W83627HG-AW	Winbond W83627HG-AW
One DIMM up to 1 GB DDR 200/266/333 SDRAM with ECC	Onboard 64/128/256 MB DDR SDRAM One DIMM up to 512 MB DDR 200/266 SDRAM
Intel® 82855GME, Dual View	AMD Geode GX466
2 x 18/24-bit	1 x 24-bit
Chrontel CH7301C	n/a
n/a	n/a
VIA VT1616, 5.1-CH	VIA VT1612A
Intel® 82551ER / 82562ET	Realtek RTL8100C
Optional Intel® 82540EM	n/a
Type I/II CF	1 x DOC, Type I/II CF
1 CardBus, 1 PCI	1 PC/104, 1 PCI
2 x EIDE	1 x EIDE
1 x RS-232, 1 x RS-232/422/485	3 x RS-232, 1 x RS-232/422/482
4 x USB 2.0	4 x USB 1.1
n/a	16-bit GPIO
2 x IEEE-1394A	n/a
ATX	ATX



# Long-life Motherboard



## EMX-965GME NEW

Intel® Q965 Core™ 2 Duo Mini ITX MB

- Intel® GME965 / ICH8 Chipset
- 1 PCI, 1 CF
- 5.1+2-CH Audio, GigaLAN
- 1 PCI, 3 SATA, 10 USB, 4 COM



## EMX945-GME3 NEW

Intel® 945GME Core™ 2 Duo Mini ITX MB

- Intel® 945GME / ICH7-M Chipset
- DVI, LVDS, Dual View
- 5.1+2-CH Audio, GigaLAN
- Intel® Graphic Media Accelerator 950
- 1 PCI, 1 CF
- 4 COM, 8 USB, 2 SATA, 16 GPIO



## EMX-910GML NEW

Onboard Intel® 915GML Pentium® M / Celeron® M Mini ITX MB

- Intel® 82910GML / ICH6-M
- 6 CH Audio, GigaLAN
- 1 PCI, 1 CF
- 4 COM, 8 USB, 2 SATA



## EMB-9655 NEW

AMD Geode LX800 Mini ITX MB

- AMD Geode LX800 / CS5536 Chipset
- TFT, LVDS, Dual LAN
- Optional Touch Screen I/F
- 1 PCI, 1 Mini PCI, 1 CF
- 4 COM, 4 USB, 16 GPIO



## ERX965Q NEW

Intel® Q965 Core™ 2 Duo Micro ATX MB

- Intel® Q965 / ICH8 Chipset
- Intel® Graphic Media Accelerator 3000
- 8-CH Audio, GigaLAN
- 10 USB, 4 SATA
- 1 PCIe x 16, 1 PCIe x 4, 2 PCI, 1 CF



## EAX945G NEW

Intel® 945G Pentium® 4 ATX MB

- Intel® 945G / ICH7 Chipset
- Intel® Graphic Media Accelerator 950
- 8-CH Audio, Dual GigaLAN
- 1 PCIe x 16, 1 PCIe x 1, 5 x PCI
- 4 SATA, 4 COM, 8 USB

## Long-life Motherboard

Form Factor	Mini ITX: 6.69" x 6.69" (170 mm x 170 mm)
Model Number	EMX-965GME
Page No.	P. 6-8 <span style="background-color: orange; color: white; padding: 2px;">NEW</span>
CPU	Intel® socket P Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm
FSB	533/800 MHz
System Chipset	Intel® GME965 / ICH8M-DO
I/O Chip	Winbond W83627DHG-A
System Memory	Two SODIMM up to 4 GB Dual Channel DDR2 533/667 SDRAM
Display	Intel® GME965 integrated Graphics Media Accelerator X3100
LVDS	2 x 24-bit LVDS
DVI	Chrontel CH7307C
TV-out	--
Audio (Codec)	ADI 1882 5.1-CH HDA Codec
10/100M LAN	--
Gigabit LAN	Realtek RTL8111B PCIe Gigabit LAN
Touch Screen Interface	--
SSD	Type I/II CF
Expansion	1 PCI
HDD Interface	3 x SATA
Serial Port	4 x RS-232
USB	10 x USB 2.0
DIO	8-bit GPIO

Form Factor	Mini ITX: 6.69" x 6.69" (170 mm x 170 mm)
Model Number	EMB-9655
Page No.	P. 6-14 <span style="background-color: orange; color: white; padding: 2px;">NEW</span>
CPU	Onboard AMD Geode LX800 @ 0.9 W with 128K L2 Cache
FSB	n/a
System Chipset	AMD Geode LX800 / CS5536
I/O Chip	Winbond W83627HG-AW
System Memory	One DIMM up to 1 GB DDR 333/400 SDRAM
Display	AMD Geode LX800
LVDS	Single channel 24-bit LVDS
DVI	n/a
TV-out	n/a
Audio (Codec)	Realtek ALC203, 2-CH
10/100M LAN	Dual Realtek RTL8100C
Gigabit LAN	Optional Dual Realtek RTL8110S
Touch Screen Interface	Optional 4/5/8-wire Resistive
SSD	Type I/II CF
Expansion	1 PCI, 1 Mini PCI
HDD Interface	1 x EIDE
Serial Port	3 x RS-232, 1 x RS-232/422/485
USB	4 x USB 2.0
DIO	16-bit GPIO



# Long-life Motherboard

## Mini ITX: 6.69" x 6.69" (170 mm x 170 mm)

EMX945-GME3	EMX-910GMLE	EMB-9682	EMB-9676	EMB-9675
P. 6-9 <b>NEW</b>	P. 6-10 <b>NEW</b>	P. 6-11	P. 6-12	P. 6-13
Intel® 945GME 478 Core™ 2 Duo / Core™ Duo / Core™ Solo CPU	Onboard Intel® 915GML Pentium® M / Celeron® M	Intel® 915GM Pentium® M / Celeron® M	Supports 90nm Intel® Pentium® M / Celeron® M	Supports 90nm Intel® Pentium® M / Celeron® M
533/667 MHz	400 MHz	400/533 MHz	400 MHz	400 MHz
Intel® 82945GME GMCH / 82801 ICH7-M DH	Intel® 82910GMLE GMCH / 82801FBM ICH6-M	Intel® 82915GM GMCH / 82801FBM ICH6-M	Intel® 82855GME GMCH / 82801DB ICH4	Intel® 82855GME GMCH / 82801DB ICH4
Winbond W83627DHG-A	Winbond W83627EHG-A	Winbond W83627HG-AW	Winbond W83627HG-AW	Winbond W83627HG-AW
Two SODIMM up to 4 GB Dual Channel DDR2 533/667 SDRAM	Two SODIMM up to 2 GB DDR2 400 SDRAM	Two SODIMM up to 2 GB DDR2 533 SDRAM	One DIMM up to 1 GB DDR 266/333 SDRAM with ECC	One DIMM up to 1 GB DDR 266/333 SDRAM with ECC
Intel® 82945GME GMCH	Intel® 82910GMLE GMCH	Intel® 82915GM GMCH	Intel® 82855GME, Dual View	Intel® 82855GME GMCH, Dual View
18/24-bit or 2 x 18-bit	18 / 2 x 18-bit	18 / 2 x 18-bit 24 / 2 x 24-bit	2 x 18/24-bit LVDS	2 x 18/24-bit LVDS
Chrontel CH7307C	Chrontel CH7307C	--	Chrontel CH7009B	Chrontel CH7009B
--	--	Intel® 82915GM GMCH Integrated	Chrontel CH7009B, NTSC / PAL	Chrontel CH7009B, NTSC / PAL
Realtek ALC888, 5.1+2 CH	Realtek ALC655, 5.1-CH	VIA T1616, 5.1-CH	VIA VT1616, 5.1-CH	VIA VT1616, 5.1-CH
--	--	--	n/a	n/a
Realtek RTL8111B	Realtek RTL8110SC	Dual Marvell 88E8053	Realtek RTL8110S	Realtek RTL8110S
--	--	4/5/8-wire touch screen	--	Optional 4/5/8-wire Resistive
Type I/II CF	Type I/II CF	Type I/II CF	Type I/II C/F	Type I/II CF
1 PCI	1 PCI	1 PCI, 1 Mini PCI	1 PCI, 1 Mini PCI	1 PCI, 1 Mini PCI
1 x EIDE, 2 x SATA	1 x EIDE, 2 x SATA	2 x EIDE, 2 x SATA	2 x EIDE	2 x EIDE
4 x RS-232	4 x RS-232	4 x RS-232, 1 x RS-232/422/485	3 x RS-232, 1 x RS-232/422/485	3 x RS-232, 1 x RS-232/422/485
8 x USB 2.0	8 x USB 2.0	8 x USB 2.0	6 x USB 2.0	6 x USB 2.0
16-bit GPIO	16-bit GPIO	16-bit GPIO	16-bit GPIO	16-bit GPIO

## Micro ATX: 9.6" x 9.6" (243.8 mm x 243.84 mm)

## ATX: 12" x 9.6" (304.8 x 243.84 mm)

EMX-M690E	ERX-965Q	ERX-965Q2	ERX945G	EAX945G
P. 6-7	P. 6-4 <b>NEW</b>	P. 6-6 <b>NEW</b>	P. 6-5 <b>NEW</b>	P. 6-3 <b>NEW</b>
AMD S1 CPU Socket	Intel® Q965 Pentium® 4 / Pentium® D / Celeron® D / Core™ 2 Duo	Intel® Q965 Pentium® 4 / Pentium® D / Celeron® D / Core™ 2 Duo	Intel® 945G Core™ 2 Duo / Pentium® M / Pentium® 4 / Celeron® D	Intel® 945 Core™ 2 Duo / Pentium® D / Pentium® 4 / Celeron® D
Depend on CPU	1066/800/533 MHz	1066/800/533 MHz	533/800/1066 MHz	1066/800/533 MHz
AMD Geode LX800 / CS5536	Intel® Q965 / ICH8	Intel® Q965 / ICH8	Intel® 82945G GMCH / ICH7	Intel® 82945G GMCH / ICH7
--	Winbond W83627EHG-A	Winbond W83627DHG-A	Winbond W83627EHG-A	Winbond W83627EHG-A
Two SODIMM up to 4 GB DDR2 SDRAM	Four DIMM up to 8 GB DDR2 800/667/533 SDRAM	Four DIMM up to 8 GB DDR2 800/667/533 SDRAM	Four DIMM up to 4 GB DDR2 400/533/667 SDRAM	Four DIMM up to 4 GB DDR2 400/667/533 SDRAM
ATI M690E	Intel® Q965	Intel® Q965	Intel® 82945G GMCH	Intel® 82945G GMCH
2 x 18/24 bit LVDS	Through ADD2 Card	--	Through ADD 2 Card	Through ADD2 Card
ATI M690E	Through ADD2 Card	Through ADD2 Card	Through ADD 2 Card	Through ADD2 Card
--	Through ADD2 Card	--	Through ADD 2 Card	Through ADD2 Card
Realtek ALC655, 5.1-CH	ADI AD1988, 8-CH	Realtek ALC888, 5.1+2 CH	Realtek ALC888, 5.1+2 CH	Realtek ALC882, 5.1+2
--	--	--	--	--
Dual Atheros L1e	Intel® 82566DM	Realtek 8111B PCIe GigaLAN	Intel® 82573L	Dual Intel® 82573 GigaLAN
--	--	--	--	--
Type I/II CF	Type I/II CF	--	--	--
1 PCI	1 PCIe x 16, 1 PCIe x 4, 2 PCI	1 PCIe x 16, 3 PCI	1 PCIe x 16, 1 PCIe x 1, 2 PCI	1 PCIe x 16, 1 PCIe x 1, 5 PCI
2 x EIDE, 4x SATA	1 x EIDE, 4 x SATA	1 x EIDE, 2 x SATA	2 x EIDE, 4 x SATA	2 x EIDE, 4 SATA
5 x RS-232, 1 x RS-232/422/485	1 x RS-232	4 x RS-232	2 x RS-232	3 x RS-232, 1 x RS-232/422/485
10 x USB 2.0	10 x USB 2.0	10 x USB 2.0	8 x USB 2.0	8 x USB 2.0
16-bit GPIO	16-bit GPIO	--	--	--

# Fanless Embedded System



## ASM-CX700 NEW

Fanless VIA CX700M Eden V4 Micro PC

- VIA ULV CX700M 500 MHz up to 1.5 GHz CPU
- VIA CX700M Supports MPEG-2/4 and WMV9
- 5.1-CH Audio, LAN, Optional Dual GigaLAN
- 1 Mini PCI, 1 CF, 4 USB
- Optional DVI, TV-out
- 2.5" SATA HDD
- Fanless, VESA Compliance
- 182 mm x 257 mm x 25 mm



## EPC-945GM NEW

Intel® Core™ Duo Tiny Box PC Micro PC

- 65nm Intel® µFC-PGA 478 / µFC-BGA 479 Core™ Duo / Core™ Solo CPU
- Intel® 945GME / ICH7-M
- 7.1-CH Audio, Dual GigaLAN
- 1 Mini PCI, 1 CF, 1 COM, 3 USB
- TV-out
- Single +12 V Power
- 2.5" SATA HDD
- 117 mm x 112 mm x 50 mm



## EPC-3711/CX700 NEW

Fanless VIA Eden V4 Micro PC

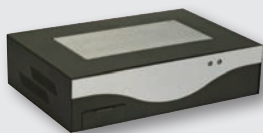
- VIA Eden V4 1 GHz CPU for EPC-3711
- VIA Eden V4 500 MHz CPU for EPC-CX700
- VIA CN700 VT8251 Chipset Supports MPEG-2
- 5.1/7.1-CH Audio, Dual LAN / Dual GigaLAN
- 1 Mini PCI, 1 CF, 1 COM, 3 USB
- TV-out for EPC-CX700
- Single +5V Power
- 2.5" SATA HDD
- Fanless, VESA Compliance
- 117 mm x 112 mm x 50 mm



## EES-3720/3723 NEW

Fanless EPIC-based Modular Micro PC

- Intel® Pentium® 1.5 GHz for EES-3720
- Intel® Celeron® M 600 MHz for EES-3723
- Intel® 852GM / ICH4 chipset
- Dual View, Optional LVDS
- 5.1-CH Audio, Dual LAN
- 1 COM, 4 USB
- Single +12V operation



## EES-5718

Fanless Intel® 852GM Celeron® M 600 MHz Micro PC

- Intel® 82852GM / ICH4 Chipset
- DVI, Dual View
- 5.1-CH Audio
- Dual LAN, Optional One Gigabit LAN
- 1 IEEE-1394A, 1 CardBus, 1 CF
- 2 COM, 4 USB 2.0

## Fanless Embedded System

Model Number	ASM-CX700
Dimensions (W x D x H)	7.2" x 10.1" x 1.0" (182 mm x 257 mm x 25 mm)
Page No.	P. 7-2 <span style="float: right;">NEW</span>
CPU	VIA Eden 500 MHz ULV up to 1 GHz CPU
System Chipset	VIA CX700M
System Memory	One SODIMM up to 1 GB DDR2 400/533 SDRAM
10/100M LAN	Realtek RTL8101L
Gigabit LAN	Optional Dual RTL8110S
Expansion Interface	1 mini PCI (hidden)
SSD	Type I/II CF
System Indicators	4 LED show power, HDD, LAN 1, LAN 2
HDD	2.5" SATA HDD
Serial Port	1 x RS-232
VGA/LCD Port	1 x DB-15, 1 x DVI (Optional)
TV out	1 x RCA jack (Optional)
Audio Port	Mic in, Line in, Line out
USB Port	4 x USB 2.0
IEEE-1394 Port	--
Parallel Port	--
Mouse & KB	1 x PS/2 mini DIN
Power Input	100~240 Vac / 50~60 Hz
Power Output	+12 Vdc / 4.16 A (50 W)

## Fanless Embedded System

Model Number	EXC-2743
Dimension (W x D x H)	9.8" x 6.1" x 2.6" (249 mm x 155 mm x 67 mm)
Page No.	P. 7-8
CPU	Onboard Intel® Celeron® M 600 MHz with 512K L2 Cache
System Chipset	Intel® 82852GM GMCH / 82801DB ICH4
System Memory	One SODIMM up to 1 GB DDR 200/266 SDRAM
10/100M LAN	Dual Realtek RTL8101L
Gigabit LAN	n/a
Expansion Interface	1 Mini PCI
SSD	Type I/II CF with ejector
System Indicators	PWR, HDD
HDD	1 x 2.5" HDD
Serial Port	3 x RS-232, 1 x RS-232/422/485
VGA/LCD Port	1 x DB-15
TV out	1 x RCA jack
Audio Port	Mic in, Line in, Line out
USB Port	6 x USB 2.0
SATA Port	n/a
Parallel Port	1 x DB-25
Mouse & KB	2 x PS/2 mini DIN
Power Input	100~240 Vdc / 50~60 Hz
Power Output	+12 Vdc / 4.16 A (50 W)





# Fanless Embedded System

EPC-945GM	EPC-3711	EPC-CX700	EES-3720	EES-3723
7" x 4.4" x 2.0" (178 mm x 112 mm x 50 mm)			8.89" x 5.94" x 2.91" (226 mm x 151 mm x 74 mm)	
P. 7-4 <b>NEW</b>	P. 7-4 <b>NEW</b>	P. 7-4 <b>NEW</b>	P. 7-6 <b>NEW</b>	P. 7-6 <b>NEW</b>
65nm Intel® µFC-PGA 478 / µFC-BGA 479 Core™ Duo / Core™ Solo CPU	Onboard VIA Eden V4 1 GHz CPU	Onboard VIA Eden V4 500 MHz CPU	Onboard Intel® Pentium® M 1.5 GHz CPU	Onboard Intel® Celeron® M 600 MHz CPU
Intel® 945GME / ICH7-M	VIA CN700 / VT8251	VIA CX700	Intel® 82852GM GMCH / 82801DB ICH4	Intel® 82852GM GMCH / 82801DB ICH4
One SODIMM up to 2 GB DDR2 400/533/667 SDRAM	One SODIMM up to 1 GB DDR2 400/533 SDRAM	One SODIMM up to 1 GB DDR2 400/533 SDRAM	One SODIMM up to 1 GB DDR 200/266 SDRAM	One SODIMM up to 1 GB DDR 200/266 SDRAM
n/a	n/a	Dual Realtek RTL8101L	Dual Intel® 82551ER	Dual Intel® 82551ER
Dual Realtek RTL 8111B GigaLAN	Dual Realtek RTL8111B GigaLAN	n/a	n/a	n/a
1 Mini PCI	1 Mini PCI	1 Mini PCI	n/a	n/a
Type I/II CF	Type I/II CF with ejector	Type I/II CF with ejector	Type I/II C/F with ejector	Type I/II C/F with ejector
PWR, HDD	PWR, HDD	PWR, HDD	PWR, HDD	PWR, HDD
1 x 2.5" SATA / EIDE HDD	1 x 2.5" SATA / EIDE HDD	1 x 2.5" SATA / EIDE HDD	1 x 2.5" HDD	1 x 2.5" HDD
1 x RS-232, 1 x RS-232/422/485 setting by BIOS	1 x RS-232, 1 x RS-232/422/485 setting by BIOS	1 x RS-232, 1 x RS-232/422/485 setting by BIOS	1 x RS-232/422/485	1 x RS-232/422/485
1 x DB-15	1 x DB-15	1 x DB-15, 1 x 26-pin LVDS output	1 x DB-15, 1 x 26-pin LVDS output (optional)	1 x DB-15, 1 x 26-pin LVDS output (optional)
1 x RCA jack (Optional)	n/a	1 x RCA jack	n/a	n/a
Mic in, Line in, Line out	Mic in, Line in, Line out	Mic in, Line in, Line out	Mic in, Line in, Line out	Mic in, Line in, Line out
3 x USB 2.0	3 x USB 2.0	3 x USB 2.0	4 x USB 2.0	4 x USB 2.0
n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	1 x DB-25	1 x DB-25
1 x PS/2 mini DIN	1 x PS/2 mini DIN	1 x PS/2 mini DIN	1 x PS/2 mini DIN	1 x PS/2 mini DIN
100~240 Vdc / 50~60 Hz	100~240 Vdc / 50~60 Hz	100~240 Vdc / 50~60 Hz	100~240 Vdc / 50~60 Hz	100~240 Vdc / 50~60 Hz
+12 Vdc / 4.5 A (60W)	+5 Vdc / 8 A (40 W)	+5 Vdc / 8 A (40 W)	+12 Vdc / 4.16 A (50W)	+12 Vdc / 4.16 A (50 W)

EES-3711	EES-3512	EES-5718	EES-9674
8.7" x 5.8" x 2.6" (220 mm x 147 mm x 65 mm)		9.37" x 6.38" x 2.37" (238 mm x 162 mm x 60.3 mm)	15.24" x 10.39" x 2.97" (387 mm x 264 mm x 75.5 mm)
P. 7-10	P. 7-10	P. 7-12	P. 7-14
Onboard VIA Eden V4 1 GHz CPU	Onboard AMD Geode GX466 333 MHz	Onboard Intel® Celeron® M 600 MHz with 512K L2 Cache	Supports Intel® Pentium® 4 / Celeron®
VIA CN700 / VT8251	AMD Geode GX466 / CS5535	Intel® 82852GM GMCH / 82801DB ICH4	Intel® 82845GV
One SODIMM up to 1 GB DDR2 400/533 SDRAM	One SODIMM up to 512 MB DDR 200/266 SDRAM	One DIMM up to 1 GB DDR 200/266 SDRAM	One DIMM up to 1 GB DDR 200/266/333 SDRAM
n/a	Dual Realtek RTL8101L	Intel® 82551ER and 82562ET	Intel® 82562ET and Realtek RTL8101L, Optional Intel® 82551QM / 82551ER
Dual Realtek RTL8111B	n/a	Optional one Intel® 82540EM Gigabit LAN	Optional Intel® 82541PI
n/a	n/a	1 CardBus Type II slot	2 PCI
Type I/II CF with ejector	Type I/II CF with ejector	Type I/II CF	Type I/II CF
PWR, HDD	PWR	PWR, HDD	PWR, HDD
1 x 2.5" SATA HDD	1 x 2.5" HDD	1 x 2.5" HDD	1 x 3.5" HDD
1 x RS-232, 1 x RS-232/422/485 (Setting by BIOS)	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485
1 x DB-15	1 x DB-15	1 x DB-15, 1 x 24-pin DVI port	1 x DB-15, 1x SCSI 36-pin for 48-bit LVDS output (optional)
n/a	n/a	n/a	n/a
Mic in, Line in, Line out	Mic in, Line in, Line out	Mic in, Line in, Line out	Mic in, Line in, Line out
2 x USB 2.0	2 x USB 1.1 ports	4 x USB 2.0	4 x USB 2.0
1 x eSATA	n/a	1x IEEE-1394A	n/a
n/a	1 x DB-25	1 x DB-25	1 x DB-25
1 x PS/2 mini DIN	1 x PS/2 mini DIN	1 x PS/2 mini DIN	2 x PS/2 mini DIN
100~240 Vdc / 50~60 Hz	100~250 Vdc / 47~63 Hz	100~240 Vdc / 50~60 Hz	115~230 Vac / 47~63 Hz
+5 Vdc / 8 A (40 W)	+5 Vdc / 8 A (40 W)	+12 Vdc / 4.16 A (50 W)	ATX Power (200 W)

# MTP Panel PC



## MTP-1201

NEW

### 12" Medical Touch Panel PC

- 12" TFT LCD Display, Shatterproof Touch-Screen
- Onboard Intel® µFC-BGA 479 Celeron® M 600 MHz with 512K L2 Cache
- Internet Accessible
- Smart Card Reader
- 4 USB Expansion Ports
- Anti-Bacteria Plastic Housing
- IP65 Compliant Front Face Sealing
- Fanless Operation



## ZIVO MTP-1502

NEW

### 15" Intel® Multi-functional Touch Panel Computer

- 15" TFT Touch Screen Display
- Intel® Celeron® M 600 MHz / 1 GHz with 512K L2 Cache
- VoIP Telephony
- Internet Accessible
- Smart Card Reader
- TV/Phone/Radio Selector
- 4 USB Expansion Ports
- Optional Wi-Fi or Bluetooth
- Anti-Bacteria Plastic Housing
- IP65 Compliant Front Face Sealing
- VESA Mount (75mm, M6)
- Fanless & Soundless Operation



## obie MTP-1702

NEW

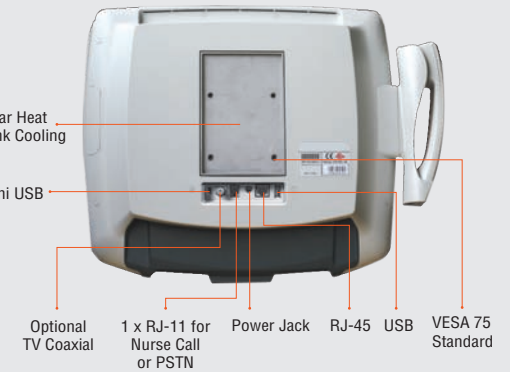
### 17" Intel® Multi-functional Touch Panel Computer

- 17" TFT Touch Screen Display
- Intel® Celeron® M 600 MHz / 1 GHz with 512K L2 Cache
- Slimlined Design
- VoIP Telephony
- Internet Accessible
- 4 USB Expansion Ports
- Optional Smart Card Reader
- Optional Web Camera
- Optional Bluetooth (Available soon)
- Optional Analog TV Tuner
- Optional Magnetic Stripe Reader (MSR)
- VESA Mount (75mm, M6)
- Fanless & Soundless Operation

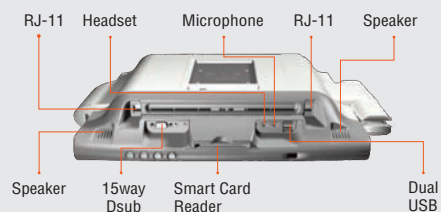
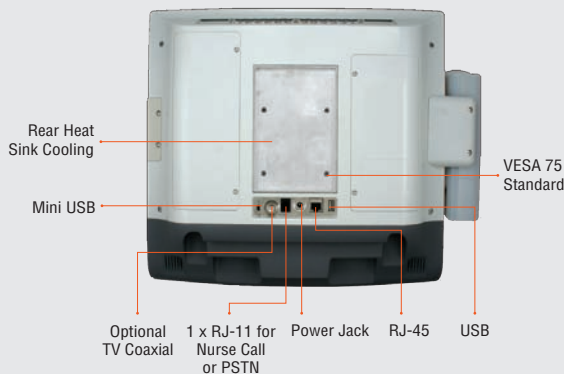
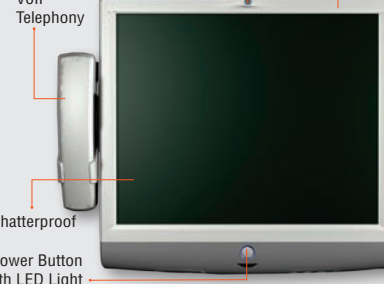
VoIP Telephony    Wi-Fi Capable    Optional Bluetooth    Visual Call Indicators



Shatterproof    Membrane Keypads Enable Programmable Entertainment Selection    IP65 Compatible



Web Camera    Optional Bluetooth



# MTP Panel PC

## MTP Panel PC

Module Number	MTP-1201	MTP-1502	MTP-1702
Page No.	P. 8-10 <b>NEW</b>	P. 8-6 <b>NEW</b>	P. 8-2 <b>NEW</b>
CPU	Onboard Intel® uFC-BGA 479 Celeron® M 600 MHz with 512K L2 Cache	Intel® Celeron® M 600 MHz / 1 GHz with 512K L2 Cache	Intel® Celeron® M 600 MHz / 1 GHz with 512K Cache
Northbridge	Intel® 82852GM GMCH	Intel® 82852GM GMCH	Intel® 82852GM GMCH
Southbridge	Intel® 82801DB I/O Controller Hub 4 (ICH4)	Intel® 82801DB I/O Controller Hub 4 (ICH4)	Intel® FW82801DB I/O Controller Hub 4 (ICH4)
System Memory	1 x 512 MB 184-pin DDR 333 SDRAM supports up to 1 GB DDR 266/333 SDRAM with ECC Supported	1 x DIMM up to 1 GB DDR SDRAM	1 x DIMM up to 1 GB DDR SDRAM
Video	Supports Intel® DVM T 2.1	Supports Intel® DVM T 2.0	Supports Intel® DVM T 2.0
Video Memory	64 MB shared memory	64 MB shared memory	64 MB shared memory
10/100M LAN	--	Realtek RTL8100C	Realtek RTL8100C
Gigabit LAN	RTL8110S GigaLAN	n/a	Optional Realtek RTL8110SB
Expansion	1 x PCI & 1 x Internal Mini PCI	2 x Mini-PCI (incl. one optional)	2 x Mini-PCI (incl. one optional)
LCD Option	12" SVGA TFT (800 x 600 resolution)	15" XGA TFT (1024 x 768 resolution)	17" SXGA TFT (1240 x 1024 resolution)
Serial Port	1 x RS-232, 1 x RS-232/422/485	1 x TTL for Smart Card Reader, 1 x RS-232 for optional Magnetic Strip Card Reader	1 x TTL for Smart Card Reader, 1 x RS-232 for optional Magnetic Strip Card Reader
External USB	4 x USB 2.0	4 x USB 2.0	4 x USB 2.0
Internal USB	--	1 x for T/S controller 1 x for optional Bluetooth 3 reserved for future configuration	1 for T/S controller 1 for optional Bluetooth 1 for optional PC camera 2 reserved for future configuration
GPIO	--	9 x I/O lines for keypad, buzzer, on-hook, etc.	9 x I/O lines for keypad, buzzer, on-hook, etc.
Headphone Socket	--	1 x 3.5 mm phone jack	1 x 3.5 mm phone jack
Phone Handset	--	2 x RJ-11	2 x RJ-11
Speaker	--	Built in @ 2 W 8 Ohm speaker x 2	Built in @ 2 W 8 Ohm speaker x 2
Smart Card Reader	RS-232 Complies with PC/SC Version 1.0 Standard	Integrated in display module	Optional integrated in display module
IrDA Receiver/Transceiver	--	n/a	Optional one IrDA 1.2 Receiver/Transceiver sensor integrated in front bezel
Video Camera	--	n/a	Optional USB2.0 1.3 M Pixels CMOS Sensor PC camera intergraded on the top side of display module
User Controls	--	Membrane keypad integrated on front of Panel	Control buttons integrated on front & bottom of Panel
Visual Call Indication	--	Call indication visible front and rear	n/a
Power Input	VAC 90-240 V Power Plug	AC 90-264 V	AC 90-264 V
Power Output	--	DC 19 V 4.71 A	DC 19 V 4.71 A
Mounting	--	VESA 75, M6 desktop stand	VESA 75, M6 desktop stand
IP Rating	IP65 compliance for front face seal	IP65 compliance for front face seal	--
Dimensions	370 mm x 230 mm x 75 mm	441.9 mm x 348.9 mm x 70.0 mm (Handset included)	457.3 mm x 374 mm x 75 mm (Handset included)
Weight	4.65 kgs (11 lbs)	5 kg / 11 lbs	7 kg / 15.43 lbs
Cooling	Fanless Operation	Fanless design, rear heatsink with wipe clean design	Fanless design, rear heatsink with wipe clean design





## LPC-1201/ 1001 NEW

### 12" / 10" Fanless Industrial Touch Panel PC

- 12" / 10" Multifunctional Touch Panel Computer
- VIA Eden V4 1 GHz, Optional ULV 1.5 G (7W)
- VIA CX700M Chipset, Supports MPEG-2/4/WMV9
- 1 Mini PCI, 1 CF, 1 COM, 3 USB 2.0
- Optional GigaLAN, TV-out
- Wide Range Temp.: -10~60°C for LPC-1201
- Fanless & Single +12V Operation



## LPC-0801/ 0803 NEW

### 8.4" Fanless Industrial Touch Panel PC

- Onboard VIA Eden ULV V4 500 MHz / 1 GHz CPU
- One SODIMM up to 1 GB DDR2 SDRAM
- 8.4" Touch Panel, Dual LAN
- 1 Mini PCI, 1 CF, 2 COM, 2 USB 2.0
- Supports 2.5" SATA
- Fanless Operation
- Dimensions(W x D x H): 237 x 170 x 64 mm

Panel PC		
Module Number	LPC-1201	LPC-1001
Page No.	P. 9-2	
Display Type	12.1" resistive 5 wires	10.1" resistive 4 wires
Brightness	450 nit (cd/m2)	230 nit (cd/m2)
Resolution	800 x 600	
CPU	Onboard VIA Eden V4 1G (5W), Optional ULV 1.5 G (7W)	
BIOS	Award 512 KB Flash BIOS	
System Chipset	VIA CX700M	
System Memory	One 200-pin SODIMM supports up to 1 GB DDR2 400/533 SDRAM	
SSD	One CF socket by IDE secondary slave channel supports Type I/II Compact Flash Card	
Watchdog Timer	Reset: 1 sec.-255 min., 1 min./step	
H/W Status Monitor	Monitoring system and CPU temperature, voltage, Auto throttling control when CPU overheats	
HDD	IDE 44-pin / SATA 2.5" HDD	
Display Chipset	VIA CX700M	
CRT	CRT Resolution up to 2048 x 1536	
TV-out	Optional, TV resolution up to 1920 x 1080	
Audio	AC97 Codec VIA VT1708A	
Ethernet	Dual RTL8101L, Optional RTL8110S GigaLAN	
System Indicators	4 LED indicators show the power, HDD, LAN1 and LAN2	
IO	1 x RS-232, 2 x SATA, 1 Mini PCI, 3 x USB 2.0	
Power Input	12V	
Power Output	5 A (60W)	
Operating Temperature	-10~60°C (14~140°F)	0~40°C (32~104°F)
Storage Temperature	-20~+75°C (-4~167°F)	-20~+75°C (-4~167°F)
Relative Humidity	5 to 90% @ 40°C (104°F), relative humidity, non-condensing	
Dimension (W x D x H)	283x x222 x 44 mm	259 x 188 x 37 mm

Panel PC		
Module Number	LPC-0801	LPC-0803
Page No.	P. 9-3	
Display Type	8.4" resistive 4 wires	
Brightness	200 nit (cd/m2)	
Resolution	800 x 600	
CPU	Onboard VIA Eden V4 1 GHz CPU	Onboard VIA Eden V4 500 MHz / 1 GHz CPU
BIOS	Award 512 KB Flash BIOS	
System Chipset	VIA CN700 / VT8251	VIA CX700M
System Memory	One 200-pin SODIMM supports up to 1 GB DDR2 400/533 SDRAM	
SSD	One CF socket by IDE secondary slave channel supports Type I/II Compact Flash Card	
Watchdog Timer	Reset: 1 sec.-255 min., 1 min./step	Reset: 1 sec.-255 min., 1 min./step
H/W Status Monitor	Monitoring system and CPU temperature, voltage, Auto throttling control when CPU overheats	
HDD	IDE 44-pin / SATA 2.5" HDD	
Display Chipset	VIA CN700	VIA CX700M
VGA/LCD Port	DB-15	DB-15
Display Memory	64 MB frame biffer using system menyory	64 MB frame biffer using system menyory
Audio	AC97 Codec; Mic in , Line in, Line out	AC97 Codec; Mic in , Line in, Line out
Ethernet	Dual RTL8111B GigaLAN	Dual RTL8101L, Optional RTL8110S GigaLAN
IO	1 x RS-232, 1 x RS-232/422/485, 1 Mini PCI (hidden), 4 x USB 2.0	
Power Input	100~250 Vdc / 47~63 Hz	
Power Output	+12 Vdc / 4.16 A (50W)	+12 Vdc / 5 A (60W)
Operating Temperature	0~40°C (32~104°F)	
Storage Temperature	-20~+75°C (-4~167°F)	
Relative Humidity	5 to 90% @ 40°C (104°F), relative humidity, non-condensing	
Dimension (W x D x H)	237 x 170 x 64 mm	

# POS/Kiosk/Signage Solutions



## 15" Wide Screen Series

Model Name	FPC-15W01	FPC-15W02	FPC-15W03
<b>Page No.</b>	P. 10-2	P. 10-2	P. 10-2
<b>LCD Size</b>	15.4"	15.4"	15.4"
<b>Display Type</b>	WXGA TFT	WXGA TFT	WXGA TFT
<b>Resolution</b>	1280 x 800	1280 x 800	1280 x 800
<b>Color/ Pixel Pitch</b>	262K/ 0.255 mm (H) x 0.255 mm (V)	262K/ 0.255 mm (H) x 0.255 mm (V)	262K/ 0.255 mm (H) x 0.255 mm (V)
<b>Luminance</b>	500 cd/m2	500 cd/m2	500 cd/m2
<b>Contrast Ratio</b>	400	400	400
<b>System</b>			
<b>CPU</b>	Supports Intel® µFC-PGA Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology	Supports Intel® socket P Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology	Onboard Intel® uFC-BGA 479 Celeron® M 900 MHz w/512K 2nd Level Cache with 90nm process technology
<b>System Chipset</b>	Intel® 82945GME GMCH / 82801GBM ICH7-M	Intel® GME965 GMCH / ICH8-M	Intel® 82910GMLE GMCH/82801FBM ICH6-M
<b>System Memory</b>	2 x 240-pin DIMM socket supports up to 4GB DDR2 533/667 SDRAM	2 x 200-pin SODIMM socket supports up to 4GB DDR2 533/667 SDRAM	2 x 240-pin DIMM socket supports up to 2GB DDR2 400 SDRAM
<b>SSD</b>	1 x CompactFlash Type I/II socket (Internal)	1 x CompactFlash Type I/II socket (Internal)	1 x CompactFlash Type I/II socket (Internal)
<b>VGA/ DVI</b>	1 x VGA/ 1 x DVI	1 x VGA/ 1 x DVI	1 x VGA/ 1 x DVI
<b>HDD Driver Bay</b>	1 x 3.5" SATA or 1 x 2.5" SATA	1 x 3.5" SATA or 1 x 2.5" SATA	1 x 3.5" SATA or 1 x 2.5" SATA
<b>Audio</b>	Line in, Line out, Mic	Line in, Line out, Mic	Line in, Line out, Mic
<b>WiFi</b>	Optional USB WiFi 802.11 b,g	Optional USB WiFi 802.11 b,g	Optional USB WiFi 802.11 b,g
<b>Expansion Interface</b>	1 x PCI slot	1 x PCI slot	1 x PCI slot
<b>Rear I/O</b>			
<b>Serial Port</b>	3 x RS-232 COM ports	3 x RS-232 COM ports	3 x RS-232 COM ports
<b>Ethernet</b>	1 x RJ-45 ( Realtek RTL8111B Gigabit Ethernet )	2 x RJ-45 ( Realtek RTL8111B Gigabit Ethernet )	1 x RJ-45 ( Realtek RTL8110SC Gigabit Ethernet )
<b>USB Port</b>	6 x USB 2.0 (Optional extra 2 USB ports)	6 x USB 2.0 (Optional extra 2 USB ports)	6 x USB 2.0 (Optional extra 2 USB ports)

## 17" Wide Screen Series

Model Name	FPC-17W01	FPC-17W02	FPC-17W03
<b>Page No.</b>	P. 10-4	P. 10-4	P. 10-4
<b>LCD Size</b>	17"	17"	17"
<b>Display Type</b>	WXGA TFT	WXGA TFT	WXGA TFT
<b>Resolution</b>	1440 x 900	1440 x 900	1440 x 900
<b>Color/ Pixel Pitch</b>	262K/ 0.255 mm (H) x 0.255 mm (V)	262K/ 0.255 mm (H) x 0.255 mm (V)	262K/ 0.255 mm (H) x 0.255 mm (V)
<b>Luminance</b>	400 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>
<b>Contrast Ratio</b>	600	600	600
<b>System</b>			
<b>CPU</b>	Supports Intel® µFC-PGA Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology	Supports Intel® socket P Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology	Onboard Intel® µFC-BGA 479 Celeron® M 900 MHz w/512K 2nd Level Cache with 90nm process technology
<b>System Chipset</b>	Intel® 82945GME GMCH / 82801GBM ICH7-M	Intel® GME965 GMCH / ICH8-M	Intel® 82910GMLE GMCH / 82801FBM ICH6-M
<b>System Memory</b>	2 x 240-pin DIMM socket supports up to 4GB DDR2 533/667 SDRAM	2 x 200-pin SODIMM socket supports up to 4GB DDR2 533/667 SDRAM	2 x 240-pin DIMM socket supports up to 2GB DDR2 400 SDRAM
<b>SSD</b>	1 x CompactFlash Type I/II socket (internal)	1 x CompactFlash Type I/II socket (internal)	1 x CompactFlash Type I/II socket (internal)
<b>VGA/ DVI</b>	1 x VGA/ 1 x DVI	1 x VGA/ 1 x DVI	1 x VGA/ 1 x DVI
<b>HDD Driver Bay</b>	1 x 3.5" SATA or 1 x 2.5" SATA	1 x 3.5" SATA or 1 x 2.5" SATA	1 x 3.5" SATA or 1 x 2.5" SATA
<b>Audio</b>	Line in, Line out, Mic	Line in, Line out, Mic	Line in, Line out, Mic
<b>WiFi</b>	Optional USB WiFi 802.11 b,g	Optional USB WiFi 802.11 b,g	Optional USB WiFi 802.11 b,g
<b>Expansion Interface</b>	1 x PCI slot	1 x PCI slot	1 x PCI slot
<b>Rear I/O</b>			
<b>Serial Port</b>	3 x RS-232 COM ports	3 x RS-232 COM ports	3 x RS-232 COM ports
<b>Ethernet</b>	1 x RJ-45 (Realtek RTL8111B Gigabit Ethernet )	2 x RJ-45 (Realtek RTL8111B Gigabit Ethernet )	1 x RJ-45 ( Realtek RTL8110SC Gigabit Ethernet )
<b>USB Port</b>	6 x USB 2.0 (Optional extra 2 USB ports)	6 x USB 2.0 (Optional extra 2 USB ports)	6 x USB 2.0 (Optional extra 2 USB ports)



# ➤ POS/Kiosk/Signage Solutions



## 22" Wide Screen Series

Model Name	FPC-22W01	FPC-22W02
Page No.	P. 10-6	P. 10-6
LCD Size	22"	22"
Display Type	WXGA TFT	WXGA TFT
Resolution	1680 x 1050	1680 x 1050
Color/ Pixel Pitch	16.7 Million/ 0.282 mm (H) x 0.282 mm (V)	16.7 Million/ 0.282 mm (H) x 0.282 mm (V)
Luminance	300 cd/m <sup>2</sup>	300 cd/m <sup>2</sup>
Contrast Ratio	700	700
<b>System</b>		
CPU	Supports Intel® µFC-PGA Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology	Supports Intel® socket P Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology
System Chipset	Intel® 82945GME GMCH / 82801GBM ICH7-M	Intel® GME965 GMCH / ICH8-M
System Memory	2 x 240-pin DIMM socket supports up to 4GB DDR2 533/667 SDRAM	2 x 200-pin SODIMM socket supports up to 4GB DDR2 533/667 SDRAM
SSD	1 x CompactFlash Type I/II socket (internal)	1 x CompactFlash Type I/II socket (internal)
VGA/ DVI	1 x VGA/ 1 x DVI	1 x VGA/ 1 x DVI
HDD Driver Bay	1 x 3.5" SATA or 1 x 2.5" SATA	1 x 3.5" SATA or 1 x 2.5" SATA
Audio	Line in, Line out, Mic	Line in, Line out, Mic
WiFi	Optional USB WiFi 802.11 b,g	Optional USB WiFi 802.11 b,g (will occupy 1 USB port)
Expansion Interface	1 x PCI slot	1 x PCI slot
<b>Rear I/O</b>		
Serial Port	3 x RS-232 COM ports	3 x RS-232 COM ports
Ethernet	1 x RJ-45 ( Realtek RTL8111B Gigabit Ethernet )	2 x RJ-45 ( Realtek RTL8111B Gigabit Ethernet )
USB Port	6 x USB 2.0 (Optional extra 2 USB ports)	6 x USB 2.0 (Optional extra 2 USB ports)
Mouse & K/B	1 x PS/2 Keyboard & 1 x PS/2 Mouse Connector	1 x PS/2 Keyboard & 1 x PS/2 Mouse Connector

# POS/Kiosk/Signage Solutions



## 15" Series

Model Name	FPC-1501	FPC-1502	FPC-1503
Page No.	P. 10-8	P. 10-8	P. 10-8
LCD Size	15.0"	15.0"	15.0"
Display Type	XGA TFT	XGA TFT	XGA TFT
Resolution	1024 x 768	1024 x 768	1024 x 768
Color/ Pixel Pitch	16.7 Million/ 0.297 mm (H) x 0.297 mm (V)	16.7 Million/ 0.297 mm (H) x 0.297 mm (V)	16.7 Million/ 0.297 mm (H) x 0.297 mm (V)
Luminance	260 cd/m2	260 cd/m2	260 cd/m2
Contrast Ratio	350	350	350
<b>System</b>			
CPU	Supports Intel® uFC-PGA Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology	Supports Intel® socket P Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology	Onboard Intel® uFC-BGA 479 Celeron® M 900 MHz w/512K 2nd Level Cache with 90nm process technology
System Chipset	Intel®82945GME GMCH / 82801GBM ICH7-M	Intel® GME965 GMCH / ICH8-M	Intel® 82910GMLE GMCH / 82801FBM ICH6-M
System Memory	2 x 240-pin DIMM socket supports up to 4GB DDR2 533/667 SDRAM	2 x 200-pin SODIMM socket supports up to 4GB DDR2 533/667 SDRAM	2 x 240-pin DIMM socket supports up to 2GB DDR2 400 SDRAM
SSD	1 x CompactFlash Type I/II socket (internal)	1 x CompactFlash Type I/II socket (internal)	1 x CompactFlash Type I/II socket (internal)
VGA/ DVI	1 x VGA/ 1 x DVI	1 x VGA/ 1 x DVI	1 x VGA/ 1 x DVI
HDD Driver Bay	1 x 3.5" SATA or 1 x 2.5" SATA	1 x 3.5" SATA or 1 x 2.5" SATA	1 x 3.5" SATA or 1 x 2.5" SATA
Audio	Line in, Line out, Mic	Line in, Line out, Mic	Line in, Line out, Mic
WiFi	Optional USB WiFi 802.11 b,g	Optional USB WiFi 802.11 b,g	Optional USB WiFi 802.11 b,g
Expansion Interface	1 x PCI slot	1 x PCI slot	1 x PCI slot
<b>Rear I/O</b>			
Serial Port	3 x RS-232 COM ports	3 x RS-232 COM ports	3 x RS-232 COM ports
Ethernet	1 x RJ-45 ( Realtek RTL8111B Gigabit Ethernet )	2 x RJ-45 ( Realtek RTL8111B Gigabit Ethernet )	1 x RJ-45 ( Realtek RTL8110SC Gigabit Ethernet )
USB Port	6 x USB 2.0 (Optional extra 2 USB ports)	6 x USB 2.0 (Optional extra 2 USB ports)	6 x USB 2.0 (Optional extra 2 USB ports)

## 17" Series

Model Name	FPC-1701	FPC-1702
Page No.	P. 10-10	P. 10-10
LCD Size	17.0"	17.0"
Display Type	SXGA TFT	SXGA TFT
Resolution	1280 x 1024	1280 x 1024
Color/ Pixel Pitch	16 Million/ 0.264 mm (H) x 0.264 mm (V)	16 Million/ 0.264 mm (H) x 0.264 mm (V)
Luminance	300 cd/m2	300 cd/m2
Contrast Ratio	400	400
<b>System</b>		
CPU	Supports Intel® uFC-PGA Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology	Supports Intel® socket P Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology
System Chipset	Intel®82945GME GMCH / 82801GBM ICH7-M	Intel® GME965 GMCH / ICH8-M
System Memory	2 x 240-pin DIMM socket supports up to 4GB DDR2 533/667 SDRAM	2 x 200-pin SODIMM socket supports up to 4GB DDR2 533/667 SDRAM
SSD	1 x CompactFlash Type I/II socket (internal)	1 x CompactFlash Type I/II socket (internal)
VGA/ DVI	1 x VGA/ 1 x DVI	1 x VGA/ 1 x DVI
HDD Driver Bay	1 x 3.5" SATA or 1 x 2.5" SATA	1 x 3.5" SATA or 1 x 2.5" SATA
Audio	Line in, Line out, Mic	Line in, Line out, Mic
WiFi	Optional USB WiFi 802.11 b,g	Optional USB WiFi 802.11 b,g
Expansion Interface	1 x PCI slot	1 x PCI slot
<b>Rear I/O</b>		
Serial Port	3 x RS-232 COM ports	3 x RS-232 COM ports
Ethernet	1 x RJ-45 ( Realtek RTL8111B Gigabit Ethernet )	2 x RJ-45 ( Realtek RTL8111B Gigabit Ethernet )
USB Port	6 x USB 2.0 (Optional extra 2 USB ports)	6 x USB 2.0 (Optional extra 2 USB ports)
Mouse & K/B	1 x PS/2 Keyboard & 1 x PS/2 Mouse Connector	1 x PS/2 Keyboard & 1 x PS/2 Mouse Connector

# ➤ POS/Kiosk/Signage Solutions



System	Probe-945D01	Probe-965D01	Probe-910D01
<b>Page No.</b>	P. 10-12	P. 10-12	P. 10-12
<b>CPU</b>	Supports Intel® µFC-PGA Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology	Supports Intel® socket P Core™ Duo / Core™ Solo / Core™ 2 Duo with 65nm process technology	Onboard Intel® µFC-BGA 479 Celeron® M 900 MHz w/512K 2nd Level Cache with 90nm process technology
<b>Cooling Method</b>	Active CPU cooler	Active CPU cooler	Passive CPU heatsink
<b>System Chipset</b>	Intel® 82945GME GMCH / 82801GBM ICH7-M	Intel® GME965 GMCH / ICH8-M	Intel® 82910GML E GMCH / 82801FBM ICH6-M
<b>System Memory</b>	2 x DIMM socket up to 4GB DDR2 533/667 SDRAM	2 x SODIMM socket up to 4GB DDR2 533/667	2 x DIMM socket up to 2 GB DDR2 400 SDRAM
<b>SSD</b>	1 x CompactFlash Type I/II socket (internal)	1 x CompactFlash Type I/II socket (internal)	1 x CompactFlash Type I/II socket (internal)
<b>VGA</b>	1 x VGA	1 x VGA	1 x VGA
<b>DVI</b>	1 x DVI	1 x DVI	1 x DVI
<b>HDD Driver Bay</b>	1 x 3.5" SATA or 1 x 2.5" SATA	1 x 3.5" SATA or 1 x 2.5" SATA	1 x 3.5" SATA or 1 x 2.5" SATA
<b>Audio</b>	Line in, Line out, Mic	Line in, Line out, Mic	Line in, Line out, Mic
<b>WiFi</b>	Optional USB WiFi 802.11 b,g	Optional USB WiFi 802.11 b,g	Optional USB WiFi 802.11 b,g
<b>System Fan</b>	1 x system Fan	1 x system Fan	1 x system Fan
<b>Expansion Interface</b>	1 x PCI slot	1 x PCI slot	1 x PCI slot
<b>Rear I/O</b>			
<b>Serial Port</b>	4 x RS-232 COM ports	4 x RS-232 COM ports	4 x RS-232 COM ports
<b>Ethernet</b>	1 x RJ-45 (Realtek RTL8111B Gigabit Ethernet )	2 x RJ-45 (Realtek RTL8111B Gigabit Ethernet )	1 x RJ-45 ( Realtek RTL8110SC Gigabit Ethernet )
<b>USB Port</b>	8 x USB 2.0	8 x USB 2.0 (Optional extra 2 USB ports)	8 x USB 2.0 (Optional extra 2 USB ports)
<b>Mouse &amp; K/B</b>	1 x PS/2 Keyboard Connector 1 x PS/2 Mouse Connector	1 x PS/2 Keyboard Connector 1 x PS/2 Mouse Connector	1 x PS/2 Keyboard Connector 1 x PS/2 Mouse Connector
<b>Mechanical</b>			
<b>Color</b>	Front Panel Black; Rear Body Black	Front Panel Black; Rear Body Black	Front Panel Black; Rear Body Black
<b>Mounting</b>	Wall Mount/Stand/VESA 75 mm X 75 mm and 100 mm X 100 mm	Wall Mount/Stand/VESA 75 mm X 75 mm and 100 mm X 100 mm	Wall Mount/Stand/VESA 75 mm X 75 mm and 100 mm X 100 mm
<b>Power Supply</b>	100-240 VAC ( 150W)	100-240 VAC ( 150W)	100-240 VAC ( 150W)
<b>Operating Temp.</b>	0~40°C	0~40°C	0~40°C
<b>Storage Temperature</b>	-5~50°C	-5~50°C	-5~50°C
<b>Relative Humidity</b>	10 to 95% @ 40°C, non-condensing	10 to 95% @ 40°C, non-condensing	10 to 95% @ 40°C, non-condensing



# ▶ PC/104 Modules



## ETM-LX800 NEW AMD Geode LX800 PC/104+ CPU Module

- Onboard AMD Geode LX800
- AMD Geode CS5536 Chipset
- TFT, Gigabit LAN
- 1 PCI-104, 1 PC/104
- 2 COM, 4 USB



## ECM-1342 STPC Atlas PC/104 CPU Module

- Onboard STPC Atlas 133 MHz
- STPC Atlas Chipset
- 32 MB SDRAM Onboard
- TFT, LAN
- 1 PC/104, 1 CF
- 2 COM, 2 USB, 16 GPIO
- Fanless Operation

## PC/104 Modules

Dimensions	3.8" x 4.5" (96 mm x 114 mm)	3.8" x 3.5" (96 mm x 90 mm)
Model Number	<b>ETM-LX800</b>	<b>ECM-1342</b>
Page No.	P. 5-2 <span style="background-color: orange; color: white; padding: 2px;">NEW</span>	P. 5-2
CPU	Onboard AMD Geode LX800 @ 0.9 W with 128K L2 Cache	Onboard STPC Atlas 133 MHz
System Chipset	AMD Geode LX800 / CS5536	STPC Atlas
I/O Chip	Winbond W83627HG-AW	Winbond W83977G-A
System Memory	One SODIMM up to 1 GB DDR 400 SDRAM	32 MB SDRAM onboard
SSD	n/a	Type I/II CF
Expansion	1 PCI-104, 1 PC/104	1 PC/104
MIO	1 x EIDE (ATA-5)	1 x EIDE (PIO mode 4)
Serial Port	2 x RS-232	1 x RS-232, 1 x RS-232/422/485
USB	4 x USB 2.0 ports	2 x USB 1.1 ports
DIO	n/a	16-bit GPIO
Display	AMD Geode LX800	STPC Atlas
10/100M LAN	Realtek RTL8110S	Realtek RTL8101L

# Life Automation

## POS/Kiosk/Signage

**Avalue** provides powerful and customized core parts for advanced POS and KIOSK machines. With experience in embedded industry, Avalue is accustomed to providing clients with stable, reliable, compact and versatile boards that help them produce an ideal and well-integrated system. To satisfy the rapidly increasing demands of this market, Avalue is developing a new generation of POS/KIOSK solutions to keep our customers ahead of their competitors.

### Features:

- Applications and solutions with enhanced functions — fast networking transfer, multi-media, recording and monitoring powered by Core™ 2 Duo and advanced graphic technologies.
- Fulfills the demands of exceptional video performance by providing dual display, digital/TTL, DVI functions and etc.
- Rich I/O and legacy support for the connection of external devices, wide expansions and system integration.
- Modular design to increase system flexibility, cost-savings, ease of maintenance and speed of upgrading.
- Maximizes customers' investment efficiency by offering Windows Embedded for Point of Service (WEPOS) and software support.
- Outstanding hardware designs for harsh environments and critical conditions include IP-65 (anti-dust / waterproof), VESA compliance, compact size, smart thermal solutions, green materials (RoHS, lead-free) and ID design.

## Gaming

**Avalue** has accumulated extensive knowledge and experience and accordingly offers a full range of industrial-grade products to fit the gaming industry. Wherever you need VLT, graphic-intensive games, special form factor boards, or mechanical designs to fit strict environments, Avalue can provide complete service to help you build a successful gaming machine.

### Features:

- Fast, flexible and scalable — customized performance to suit your needs
- Long lifecycle industrial motherboard, including Mini ITX, ITX, Micro ATX and ATX form factors
- Good failure recovery capability & high-level security encryption algorithms: TPM, IC chip hopping encoders
- Sophisticated data protection: battery backup SRAM
- Powerful multimedia functions for the gaming industry
- Intel® Core™ 2 Duo, AMD + ATI's Mobility™ Radeon™, dual display, DVI, MPEG 4, PCI-E

## Medical

**Avalue** delivers the ideal embedded boards and systems for medical terminals and has long been providing successful solutions for bed-side information, communication, entertainment terminals and mobile medical carts. Accommodating the needs of health-care professionals and patients has become a significant factor in improving healthcare performance, environment and evaluations. Avalue's products adhere to the strictest medical standards and provide unsurpassed reliability.

### Features:

- Shatterproof, 5-wire resistive touch screen
- Fanless operation
- IP65: Dustproof, waterproof, anti-bacteria
- All-in-one but slim appearance
- Medical-grade certificate
- VESA standard mount
- Entertainment/Communication Provider: Audio, TV-tuner, Networking, Web-cam and VoIP



- **Embedded Computing**
- **Long-life Motherboard**
- **Computer-on-Module Series**
- **Fanless Embedded System**
- **Multi-functional Touch Panel PC**
- **OEM / ODM Service**



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Embedded solutions for life

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