

2010

Embedded Platform
Industrial Motherboard
eService Platform

Vision in
Future **INNOVATIONS**



avalue
Technology Inc.

Fanless Rugged System

Avalue Rugged Systems were specially designed for long-term operation in extreme harsh environments

Specially Rugged Designed

to fulfill harsh environment usage, long-term operation such as automation, heavy vehicle...etc.

- Anti-shock: according to IEC60068-2-27 (CF : 50G ; HDD : 20G)
- Anti-Vibration: according to IEC60068-2-64 (CF : 5G ; HDD : 1G)
- Extreme temperatures: -15°C to 60°C
- Wide Range DC Power Input: 9V ~ 32V DC acceptable

Mobile Expansion – Express Card Slot/ 34mm

to add memory, wireless communications, multimedia by inserting ExpressCard modules

- Wireless LAN (802.11 b/g, WIFI)
- Wireless Broadband Internet (3G, CDMA, EVDO, GPRS, UMTS, etc.)

Great Thermal Design

to meet the harsh environment demands.



Industrial Automation
Factory Management



Transportation
Heavy Vehicle



Outdoor Kiosk

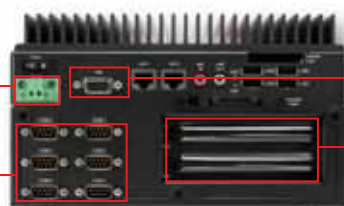
Customized Functions

Phoenix-type

Easy to use, resistant to vibration, resistant to loosening

Customized I/O

- LVDS & Backlight Control Connector
- GPIO connector



VGA/ DVI

Standard VGA, Optional DVI

2 PCI Slot

2 PCI expansion slots for most industrial I/O cards

Ruggedized



EPS-AT270-2PCI

Fanless Intel® Atom™ N270 Rugged Micro PC with Intel® 945GSE + ICH7-M Chipset and 2 PCI

- Onboard Intel® Atom™ N270 1.6GHz with 512K Cache CPU
- Intel® 945GSE/ ICH7-M Chipset
- One 200-pin DDR2 SODIMM Supports Up to 2GB DDR2 533MHz SDRAM
- 5.1-CH Audio, Dual Gigabit Ethernet
- 2 PCI, Express Card/ 34mm
- 1 CF, 2 SATA, 6 COM, 6 USB
- -15°C ~ 60°C Wide Temperature Operation
- 9 ~ 32V Wide Range DC Power Input
- Rugged Design with Vibration/ Shock Protection
- Fanless Operation
- Dimensions: 220mm x 215mm x 126mm



EPS-AT270

Fanless Intel® Atom™ N270 Rugged Micro PC with Intel® 945GSE + ICH7-M Chipset

- Onboard Intel® Atom™ N270 1.6GHz with 512K Cache CPU
- Intel® 945GSE/ ICH7-M Chipset
- One 200-pin DDR2 SODIMM Supports Up to 2GB DDR2 533MHz SDRAM
- 5.1-CH Audio, Dual Gigabit Ethernet
- 1 CF, 2 SATA, 6 COM, 6 USB, Express card/ 34mm
- Service Windows, Easy to Install HDD & Memory
- -15°C ~ 60°C Wide Temperature Operation
- 9 ~ 32V Wide Range DC Power Input
- Rugged Design with Vibration/ Shock Protection
- Fanless Operation
- Dimensions: 220mm x 160mm x 80mm



EPS-910

Fanless Intel® Celeron® M Rugged Micro PC with Intel® 910GMLE + ICH6-M Chipset

- Intel® Celeron® M 600MHz with 512K L2 Cache CPU
- Intel® 910GMLE/ ICH6-M Chipset
- One 200-pin DDR2 SODIMM Supports Up to 1GB DDR2 400MHz SDRAM
- 2-CH Audio, Dual Gigabit Ethernet
- 1 CF, 2 SATA, 4 COM, 6 USB, Express card/ 34mm
- Service Windows, Easy to Install HDD & Memory
- -15°C ~ 55°C Wide Temperature Operation
- 9 ~ 32V Wide Range DC Power Input
- Rugged Design with Vibration/ Shock Protection
- Fanless Operation
- Dimensions: 220mm x 160mm x 80mm



ERS-945

Fanless Intel® Core™ 2 Duo/ Core™ Duo Rugged Embedded System with Intel® 945GME + ICH7-M Chipset

- Onboard Intel® Core™ 2 Duo 1.5GHz/ Core™ Duo 1.2GHz CPU
- Intel® 945GME/ ICH7-M Chipset
- One 200-pin SODIMM Supports Up to 2GB DDR2 400/ 533/ 667MHz SDRAM
- 5.1-CH Audio, Dual Gigabit Ethernet
- 1 CF, 2 SATA, 2 COM, 3 USB, 1 Mini PCI
- Service Windows, Easy to Install HDD and Memory
- Fanless Operation: 0 ~ 45°C
- Dimensions: 271mm x 150mm x 55mm



ERS-PNV

Fanless Intel® Atom™ D510 Dual-Core Rugged Embedded System with Intel® ICH8-M Chipset

- Onboard Intel® Atom™ D510 Dual-Core 1.66GHz CPU (Optional: D410/ N450)
- Intel® ICH8-M Chipset
- One 200-pin SODIMM Supports Up to 1GB DDR2 667MHz SDRAM
- 5.1-CH Audio, Dual Gigabit Ethernet
- 1 CF, 2 SATA, 3 COM, 5 USB, 1 Mini PCI
- Service Windows, Easy to Install HDD and Memory
- Fanless Operation
- 0 ~ 50°C Wide Temperature Operation
- Dimensions: 271mm x 150mm x 55mm



ERS-AT270

Fanless Intel® Atom™ N270 Rugged Embedded System with Intel® 945GSE + ICH7-M Chipset

- Intel® Atom™ N270 1.6GHz with 512K Cache CPU
- Intel® 945GSE/ ICH7-M Chipset
- One 200-pin SODIMM Supports Up to 2GB DDR2 533MHz SDRAM
- 5.1-CH Audio, Dual Gigabit Ethernet, DVI, TV-out
- 1 CF, 2 SATA, 2 COM, 5 USB, 1 Mini PCI
- Service Windows, Easy to Install HDD and Memory
- Fanless Operation
- 0 ~ 50°C Wide Temperature Operation
- Dimensions: 271mm x 150mm x 55mm

Ultra-Compact



EPC-945

Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M Tiny Box PC with Intel® 945GME + ICH7-M Chipset

- Supports 65nm Intel® µFC-PGA 478/ µFC- BGA 479 Core™ 2 Duo/ Core™ Duo/ Celeron® M CPU
- Intel® 945GME/ ICH7-M Chipset
- One 200-pin SODIMM Supports Up to 2GB DDR2 400/ 533/ 667MHz SDRAM
- Dual Gigabit Ethernet
- 1 CF, 1 COM, 3 USB
- Supports 2.5" SATA HDD
- Dimensions: 178mm x 142mm x 50mm



EPC-AT270

Fanless Intel® Atom™ N270 Tiny Box PC with Intel® 945GSE + ICH7-M Chipset

- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533MHz SDRAM
- 5.1-CH Audio, Optional DVI
- Dual Marvell 88E8053 Gigabit Ethernet
- Realtek ALC655 supports 5.1-CH Audio
- 1 Mini PCIe, 1 CF, 2 COM, 5 USB
- Fanless Operation; VESA Compliance
- Dimensions: 178mm x 112mm x 50mm



ASM-AT270

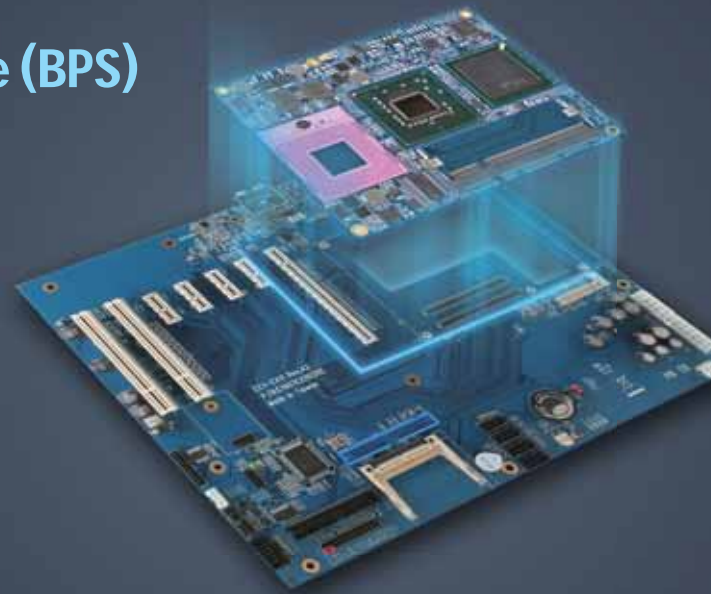
Fanless Intel® Atom™ N270 Ultra Slim PC with Intel® 945GSE + ICH7-M Chipset

- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- Onboard 1GB DDR2 and One SODIMM Up to 2GB
- Realtek ALC655 supports 5.1-CH Audio
- CRT, Optional DVI, TV-out
- Dual Realtek RTL8111C Gigabit Ethernet
- 1 Mini PCI, 1 CF, 1 COM, 4 USB
- Supports 2.5" SATA HDD
- Fanless Operation
- Super Slim Size: 182mm x 257mm x 25mm

Embedded Platform - COM Express

Avalue provides 30-day Baseboard Prototyping Service (BPS) Save 60% Development Time

COM stands for Computer-On-Module. Avalue's COMs are Component-like system boards with complete PC functionality that plug onto application-specific baseboards through high-density, low profile, surface-mount connectors. COMs are also scalable and interchangeable, and deliver rapid development of semi-custom solutions for embedded applications.



Benefits

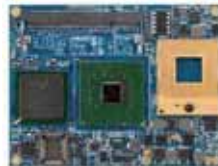
- Small footprint with full PC integration
- Save 60% on time and cost
- Reduces development risk
- Flexible and scalable performance
- Custom functions on separate carrier board
- 30-day Baseboard Prototyping Services



ESM-GM45

Intel® Core™ 2 Duo/ Celeron® M COM Express Module with Intel® GM45 + ICH9-M Chipset

- Supports Intel® Core™ 2 Duo and Celeron® M CPU
- Intel® GM45/ ICH9-M Chipset
- Intel® GL40/ ICH9-M Chipset
- Two 200-pin SODIMM Sockets Supports Up to 4GB DDR2 667/ 800 MHz SDRAM
- Dual View, 2 x 18/ 24-bit LVDS, TV-out, HDTV
- Intel® High Definition Audio
- Intel® 82583V Gigabit Ethernet
- 4 PCI, 4 PCIe1x1, 1 PCIe1x16, 4 SATA, 8 USB, 8-bit GPIO
- Size: 125mm x 95mm



ESM-945GME

Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M COM Express Module with Intel® 945GME + ICH7-M Chipset

- Supports 65nm Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M CPU
- Intel® 945GME/ ICH7-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533/ 667MHz SDRAM
- Dual View, 2-CH 18/ 24-bit LVDS, TV-out, HDTV
- Intel® High Definition Audio
- Marvell 88E8053 Gigabit Ethernet
- 4 PCI, 1 PCIe1x16, 3 PCIe1x1, 2 SATA, 8 USB, 8-bit GPIO
- Size: 125mm x 95mm



ESM-945GSE

Intel® Atom™ N270 COM Express Module with Intel® 945GSE + ICH7-M Chipset

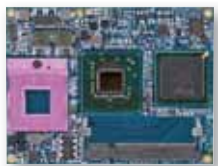
- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- One 200-pin SODIMM Socket Supports Up to 1GB DDR2 400/ 533MHz SDRAM
- Onboard 1GB DDR2 Memory
- Dual View, 2-CH 18-bit LVDS, TV-out, HDTV
- Intel® High Definition Audio
- Intel® 82583V Gigabit Ethernet
- 4 PCI, 3 PCIe1x1, 2 SATA, 8 USB, 8-bit GPIO
- Size: 125mm x 95mm



ESM-910

Intel® Celeron® M COM Express Module with Intel® 910GML6 + ICH6-M Chipset

- Onboard Intel® µFC-BGA 479 Celeron® M 600MHz CPU
- Intel® 910GML6/ ICH6-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400MHz SDRAM
- Dual View, 2-CH 18/24-bit LVDS
- Intel® High Definition Audio
- Marvell 88E8053 Gigabit Ethernet
- 4 PCI, 1 PCIe1x16, 3 PCIe1x1, 2 SATA, 8 USB, 8-bit GPIO
- Fanless Possible Operation
- Size: 125mm x 95mm



ESM-GME965

Intel® Core™ 2 Duo COM Express Module with Intel® GME965 + ICH8-M Chipset

- Supports 65nm Intel® µFC-PGA 478/ µFC-BGA 479 Core™ 2 Duo CPU
- Intel® GME965/ ICH8-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533/ 667MHz SDRAM
- Dual View, 2-CH 18/ 24-bit LVDS, TV-out, HDTV
- Intel® High Definition Audio
- Broadcom BCM5786 Gigabit Ethernet
- 4 PCI, 5 PCIe1x1, 1 PCIe1x16, 3 SATA, 8 USB, 8-bit GPIO
- Size: 125mm x 95mm

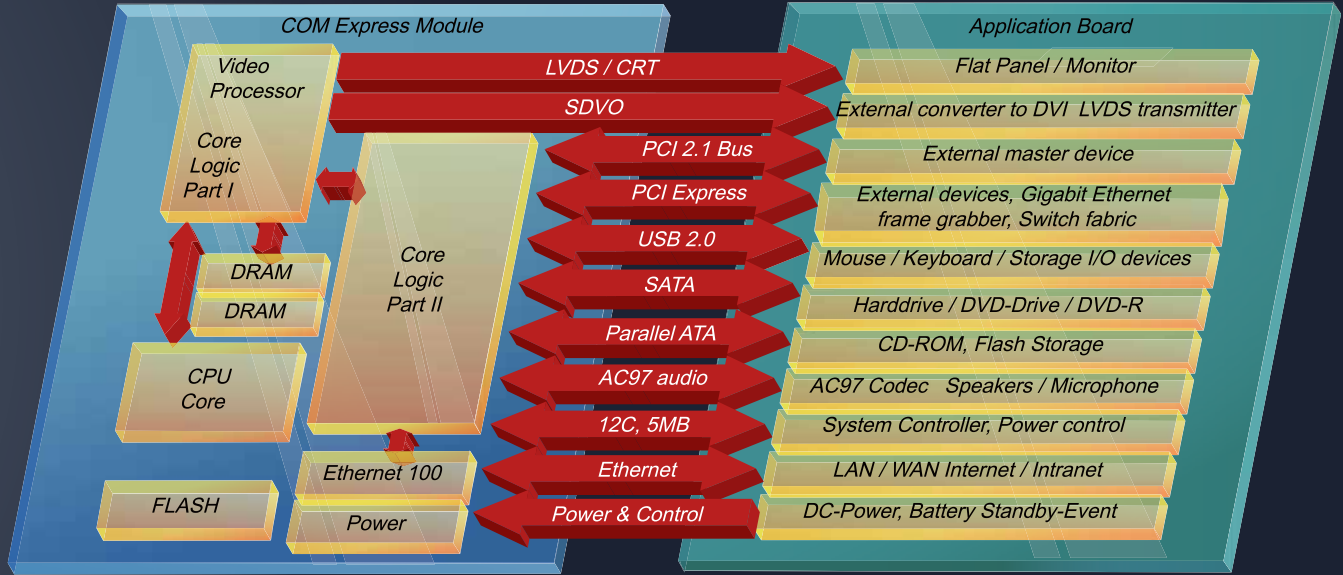


EEV-EX13

Micro-ATX COM Express Carrier Board

- Micro-ATX Form Factor
- Accepts Avalue & Other COM Express CPU Modules
- VGA/ LVDS/ Audio/ TV-out Interfaced
- 1 CF, 1 PCI, 2 PCIe1x1, 1 PCIe1x16,
- 4 SATA, 2 COM, 8 USB, Express Card/ 54mm
- Size: 243.84mm x 243.84mm

COM Express Focused Embedded Standard



EAP-CE95

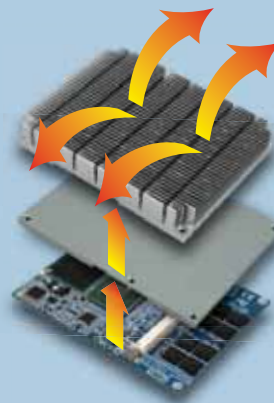
Mini-ITX COM Express Carrier Board with JAMMA Standard Interface

- Mini-ITX Form Factor
- Accept Avalue & Other COM Express CPU Modules
- Two 512KB Battery Backup SRAM
- Security IC protection
- VGA/ LVDS/ Audio/ TV-out Interface
- 1 CF, 1 PCI, 2 SATA, 6 USB, 4 COM, 64-bit GPIO, 8-bit Isolated DIO
- JAMMA Standard Interface
- Size: 170mm x 170mm

30-day Baseboard Prototyping Service

- 1 > **Select ETX/COMexpress Engine**
Test different ETX/COMexpress CPU modules to meet your system requirements
 - 2 > **Select Function Block**
Choose interfaces for storage device connection or use them for software compatibility tests
 - 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**
- Select expansion slots for extra system functions

Thermal Solution



Customized Thermal Solution

The heatsink customization service is available upon request to meet different application requirements.

- Mechanical drawing
- Mock-up sample
- Production

Modularized Thermal Solution

Provides a flexible way to meet any thermal requirements. We offer heatspreaders, heatsinks and coolers as optional items

- Reducing design effort
- High flexibility
- Easy to upgrade

COM Express Starter Kit

- Complete Starter Kit for Immediate Evaluation Purposes
- Choose Your COM Express Module for The Starter Kit.



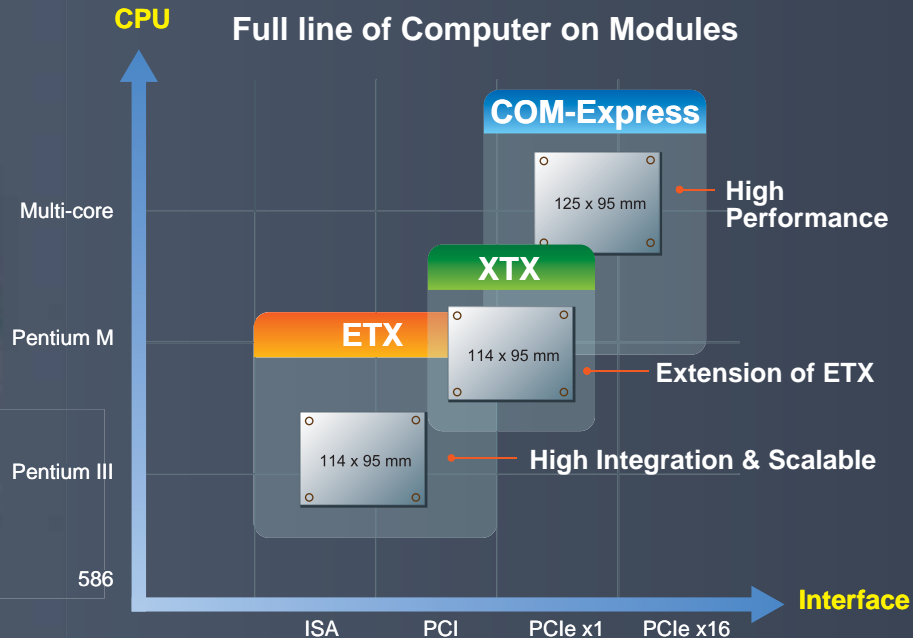
ESK-COM

COM Express Starter Kit Supports Quick Start-up of COM Express

- EEV-EX13 Evaluation Carrier Board
- ESM-945GSE COM Express Module (Can be Changed to Other COM Express Modules)
- Thermal Solutions (Heatspreader + Heatsink)
- Schematics, Design Guide, and User Manual
- ATX Power Supply
- Cable Set
- WinXP Embedded & Linux Bsp
- Dimension: 400mm x 350mm x 10mm

Embedded Platform - ETX/ XTX

Save Your Cost and Time
of Assembly & Upgrade



ETX



ESM-945GSX

Intel® Atom™ N270 ETX Module with Intel® 945GSE + ICH7-M Chipset

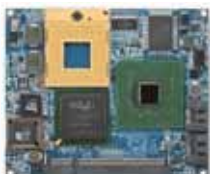
- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533 MHz SDRAM
- Dual View, 2-CH 18/ 24-bit LVDS, TV-out, HDTV, Audio
- Realtek RTL8101L LAN
- 4 PCI, 1 ISA Bus, 2 SATA, 2 COM, 4 USB
- Size: 114mm x 95 mm



ESM-LX800

AMD Geode LX800 ETX Module with AMD Geode LX800 + CS5536 Chipset

- Onboard AMD Geode LX800 @ 0.9W 500MHz with 128K L2 Cache CPU
- AMD Geode LX800/ CS5536 Chipset
- Onboard 256MB DDR Memory (Optional 512MB)
- 18-bit LVDS, Audio
- Realtek RTL8101L LAN
- 4 PCI, ISA Bus, 2 SATA, 4 USB, 2 COM
- Fanless Operation
- Size: 114mm x 95mm



ESM-945ETX

Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M ETX Module with Intel® 945GME + ICH7-M Chipset

- Supports Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M CPU
- Intel® 945GME/ ICH7-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533/ 667MHz SDRAM
- Dual View, 2-CH 18/ 24-bit LVDS, TV-out, HDTV, Audio
- Realtek RTL8101L LAN
- 4 PCI, 1 ISA Bus, 2 SATA, 4 USB, 2 COM
- Size: 114mm x 95mm



EEV-EX03

Micro-ATX ETX Carrier Board

- Micro-ATX Form Factor
- Accepts Avalue & Other ETX CPU Modules
- VGA/ LVDS/ Audio/ TV-out Interface
- 3 PCI, 2 ISA (Max External 4 Slot)
- 1 CF, 2 COM, 4 USB, 32-bit GPIO
- Size: 240mm x 240mm



ESM-910ETX

Intel® Celeron® M ETX Module with Intel® 910GML + ICH6-M Chipset

- Onboard Intel® Celeron® M 600 MHz with 512K L2 Cache CPU
- Intel® 910GML/ ICH6-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 333/ 400MHz SDRAM
- Dual View, 2-CH 18/ 24-bit LVDS, Audio
- Realtek RTL8101L LAN
- 4 PCI, 1 ISA Bus, 2 SATA, 4 USB, 2 COM
- Fanless Possible Operation
- Size: 114mm x 95mm

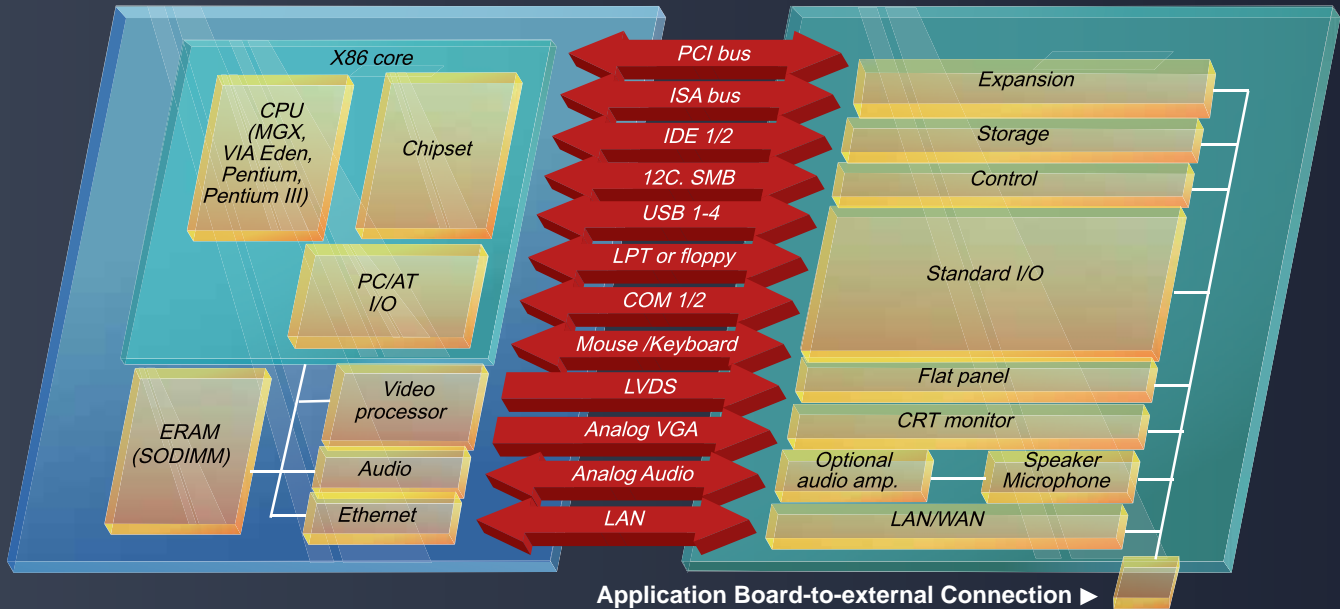


EAP-EX95

Mini-ITX ETX Carrier Board with JAMMA Standard Interface

- Mini-ITX Form Factor
- Accepts Avalue & Other ETX CPU Modules
- Two 512KB Battery Backup SRAM
- Security IC Protection
- Audio, LAN
- 1 CF, 1 PCI, 4 USB, 4 COM, 64-bit GPIO, 8 Isolated DIO
- JAMMA Standard Interface
- Size: 170mm x 170mm

ETX-to-application Board Connection



XTX



XTX-US15WP

Intel® Atom™ Z510P/ Z530P XTX Module with Intel® US15WP Chipset

- Intel® Atom™ Z510P/ Z530P CPU
- Intel® US15WP Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533MHz SDRAM
- Dual View, Dual LVDS
- Intel® High Definition Audio
- Realtek 8103E LAN
- 4 PCI, 1 PCIe x1, 1 LPC Bus, Micro SD
- 2 SATA, 6 USB, 4 COM (2 Optional)
- Wide Temperature Version available
- Size: 114mm x 95mm



EEV-EX20

Micro-ATX XTX Carrier Board

- Micro-ATX Form Factor
- Accept Avalue and Other XTX CPU Modules
- VGA/ LVDS/ Audio/ TV-out Interface
- 2 PCI, 1 PCIe x4, 1 PCIe x1
- 1 Express Card/ 54mm, 1 Mini PCIe Slot,
- 1 CF, 1 LPT, 2 COM, 6 USB, 16-bit GPIO
- Size: 240mm x 240mm

Thermal Solution

Customized Thermal Solution

The heatsink customization service is available upon request to meet different application requirements.

- Mechanical drawing
- Mock-up sample
- Production

Modularized Thermal Solution

Provides a flexible way to meet any thermal requirements. We offer heatspreaders, heatsinks and coolers as optional items

- Reducing design effort
- High flexibility
- Easy to upgrade

ETX Starter Kit

- Complete Starter Kit for immediate evaluation Purposes
- Choose your ETX module for the Starter Kit.



ESK-ETX

ETX Starter Kit Supports Quick Start-up of ETX

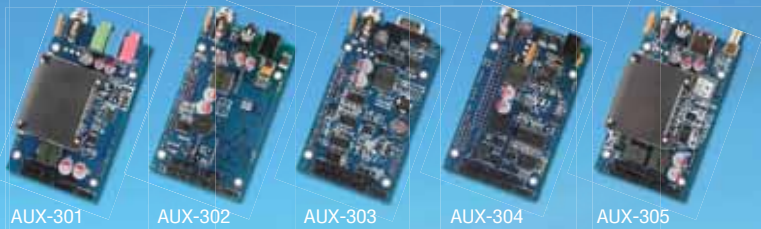
- EEV-EX03 Evaluation Carrier Board
- ESM-945GSX ETX Module (Can be Changed to Other ETX Modules)
- Thermal Solutions (Heatspreader + Heatsink)
- Schematics, Design Guide, and User Manual
- ATX Power Supply
- Cable Set
- WinXP Embedded & Linux Bsp
- Dimension: 400mm x 350mm x 10mm

Embedded Platform - 3.5" SBC

ECM-945GSE+ Advanced Micro Platform

Featuring Intel® Atom™ N270 1.6GHz CPU, 945GSE Chipset, 82538V GbE and 1GB DDR2 Onboard Memory

Application Modules



	AUX-301	AUX-302	AUX-303	AUX-304	AUX-305
15~28V DC Input	v	v	--	v	v
Smart Battery	--	--	--	--	v
Amplified Audio	v	v	--	--	v
PC104	--	--	--	v	--
RS-232/ 485/ CAN/ USB	--	2/0/0/1	4/0/0/2	1/1/1/0	2/0/0/1
Socket MODEM	--	v	--	v	--
i-Button I/F	--	v	v	--	--
GPIOs	--	v	v	v	--
Touch Screen Controller	--	v	--	--	--
GPS/ Gyro	--	--	--	--	v
SATA CF	v	--	--	--	v



ECM-PNV

Intel® Atom™ D510 Dual-Core 3.5" Micro Module with Intel® ICH8-M Chipset

- Onboard Intel® Atom™ D510 Dual-Core 1.66GHz CPU (Optional: D410/ N450)
- Intel® ICH8-M Chipset
- One 200-pin SODIMM Socket Supports Up to 1GB DDR2 667MHz SDRAM
- Dual View, 2-CH 24-bit LVDS, VGA
- 5.1-CH HD Audio
- Dual Intel® 82583V Gigabit Ethernet
- 1 CF, 1 Mini PCIe Card
- 2 SATA, 6 USB, 6 COM, 16-bit GPIO
- Size: 146mm x 101mm



ECM-945GSE

Intel® Atom™ N270 3.5" Micro Module with Intel® 945GSE/ ICH7-M Chipset

- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533MHz SDRAM
- Dual View, 2-CH LVDS, TV-out, HDTV
- 5.1-CH Audio
- Dual Intel® 82583V Gigabit Ethernet
- 1 CF, 1 Mini PCIe Card
- 2 SATA, 2 COM, 6 USB, 16-bit GPIO
- Size: 146mm x 101mm



ECM-US15WP

Intel® Atom™ Z510P/ Z530P 3.5" Micro Module with Intel® US15WP Chipset

- Intel® Atom™ Z510P/ Z530P CPU
- Intel® US15WP Chipset
- Onboard 1GB Memory
- 1-CH 24-bit LVDS, 5.1-CH Audio
- Intel® 82583V Gigabit Ethernet
- 1 CF, 2 SATA, 6 USB, 2 COM, 16-bit GPIO
- 1 SDIO, 1 SDVO
- Optional Built-in Touch Screen Interface
- Fanless Operation
- Wide Temperature Version Available
- Support ACC-SDVO2-VGA
- Size: 146mm x 101mm



ECM-945GSE+

Intel® Atom™ N270 3.5" Micro Module with Intel® 945GSE/ ICH7-M Chipset

- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- Onboard 1G DDR2 Memory
- Dual-channel 18-bit LVDS
- 2 PCIe Mini Card Slots
- Size: 146mm x 101mm

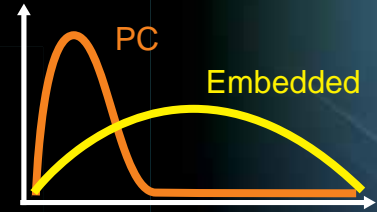
The Preferred Architecture for Embedded Boards

Scalable Architecture

Fanless
Low power
Ruggedized
Supercomputing



Long Life Cycle Support



Full Function Range

CPU, Audio, Video, Network, Control,
Power, DIO, FPGA, AD/DA



Software Engineering Support for porting, training.

Windows XPe, WinCE, BIOS



ECM-GME965

Intel® Core™ 2 Duo 3.5" Micro Module with Intel® GME965 + ICH8-M Chipset

- Supports 65nm Intel® µFC-PGA 478/ µFC-BGA 479 Core™ 2 Duo CPU
- Intel® GME965/ ICH8-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533/ 667MHz SDRAM
- Dual View, 2-CH 18/ 24-bit LVDS, TV-out, HDTV
- 5.1-CH/ 7.1-CH Audio, S/PDIF
- Dual Realtek RTL8111B Gigabit Ethernet
- 1 CF, 1 Mini PCI
- 2 SATA, 2 COM, 4 USB, 8-bit GPIO
- Size: 146mm x 101mm



ECM-910

Intel® Celeron® M 3.5" Micro Module with Intel® 910GMLE + ICH6-M Chipset

- Onboard Intel® Celeron® M 600MHz with 512K L2 Cache CPU
- Intel® 910GMLE/ ICH6-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 333/ 400MHz SDRAM
- Dual View, 2-CH 18/24-bit LVDS
- 2-CH Audio, S/PDIF
- Dual Atheros AR8121 Gigabit Ethernet
- 1 CF, 2 SATA, 8 USB, 16-bit GPIO
- Size: 146mm x 101mm



ECM-945GME

Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M 3.5" Micro Module with Intel® 945GME + ICH7-M Chipset

- Supports 65nm Intel® µFC-PGA 478/ µFC-BGA 479 Core™ 2 Duo/ Core™ Duo/ Celeron® M CPU
- Intel® 945GME/ ICH7-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533/ 667MHz SDRAM
- Dual View, 2-CH 18/ 24-bit LVDS, TV-out, HDTV
- 5.1-CH/ 7.1-CH Audio, S/PDIF
- Dual Realtek RTL8111C Gigabit Ethernet
- 1 Mini PCI, 1 CF, 2 SATA, 2 COM, 4 USB, 8-bit GPIO
- Jumperless Serial Port Configuration
- ACPI S3/ S4 Supported
- Size: 146mm x 101mm



ECM-LX800D

AMD Geode LX800 3.5" Micro Module with AMD Geode LX800 + CS5536 Chipset

- Onboard AMD Geode LX800 @ 0.9W 500MHz CPU
- AMD Geode LX800/ CS5536 Chipset
- Onboard 256MB Memory (Optional 512MB)
- 18-bit LVDS, 2-CH Audio
- Dual Realtek RTL8101L LAN
- 1 CF, 1 PC/104, 2 COM, 2 USB, 8-bit GPIO
- Optional Built-in Touch Screen Interface
- Fanless Operation
- Wide Voltage: +10V ~ +28V
- Size: 146mm x 101mm

Embedded Platform - EPIC/ PC-104/ 5.25"

Advantages of Boards and Modules



Facilitation

- Off-the-shelf computer board
- Support the future bus architecture extension interfaces



Reliability

- Expertise of ruggedize design
- Serving medical, transportation, and harsh environment demanding



Compliance

- Compliant regulatory of industry standards
- Compliant Safety Regulatory
- In-house testing and certification facilities

EPIC



EPI-QM57

Intel® Core™ i7-620LE/ 620UE EPIC Module with Intel® QM57 Chipset

- Onboard LV/ ULV Intel® Core™ i7 Processors
- Intel® QM57 Chipset
- One 204-pin SODIMM Socket Supports Up to 4GB DDR3 800/ 1066MHz SDRAM
- Dual View, 2-CH 18/ 24-bit LVDS, DVI-I
- Dual Intel® Gigabit Ethernet
- 1 CF, 4 SATA, 2 COM, 8 USB, 16-bit GPIO
- Options: Express Card/ 34mm, Built-in Touch Screen Interface
- Support iAMT 6.0, RAID 0/ 1/ 5/ 10
- Size: 115mm x 165mm



EPI-910

Intel® Celeron® M EPIC Module with Intel® 910GMLE + ICH6-M Chipset

- Onboard Intel® Celeron® M 600MHz with 512K L2 Cache CPU
- Intel® 910GMLE/ ICH6-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400MHz SDRAM
- Dual View, 2-CH 18/ 24-bit LVDS, 2-CH Audio
- Dual Atheros AR8121 Gigabit Ethernet
- 1 CF, 2 SATA, 6 COM, 6 USB, 8-bit GPIO
- Options: 2W Audio Amplifier, Express card/ 34mm, Built-in Touch Screen Interface
- Size: 115mm x 165mm



EPI-945GSE

Intel® Atom™ N270 EPIC Module with Intel® 945GSE + ICH7-M Chipset

- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533MHz SDRAM
- Dual View, 2-CH 18-bit LVDS, TV-out, DVI-I, HDTV, 5.1-CH Audio
- Dual Realtek 8111C Gigabit Ethernet
- 1 CF, 2 SATA, 6 COM, 6 USB, 16-bit GPIO
- Options: 10W Audio Amplifier, Express Card/ 34mm, Built-in Touch Screen Interface
- Size: 115mm x 165mm

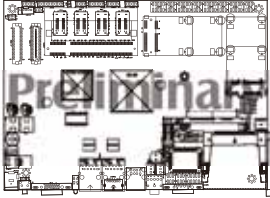


EPI-LX800

AMD Geode LX800 EPIC Module with AMD Geode LX800 + CS5536 Chipset

- Onboard AMD Geode LX800 @ 0.9W 500MHz with 128K L2 Cache CPU
- AMD Geode LX800/ CS5536 Chipset
- One 200-Pin SODIMM Socket Supports Up to 1GB DDR 266/ 400/ 533MHz SDRAM
- Dual View, TFT, 18-bit LVDS, 2-CH Audio
- Dual LAN, Optional Gigabit Ethernet
- 1 PCI-104, 1 CF, 2 COM, 4 USB, 16-bit GPIO
- Single +12V Power Input
- Optional Built-in Touch Screen I/F
- Size: 115mm x 165mm

5.25" SBC



* Available on 2010 Q2

EBM-PNV

Intel® Atom™ D510 Dual-Core 5.25" Mini Module with Intel® ICH8-M Chipset

- Onboard Intel® Atom™ D510 Dual-Core 1.66GHz CPU or D410/ N450 1.66GHz CPU (Optional)
- Intel® ICH8-M Chipset
- Onboard 1GB DDR2, One 200-pin SODIMM Socket Supports Up to 2GB 667MHz SDRAM
- Dual View, LVDS, 5.1-CH Audio
- Dual Intel® 82583V PCIe Gigabit Ethernet
- 2 Mini PCIe Slots
- 1 CF, 2 SATA, 6 COM, 6 USB, 16-bit GPIO
- Size: 203mm x 146mm



EBM-LX800

AMD Geode LX800 5.25" Mini Module with AMD Geode LX800 + CS5536 Chipset

- Onboard AMD Geode LX800/ LX900 CPU
- AMD Geode LX800/ CS5536 Chipset
- One 184-Pin DIMM Socket Supports Up to 1GB DDR 333/ 400MHz SDRAM
- Dual View, TTL, 18-bit LVDS
- 2-CH Audio, Realtek RTL8101L LAN
- 1 PC/104, 1 PCI, 1 CF, 2 SATA, 6 COM, 4 USB, 16-bit GPIO
- Fanless Operation
- Size: 203mm x 146mm



EBM-945GSE

Intel® Atom™ N270 5.25" Mini Module with Intel® 945GSE + ICH7-M Chipset

- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- Onboard 1 GB DDR2, One 200-pin SODIMM Socket Supports Up to 2GB 400/ 533MHz SDRAM
- Dual View, TV-out, DVI with 2-CH 18-bit LVDS, Optional 2-CH 18/ 24-bit LVDS
- Dual Realtek RTL8111C Gigabit Ethernet
- 1 Mini PCI, 1 Optional Mini PCIe
- 1 CF, 2 SATA, 2 COM, 6 USB, 16-bit GPIO
- Optional Built-in Touch Screen I/F
- Fanless Operation
- Size: 203mm x 146mm

PC-104



ETM-LX800

AMD Geode LX800 PC/104+ Module with AMD Geode LX800 + CS5536 Chipset

- Onboard AMD Geode LX800 @ 0.9W 500MHz with 128K L2 Cache CPU
- AMD Geode LX800/ CS5536 Chipset
- One 200-Pin SODIMM Socket Supports Up to 1GB DDR 266/ 333/ 400MHz SDRAM
- 18/ 24-bit TFT, 2-CH Audio
- Realtek RTL8110S Gigabit Ethernet
- 1 PC/104, 1 PC/104, 2 COM, 4 USB
- Size: 96mm x 114mm

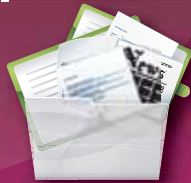
Comparison Chart

Item	Navy Pier Intel® Atom™ N270 + 945GSE + ICH7M	Luna Pier Pineview-M N450 + ICH8M	Luna Pier Refresh Pineview-D D410/ D510 + ICH8M
Kit TDP	8~10W	~8W	~13W/ ~17W (DC)
Kit Size	2220	1450	1450
L2 Cache	512Kb	512Kb	512/ 1024Kb
CPU/ FSB Freq	1.6GHz/ 533MHz	1.66GHz/ 667MHz	TBD
Graphic Core Freq	166MHz	200MHz	400MHz
Memory	DDR2 533	DDR2 667	DDR2 667
Max Memory	2GB	2GB	2GB
Display	VGA, LVDS, SDVO, TV	VGA, LVDS	VGA, LVDS
PCIe	4 x 1, 1 x 4	6 x 1 (1 x 4 + 2 x 1)	6 x 1 (1 x 4 + 2 x 1)
SATA	2 Ports	3 Ports	3 Ports
PATA	Yes	Yes	Yes
USB	8	10	10
PCI	6	4	4

Avalue RISC Platform: A Choice Beyond X86 Platform

Knowing arising demands in market, Avalue teams up to develop new RISC products with our experience and expertise in embedded computing. RISC series features of "3 Savings" :

Space-Saving



Avalue's RISC is given with small size, 2.5" and SODIMM size

Energy-Saving



Each product is designed with low TDP and estimated power consumption is less than 1W (w/conditions)

Cost-Saving



By deducting redundant functions, execution process and hardware, total cost could be effectively controlled

RISC Applications for Reference

Small-size/ wide temp/ Low TDP

RISC platform is renown with it's small footprint, low thermal issue and wide operation temperature.

These make RISC an ideal solution for automation and medical applications. By adding rich I/O, Avalue RISC is also suitable for HMI or entry level digital signage controls.



Automation



HMI



Medical Device

Low Power Consumption/ Mobility

Mobility and Portability are the major trend in the future; RISC platform is the first choice for users to develop these kinds of devices due to the extremely low power consumption, especially compares with X86 platform. With an average power consumption less than 1W, duration of battery could be extended.



Consumer Electronics



Hand-Held Devices



Portable Game Device

Factory Automation
 Mobile/ Portable Devices
 Transportation
 POS/ KIOSK/ Advertisement
 Medical/ HMI



RSC-W910

Nuvoton W90P910 ARM9 RISC Module

- Nuvoton W90P910 ARM9 CPU
- Onboard 128MB NAND Flash, Optional 512MB
- Onboard 64MB SDRAM, Optional 128MB
- 16 ~ 18-bits TTL, AC97 Audio
- 10/ 100Mbps LAN
- 1 x RS-232, 1 x RS-232/ 485, 3 USB
- +9V ~ +24V DC Input
- Optional Onboard Battery Charger
- Optional Onboard G.Sensor
- Windows CE 5.0/6.0 & Linux
- Size: 110mm x 70mm



RSM-MX515

Freescale i.MX515 SOM Module

- Onboard Freescale i.MX515 SoC
- Onboard AUDIO/ Touch/ PWM Companion Chip
- Onboard DDR2 128MB SDRAM & 256MB NAND Flash
- Supports Open GL ES 2.0/ Open VG 1.1
- 2 SDIO, 1 ATA, 1 USB Host, 1 USB OTG, 3 UARTs (on SODIMM Slot)
- Size: 67mm x 44mm

* Available on 2010 Q2



EEV-R51

5.25" SOM Carrier Board

- Accept RSM-MX515 SOM Module
- VGA & LVDS
- Audio & TV-out Interface
- 10/ 100bps LAN
- 1 x USB Host, 1 x USB OTG, 3 x UARTs (or 2 x UARTs & 1 x IrDA), Touch Controller
- 2 SDIO, 1 ATA
- 16-bit programmable GPIO
- Size: 203mm x 146mm

* Available on 2010 Q2

(*Panel is for options)



LPC-08R1

8" ARM9 Based Fanless Panel PC

- 8" ARM9 Based Panel PC
- Onboard Nuvoton W90P910 ARM9 200MHz SoC
- Onboard 64MB SDRAM (Up to 128MB)
- Onboard 2MB NOR Flash (Boot System)
- Onboard 128MB NAND Flash (Storage)
- Single-Channel 8/ 16/ 18-bit TTL, AC97 Audio
- 1 COM, 2 USB, SD Socket
- 10/100 LAN in RJ45, Optional Support POE (802.af)
- Optional Onboard Battery Charger
- Wide Voltage Input: +9V ~ 24Vdc, Wide Operating Temperature: -10 ~ 60°C
- Low Profile, Low Power and Stylish Design
- Dimension: 202mm x 159mm x 43mm

* Available on 2010 Q2

Comparison

RISC vs CISC (X86)

Avalue provides both RISC and CISC platforms for users demands. These two platforms have their own advantages respectively. Find out the defference from the comparison chart below:

Item	RISC	CISC
Characteristic	Emphasis on Software	Emphasis on Hardware
Instructions Type	Single Reduced Instruction Only	Include Multi Complex Instructions
Power Consumption	Extreme Low	Medium to High
Performance	Medium or Low	High
Cost	Low	Medium to High
Develop Time	Shorter	Longer

Embedded Platform - Peripherals



EPM-1712 Vehicle 100Watt Smart DC/DC Converter

- Wide Range DC Power Input: 6 ~ 30V DC
- Output Voltage: 12V DC
- Intelligent System on/off Control Via Jumper Setting
- 6 Selectable Power on/off Timing Modes
- Load Down Protection
- Over Voltage Protection
- Short Circuit Protection
- Over Current Protection
- Battery Voltage Monitor
- Size: 50mm x 135mm



EPM-1560T Panel-Link Transmitter Module

- Scalable Bandwidth: 25 ~ 165megapixels/sec (VGA to UXGA)
- Flexible Graphics Controller Interface: 24-bit (1pixel/clock) Mode Inputs
- Flexible Input Clocking:
 - Single Clock Single Edge
 - Single Clock Dual Edge
- Low EMI Low Voltage Interface: +3.3V with Option for +1.0 ~ +1.8V
- Receiver Detection: Supports Hot Plug Detection
- Cable Distance Support: Over 5m with Twisted Pair and Fiber-optics Ready
- Standards Compliant with DVI 1.0 (DVI is Backwards Compliant with VESA DTM and DFP)
- Size: 66mm x 50mm



EPM-1710 70W Smart Battery Charger Module

- I/O Interface: RS-232& SMBus
- AT/ ATX Mode
- Load Down Protection
- Over Voltage Protection
- Short Circuit Protection
- Over Current Protection
- Smart Battery Charger for Li-ion
- SPEC: Input Voltage: 6VDC ~ 30VDC
Battery Charge Voltage: 16.8V
Efficiency: Up to 90%
- Size: 60mm x 146mm x 20mm



EPM-1570 VGA to TV-out Module

- Simultaneous Display on Monitor, LCD and TV
- Multiple Frequency Input Formats: 640 x 480, Up to 85Hz; 800 x 600, Up to 85Hz; 1024 x 768, Up to 70Hz
- Underscan, Freeze, Zoom, Pan and Scroll
- Supports NTSC, NTSC-EIAJ, and PAL-B/ D/ G/ H/ I/ M/ N Standards
- Flick-free Filter
- Selectable TV-out Format - Composite, S-Video
- Auto Detect Input Video Mode
- Auto Detect The Presence of The TV
- Single +5V Power Supply
- Size: 96mm x 90mm



EPM-1520 18/24-bit LVDS Transmitter Module

- Supports 20 ~ 85MHz Shift Clock
- Up to 2.38Gbps Throughput
- Up to 297.5Mbytes/sec Bandwidth
- 345mV (typ) Swing LVDS Devices for Low EMI
- Compatible with TIA/ EIA-644 LVDS Standard
- Flat Panel/ CRT Interface:
 - NS DS90C385 or Equivalent Transmitter Chipset (EPM-1520-24)
 - NS DS90C365 or Equivalent Transmitter Chipset (EPM-1520-18)
 - Supports VGA, SVGA, XGA and single/dual pixel
- SXVGA Display Type
- 40-pin DFB-40DP-1.25V (Input)
- Operating Temperature: 32 ~ 140°F (0 ~ 60°C)
- Size: 65mm x 50mm



EPM-1524 USB to Serial Port Module

- USB Input Via Connector or Pin Header
- Supports USB Specification V2.0 and USB CDC V1.1
- +5V or 12V Power Output Select for Each RS-232 Serial Port
- Supports Bus Power and External Power
- Supports Additional Power Input from Avalue Boards Directly
- Operating Temperature: 32 ~ 140°F (0 ~ 60°C)
- Size: 101mm x 40mm



EPM-1530 18/24-bit LVDS Receiver Module

- Supports 20 ~ 85MHz Shift Clock
- Up to 2.38Gbps Throughput
- Up to 297.5Mbytes/sec Bandwidth
- 345mV (typ) Swing LVDS Devices for Low EMI
- Compatible with TIA/ EIA-644 LVDS Standard
- Flat Panel/ CRT Interface:
 - NS DS90C384 or Equivalent Receiver Chipset
 - Supports VGA, SVGA, XGA and Single/ Dual Pixel SXVGA Display Type
- 20-pin HIROSE DF14A-20P-1.25H Connector (Input)
- Operating temperature: 32 ~ 140°F (0 ~ 60°C)
- Size: 65mm x 50mm



EPM-1525 VGA/ DVI to TTL/ LVDS Scaler Module

- Supports Single Channel 18/ 24-bit TTL and Dual-channel 18/ 24-bit LVDS
- Supports VGA/ TMDS/ YPcPr Input to LVDS SXGA/ UXGA/ WSXGA+/ WXGA+ Resolution
- Fully Programmable Zoom Ratios
- Supports Non-linear Scaling from 4:3 to 16:9 or 16:9 to 4:3
- Zoom Scaling Up and Down
- Supports Power Save Mode When No Signal Input
- Programmable 5 keys OSD
- 2W Amplify Audio Output
- +12V Only Operation



EPM-1522 18/24-bit TTL/ LVDS to DVI Transmitter

- Supports 18 and 24-bit LVDS to DVI
- Supports 18-bit/ 24-bit TTL LCD to DVI (Option)
- Standard DVI Connector
- Single +5 V power supply
- LCD Connector: Hirose DF13-40DP-1.25V x 2, One for LVDS Input, One for TTL Input
- Power Input Connector: Standard Mini Power Connector, Pitch 2.54mm (+5V, GND, GND, +12V), Can be Changed to Vertical/ Horizontal Type of Connector
- DVI Output: Standard DVI Connector
- Operating Temperature: 32 ~ 140°F (0 ~ 60°C)
- Size: 66mm x 66mm (4 Stand-off Need Compatible with uPGA479 Cooler Stand-off)



Industrial System

Extending expertise on industrial motherboards and industrial PC manufacturing, Avalue combines scalable motherboards and various chassis to provide customers numbers of MB-based systems. Two key factors to develop Avalue's MB system is expansion and thermal design; for higher rugged/harsh applications, better expansion and thermal design are required.



BMX-R113 Mini ITX Barebone

- Cost Effective Industrial Design
- Scalable with Avalue Mini-ITX Boards
- Default Internal Boards: (Page 18-19)
EMX-910GMLE/ EMX-945GSE/ EMX-6901G
- 2.5" HDD, 2 COM, 2 RJ-45, DVI, 4 USB
- Compact Size; Metal Chassis
- Fanless Operation
- VESA Compliance; Wall Mount Bracket
- Key Lock for Quickly-remove
- Scalable Performance
- 60W AC Adapter/ 12V DC-in
- Dimension: 251mm x 66mm x 200mm



BMX-R123 Fanless Mini-ITX TC Chassis

- Cost Effective Solution
- Scalable with Avalue Mini-ITX Boards
- Default Internal Boards: (Page 18-19)
EMX-910GMLE/ EMX-945GSE/ EMX-6901G
- 2.5" HDD, 6 USB, 2 COM, DVI
- Front USB/ Mic-in/ Line-in
- VESA Compliance; Optional VESA Bracket
- Compact Size
- Fanless Operation
- Scalable Performance
- 60W AC Adapter/ 12V DC-in
- Dimension: 90mm x 230mm x 205mm



BMX-A10 Slim Mini-ITX Barebone

- Slim Systems Supports CPU Ranged from Intel® Celeron® M to Core™ 2 Duo CPU
- Scalable with Avalue Mini-ITX Boards
- Default Internal Boards: (Page 18-19)
EMX-965GME/ EMX-945GME3/ EMX-910GMLE
- LVDS, DVI, CF, 5.1/ 5.1+2-CH Audio, 6W AMP
- 2 COM, 6 USB, 2.5" HDD Supported
- 90W Adapter & Optional Cable Fastener
- Optional Knock-out for 1 COM
- Desk/ Wall Mount for Optiona
- Dimension: 225mm x 220mm x 63.5mm



BMX-A30 Mini-ITX Barebone with PCIe Expansion

- Mini-ITX System Supports CPU Ranged from Intel® Celeron® M to Core™ 2 Quad CPU
- Scalable with Avalue Mini-ITX Boards
- Default Internal Boards: (Page 18-19)
EMX-965Q/ EMX-965GME/ EMX-945GME3/ EMX-910GMLE
- LVDS, DVI, 1 CF, 5.1/ 5.1+2-CH Audio, 6W AMP
- 1 PCI/ PCIe, 2 COM, 6 USB
- 3.5"/ 2.5" HDD Supported
- PCIe16 for ADD2 HDMI/ VGA/ DVI Card
- Built-in 200W PSU
- Desk/ Wall Mount for Options
- Dimension: 300mm x 220mm x 72mm



BMX-P10 Intel® Pentium™ M/ Celeron® M Mini-ITX Barebone

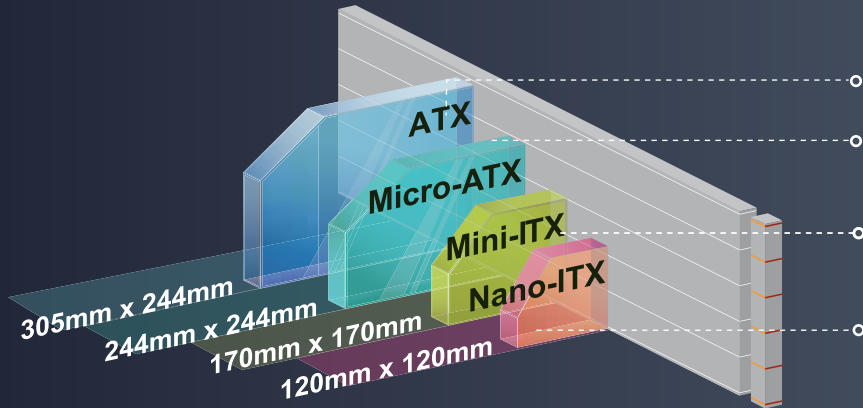
- Intel® Pentium™ M/ Celeron® M Series CPU
- Scalable with Avalue Mini-ITX Boards
- Default Internal Board: (Page 18-19)
EMX-910GMLE: Intel® 910GMLE + ICH6-M
- 1 PCI, CF, 4 COM, 8 USB, 2 SATA
- 2.5" HDD Supported
- 80W AC Power Adpator
- Dimension: 215mm x 230mm x 65mm



BMX-P30/ P50 Intel® Pentium™ M/ Celeron® M Mini-ITX Barebone

- Intel® Pentium™ M/ Celeron® M Series CPU
- Scalable with Avalue Mini-ITX Boards
- Default Internal Board: (Page 18-19)
EMX-910GMLE: Intel® 910 GMLE + ICH6-M
- 3.5"/ 2.5" HDD Supported
- 2 PCI/ PCIe Expansion (BMX-P50),
1 PCI/ PCIe Expansion (BMX-P30)
- 4 COM, 8 USB
- 80W AC Power Adpator
- Dimension: 300mm x 273mm x 65mm

Industrial MB - ATX/ Micro ATX/ Nano ITX



Powerful Platform
Reliable/Wide-Expansion

High Performance
Fair Capabilities of Expansion

Scalable Performance
Suitable for Various Applications

Small Footprint
Low Power Consumption

ATX



EAX-Q45

Intel® Core™ 2 Quad/ Core™ 2 Duo ATX Motherboard with Intel® Q45 + ICH10DO Chipset

- Supports Intel® Core™ 2 Quad/ Core™ 2 Duo Processors CPU
- Intel® Q45/ ICH10DO Chipset
- Four DIMMs Up to 8GB DDR2 800/ 667MHz SDRAM, Non-ECC
- Intel® Graphics Media Accelerator 4500
- 5.1+2-CH HD Audio Streams
- Dual Realtek RTL8111SC Gigabit Ethernet
- 1 PCIe16, 2 PCIe1, 4 PCI
- 2 x COM (5/ 12V), 5 x SATA II, 1 x eSATA, 12 x USB, 16-bit DIO
- Integrated TPM
- Power Fail Auto-on
- Size: 304.8mm x 243.84mm



EAX-945G

Intel® Core™ 2 Duo/ Core™ Duo/ Pentium® 4/ Celeron® D ATX Motherboard with Intel® 945G Chipset

- Supports Intel® Core™ 2 Duo/ Core™ Duo/ Pentium® 4/ Pentium® D CPU
- Intel® 945G/ ICH7 Chipset
- Four DIMMs Up to 4GB 2-CH DDR2 667/ 533MHz SDRAM
- Intel® Graphics Media Accelerator 950
- Realtek ALC888 8-CH High Definition Audio
- Dual Intel® 82573L Gigabit Ethernet
- 1 PCIe16, 1 PCIe1, 5 PCI
- 4 COM, 8 USB, 4 SATA II
- 4 x SATA with Intel® Matrix Storage Manager Support
- PCIe16 Supports ADD2 VGA/ DVI/ HDMI Card
- Size: 304.8mm x 243.84mm



EAX-Q35

Intel® Core™ 2 Quad/ Core™ 2 Duo ATX Motherboard with Intel® Q35 + ICH9DO Chipset

- Supports 45nm Intel® Core™ 2 Quad/ Core™ 2 Duo Processors CPU
- Intel® Q35/ ICH9DO Chipset
- Four DIMMs Up to 8GB 2-CH DDR2 800/ 667MHz SDRAM, Non-ECC
- Intel® Graphics Media Accelerator 3100
- Realtek ALC888 Supports 5.1+2-CH HD Audio Streams, 6W AMP
- Dual Realtek RTL8111C Gigabit Ethernet
- 1 PCIe16, 1 PCIe1, 5 PCI
- 4 COM (5/ 12V), 6 SATA, 12 USB, 16-bit DIO
- TPM 9635TT 1.2
- 6 x SATA II with Intel® Matrix Storage Manager Support
- Size: 304.8mm x 243.84mm



EAX-915GV

Intel® Pentium® 4/ Celeron® D ATX Motherboard with Intel® 915GV + ICH6 Chipset

- Supports 90nm Intel® Pentium® 4/ Celeron® D CPU
- Intel® 915GV/ ICH6 Chipset
- Four DIMMs Up to 4GB 2-CH DDR2 667/ 533/ 400MHz SDRAM
- Intel® Graphics Media Accelerator 900
- Realtek ALC888 Supports 5.1+2-CH Audio Streams
- Dual Realtek RTL8110SC Gigabit Ethernet
- 5 PCI, 2 ISA, 1 PCIe16
- 2 COM, 8 USB, 4 SATA
- PCIe16 Supports ADD2 VGA/ DVI/ HDMI Card
- Size: 304.8mm x 243.84mm



EAX-965Q

Intel® Core™ 2 Quad/ Core™ 2 Duo/ Core™ Duo ATX Motherboard with Intel® 82Q965 + ICH8DO Chipset

- Supports 65nm Intel® Core™ 2 Quad/ Core™ 2 Duo/ Core™ Duo CPU
- Intel® Q965/ ICH8DO Chipset
- Four DIMMs Up to 8GB 2-CH DDR2 800/ 667/ 533MHz SDRAM
- Intel® Graphics Media Accelerator 3000
- AD1988 7.1-CH High Definition Audio
- Intel® 82566DM PCIe Gigabit Ethernet
- 1 PCIe16, 1 PCIe4, 5 PCI
- 4 COM, 10 USB, 7 SATA II, 1 e-SATA
- Optional IEEE1394A
- 7 x SATA with Intel® Matrix Storage Manager Support
- PCIe16 Supports ADD2 VGA/ DVI/ HDMI Card
- Size: 304.8mm x 243.84mm



Micro ATX



ERX-Q35

Intel® Core™ 2 Quad Micro ATX Motherboard with Intel® Q35 + ICH9DO Chipset

- Supports 45nm Intel® Core™ 2 Quad/ Core™ 2 Duo Processors CPU
- Intel® Q35/ ICH9DO Chipset
- Four DIMMs Up to 8 GB 2-CH DDR2 800/ 667MHz SDRAM, Non-ECC
- Intel® Graphics Media Accelerator 3100
- Realtek® ALC888 Support 7.1+2-CH Audio Streams
- Intel® 82566DM Gigabit Ethernet
- 1 PCIe16, 1 PCIe1, 2 PCI
- 1 COM, 12 USB, 6 SATA II, 2 IEEE1394
- TPM 9635TT 1.2
- 6 x SATA II with Intel® Matrix Storage Manager Support
- PCIe x16 Supports ADD2 VGA/ DVI/ HDMI Card
- Size: 243.84mm x 243.84mm



ERX-965Q2

Intel® Core™ 2 Quad/ Core™ 2 Duo®/ Core™ Duo/ Pentium® 4/ Celeron® D Micro ATX Motherboard with Intel® Q965 + ICH8 Chipset

- Supports 65nm Intel® Core™ 2 Quad/ Core™ 2 Duo/ Pentium® D/ Pentium® 4/ Celeron® D CPU
- Intel® Q965/ ICH8 Chipset
- Four 240-pin DIMMs Up to 8GB 2-CH DDR2 800/ 667/ 533MHz SDRAM
- Intel® Graphics Media Accelerator 3000
- Realtek ALC888 Supports 7.1+2-CH Audio Streams, 6W AMP
- Realtek RTL8111B Gigabit Ethernet
- 1 PCIe16, 3 PCI, 4 COM, 6 USB, 2 SATA
- TPM 9635TT 1.2
- PCIe16 Supports ADD2 VGA/ DVI/ HDMI Card
- Size: 243.84mm x 243.84mm



ERX-965Q

Intel® Core™ 2 Quad/ Core™ 2 Duo®/ Core™ Duo/ Pentium® 4/ Celeron® D Micro ATX Motherboard with Intel® Q965 + ICH8 Chipset

- Supports 65nm Intel® Core™ 2 Quad/ Core™ 2 Duo/ Pentium® D/ Pentium® 4/ Celeron® D CPU
- Intel® Q965/ ICH8 (Optional ICH8DO) Chipset
- Four 240-pin DIMMs Up to 8GB 2-CH DDR2 800/ 667/ 533MHz SDRAM
- Intel® Graphics Media Accelerator 3000
- ADI AD1988 Supports 7.1-CH High Definition Audio
- Intel® 82566DM Gigabit Ethernet
- 1 PCIe16, 1 PCIe4, 2 PCI
- 1 COM, 10 USB, 5 SATA, 1 e-SATA, 2 IEEE 1394A (Optional)
- Optional 5 x SATA with Intel® Matrix Storage Manage Support
- Size: 243.84mm x 243.84mm



ERX-945G

Intel® Core™ 2 Duo®/ Core™ Duo/ Pentium® 4/ Celeron® D Micro ATX Motherboard with Intel® 82945G + ICH7 Chipset

- Supports 65nm Intel® Core™ 2 Duo/ Core™ Duo/ Pentium® 4/ Celeron® D CPU
- Intel® 945G/ ICH7 Chipset
- Four 240-pin DIMMs Up to 4GB 2-CH DDR 400/ 533/ 667MHz SDRAM
- Intel® Graphics Media Accelerator 950
- Realtek ALC882 Supports 7.1-CH High Definition Audio
- Intel® 82573L Gigabit Ethernet
- 1 PCIe16, 1 PCIe1, 2 PCI
- 2 COM, 8 USB, 4 SATA
- PCIe16 Supports ADD2 VGA/ DVI/ HDMI Card
- Size: 243.84mm x 243.84mm

Nano ITX



ENX-PNV

Intel® Atom™ PNV-M/ PNV-D Nano ITX Motherboard with Intel® ICH8-M Chipset

- Onboard Intel® Atom™ PNV-M (w/ 512KB Cache)/ PNV-D(w/ 1024KB Cache) Series CPU
- Intel® ICH8-M Chipset
- One 200-pin SODIMM Up to 2GB DDR2 667MHz SDRAM (PNV-M); 4GB (PNV-D), Non-ECC
- Dual View, LVDS, VGA
- Realtek ALC888 Supports 7.1-CH HD Audio
- Realtek RTL8111C Gigabit Ethernet
- 1 Mini PCI, 1 CF
- 2 COM, 4 USB, 2 SATA
- Size: 120mm x 120mm



ENX-US15WP

Intel® Atom™ Z510P/ Z530P Nano ITX Motherboard with Intel® US15WP Chipset

- Onboard Intel® Atom™ Z510P/ Z530P CPU
- Intel® US15WP Chipset
- 2D/3D Graphics Acceleration Supports Direct X9, EMV9, H.264.A and MPEG2 Video Decoding
- One 200-pin SODIMM Up to 2GB DDR2 400/ 533MHz SDRAM
- Dual View, VGA, LVDS
- Realtek ALC888 Supports 7.1-CH HD Audio
- Realtek RTL8111C Gigabit Ethernet
- 1 Mini PCIe, 1 CF
- 1 COM, 4 USB, 8-bit GPIO
- Optional TPM
- Size: 120mm x 120mm



ENX-LX800

AMD Geode LX800 Nano ITX Motherboard with AMD Geode LX800 + CS5536 Chipset

- Onboard AMD Geode LX800 500MHz @ 0.9W CPU
- AMD Geode LX800/ CS5536 Chipset
- One SODIMM Up to 1GB DDR 400MHz SDRAM
- 18/24-bit TTL, LVDS
- Realtek ALC655 Supports 2-CH Audio
- Realtek RTL8139DL 10/100 Mbps LAN
- 1 Mini PCI, 1 CF
- 2 COM (1 Powered COM), 4 USB, 8-bit GPIO
- Size: 120mm x 120mm



Industrial MB - Mini ITX



Scalable Performance/ CPU Range
 Low Power; Eco-friendly
 Possible Fanless Operation

MINI-ITX



EMX-GM45

Intel® Core™ 2 Duo GM45 Mini-ITX Mainboard with Intel® GM45/ ICH9-M Chipset

- Supports 45nm Intel® µFC-PGA/ BGA Socket-P Core™ 2 Duo CPU
- Intel® GM45/ ICH9-M Chipset
- Two 200-pin SODIMMs Up to 8GB DDR2 667/ 800MHz SDRAM
- Intel® Graphics Media Accelerator HD4500
- Dual VGA, 2-CH LVDS
- Realtek ALC888 7.1-CH Audio, 6W AMP
- Dual AR8121 Gigabit Ethernet
- 1 CF, 1 PCI, 4 SATA, 6 COM, 8 USB, 16-bit GPIO
- Optional 1 ~ 4MB Battery Backup SRAM
- Size: 170mm x 170mm



EMX-945GME3

Intel® Core™ 2 Duo/ Core™ Duo/ Core™ 2 Solo/ Core™ Solo Mini ITX Motherboard with Intel® 945GME + ICH7-M Chipset

- Supports 65nm Intel® socket P Core™ 2 Duo/ Core™ Duo/ Core™ 2 Solo/ Core™ Solo CPU
- Intel® 945GME/ ICH7-M Chipset
- Two DIMMs Up to 4GB 2-CH DDR2 667/ 533MHz SDRAM
- Intel® Graphics Media Accelerator 950
- Dual View, DVI, 2-CH LVDS
- 5.1+2-CH Audio, 6W AMP
- Realtek RTL8111B Gigabit Ethernet
- 1 PCI, 1 CF, 4 COM (5V/ 12V), 8 USB, 2 SATA, 16-bit GPIO
- Size: 170mm x 170mm



EMX-965Q

Intel® Core™ 2 Quad/ Core™ 2 Duo/ Core™ 2 Duo/ Pentium® 4 / Celeron® D Mini ITX Motherboard with Intel® Q965 + ICH8 Chipset

- Support 65nm Intel® Core™ 2 Quad/ Core™ 2 Duo/ Core™ 2 Duo/ Pentium® 4/ Celeron® D CPU
- Intel® Q965/ ICH8 Chipset
- Two DIMMs Up to 4GB 2-CH DDR2 533/ 667/ 800MHz SDRAM
- Intel® Graphic Media Accelerator 3000
- Realtek ALC888 Supports 5.1+2-CH Audio Streams, 6W AMP
- Realtek RTL8111B Gigabit Ethernet
- 2 COM (5V/ 12V), 6 USB, 2 SATA II
- 1 PCIe16 Supports ADD2 VGA/ DVI/ HDMI Card
- TPM 9635TCG 1.2
- Size: 170mm x 170mm



EMX-945GM2

Intel® Core™ 2 Duo/ Core™ Duo/ Core™ 2 Solo/ Core™ Solo Mini ITX Motherboard with Intel® 945GME + ICH7-M Chipset

- Supports 65nm Intel® Core™ 2 Duo/ Core™ Duo/ Core™ 2 Solo/ Core™ Solo Mobile CPU
- Intel® 945GME/ ICH7-M Chipset
- Two DIMMs Up to 4 GB 2-CH DDR2 667/ 533MHz SDRAM
- Intel® Graphics Media Accelerator 950
- Dual View, 2-CH LVDS
- Realtek ALC888 Supports 5.1+2-CH Audio Streams, 6W AMP
- Dual Marvell 88E8053 Gigabit Ethernet
- 1 PCIe16, 1 PCI 2.2, 1 Mini PCI, 1 CF, 2 SATA
- 4 COM (2 powered COM), 8 USB, 8-bit GPIO
- PCIe16 Slot Supports ADD2 VGA/ DVI/ HDMI Card
- Size: 170mm x 170mm



EMX-965GME

Intel® Core™ 2 Duo/ Core™ Duo/ Core™ 2 Solo/ Core™ Solo Mini ITX Motherboard with Intel® GME965 + ICH8-M Chipset

- Supports 65nm Intel® socket P Core™ 2 Duo/ Core™ Duo/ Core™ 2 Solo/ Core™ Solo CPU
- Intel® GME965/ ICH8-M Chipset
- Two 200-pin SODIMMs Up to 4 GB 2-CH DDR2 533/ 667MHz SDRAM
- Intel® Graphics Media Accelerator X3100
- DVI, 2-CH LVDS, Dual View
- Realtek ALC888 Supports 5.1+2-CH Audio, 6W AMP
- Dual Realtek RTL8111B Gigabit Ethernet
- 1 PCI, 1 CF
- 4 COM (5V/ 12V), 10 USB, 3 SATA II, 8-bit GPIO
- TPM 9635TCG 1.2
- Size: 170mm x 170mm



EMX-945GSE

Intel® Atom™ N270 Mini ITX Motherboard with Intel® 945GSE + ICH7-M Chipset

- Onboard 45nm Intel® Atom™ N270 1.6GHz
- Intel® 945GSE/ ICH7-M Chipset
- One 200-pin SODIMM Up to 2GB DDR2 533MHz SDRAM, Non-ECC
- Intel® Graphics Media Accelerator 950
- Dual View, 2-CH LVDS
- DVI for EMX-945GSE-A1-DVIR only
- 5.1-CH HD Audio, 6W AMP
- Dual Realtek RTL8111C Gigabit Ethernet
- 1 PCI 2.3, 1 Mini PCIe1
- 1 CF, 4 COM, 2 SATA, 6 USB, 8-bit GPIO
- Size: 170mm x 170mm



EMX-910GMLE/ C10F

Intel® Celeron® M Mini ITX Motherboard with Intel® 910GMLE + ICH6-M Chipset

- Onboard Intel® Celeron® M 900MHz/ 1GHz CPU
- Intel® 910GMLE/ ICH6-M Chipset
- Two DIMMs Up to 2 GB DDR2 400MHz SDRAM
- Intel® Graphics Media Accelerator 900
- Dual View, 2-CH LVDS, DVI
- Realtek ALC655 Supports 5.1-CH Audio, 6W AMP
- Realtek RTL8110SC Gigabit Ethernet
- 1 PCI 2.2, 1 CF
- 4 COM (5V/ 12V), 8 USB, 2 SATA, 16-bit GPIO
- Size: 170mm x 170mm



EMX-M690L3

AMD Athlon Neo X2 L325 Mini-ITX Motherboard with AMD M690E + SB600 Chipset

- Onboard AMD Athlon Neo X2 L325 CUP
- AMD M690E/ SB600 Chipset
- Two 200-pin SODIMMs Up to 4GB DDR2 400/ 533/ 667/ 800MHz SDRAM
- Dual View, 2-CH LVDS, DVI
- Realtek ALC655 Supports 5.1-CH Audio
- Dual 10/100/1000 Mbps LAN
- 1 PCI 2.3
- 4 SATA, 10 USB, 6 COM, 16-bit GPIO
- Optional TPM
- Size: 170mm x 170mm



EMX-910GMLE/ C10/ CS

Intel® Celeron® M 600MHz/ 1GHz/ CPU Socket Mini ITX Motherboard with Intel® 910GMLE + ICH6-M Chipset

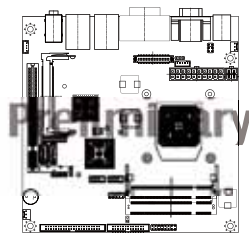
- Onboard Intel® Celeron® M 600MHz/ 1GHz CPU
- Supports Intel® Celeron® M CPU Socket (EMX-910GMLE-CS)
- Intel® 910GMLE/ ICH6-M Chipset
- Two DIMMs Up to 2GB DDR2 400MHz SDRAM
- Intel® Graphics Media Accelerator 900
- 2-CH LVDS, Dual View, 5.1-CH Audio
- Realtek RTL8110SC Gigabit Ethernet
- 4 COM (5V/ 12V), 8 USB, 2 SATA, 16-bit GPIO
- Size: 170mm x 170mm



EMX-M690T

AMD S1 Mini ITX Motherboard with AMD M690T + SB600 Chipset

- AMD S1 CPU Socket
- AMD M690T/ SB600 Chipset
- Two 200-pin SODIMMs Up to 4GB DDR2 400/ 533/ 667/ 800MHz SDRAM
- Dual View, 2-CH LVDS, DVI
- ALC655 Supports 5.1-CH Audio
- Dual 10/100/1000Mbps LAN
- 1 PCI, 4 SATA, 10 USB, 6 COM, 16-bit GPIO
- Optional TPM
- Size: 170mm x 170mm



EMX-M780E

AMD Athlon/ Athlon X2/ Quad-Core™ AMD Phenom™ Mini ITX Motherboard with AMD RS780E + SB710 Chipset

- AM2/ AM2 + Socket Support Athlon/ Athlon X2/ Quad-Core™ AMD Phenom™ Processors
- AMD RS780E/ SB710 Chipset
- Two 200-pin SODIMMs Up to 4GB DDR2 800MHz SDRAM
- Dual View, 2-CH LVDS, HDMI
- ALC888 Supports 5.1-CH HD Audio
- Dual Realtek RTL8111D Gigabit Ethernet
- 1 CF, 1 PCIe16, 1 Mini PCIe
- 2 SATA, 8 USB, 4 COM, 8-bit GPIO
- Size: 170mm x 170mm

* Available on 2010 Q2



EMX-M690S1

AMD S1 Mini ITX Motherboard with AMD M690T + SB600 Chipset

- AMD S1 Socket Supports Turion/ Turion 64 Processor
- AMD M690E/ SB600 Chipset
- Two 200-pin SODIMMs Up to 2GB DDR2 400/ 533/ 667/ 800MHz SDRAM
- Dual View, 2-CH LVDS, DVI
- Realtek ALC888 Supports 7.1/ 5.1+2-CH Audio Streams, 6W AMP
- Dual Realtek RTL8111C Gigabit Ethernet
- 1 PCI, 1 Mini PCIe, 1 bNAND, 1 CF
- 4 SATA II, 8 USB, 4 COM (5V/ 12V), 8-bit GPIO
- TPM 9635TT 1.2
- Size: 170mm x 170mm



EMX-M6901G

AMD 200U Mini ITX Motherboard with AMD M690E + SB600 Chipset

- Onboard AMD 200U 1 GHz CPU
- AMD M690E/ SB600 Chipset
- One SODIMM Up to 2GB DDR2 400/ 533/ 667/ 800MHz SDRAM
- Dual View, 2-CH LVDS, DVI
- ALC655 Supports 5.1-CH Audio
- Dual 10/100/1000 Mbps LAN
- 1 PCI 2.3
- 4 SATA, 10 USB, 6 COM, 16-bit GPIO
- Optional TPM
- Size: 170mm x 170mm



Industrial MB - ACP Series



Applied Computing Platform - ACP Series



Gaming

ACP-GM series

- ESD Protection
- Battery backup SRAM
- 3D Graphics
- CCTalk
- Dual View
- Intrusion Detection
- Data Protection
- Extend I/O Interface

ACP Series Developing Process



ACP-GM45DS

Intel® Core™ 2 Duo Mini ITX Digital Signage Board with Intel® GM45 + ICH9M-E Chipset

- Intel® Supports Socket-P Core™ 2 Duo Mobile CPU with 65nm Process Technology
- Intel® GM45/ ICH9M-E Chipset
- Two 200-pin SODIMMs Sockets Support Up to 8GB 2-CH DDR2 800MHz SDRAM
- Intel® Graphics Accelerator 4500MHD
- Display: VGA/ DVI/ LVDS
- Realtek ALC888 5.1+2 CH Audio Streams, 6W x 2-CH Amplifier
- Intel® 82567LM Gigabit Ethernet, Intel® 82574L PCI-E Gigabit Ethernet
- 1 Mini PCIe, 1 PClex1, 1 CF, 1 PCI 2.3
- 5 COM, 8 USB, 4 SATA, 8-bit GPIO
- TPM 1.2, iAMT 4.0
- Size: 170mm x 170mm



ACP-945GDS

Intel® Atom™ Processor N270 Mini ITX Digital Signage Board with Intel® 945GSE + ICH7-M Chipset

- Intel® Atom™ Processor N270 1.6 GHz
- Intel® 945GSE/ ICH7-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 533 MHz SDRAM
- Intel® Graphics Media Accelerator 950
- VGA, 2-CH 18-bit LVDS, HDMI
- Realtek ALC888 5.1-CH HD Audio Streams
- Dual Intel® 82574L Gigabit Ethernet
- 1 Mini PCIe, 1 CF, 1 PCI, 1 LPT
- 6 COM, 6 USB, 2 SATA, 8-bit GPIO
- Fanless Operation
- +12V DC Input
- Size: 170mm x 170mm



Digital Signage



POS/ KIOSK



Digital Surveillance

ACP-DS series

- AMD/ VIA/ Intel® Celeron®/ Atom™ to Core™ 2 Duo CPU
- Exceptional Multi Media Performance
- Various video I/F: VGA/ LVDS/ DVI/ HDMI/ TV-out
- HD Audio, Multiple Audio streaming/ AMP/ SPDIF

ACP-POS series

- COMs, USB, PCI, CF
- Entry to high performance CPU power
- DC to ATX power module
- LVDS LCD interface
- Fanless operation
- System longevity and Stability
- Competitive price/ performance ratio

ACP-DV series

- High Performance platform
- SATA RAID for Heavy Storage
- Multi Streaming Audio, Dual View
- PCI/ PCIe/ PCIe16 for Capture Cards
- Rich I/O design for expansion
- iAMT for Remote Management
- RAID Function Supported



ACP-Q45DV2

Intel® Core™ 2 Quad/ Core™ 2 Duo ATX Motherboard with Intel® Q45 + ICH10DD Chipset

- Intel® LGA775 Socket for Core™ 2 Quad / Core™ 2 Duo CPU
- Intel® Q45/ ICH10DD Chipset
- Four 240-pin DIMMs Sockets Support Up to 8GB DDR3 800/ 1066/ 1333MHz SDRAM, Non-ECC
- Intel® Graphics Media Accelerator 4500
- 5.1+2-CH Audio Streams
- Dual Realtek RTL8111SC Gigabit Ethernet
- 2 PCIe16, 4 PCIe1, 1 PCI 2.3
- 2 Powered COM, 12 USB, 5 SATA II, 1 eSATA
- Power Fail Auto-on
- Size: 304.8mm x 243.84mm



ACP-GM45

Intel® Core™ 2 Duo Mini ITX Gaming Board with Intel® GM45 + ICH9-M Chipset

- Supports 45nm Intel® µFC-PGA/BGA Socket-P Core™ 2 Duo CPU
- Intel® GM45/ ICH9-M Chipset
- Two 200-pin SODIMMs Sockets Support Up to 4GB DDR2 667/800 MHz SDRAM
- Intel® Graphics Accelerator 4500MHD
- Dual View, 2-CH 18/24-bit LVDS, Dual VGA
- 7.1+2-CH Audio, 6W Amplifier, Dual GbE
- 1 CF, 1 PCI, 8 USB, 4 SATA, 3 COM, 2 CC Talk
- 32 Isolated DI, 32 Darlington DO
- 1 x 1 MB Battery Backup SRAM, Optional Up to 4 MB
- JAMMA Interface
- Size: 170mm x 200mm



ACP-Q45DV

Intel® Core™ 2 Quad/ Core™ 2 Duo Micro ATX Motherboard with Intel® Q45 + ICH10DD Chipset

- Supports Intel® Core™ 2 Quad/ Core™ 2 Duo CPU
- Intel® Q45/ ICH10DD Chipset Supports Intel® AMT 5.0 & vPro
- Four 240-pin DIMMs Sockets Support up to 8GB DDR2 800/ 667MHz SDRAM, Non-ECC
- Intel® Graphics Media Accelerator 4500
- Realtek ALC888 Supports 5.1+2-CH Audio Streams
- Intel® 82567-LM PCI-E Gigabit Ethernet
- 1 PCIe16, 1 PCIe1, 2 PCI 2.3
- 2 Powered COM, 12 USB, 6 SATA II, 16-bit GPIO
- TPM 1.2
- Size: 243.84mm x 243.84mm



ACP-910POS

Intel® Celeron® M CPU or Intel® µFC-PGA 478 CPU Socket Mini-ITX Motherboard for POS with Intel® 910GML E + ICH6-M Chipset

- Onboard µFC-BGA 479 Intel® Celeron® M CPU or Intel® µFC-PGA 478 CPU Socket
- Intel® 910GML E/ ICH6-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400 MHz SDRAM
- Intel® Graphics Media Accelerator 900
- Dual View, 2-CH 24-bit LVDS, VGA
- 5.1-CH Audio, Optional 6W Amplifier
- Realtek RTL8111C PCIe Gigabit Ethernet
- 1 CF, 1 PCI, 2 SATA, 6 COM (5V/ 12V), 8 USB, 16-bit GPIO
- Size: 170mm x 170mm



HMI Solutions



Panel Technology

- SAA (Super Anti-Abrasion) Panel Glass on Top Technology
- LED Backlight with PWM
- Sunlight Readable
- Privacy Filter by Requirement



Outstanding EE Design

- Low Power Consumption
- Scalable System Performance
- Wide Temperature: -10~60°C
- Single 12V Power Input
- Onboard CPU/RAM



LPC-08A1

Fanless AMD Geode LX800 8" Multifunctional Touch Panel PC with AMD Geode LX800 + CS5536 Chipset

- 8" SVGA TFT Multifunctional Touch Panel PC
- Onboard AMD Geode LX800 @ 0.9W 500MHz with 128K L2 Cache CPU
- AMD Geode LX800/ CS5536 Chipset
- Onboard 512MB DDR Memory
- Dual Ethernet, Optional WiFi Module
- VGA, Audio, 1 CF, 2 COM, 2 USB
- IP-65 Compliant Front Panel
- VESA Compliance
- Fanless Operation
- +10 ~ 28V Wide Voltage, -10 ~ 60°C Wide Temp.
- Rugged Environment Applicable
- Dimension: 202mm x 159mm x 43mm (w/ HDD bay 202 x 159 x 55mm, Optional)



LPC-1003

Fanless Intel® Atom™ N270 10.4" Multifunctional Touch Panel PC with Intel® 945GSE + ICH7-M Chipset

- 10.4" XGA TFT Multifunctional Touch Panel PC
- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- Onboard 1GB DDR2 Memory
- Dual Gigabit Ethernet
- 1 Mini PCI, 1 CF, 1 COM, 2 USB
- Optional WiFi Module, 2.5" HDD, 6 COMs
- Fanless & Single +12V Operation
- Super Anti-Abrasion (SAA) Touch
- IP-65 Compliant Front Panel
- Dimension: 259mm x 196mm x 41mm



LPC-0803

Fanless Intel® Atom™ N270 8" Multifunctional Touch Panel PC with Intel® 945GSE + ICH7-M Chipset

- 8" SVGA TFT Multifunctional Touch Panel PC
- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- VGA, Audio
- Dual Gigabit Ethernet, Optional WiFi Module
- 1 CF, 2 COM, 4 USB
- IP-65 Compliant Front Panel
- VESA Compliance, Fanless Operation
- Rugged Environment Applicable
- Dimension: 202mm x 159mm x 43mm (w/ HDD bay 202 x 159 x 55mm, Optional)



LPC-1203

Fanless Intel® Atom™ N270 12.1" Multifunctional Touch Panel PC with Intel® 945GSE + ICH7-M Chipset

- 12.1" XGA TFT Multifunctional Touch Panel PC
- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- Onboard 1GB DDR2 Memory
- Dual Gigabit Ethernet
- 1 Mini PCI, 1 CF, 1 COM, 2 USB
- Optional WiFi Module, 2.5" HDD, 6 COMs
- Fanless & Single +12V Operation
- IP-65 Compliant Front Panel
- Class B Certification
- Dimension: 283mm x 222mm x 45mm

LPC Series

Mechanical Design Features

- Panel Size from 8~15"
- IP-65 Front Panel
- Fanless Operation
- VESA/Versatile Installations
- Panel Mount/Open Frame

Options and Customization

- Optional Extra 3 COMs
- WiFi, 3G, GPS Modules
- Whole System IP-65
- Various Panel Size
- Customized Chassis Design



LPC-1503

Fanless Intel® Atom™ N270 15" Multifunctional Touch Panel PC with Intel® 945GSE + ICH7-M Chipset

- 15" XGA TFT Multifunctional Touch Panel PC
- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- Onboard 1GB DDR2 Memory
- Dual Gigabit Ethernet
- 1 Mini PCI, 1 CF, 1 COM, 2 USB
- 2 x 2W Speaker
- Optional WiFi Module, 2.5" HDD, Mini PCIe
- Fanless & Single +12V Operation
- IP-65 Compliant Front Panel
- Dimension: 351.5mm x 272mm x 52mm

Power Consumption

Condition:

Power on-Boot sequency: Measure the maximum current value of between system power on and boot-up to O.S.

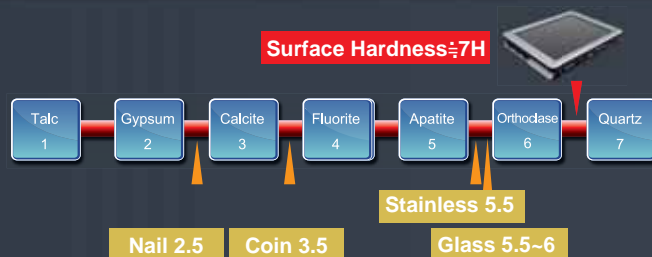
Dos Idle mode: Measure the current value when system in DOS mode and without running any Program

Win. Idle mode: Measure the current value when system in windows mode and without running any Program

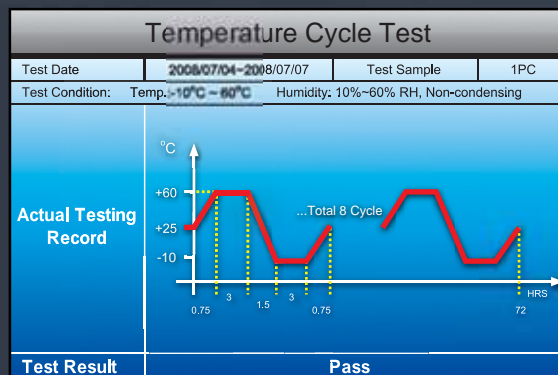
Max. load: Measure the maximum current value which system under maximum load (CPU: Top speed, RAM & Graphic: Full loading)

Condition	Power Consumption (A or mA)						Note/ Issue ID
	Power on-Boot procedure	S1	S3	S5	Max. load	Testing Software	
+12V	1.55	0.57	0.05	0.04	1.86	2	
Total	= 22.32 W						

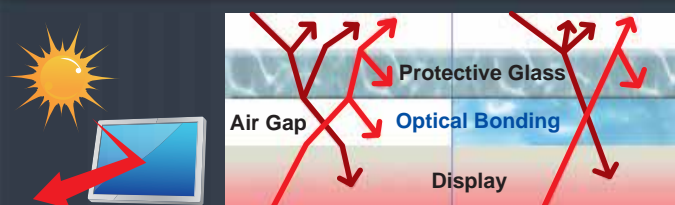
Anti-Abrasion



Thermal Test: -10~60°C Operation Temperature



Sunlight Readable



Digital Signage Solutions - MPC Series

Hardware

Touch Panel Technology

- Industrial Grade Panel
- IP-65 Water/Dust Proof
- 5-Wire Resistive
- High Luminance
- High Contrast Ratio
- High Resolution
- Various Sizes for Options
- Glass-on-Top

Rich I/O Design

- SATA, COM, USB, GPIO, CF
- PCI, PCIe, Mini PCI, Mini PCIe for Diverse Applications

Headquarters / Control Center

Network

- Dual LAN/Dual Gigabit LAN
- Wireless LAN:WiFi/Bluetooth
- Remote Control Possible

Multi-Media Performance

- Latest Chipset
- 3D Accelerator
- Dual View
- MPEG2/4/WMV
- Speakers/Amplifier
- Multiple Audio Streams
- Camera

Installation

- VESA Compliant Accessories
- Open Frame Model for Customization



Software

Embedded OS

AP/API: Optional AP or API for your SW development

To match your AP, Avalue solutions are compatible with:

Multimedia Content Type:

JPG, MOV, WMV, MPEG, AVI...

Connect I/F:

VGA/LVDS/TV-out/DVI/HDMI...

by requirement



Applications



Technologies

- **PIR:** Pyroelectrics InfraRed sensor which has surveillance and power-saving function. It leverages infrared technology to detect human activities and turn on/off screen automatically
- **CIR:** Remote and safety control. Support users self-set functions such as volume, backlight, screen switch, touch panel or power on/off
- **Environmental Light Sensor:** Light sensor which adjusts screen to be brighter when the external environment is too bright or darkens the screen when the external environment is dark, not only to save power, but also give users the best visual effects.
- **Touch Inverter Switch**
- **Automatic Periodic (Time/Day) Power On/Off Function**



MPC-10W3

Fanless Intel® Atom™ N270 10"W Multimedia Touch Panel PC with Intel® 945GSE + ICH7-M Chipset

- 10"W Multimedia Panel PC
- Intel® Atom™ N270 1.6GHz CPU
- Onboard 1GB DDR2 Memory
- Dual Gigabit Ethernet, 2 x 1W Speakers
- 1 Mini PCI, 1 CF, 1 COM, 2 USB
- Optional WiFi, Camera, Bluetooth Module
- Optional Mini PCIe
- Fanless & Single +12V Operation
- Dimension: 247mm x 180mm x 42mm



MPC-21W3

Fanless Intel® Atom™ N270 21"W Multimedia Panel PC with Intel® 945GSE + ICH7-M Chipset

- Slim & Stylish Design
- Intel® Atom™ N270 1.6GHz CPU
- Onboard 1GB DDR2 Memory
- Dual Gigabit Ethernet, 2 x 1W Speakers
- Dual View, Optional TV-out
- 1 Mini PCI, 1 CF, 1 COM, 2 USB
- Optional Touch Screen, WiFi Module, 2.5" HDD
- Optional Mini PCIe
- Fanless System & VESA Compliance
- Single +12V Operation
- CE/ FCC Class B
- Dimension: 508 x 301 x 53.8 mm

Interactive Client Solutions - PPC Series

Flexible, Scalable, and Cost-Effective
Solutions for Your Interactive Clients

PPC Features

RFID

(Radio Frequency Identification;
Internal & External Type)

- Supply Chain Management
- Health Care
- Bio-identification
- Tracking

MSR

(Magnetic Strip Reader)

- User Identification
- Information Acquiring
- Cash Flow

Programmable Function Keys

- User Friendly
- Programmable Front Panel Key
- Drivers installed
- Evaluation Kit



PPC-1503

Intel® Atom™ N270 15" Multifunctional
Panel PC with Intel® 945GSE + ICH7-M
Chipset

- 15" 5-wire Resistive XGA TFT
- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- Onboard 1GB DDR2 Memory
- Dual Gigabit Ethernet
- Audio, 2 x 2W Speakers
- 1 Mini PCI, 1 CF, 1 COM, 2 USB
- Supports 2.5" SATA HDD
- Fanless Operation, VESA Compliance
- Programmable Function Key
- Dimension: 340mm x 285mm x 53mm
- VESA 100mm x 100mm



PPC-22W03

Intel® Atom™ N270 22" Multifunctional
Panel PC with Intel® 945GSE + ICH7-M
Chipset

- 22" 5-wire Resistive WSXGA TFT
- Onboard Intel® Atom™ N270 1.6 GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- Onboard 1GB DDR2 Memory
- Dual Gigabit Ethernet
- Audio, 2 x 2W Speakers
- 1 Mini PCI, 1 CF, 1 COM, 2 USB
- Supports 2.5" SATA HDD
- Fanless Operation, VESA Compliance
- Programmable Function Key
- Dimension: 510mm x 352mm x 55mm
- VESA 100mm x 100mm



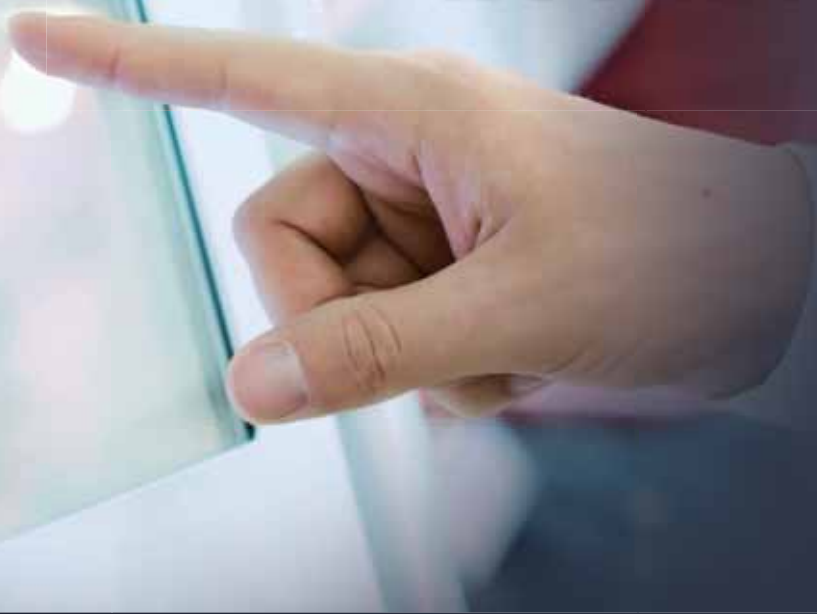
PPC-1703

Intel® Atom™ N270 17" Multifunctional
Panel PC with Intel® 945GSE + ICH7-M
Chipset

- 17" 5-wire Resistive SXGA TFT
- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- Onboard 1GB DDR2 Memory
- Dual Gigabit Ethernet
- Audio, 2 x 2W Speakers
- 1 Mini PCI, 1 CF, 1 COM, 2 USB
- Supports 2.5" SATA HDD
- Fanless Operation, VESA Compliance
- Programmable Function Key
- Dimension: 372mm x 324mm x 53mm
- VESA 100mm x 100mm



POS / KIOSK Solutions - FPC Series



FPC, Avalue's 5S Panel PC

Small

8/10" small size touch panel with slim-deigned system; minimize the total footprint

Strong

Be given with features to increase resistance in harsh conditions, such as wide voltage range, IP-65 water/dust proof, metal chassis.

Scalable

Various internal boards and platforms for users' demands. Featured optional devices or expansion interface to satisfy customers by requirements.

Smart

Friendly user interface, Rich I/O design, Smart Power-saving Mechanism, and Flexibility of customization to provide users smartest solutions.

Stylish

Thin bezel, high quality with whole metal chassis, elaborate-designed, ingenious ID, a stylish machine to fit appearance or decoration intensive applications.



FPC-08WA1

Fanless AMD Geode LX800 8.9" Multifunctional Touch Panel PC with AMD Geode LX800 + CS5536 Chipset

- 8.9" WSVGA Touch Panel PC
- 5-wire Resistive Touch Screen
- AMD Geode LX800/ CS5536 Chipset
- Onboard 512MB DDR Memory
- VGA, Audio
- Dual Ethernet, Optional WiFi Module
- 1 CF, 2 COM, USB
- Fanless & +12V Single Power Input
- Wide Range Voltage Input: +10V ~ 28V
- VESA Compliance, IP-65 Compliant Front Panel
- Dimension: 225mm x 139mm x 38.9mm



FPC-08W04

Fanless Intel® Atom™ N270 8.9" Multifunctional Touch Panel PC with Intel® 945GSE + ICH7-M Chipset

- 8.9" WSVGA Touch Panel PC
- 5-wire Resistive Touch Screen
- Intel® 945GSE/ ICH7-M Chipset
- VGA, Audio
- Dual Gigabit Ethernet, Optional WiFi Module
- 1 CF, 2 COM, 4 USB
- Fanless & +12V Single Power Input
- VESA Compliance, IP-65 Compliant Front Panel
- Dimension: 225mm x 139mm x 38.9mm



FPC-10W01

Fanless AMD Geode LX800 10" WSVGA TFT Touch Panel PC with AMD Geode LX800 + CS5536 Chipset

- 10" WSVGA Touch Panel PC
- 5-wire Resistive Touch Screen
- Intel® 945GME + ICH7-M Chipset
- One 200-pin SODIMM Supports Up to 2GB DDR2 400/ 533/ 667MHz SDRAM
- VGA, Audio
- Dual Gigabit Ethernet, Optional WiFi Module
- 1 CF, 2 COM, 4 USB
- 2.5" SATA HDD Supported
- +12V Single Power Input
- VESA Compliance, IP-65 Compliant Front Panel
- Dimensio: 300mm x 195mm x 56mm



FPC-10W04

Fanless Intel® Atom™ N270 10" WSVGA TFT Touch Panel PC with Intel® 945GSE + ICH7-M Chipset

- 10" WSVGA Touch Panel PC
- 5-wire Resistive Touch Screen
- Intel® 945GSE + ICH7-M Chipset
- One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533MHz SDRAM
- VGA, Audio
- Dual Gigabit Ethernet, Optional WiFi Module
- 1 CF, 2 COM, 4 USB
- 2.5" SATA HDD Supported
- +12V Single Power Input
- VESA Compliance, IP-65 Compliant Front Panel
- Dimensio: 300mm x 195mm x 56mm



ACC-ARM-D1R Stylist Table Stand

- Easy install short arm
- Meets VESA standards
- 360 degrees display side-to-side rotation
- Easy to install with the perfect desk stand
- Superior flexibility and movement
- Tilting up and down directions: 30 degrees
- Save your workspace
- VESA: 75 x 75 mm & 100 x 100 mm
- Loading Max: 12 Kgs
- Dimensions (W x L x D): 270 x 190 x 230 mm



ACC-ARM-D16R Multi Mounting for Stand/Wall for 8"/10"

- Multi Mounting for Stand/Wall
- Meets VESA standards
- Superior flexibility and movement
- Save your workspace
- Swivel: 90 degrees
- VESA: 75 x 75 mm & 100 x 100 mm
- Loading Max.: 3.5 kgs
- Dimensions (W x L x D): 169 x 167 x 20.5 mm



ACC-ARM-D4R Mini Heavy Loading Wall Mount

- 360 degrees smooth adjustable mini Arm
- Installation rapidly and strong combination both
- Loading object weighting easily by normal screwdriver
- Meets VESA standards (75 x 75mm and 100 x 100mm)
- Weight: 0.8 kg Height: 12.5 cm Wide: 11.2 cm
- Thickness: 8cm (Monitor to wall)
- Wall max. dimension: 12.5 x 9.5 cm (Wide x Height)
- Max Loading: 15kg
- Swivel left & right: 35 degrees
- Pivot upwards & downwards: 35 degrees
- Swivel: 360 degrees
- Free rotation smoothly



ACC-ARM-D19R Stylist Table Stand for Cable Collection

- Meets VESA standards
- Easy to install with the perfect desk stand
- Superior flexibility and movement
- Tilting up and down directions: 90 degrees
- Save your workspace
- Silver & Black
- VESA: 75 x 75 mm & 100 x 100 mm
- Loading Max: 12 Kgs
- Dimensions (W x L x D): 270 x 190 x 230 mm



ACC-ARM-D7R Swivel Aluminum Arm Mountable on Vertical Pipe

- Easy to install with the perfect Pole mount
- Superior flexibility and movement
- Meets VESA standards (7.5 x 7.5 cm and 10 x 10 cm)
- Made of 100% recycled iron and Aluminum material for strength and stability
- Max loading: 15 kgs
- Pole diameter size: 43,50 mm (1.8-2")
- Swivel any directions: 30 degrees
- Swivel: 360 degrees
- Left & right moving: 90 degrees
- Horizontal moving dist: -50-50 cm (40")
- Save your workspace



ACC-ARM-D20R Stylist Table Stand for Cable Collection

- Meets VESA standards
- Easy to install with the perfect desk stand
- Superior flexibility and movement
- Tilting up and down directions: 90 degrees
- Save your workspace
- Silver & Black
- VESA: 75 x 75 mm & 100 x 100 mm
- Loading Max: 12 Kgs
- Dimensions (W x L x D): 270 x 190 x 230 mm



ACC-ARM-D14R Table Bolted ARM

- Spinning around high and mighty; able to bear 5 kg to 12 kg
- Providing 2 mounting space in coordination with VESA standard: 75 mm x 75 mm and 100 mm x 100 mm
- The angle of view was designed adjustable for clear vision
- Flexible angle create brand-new atmosphere of monitors
- Show yourself and break the limit of environment
- Regulate as you want to make more space
- Dimensions (W x L x D): 118 x 118 x 350 mm



ACC-ARM-D21R/ D22R Stylist Table Stand for Cable Collection

- Meets VESA standards
- Easy to install with the perfect desk stand
- Superior flexibility and movement
- Tilting up and down directions: 90 degrees
- Save your workspace
- Silver & Black
- VESA: 75 x 75 mm & 100 x 100 mm
- Loading Max.: 10 kgs
- Dimensions (W x L x D): 190 x 217 x 160 mm



ACC-ARM-D15R Multi Mounting for Stand/Wall for 8"

- Multi Mounting for Stand/Wall
- Meets VESA standards
- Superior flexibility and movement
- Save your workspace
- Swivel: 90 degrees
- VESA: 75 x 75 mm & 100 x 100 mm
- Loading Max.: 2.5 kgs
- Dimensions (W x L x D): 165 x 140 x 20.5 mm



ACC-ARM-D23R L Type Stylish Table Stand

- Meets VESA standards
- Easy to install with the perfect desk stand
- Superior flexibility and movement
- Tilting up and down directions: 90 degrees
- Save your workspace
- Silver & Black
- VESA: 75 x 75 mm & 100 x 100 mm
- Loading Max.: 15 kgs
- Dimensions (W x L x D): 184 x 300 x 192 mm



Embedded Computing
Applied Computing
Computer On Module

Embedded System & Platform
Embedded Panel PC
Customized Design Service



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