▶ **Industrial SBC**

▶ **Core Module**

▶ **Baseboard**
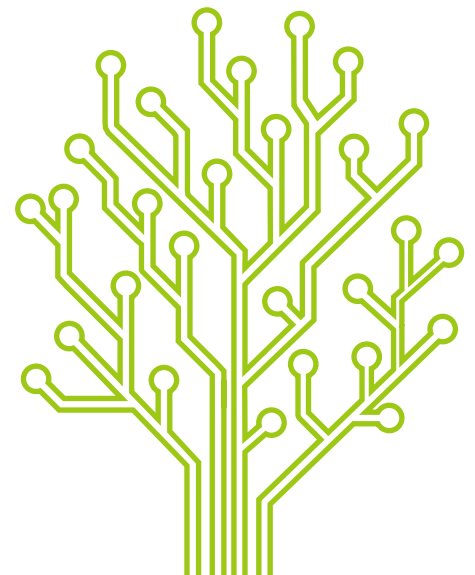
2012 Product Guide

aDotec
Aplex Group

About ADOtec

ADOtec was founded in 2008, as part of the APLEX Group, and the core team of the company has been in the IPC (industrial personal computer) development industry for over 20 years, focusing on development for the Intel x86 platform.

Recently, the company has started to design products for ultra low power ARM platforms. In addition to supporting APLEX Technology Inc. in developing IPC system products, ADOtec is also thriving and becoming a highly professional single-board computer manufacturer.

ADOtec's Market

Our current product solutions include factory automation, HMIs (human machine interfaces), embedded panel PCs, mobile phones, and wireless internet and secured multimedia sharing devices. The single board computers we design, such as the embedded Intel x86, ultra-low-power Atom inside platform, the ARM powered ARM9/ ARM11 platform, and the Cortex-AX RISC 32-bit powered platform, are all equipped with different operating systems, which include Microsoft Windows XP Pro Embedded, Windows CE 5.0 or 6.0, Windows 7, and Linux. To meet market demands, the development team at ADOtec can swiftly upgrade operating systems to the newest versions or integrate the latest Android operating system. ADOtec hopes to utilize its exceptional ability to integrate both software and hardware and expand its global market share by providing services to system integration companies around the world.

Industrial Automation

Embedded Computing

Military Industries

ADOtec's Values

Quality

During the design phase, ADOtec has always made product stability its number one priority. As a result, product development at ADOtec is not the fastest, and may even be behind by 1 or 2 quarters. However, we have the utmost confidence in the stability of our products, which is why most of ADOtec's products have extremely long life expectancies and can operate within a wide range of temperatures (-20ºC~70ºC).

Service

ADOtec values relationships with clients, and clients' feedback and inquiries are treated with the upmost importance by the ADOtec team. To this end, we use the most advanced customer relationship management system (CRM) to track customers' requests. ADOtec's goal is to achieve 100% client satisfaction.

Customization

In addition to developing for standardized form factors like Mini-ITX, EPIC, COM express, etc., we can also provide flexible customization services, from simply modifying I/O ports, to more complex services like designing completely different mainboards, and we can plan and design products according to clients' needs and projected quantities and budgets. We have successfully provided customized products for the healthcare, gaming, hotel, railway transport, and military industries.

ADOtec Features Highlights

Solid Capacitor

Extra-Long Life-Span COMS Battery

Power Input Connetor

ESD Protection

Switching Regulators

Countercurrent Protection on USB Ports

Regular Operating Temperature

	Features	Other Brands	Benefits
1	Solid Capacitor	Electrolytic Capacitor	▸ Increase reliability. ▸ Longer life time. ▸ With better tolerance under high frequencies and temperature(85℃) working condition. ▸ No leakage & explosion.
2	Extra-long life-span CMOS battery CR2477	CR2032 typical	▸ Extra-long life-span:CR4277(1000mAh), no more RMA is due to CMOS battery power exhausted.
3	Wide range DC input and terminal block connector	Standard 12V AUX connector	▸ Offering wide range DC input supports variety of applications. ▸ Allowed up to 8A current input with each pin. ▸ Slim size, only 8mm height, others are around 15mm. ▸ Build-in screw makes fastening external connector easily.
4	All external I/O ports ESD protection	Limited number of I/O ports with ESD protection	▸ All external I/O ports come with 4KV ESD protection design, this means high reliability.
5	Switching regulators	Linear regulators	▸ Better power transfer efficiency. ▸ Lower working temperature.
6	Countercurrent protection on USB ports	No protection on USB ports	▸ Anti - countercurrent from USB devices to motherboard via USB port to avoid error boot up timing.
7	Wide standard operating temperature : -20℃~70℃	Regular operating temperature : 0℃~60℃	▸ Wide operating temperature promise 7 x 24 working duration.

Recommended Intel Embedded Line Supported CPU

Why Embedded?
Embedded Processor Means Long Product Life Time.
Intel will provide 7 years product life time with embedded product line, others only 3-5 years.

Type	Family	Processor Name	Core	Frequency	FSB	TDP	L2 Cache	L3 Cache	Core Name	ADOtec Support SBC List
PBGA437	Atom	N270 (45nm)	1	1.6GHz	533MHz	2.5W	512KB	x	Diamondville	ASB-L701
PBGA441	Atom	Z510(P) (45nm)	1	1.1GHz	400MHz	2W	512KB	x	Silverthorne	ASB-B705, ASB-S700
PBGA441	Atom	Z530(P) (45nm)	1	1.6GHz	400MHz	2W	512KB	x	Silverthorne	ASB-B705, ASB-S700
FCBGA559	Atom	D525 (45nm)	2	1.8GHz	800MHz	13W	1MB	x	Pineview	ASB-L706
FCBGA559	Atom	N455 (45nm)	1	1.66GHz	800MHz	6.5W	1MB	x	Pineview	ASB-L706
FCBGA559	Atom	D2500 (32nm)	2	1.87GHz	1066MHz	10W	1MB	x	Cedarview-D	ASB-M711
FCBGA559	Atom	D2700 (32nm)	2	2.13GHz	1066MHz	10W	x	1MB	Cedarview-D	ASB-M711
FCBGA559	Atom	N2600 (32nm)	2	1.6GHz	800MHz	3.5W	1MB	x	Cedarview-M	ASB-M711, CM-NM101-CT26
FCBGA559	Atom	N2800 (32nm)	2	1.86GHz	1066MHz	6.5W	1MB	x	Cedarview-M	ASB-M711
Socket P	Core 2 Duo Mobile	L7400 (65nm)	2	1.5GHz	667MHz	17W	3MB	x	Merom	ASB-L801, ASB-M801
Socket P	Core 2 Duo Mobile	T7400 (65nm)	2	2.16GHz	667MHz	34W	4MB	x	Merom	ASB-L801, ASB-M801
Socket P	Core 2 Duo Mobile	T7500 (65nm)	2	2.2GHz	800MHz	35W	4MB	x	Merom	ASB-L801, ASB-M801
Socket P	Core 2 Duo Mobile	T9400 (45nm)	2	2.53GHz	1066MHz	35W	6MB	x	Penryn	ASB-L801, ASB-M801
Socket G2	2nd Gen. Core i3	i3-2330E (32nm)	2	2.2GHz	1333MHz	35W	512KB	3MB	Sandy Bridge	ASB-M8671
Socket G2	2nd Gen. Core i5	i5-2510E (32nm)	2	2.5GHz	1333MHz	35W	512KB	6MB	Sandy Bridge	ASB-M8671
Socket G2	2nd Gen. Core i7	i7-2710QE (32nm)	4	2.1GHz	1333MHz	45W	1MB	6MB	Sandy Bridge	ASB-M8671
Socket G2	Celeron M	B810 (32nm)	2	1.6GHz	1333MHz	35W	512KB	2MB	Sandy Bridge	ASB-M8671

ASB-B705

ECX 3.5" SBC, Intel Atom Z510P/Z530P, Onboard 1GB/DDR2, LVDS

External I/O

| COM3 | COM1 | LAN | USB4/5 | USB2/3 |
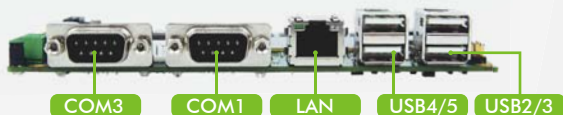
- Intel Atom Z510P/Z530P, 1.1/1.6GHz, L2 Cache 512KB processors
- Onboard 1GB DDR2 533MHz memory
- 18-bit single channel LVDS, optional 24-bit LVDS interface or VGA output via SDVO
- mini SATA device supported
- Wide Range DC 9~32V input

Specifications

System

Form Factor	3.5" SBC
Processor	Onboard Intel Atom Z510P/Z530P, 1.1/1.6GHz, L2 Cache 512KB
System Chipset	Intel SCH US15WP
System Memory	Onboard 1GB DDR2 533MHz
BIOS	AMI 8MB Flash

Display

Controller	Intel GMA 500 for SDVO and LVDS
VGA Interface	Optional transfer board for VGA output
TTL/LVDS Interface	1 x 18-bit single channel LVDS, 20 Pin DF13 Optional SDVO to 24-bit LVDS transfer board
Resolution	Up to 1366 x 768 for 18-bit LVDS Up to 1280 x 1024 for SDVO

Mechanical & Environment

Board Size (L x W)	146mm x 102mm (5.7" x 4")
Gross Weight	0.4kg (0.88lb)
Operating Temperature	Standard :-20°C~70°C (-4°F ~ 158°F) Optional :-40°C~85°C (-40°F ~ 185°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Humidity	5% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Expansion

Expansion	1x mini PCIe slot (support full/half size WLAN module) 1 x mSATA support mini PCIe devices with USB2.0

Power Connectors

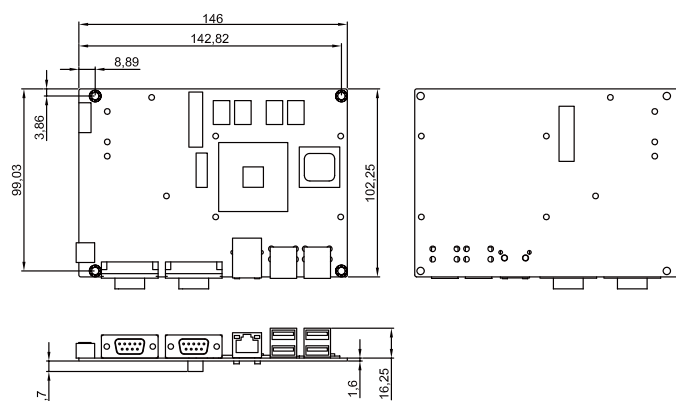|	
Power Management	Wide Range DC 9~32V input
Power Connector	1 x 2 Pin power input connector

I/O

Super I/O	Winbond W83627UHG
Ethernet	1 x GbE port by RJ-45 with Intel 82574L Controller
USB	4 x USB 2.0 (type A) stack ports 3 x USB 2.0 internal Pin header 1 x USB 2.0 in mini PCIe slot
Serial	1 x RS-232 (COM3), DB-9 connector on I/O with 5/12V Ring select 1 x RS-232/422/485 select header (COM1) 2 x RS-232 header internal (COM2/4)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	1 x SATA II connector, 1 x mSATA
Audio	Realtek ALC662, Line-in/ Line-out / MIC-in by 2 x 5 Pin header
KB/Mouse	1 x PS/2 KB/MS by 1 x 6 Pin wafer connector
Battery	1 x 2 Pin header support CR2477 (1000mAH)

Ordering Information

|	
ASB-B705P3-1G	3.5" SBC-Z530P-1G/SINK-W/18BIT-G4S8U-2SATA/ CF-mPCIe/R1.0
ASB-B705P1-1G	3.5" SBC-Z510P-1G/SINK-W/18BIT-G4S8U-2SATA/ CF-mPCIe/R1.0
TB-515	ASB-B705 SDVO1 connected card, support SDVO to CRT display and HDMI TV display

Dimension

Specifications are subject to change without notice, all brand name and trademarks are their registered properties of their respective owners.

SBC-7104

ECX 3.5" ARM9 SBC with Atmel 400MHz AT91SAM9G45 Processor, Onboard 128MB SDRAM, TTL/LVDS

ARM

External I/O

| DC 11~32V | COM1 | RS-232/485 GPIO | LAN | USB1/2 | Mini USB |

- ARM9 Atmel 400MHz AT91SAM9G45 ARM thumb processor with memory management unit
- 128MB SDRAM and 128MB NAND Flash
- 1 x 24-bit TTL and 1 x 24-bit LVDS interface
- 2MB system recovery data flash
- Wide Range DC 11~32V input
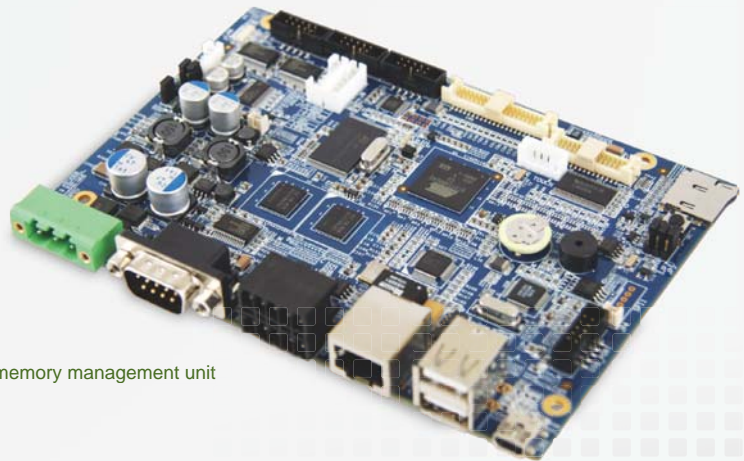
Specifications

System

Form Factor	3.5" SBC
Processor	Onboard Atmel 400MHz AT91SAM9G45 Processor with MMU
System Chipset	Atmel 400MHz AT91SAM9G45
System Memory	Onboard 128MB SDRAM and 128MB NAND Flash
BIOS	2MB System Recovery Data Flash

Display

Controller	Atmel 400MHz AT91SAM9G45
TTL/LVDS Interface	1 x 24-bit TTL
	1 x 24-bit LVDS
Resolution	Up to 1280 x 860 for 24-bit TTL/LVDS

Mechanical & Environment

Board Size (L x W)	146mm x 102mm (5.7" x 4")
Gross Weight	0.4kg (0.88lb)
Operating Temperature	0~70°C (32~158°F)
Storage Temperature	-20°C~ 85°C (-4°F ~ 185°F)
Humidity	5% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

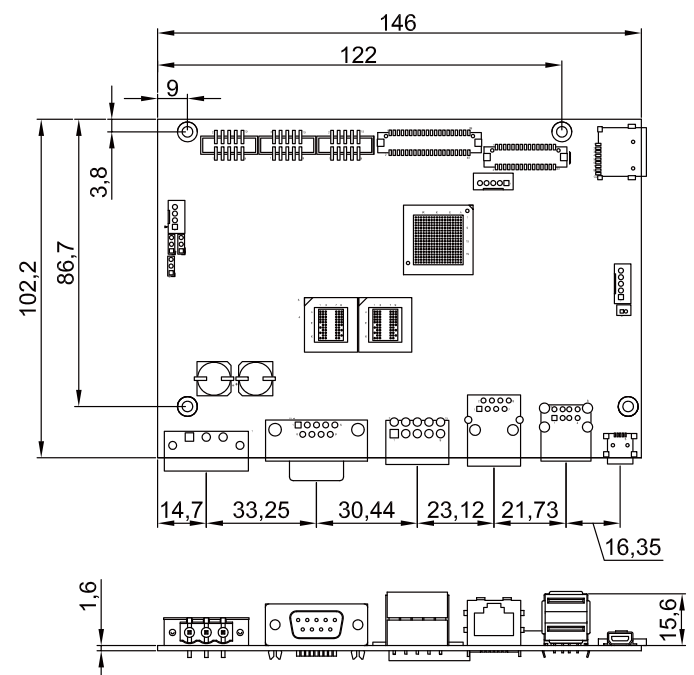|	
Power Management	Wide Range DC 11~32V input
Power Connector	1 x 3 Pin power input connector

I/O

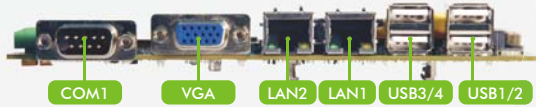|	
Super I/O	Atmel 400MHz AT91SAM9G45
Ethernet	1 x 10/100M port by RJ-45
USB	2 x USB 2.0 (type A) stack ports
	1 x USB 2.0 type mini A for external, Client
	2 x USB 2.0 header internal, Host
Serial	1 x RS-232 (COM1), DB-9 connector on I/O
	1 x RS-485 (COM2), Terminal Block
	2 x RS-232 (COM3/4), header internal
GPIO	4-bit digital I/O, Terminal Block
Storage	1 x SD/SDHC
Audio	1x 5 Pin Box for Line-in/ Line-out
Battery	CR2032

Ordering Information

ASB-7104	RISC/EPIC/AT91SAM9G45/128RAM/24BIT TTL/LVDS/SBC-7104 R1.0

Dimension

ASB-L701

EPIC, 4" SBC with Intel Atom N270, VGA/LVDS

Industrial SBC

External I/O

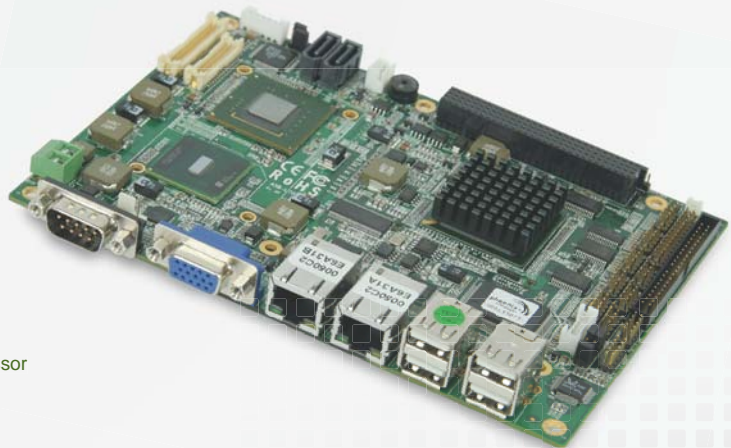| COM1 | VGA | LAN2 | LAN1 | USB3/4 | USB1/2 |

- Intel Atom N270 1.6GHz FSB 533MHz, L2 Cache 512KB processor
- Intel 945GSE + ICH7M system chipset
- Offer 18-bit LVDS, 24-bit dual channel LVDS for option
- Wide operating temperature, support -20~70°C
- DC12V input only

Specifications

System

Form Factor	4" EPIC
Processor	Onboard Intel Atom N270 1.6GHz FSB 533MHz, L2 Cache 512KB
System Chipset	Intel 945GSE + Intel ICH7M
System Memory	1 x 200 Pin 533/400MHz, DDR2 SO-DIMM, up to 2GB
BIOS	AMI 8MB Flash

Display

Controller	Intel 945GSE integrated GMA 950
VGA Interface	1 x DB-15
TTL/LVDS Interface	1 x 18-bit LVDS only, or 1 x 18/24-bit LVDS dual channel, 40 Pin DF13 (2 models)
Resolution	Up to 2048 x 1536 for VGA Up to 1600 x 1200 for 18/24-bit LVDS

Mechanical & Environment

Board Size (L x W)	165mm x 115mm (6.5" x 4.5")
Gross Weight	0.5kg (1.2 lb)
Operating Temperature	Standard :-20°C~70°C (-4°F ~ 158°F) Optional : -40°C~85°C (-40°F ~ 185°F)
Storage Temperature	-40°C~ 85°C (-40°F ~ 185°F)
Humidity	5% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Expansion

Expansion	1 x PC/104-Plus connector 1 x mini PCIe (full size)

Power Connectors

Power Management	DC 12V input only
Power Connector	1 x 2 Pin power input connector

Ordering Information

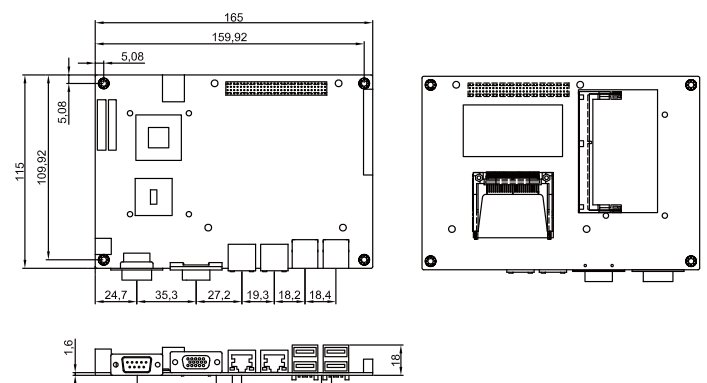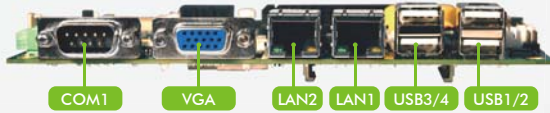|	
ASB-L701S-N270	EPIC/SBC/w INTEL ATOM N270 1.6GNGA/18LVOS/4COM/2GbE/R1.3
ASB-L701-N270	EPIC/SBC/w INTEL ATOM N270 1.6G/VGA/24LVDS/6COM/2GbE/R1.30

I/O

Super I/O	Winbond W83627UHG
Ethernet	2 x GbE ports by RJ-45 with Realtek 8111D Controller
USB	4 x USB 2.0 (type A) stack ports 2 x USB 2.0 internal Pin header
Serial	18-bit Model 1 x RS-232 (COM1), DB-9 connector on I/O, Pin 9 with 5V/12V Ring select 1 x RS-232/422/485 select header for internal (COM2), default RS-232 2 x RS-232 (COM3/4), header internal 18/24-bit Model 1 x RS-232 (COM1), DB-9 connector on I/O, Pin 9 with 5V/12V Ring select 1 x RS-232/422/485 select header for internal (COM2), default RS-232 4 x RS-232 (COM3/4/5/6), header internal
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	2 x SATA II connectors, 1 x CF (shared IDE)
Audio	Realtek ALC662, Line-in/ Line-out / MIC-in by 2 x 5 Pin header
LPT	1 x LPT port by 26 Pin header
KB/Mouse	1 x PS/2 KB/MS by 1 x 6 Pin wafer connector
Battery	1 x 2 Pin header support CR2477 (1000mAh)

Dimension

Specifications are subject to change without notice, all brand name and trademarks are their registered properties of their respective owners.

ASB-L706

EPIC, 4" SBC, Intel Atom D525/N455, DDR3, VGA/ LVDS

External I/O

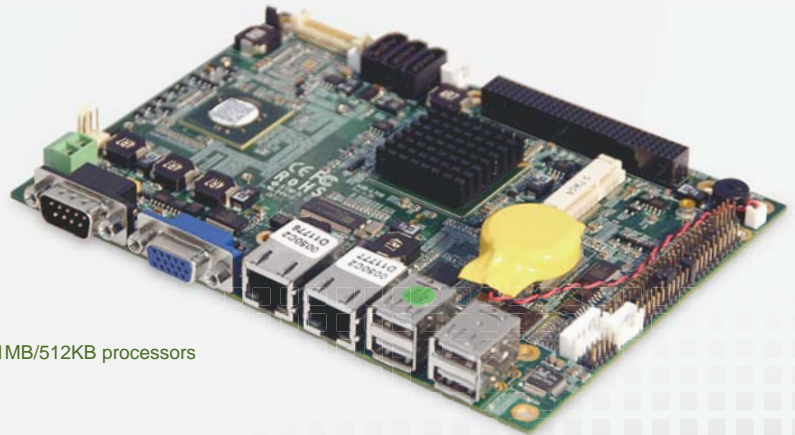| COM1 | VGA | LAN2 | LAN1 | USB3/4 | USB1/2 |

- Intel Atom D525/N455, Dual/Single Core 1.8/1.66GHz, L2 Cache 1MB/512KB processors
- 18-bit single channel LVDS integrated in D525/N455
- Two mini PCIe slots, full and half size
- Wide operating temperature, support -20~70°C
- DC12V input only

Specifications

System

Form Factor	4" EPIC
Processor	Onboard Intel Atom D525/N455, 1.8/1.66GHz, L2 Cache 1MB/512KB
System Chipset	Intel ICH8M
System Memory	1 x 204 Pin 800MHz, DDR3 SO-DIMM, up to 2GB
BIOS	AMI 8MB Flash

Display

Controller	Intel GMA 3150 build-in 400/200MHz speed for D525/N455
VGA Interface	1 x DB-15, and 2 x 8 Pin header
TTL/LVDS Interface	18-bit single channel LVDS, 30 Pin DF13
Resolution	Up to 2048 x 1536 for VGA
	Up to 1366 x 768 for 18-bit LVDS

Mechanical & Environment

Board Size (L x W)	165mm x 115mm (6.5" x 4.5")
Gross Weight	0.5kg (1.2 lb)
Operating Temperature	Standard :-20°C~70°C (-4°F ~ 158°F)
	Optional : -40°C~85°C (-40°F ~ 185°F)
Storage Temperature	-40°C~85°C (-40°F ~ 185°F)
Humidity	5% - 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC class A

Expansion

Expansion	1 x PC/104-Plus connector
	1 x mini PCIe (full size)
	1 x mini PCIe (half size)

Power Connectors

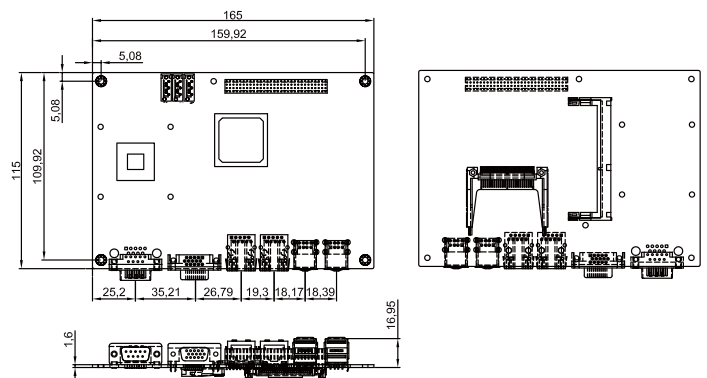|	
Power Management	DC 12V input only
Power Connector	1 x 2 Pin power input connector

I/O

Super I/O	Winbond W83627UHG
Ethernet	2 x GbE ports by RJ-45 with Intel 82574L Controller
USB	4 x USB 2.0 (type A) stack ports
	2 x USB 2.0 internal Pin header
	2 x USB 2.0 internal for mini PCIe
Serial	1 x RS-232 (COM1), DB-9 connector on I/O, Pin 9 with 5V/12V Ring select
	1 x RS-232/422/485 select header (COM3), default RS-232
	4 x RS-232 (COM2/4/5/6), header internal
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	3 x SATA II connectors, 1 x CF (shared IDE)
Audio	Realtek ALC662, Line-in/ Line-out / MIC-in by 2 x 5 Pin header
KB/Mouse	1 x PS/2 KB/MS by 1 x 6 Pin wafer connector
Battery	1 x 2 Pin header support CR2477 (1000mAh)

Ordering Information

ASB-L706N	EPIC-N455/FAN-VGA/18BIT-2G6S6U-3SATA/CF-2mPCIe/R1.0
ASB-L706D	EPIC-D525/FAN-VGA/18BIT-2G6S6U-3SATA/CF-2mPCIe/R1.0

Dimension

ASB-L801

EPIC, 4" SBC, Socket P, Intel Core 2 Duo, GM45/ICH9M, DDR3, VGA/LVDS

EPIC

External I/O

| COM1 | VGA | LAN2 | LAN1 | USB3/4 | USB1/2 |

- Socket P, Intel Core 2 Duo mobile processors support with FSB 667/800/1066MHz
- Intel GM45 + ICH9M chipset
- Dual 18/24-bit LVDS channel
- Wide operating temperature, support -20~70°C
- DC12V input only

Specifications

System

Form Factor	4" EPIC
Processor	Socket P, Intel Core 2 Duo mobile processors with FSB 667/800/1066MHz
System Chipset	Intel GM45 + ICH9M
System Memory	1 x 204 Pin 800MHz, DDR3 SO-DIMM, up to 4GB
BIOS	AMI 8MB Flash

Display

Controller	Intel GM45 built-in GMA X4500, DVMT 5.0 compliant
VGA Interface	1 x DB-15, and 2 x 8 Pin header
TTL/LVDS Interface	1 x 18/24-bit LVDS dual channel, 40 Pin DF13
Resolution	Up to 2048 x 1536 for VGA with 32-bit color
	Up to 1600 x 1200 for single 18/24-bit LVDS
	Up to 2048 x 1536 for dual 18/24-bit LVDS

Mechanical & Environment

Board Size (L x W)	165mm x 115mm (6.5" x 4.5")
Gross Weight	0.5kg (1.2 lb)
Operating Temperature	Standard :-20°C~70°C (-4°F ~ 158°F)
	Optional : -40°C~85°C (-40°F ~ 185°F)
Storage Temperature	-40°C~85°C (-40°F ~ 185°F)
Humidity	5% - 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC class A

Expansion

Expansion	1 x PC/104-Plus connector
	1 x mini PCIe (half size)

Power Connectors

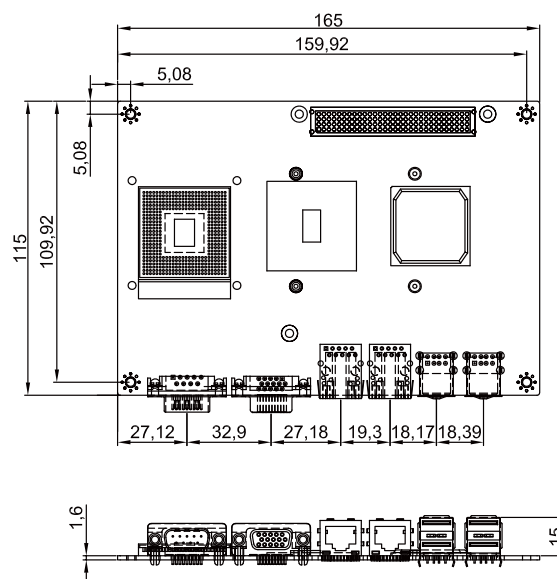|	
Power Management	DC 12V input only
Power Connector	1 x 2 Pin power input connector

I/O

Super I/O	Winbond W83627UHG
Ethernet	2 x GbE ports by RJ-45 with Intel 82574L Controller
USB	4 x USB 2.0 (type A) stack ports
	4 x USB 2.0 internal Pin header
Serial	1 x RS-232 (COM1), DB-9 connector on I/O, Pin 9 with 5V/12V Ring select
	1 x RS-422/485 select header (COM3)
	4 x RS-232 (COM2/4/5/6), header internal
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	2 x SATA II connectors, 1 x CF (shared IDE)
Audio	Realtek ALC662, Line-in/ Line-out / MIC-in by 2 x 5 Pin header
KB/Mouse	1 x PS/2 KB/MS by 1 x 6 Pin wafer connector
Battery	1 x 2 Pin header support CR2477 (1000mAH)

Ordering Information

ASB-L801	EPIC-GM45/SINK-VGA/LVDS-2G5S8U-2SATA/CF-mPCIe/R1.0

Dimension

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SBC-7102

EPIC, 4" SBC with SAMSUNG S3C2440A/400MHz,
Onboard 128MB SDRAM, TTL/LVDS

External I/O
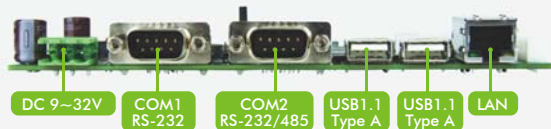
| DC 9~32V | COM1 RS-232 | COM2 RS-232/485 | USB1.1 Type A | USB1.1 Type A | LAN |

- ARM9 Samsung S3C2440A (ARM920T) 400MHz processor
- Onboard 128MB NAND Flash/SDRAM, 2MB NOR Flash
- 1 x 18-bit TTL interface
- Optional graphic controller silicon motion SM502, 18-bit LVDS supported
- Wide Range DC 9~32V input

Specifications

System

Form Factor	4" EPIC
Processor	Onboard Samsung S3C2440A (ARM920T) 400MHz
System Chipset	Samsung S3C2440A (ARM920T)
System Memory	Onboard 128MB SDRAM
BIOS	2MB Onboard, Boot-loader

Display

Controller	Samsung S3C2440A for 18-bit TTL
	Optional Graphic Controller SM502 (Silicon Motion) for 18-bit LVDS
TTL/LVDS Interface	1 x 18-bit TTL
	1 x 18-bit LVDS with optional SM502
Resolution	Up to 1024 x 768 for 18-bit TTL

Mechanical & Environment

Board Size (L x W)	165mm x 115mm (6.5" x 4.5")
Gross Weight	0.5kg (1.2 lb)
Operating Temperature	Standard :-20°C~70°C (-4°F ~ 158°F)
	Optional : -40°C~85°C (-40°F ~ 185°F)
Storage Temperature	-40°C~85°C (-40°F ~ 185°F)
Humidity	5% - 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC class A

Power Connectors

|	
Power Management	Wide Range DC 9~32V input
Power Connector	1 x 3 Pin power input connector

I/O

Super I/O	Samsung S3C2440A (ARM920T)
Ethernet	1 x 10/100 Base-Tx by RJ-45 with DM9000AEP Controller
USB	2 x USB 1.1 (type A) ports
Serial	1 x RS-232 (COM1), DB-9 connector on I/O
	1 x RS-422/485 (COM2), DB-9 connector on I/O
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	1x SD/ SDHC up to 32GB (Win CE 5.0)
Audio	1x 5 Pin Box for Line-in/ Line-out
KB/Mouse	1 x 6 Pin Box
Battery	CR1220

Ordering Information

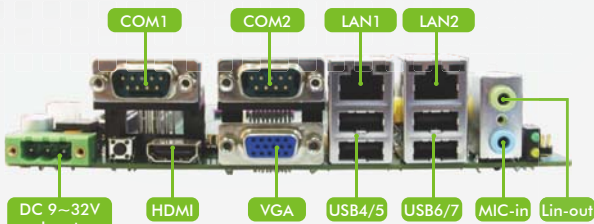|	
SBC-7102	RISC/EPIC/S3C2440/128RAM/128NAND/TTL SBC-7102 R1.4
SBC-7102-502	RISC/EPIC/S3C2440/128RAM/128NAND/18BIT/SBC-7102 R1.4

Dimension
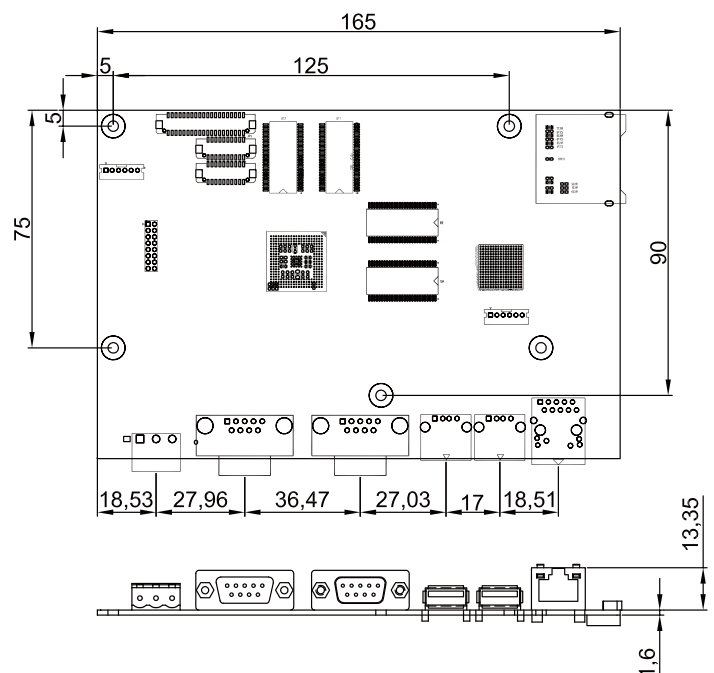
ASB-M801

Mini-ITX, Socket P, Intel Core 2 Duo, GM45/ICH9M,
2 x DDR3,VGA/LVDS/HDMI

External I/O

| COM1 | COM2 | LAN1 | LAN2 |

| DC 9~32V Input | HDMI | VGA | USB4/5 | USB6/7 | MIC-in | Lin-out |

- Socket P, Intel Core 2 Duo mobile processors support with FSB 667/800/1066MHz
- 1 x 18/24-bit LVDS channel interface
- ADOtec designed 120 Pin PCI and 40 Pin PCIe x1 expansion interface
- RAID 0,1 for option
- Wide Range DC 9~32V input

Specifications

System

Form Factor	Mini-ITX
Processor	Socket P, Intel Core 2 Duo mobile processors with FSB 667/800/1066MHz
System Chipset	Intel GM45 + ICH9M
System Memory	2 x 204 Pin 800MHz, DDR3 SO-DIMM, up to 8GB
BIOS	AMI 8MB Flash

Display

Controller	Integrated Intel GMA 4500MHD, DVMT 5.0 compliant
VGA Interface	1 x DB-15, and 2 x 8 Pin header
TTL/LVDS Interface	1 x 18/24-bit LVDS dual channel, 40 Pin DF13
HDMI Interface	1
Resolution	Up to 2048 x 1536 for VGA with 32-bit color
	Up to 1920 x 1080 for HDMI
	Up to 1600 x 1200 for single 18/24-bit LVDS
	Up to 2048 x 1536 for dual 18/24-bit LVDS

Mechanical & Environment

Board Size (L x W)	170mm x 170mm (6.7" x 6.7")
Gross Weight	0.4kg(0.88lb)
Operating Temperature	Standard :-20°C~70°C (-4°F ~ 158°F)
	Optional : -40°C~85°C (-40°F ~ 185°F)
Storage Temperature	-40°C~85°C (-40°F ~ 185°F)
Humidity	5% - 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC class A

Expansion

Expansion	120 Pin socket for PCI expansion
	2 x PCIe x1 extend by 4 x 10 Pin socket
	1 x mini PCIe slot
	1 x CRT 2x5 Pin header

Power Connectors

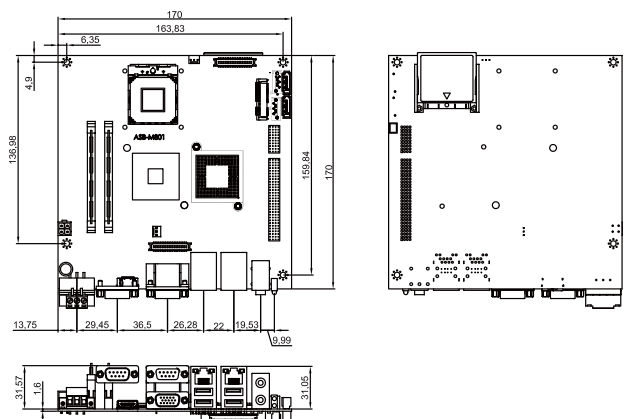|	
Power Management	Wide Range DC 9~32V input
Power Connector	1 x 3 Pin power input connector

I/O

Super I/O	Winbond W83627UHG
Ethernet	2 x GbE ports by RJ-45 with Intel 82574L Controller
USB	4 x USB 2.0 (type A) stack ports
	3 x USB 2.0 Pin header for MIO1
	4 x USB 2.0 Pin header for MIO2
Serial	1 x RS-232 (COM1), DB-9 connector on I/O, Pin 9 with 5V/12V Ring select
	1 x RS-232 (COM2), DB-9 connector on I/O
	1 x RS-232 header for internal (COM5)
	1 x RS-232 header for internal (COM6), Pin 10 with 5V/12V select
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	4 x SATA II connectors
	1 x Compact Flash II Slot (option)
Audio	2 x Stack Audio Jack, Realtek ALC662, Line-out / MIC-in
KB/Mouse	1 x PS/2 KB/MS by 1 x 6 Pin wafer connector
Battery	1 x 2 Pin header support CR2477 (1000mAH)

Ordering Information

ASB-M801	Mini-ITX-GM45/SINK-VGAILVDS-2G6S11 U-2SATAICF-mPCle/R1.0

Dimension

Specifications are subject to change without notice, all brand name and trademarks are their registered properties of their respective owners.

ASB-M8671

Mini-ITX, Socket G2, 2nd Gen Intel Core i7/i5/i3, QM67,
2 x DDR3, LVDS/DVI-I/HDMI/DP

External I/O

| COM1 | COM2 | LAN1 | LAN2 |

| DC 9~32V Input | HDMI | DVI-I | USB4/5 | USB6/7 | MIC-in | Lin-out |
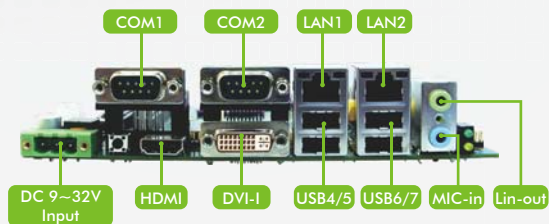
- Socket PGA988B, Intel Core i7/i5/i3 processors supported
- High speed 6Gb/Sec SATA III supported
- CFast device supported
- ADOtec designed 120 Pin PCIe x16 and 40 Pin PCIe x1 expansion interface
- Wide Range DC 9~32V input

Specifications

System

Form Factor	Mini-ITX
Processor	Socket G2, 2nd Generation Intel Core i7/i5/i3 processors
System Chipset	Intel QM67 PCH
System Memory	2 x 204 Pin 1066/1333MHz, DDR3 SO-DIMM, up to 16GB
BIOS	SPI 16M

Display

Controller	Intel HD Graphics 2000/3000
VGA Interface	1 x DB-15, and 2 x 8 Pin header
TTL/LVDS Interface	1 x 24-bit dual channel LVDS
DVI Interface	1 x DVI-I
HDMI Interface	1
Resolution	Up to 2560 x 1600 for DVI-I
	Up to 1920 x 1080 for HDMI
	Up to 2048 x 1536 for dual 24-bit LVDS

Mechanical & Environment

Board Size (L x W)	170mm x 170mm (6.7" x 6.7")
Gross Weight	0.4kg(0.88lb)
Operating Temperature	Standard :-20°C~70°C (-4°F ~ 158°F)
	Optional : -40°C~85°C (-40°F ~ 185°F)
Storage Temperature	-40°C~85°C (-40°F ~ 185°F)
Humidity	5% - 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC class A

Expansion

Expansion	120 Pin socket for PCIe x16 expansion
	2 x PCIe extend by 4 x 10 Pin socket
	1 x mini PCIe slot
	1 x CRT 2x5 Pin header

Power Connectors

Power Management	Wide Range DC 9~32V input
Power Connector	1 x 3 Pin power input connector

I/O
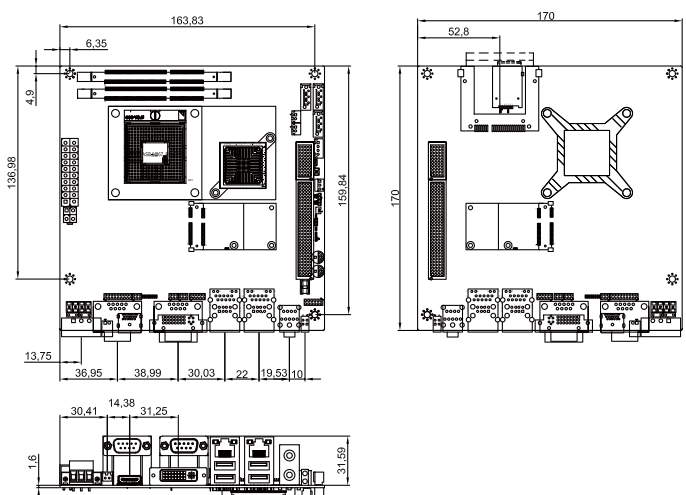
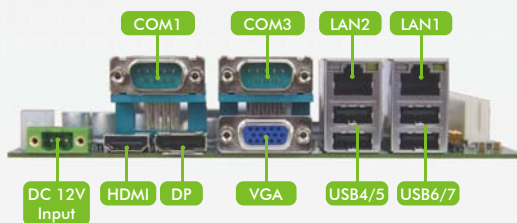|	
Super I/O	Winbond W83627UHG
Ethernet	2 x GbE ports by RJ-45 with Intel 82574L Controller
USB	4 x USB 2.0 (type A) stack ports
	8 x USB 2.0 Pin header
Serial	1 x RS-232/422/485 (COM1), RS-485 with Auto Flow Control and 5V/12V Ring select
	1 x RS-232 (COM2), DB-9 connector on I/O, Pin 9 with 5V/12V
	1 x RS-422/485 with Auto Flow Control by header (COM3)
	3 x RS-232 by header (COM4,5,6)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	3 x SATA II connectors
	2 x SATA III connectors
	1 x CFast connector
Audio	2 x Stack Audio Jack, Realtek ALC662, Line-out / MIC-in
KB/Mouse	1 x PS/2 KB/MS by 1 x 6 Pin wafer connector
Battery	1 x 2 Pin header support CR2477 (1000mAH)

Ordering Information

ASB-M8671	Mini-ITX-QM67 /SINK-L VDS/DVI/HDM I/DP-2G6S 12U-3SA TA2/2 SATA3/CFast-mPCIe/R1.0

Dimension

ASB-M711

Mini-ITX, Intel Cedarview-M/D Processors, NM10, 2 x DDR3, LVDS/VGA/HDMI/DP

Industrial SBC

External I/O

| COM1 | COM3 | LAN2 | LAN1 |
| DC 12V Input | HDMI | DP | VGA | USB4/5 | USB6/7 |

- New generation Intel Atom D2700 Dual Core 2.13GHz processor
- VGA/DP/HDMI output
- Onboard SIM card slot
- 18-bit and 24-bit dual channel LVDS interface
- DC 12V input only

Specifications

System

Form Factor	Mini-ITX
Processor	Onboard Intel Atom D2700 Dual Core 2.13GHz processor
System Chipset	Intel NM10 Express
System Memory	2 x 204 Pin 800/1066MHz, DDR3 SO-DIMM, up to 4GB
BIOS	SPI 16M

Display

Controller	Integrated Intel GMA 5650
VGA Interface	1 x DB-15
TTL/LVDS Interface	1 x 18/24-bit LVDS single channel, 40 Pin DF13
	1 x 24-bit dual channel LVDS
HDMI Interface	1
DP Interface	1
Resolution	Up to 2048 x 1536 for VGA
	Up to 1920 x 1080 for HDMI
	Up to 1600 x 1200 for single 18/24-bit LVDS
	Up to 2048 x 1536 for dual 18/24-bit LVDS

Mechanical & Environment

Board Size (L x W)	170mm x 170mm (6.7" x 6.7")
Gross Weight	0.4kg(0.88lb)
Operating Temperature	Standard :-20°C~70°C (-4°F ~ 158°F)
	Optional : -40°C~85°C (-40°F ~ 185°F)
Storage Temperature	-40°C~85°C (-40°F ~ 185°F)
Humidity	5% - 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC class A

Expansion

Expansion	1 x mini PCIe slot

Power Connectors

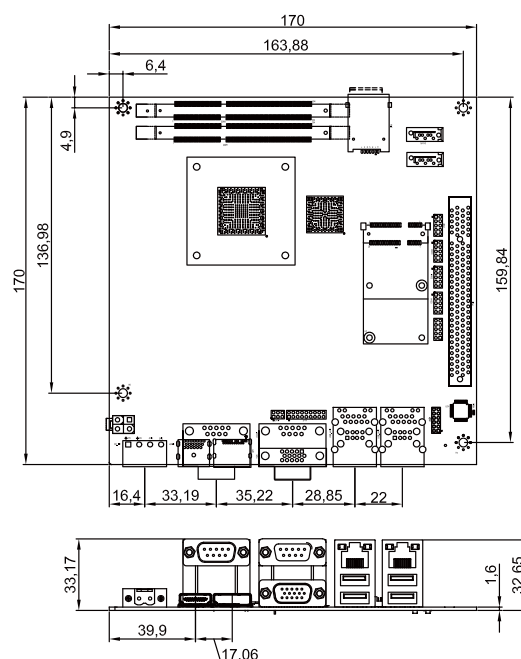|	
Power Management	DC12V input only
Power Connector	1 x 2 Pin power input connector

I/O

Super I/O	Winbond W83627UHG
Ethernet	2 x GbE ports by RJ-45 with Realtek RTL811D Controller
USB	4 x USB 2.0 (type A) stack ports
	3 x USB 2.0 Pin header
Serial	1 x RS232 (COM1), DB-9 connector on I/O, Pin 9 with 5V/12V Ring select
	1 x RS-232/422/485 select header (COM 3)
	3 x RS-232 header for internal (COM 2/4/5)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	2 x SATA II connectors
Audio	Realtek ALC662, Line-in/ Line-out / MIC-in by 2 x 5 Pin header
KB/Mouse	1 x PS/2 KB/MS by 1 x 6 Pin wafer connector
Battery	1 x 2 Pin header support CR2477 (1000mAH)

Ordering Information

ASB-M711	Mini-ITX-NM10/SINK-LVDSIVGA/HDMI/DP-2G5S7U-2SATA2-mPCIe/R 1.0

Dimension

Specifications are subject to change without notice, all brand name and trademarks are their registered properties of their respective owners.

MB-2440E

2.0" ARM9 Core Module with Samsung S3C2440A, 400MHz, Onboard 128MB SDRAM, TTL

- ARM9 Samsung S3C2440A (ARM920T) 400MHz processor
- Onboard 128MB NAND Flash/SDRAM, 2MB NOR Flash
- 18-bit TTL interface
- Windows CE 5.0 and CE 6.0 supported
- Power Consumption 5W

Specifications

System

Form Factor	2.0" DIP-RISC
Processor	Samsung S3C2440A (ARM920T) 400MHz
System Chipset	Samsung S3C2440A (ARM920T)
System Memory	Onboard 128MB SDRAM and 128MB NAND Flash
BIOS	2MB System Recovery Data Flash

Display

Controller	Samsung S3C2440A (ARM920T)
TTL/LVDS Interface	1 x 18-bit TTL
Resolution	Up to 1024 x 768 for 18-bit TTL

Mechanical & Environment

Board Size (L x W)	70mm x 50mm (2.75" x 2")
Gross Weight	0.2kg (0.44lb)
Operating Temperature	-0°C ~ 60°C (32°F~140°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

Power Management	DC 12V input only

### I/O

Super I/O	Samsung S3C2440A (ARM920T)
Ethernet	10/100M interface to baseboard
USB	2 x USB 1.1 interface to baseboard
Serial	1 x RS-232 interface to baseboard
	1 x RS-232/422/485 interface to baseboard
GPIO	4-bit GPIO interface to baseboard
Storage	SDIO interface to baseboard
Audio	1 x HAD interface to baseboard
Battery	CR2032

Ordering Information

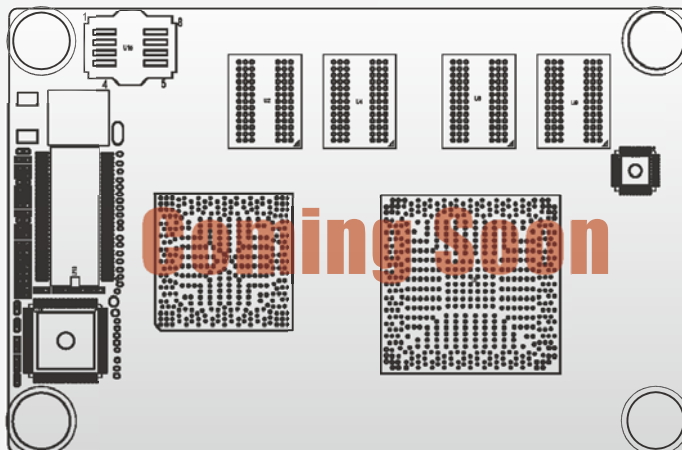|	
MB-2440E	RISC/SOM/S3C2440/128/128 MB-2440E-112R100-11202

Dimension
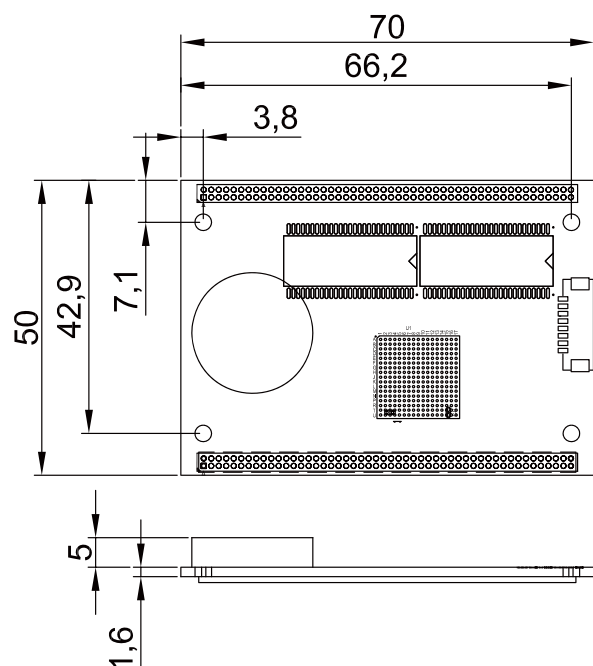
CM-NM101-CT26

NanoCOM Express Core Module, Onboard Intel Atom N2600, Onboard 2GB DDR3/SDRAM

x86 Based

NEW

- Onboard Intel Atom N2600 1.6GHz, L2 Cache 1MB processor
- Onboard 2GB DDR3/SDRAM
- 18/24-bit LVDS interface support dual display
- DP and HDMI interface output
- DC 12V input only

Coming Soon

Specifications

System

Form Factor	NanoCOM Express Core Module
Processor	Onboard Intel Atom N2600 1.6GHz
System Chipset	Intel NM10 Express
System Memory	Onboard 2GB DDR3/SDRAM
BIOS	AMI 16MB Flash

Display

Controller	Intel GMA 3600 build-in 400MHz speed
VGA Interface	1 x DB-15
TTL/LVDS Interface	18/24-bit LVDS interface support dual display
HDMI Interface	1 x interface to baseboard
DP Interface	1 x interface to baseboard
Resolution	Up to 1600 x 1200 for single 18-bit LVDS
	Up to 2048 x 1536 for dual 24-bit LVDS

Mechanical & Environment

Board Size (L x W)	84mm x 55mm (3.31" x 2.17")
Gross Weight	0.2kg (0.44lb)
Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Humidity	5% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

Power Management	DC 12V input only
	1 x 2 Pin power input connector

I/O

Super I/O	Winbond W83627UHG
Ethernet	1 x GbE interface to baseboard
USB	8 x USB 2.0 interface to baseboard
Serial	5 x RS-232 interface to baseboard
	1 x RS-232/422/485 interface to baseboard
GPIO	8-bit GPIO interface to baseboard
Storage	2 x SATA II interface to baseboard
Audio	1 x HDA interface to baseboard
Battery	CR2477 (1000mAH)

Ordering Information

CM-NM101-CT26	SOM-N2600-2G/SINK-VGA/LVDS-R1.0

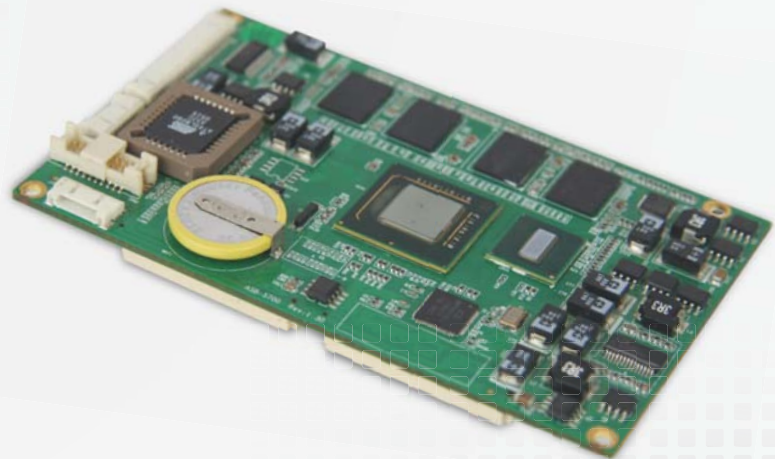### Dimension
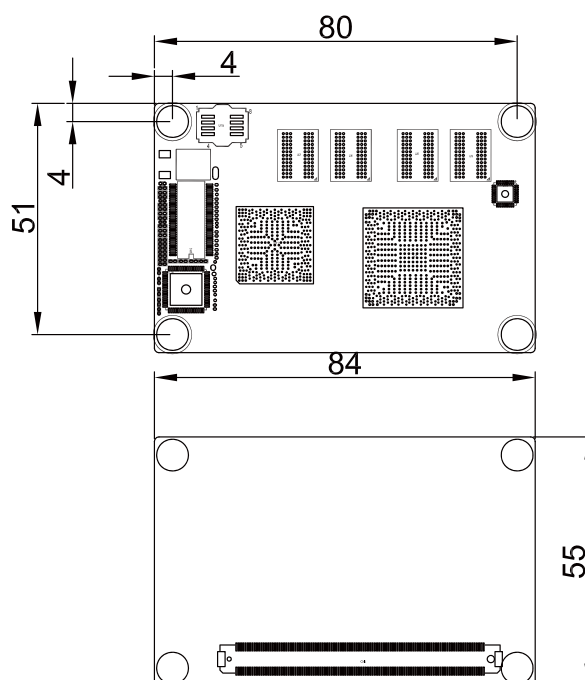
ASB-S700-Z510

2.5" Mini- Express Core Module with Intel Atom Z510, Onboard 1GB DDR2/SDRAM, LVDS

- Intel ULV Atom Z510, 1.1GHz, L2 Cache 512KB processor
- Onboard 1GB DDR2/SDRAM
- 18/24-bit LVDS interface support dual display
- Optional Reset by HW/PWR switch or SW reset by GPIO
- ADOtec designed Mini-Express interconnect system bus

Specifications

System

Form Factor	2.5" Mini- Express Core Module
Processor	Onboard Intel ULV Atom Z510, 1.1GHz, FSB 533/400MHz
System Chipset	Inte SCH US15W
System Memory	Onboard 1GB DDR2/SDRAM
BIOS	AMI 8MB Flash

Display

Controller	Intel SCH US15W integrated GMA 500
TTL/LVDS Interface	18/24-bit LVDS interface support dual display
Resolution	Up to 1600 x 1200 for single 18-bit LVDS
	Up to 2048 x 1536 for dual 24-bit LVDS

Mechanical & Environment

Board Size (L x W)	115mm x 70mm (4.5" x 2.75")
Gross Weight	0.3kg (0.66lb)
Operating Temperature	-0°C ~ 60°C (32°F ~ 140°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

Power Management	DC 12V input only

I/O
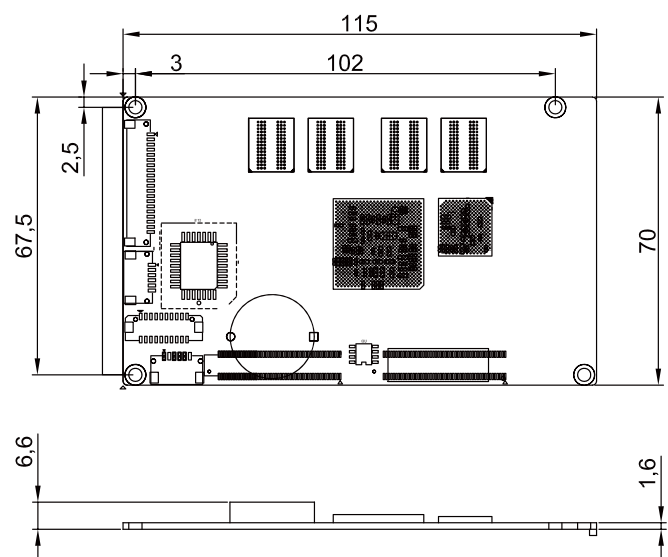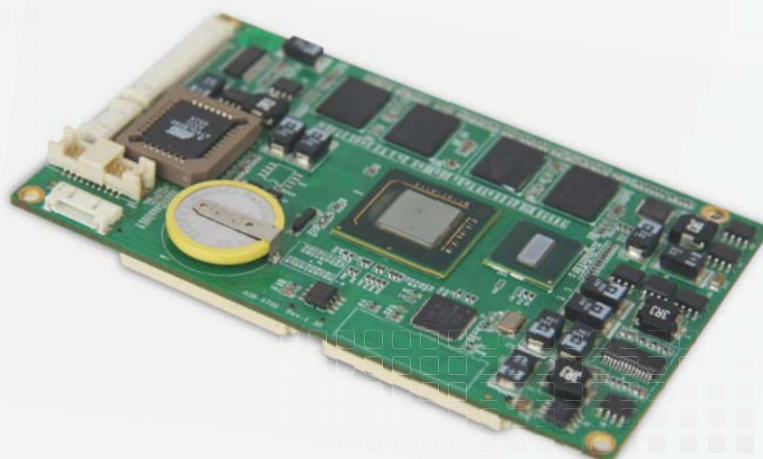
Super I/O	Winbond W83627UHG
Ethernet	1 x GbE interface to baseboard
USB	6 x USB 2.0 interface to baseboard
Serial	3 x RS-232 interface to baseboard
	1 x RS-422/485 interface to baseboard
GPIO	8-bit GPIO interface to baseboard
Storage	IDE interface to baseboard
Audio	1 x HDA interface to baseboard
Battery	CR2032

Ordering Information

ASB-S700-Z510-1G	SOM-Z51 0-1 G/S IN K-VGA/L VDS-R 1.3_02

Dimension

ASB-S700-Z530

x86 Based

Core Module

- Intel ULV Atom Z530, 1.6GHz, L2 Cache 512KB processor
- Onboard 1GB DDR2/SDRAM
- 18/24-bit LVDS interface support dual display
- Optional Reset by HW/PWR switch or SW reset by GPIO
- ADOtec designed Mini-Express interconnect system bus

Specifications

System

Form Factor	2.5" Mini- Express Core Module
Processor	Onboard Intel ULV Atom Z530, 1.6GHz, FSB 533/400MHz
System Chipset	Intel SCH US15W
System Memory	Onboard 1GB DDR2/SDRAM
BIOS	AMI 8MB Flash

Display

Controller	Intel SCH US15W integrated GMA 500
TTL/LVDS Interface	18/24-bit LVDS interface support dual display
Resolution	Up to 1600 x 1200 for single 18-bit LVDS
	Up to 2048 x 1536 for dual 24-bit LVDS

Mechanical & Environment

Board Size (L x W)	115mm x 70mm (4.5" x 2.75")
Gross Weight	0.3kg (0.66lb)
Operating Temperature	-0°C ~ 60°C (32°F ~ 140°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

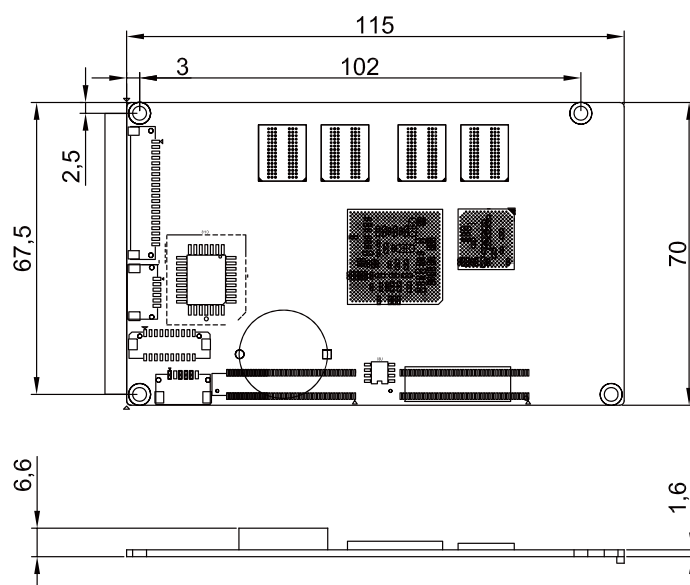|	
Power Management	DC 12V input only

I/O

Super I/O	Winbond W83627UHG
Ethernet	1 x GbE interface to baseboard
USB	6 x USB 2.0 interface to baseboard
Serial	3 x RS-232 interface to baseboard
	1 x RS-422/485 interface to baseboard
GPIO	8-bit GPIO interface to baseboard
Storage	IDE interface to baseboard
Audio	1 x HDA interface to baseboard
Battery	CR2032

Ordering Information

ASB-S700-Z530-1G	SOM-Z530-1G SINK-VGA/LVDS-R1.3_02

Dimension

Specifications are subject to change without notice, all brand name and trademarks are their registered properties of their respective owners.

PB-201

- On board 4-wire touch controllor and keyboard
- Support 18-bit TTL
- Optional POE power
- Backward external I/O ports
- Wide Range DC 10~28V input

Specifications

System

TTL/LVDS Interface	1 x 18-bit TTL
Resolution	Up to 320 x 240 for 18-bit TTL

I/O

Ethernet	1 x 10/100 Base-Tx by RJ-45
USB	1 x USB 1.1 (type A) stack ports
	1 x USB 1.1 Pin header
Serial	1 x RS-232 (COM2)
	1 x RS-422/485 (COM1)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Audio	I2S compliant codec

Mechanical & Environment

Board Size (L x W)	70mm x 60mm (2.75" x 2.4")
Operating Temperature	0°C ~ 60°C (32°F ~ 140°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

Power Management	Wide Range DC 10~28V input
Power Connector	1 x 2 Pin power input connector
PoE(Optional)	802.af (Powered Device)

Ordering Information

PB-201	PB-201 R2.10-01_3.5",LCD+TP,320x240,100x65MM

External I/O

1x 10/100Base-Tx by RJ-45 (DM9000AEP)

DC 10~28V input

USB 1.1

18-bit TTL

Dimension

PB-202

ARM Baseboard for MB-2440E

ARM Based

- On board 4-wire touch controller and keyboard
- Support 18-bit TTL
- Optional POE power
- External reset switch
- Wide Range DC 10~28V input

Specifications

System

TTL/LVDS Interface	1 x 18-bit TTL
Resolution	Up to 640 x 480 / 800 x 480 for 18-bit TTL

I/O

Ethernet	1 x 10/100 Base-Tx by RJ-45
USB	1 x USB 1.1 (type A) stack ports
	1 x USB 1.1 Pin header
Serial	1 x RS-232 (COM2)
	1 x RS-422/485 (COM1)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	T-Flash Slot
Audio	I2S compliant codec

Mechanical & Environment

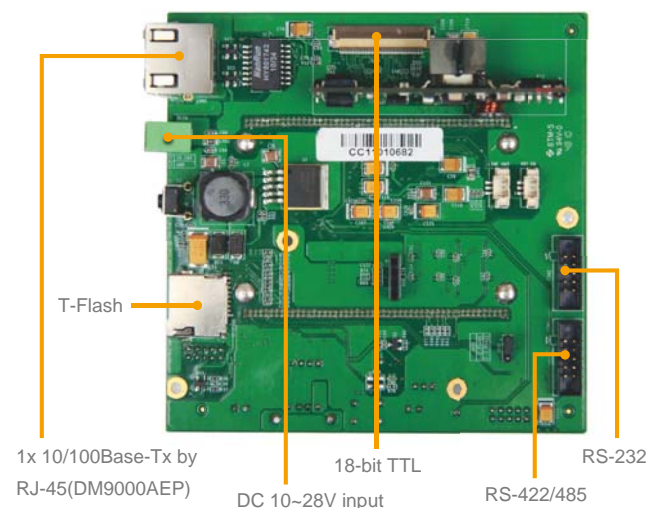| Board Size (L x W)	100mm x 100mm (4" x 4")
Operating Temperature	0°C ~ 60°C (32°F ~ 140°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

Power Management	Wide Range DC 10~28V input
Power Connector	1 x 2 Pin power input connector
PoE(Optional)	802.af (Powered Device)

Ordering Information

PB-202	PB-202 R1.40-06/7" LCD+TP+mSD 800x480/100x100mm

External I/O

T-Flash

1x 10/100Base-Tx by RJ-45(DM9000AEP)

18-bit TTL

DC 10~28V input

RS-422/485

RS-232

Dimension

103,5
100
18,8
62,4
13,35
31,1
35,8
100
30,5
15
10,5
11
18,12
15
15,25
13
1,6

PB-700S

x86 Baseboard for ASB-S700
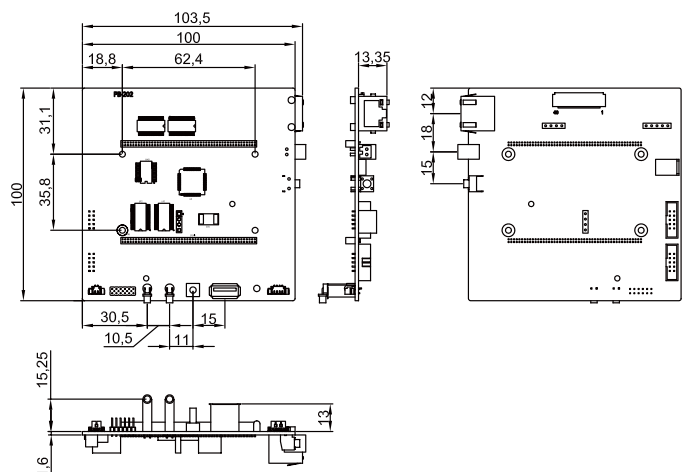
- Baseboard for Mini-Express Core Module
- Selectable AT/ATX mode
- DC 12V input only

Specifications

System

Controller	Chrontel CH7317 Display Controller
VGA Interface	1 x 2x5 Pin header
Resolution	Up to 1600 x 1200 for VGA

I/O

Super I/O	Winbond W83627UHG
Ethernet	1 x GbE port by RJ-45, Wake On LAN
USB	2 x USB 2.0 (type A) stack ports
	1 x USB 2.0 Pin header
Serial	1 x RS-232 (COM1)
	1 x RS-422/485 (COM2)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	1 x CF, 1 x ZIF/IDE
Audio	Realtek ALC662, Line-in/ Line-out / MIC-in by
	2 x 5 Pin header
Battery	CR2032

Mechanical & Environment

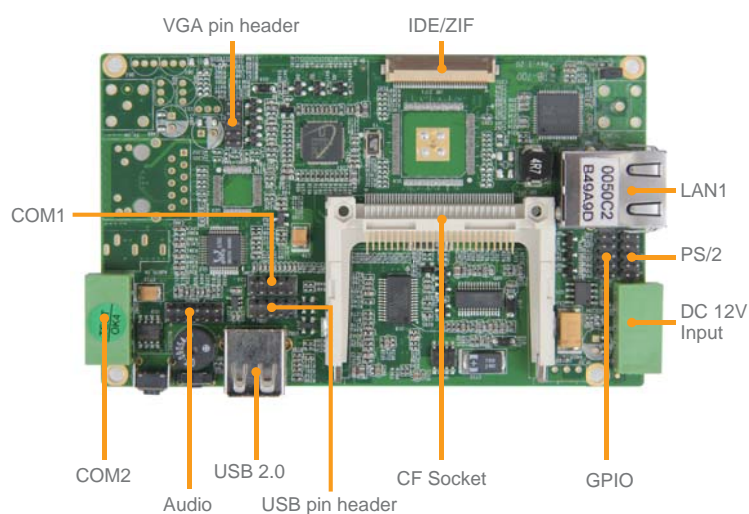|	
Board Size (L x W)	115mm x 70mm (4.5" x 2.75")
Operating Temperature	0°C ~ 60°C (32°F ~ 140°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

Power Management	DC 12V input only
Power Connector	1 x 3 Pin power input connector

Ordering Information

PB-700S	CARRIER/USB/LAN/ZIF/ACS-9202S PB-700S R1.2

External I/O

VGA pin header
IDE/ZIF
COM1
LAN1
PS/2
DC 12V Input
COM2
USB 2.0
Audio
USB pin header
CF Socket
GPIO

Dimension
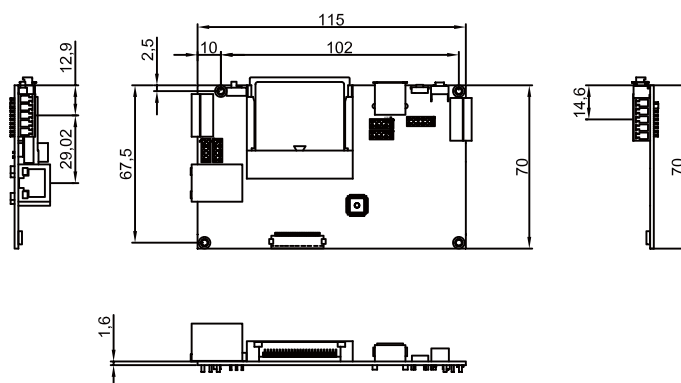
PB-700F

x86 Baseboard for ASB-S700

- Baseboard for Mini-Express Core Module
- Video Capture with CX23885 to 1 channel D1 input
- TV-out by BNC with SDVO CH7021
- Selectable AT/ATX mode
- RJ-45 FE-LAN for IP camera

Specifications

System

Controller	Chrontel CH7317 Display Controller
VGA Interface	1x 2x5 Pin header
Other Interface	SDVO CH7021 TV-out by BNC
Resolution	Up to 1600 x 1200 for VGA

I/O

Super I/O	Winbond W83627UHG
Ethernet	1 x GbE port by RJ-45, Wake On LAN
	1 x FE-LAN port by RJ-45 for IP Camera
USB	2 x USB 2.0 (type A) stack ports
	1 x USB 2.0 Pin header
Serial	1 x RS-232 (COM1)
	1 x RS-422/485 (COM2)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	1 x CF, 1 x ZIF/IDE
HD Audio codec	Realtek ALC662, Line-in/ Line-out / MIC-in by
	2 x 5 Pin header
Battery	CR2032

Mechanical & Environment

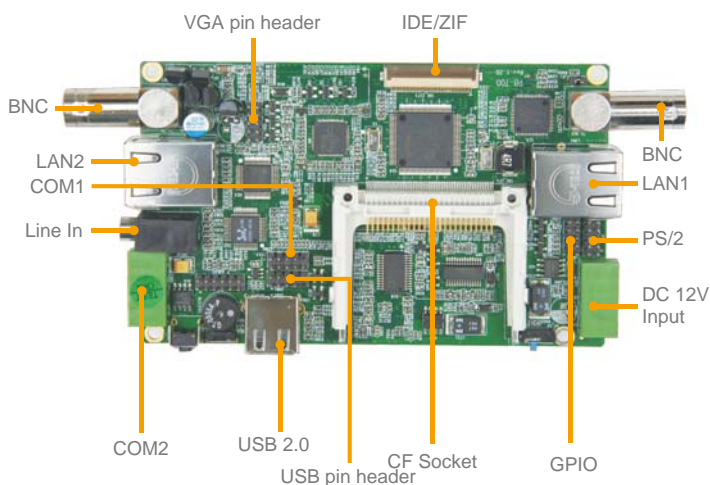|	
Board Size (L x W)	115mm x 70mm (4.5" x 2.75")
Operating Temperature	0°C~60°C (32°F~140°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

Power Management	DC 12V input only
Power Connector	1 x 3 Pin power input connector

Ordering Information

PB-700F	CARRIER/USB/LAN/ZIF/CX23885/ACS9202 PB-700F R1.0

External I/O

VGA pin header
IDE/ZIF
BNC
LAN2
COM1
Line In
BNC
LAN1
PS/2
DC 12V Input
COM2
USB 2.0
USB pin header
CF Socket
GPIO

Dimension

115
102
10
2.5
12.9
29.02
67.5
17.28
70
14.6
29.79
29.05
15.55
13.6
1.6
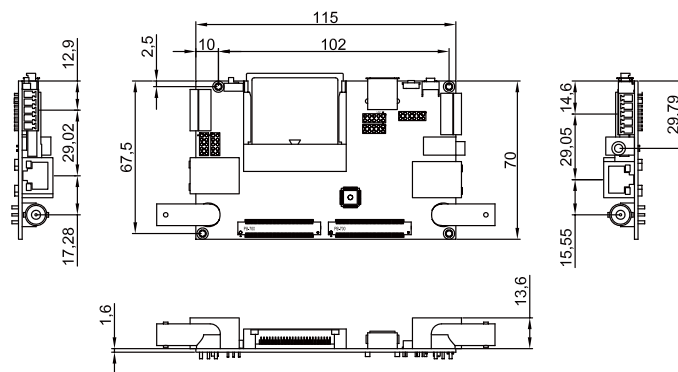
PB-701 x86 Baseboard for ASB-S700

- Baseboard for Mini-Express Core Module
- Video Capture with CX23820 and CX25850 for 2 channel D1 input
- TV-out by BNC with SDVO CH7021
- Selectable AT/ATX mode
- Isolated 8-bit GPIO

Specifications

System

Controller	Chrontel CH7317 Display Controller
VGA Interface	1 x 2x5 Pin header
Other Interface	SDVO CH7021 TV-out by BNC
Resolution	Up to 1600 x 1200 for VGA

I/O

Super I/O	Winbond W83627UHG
Ethernet	1 x GbE port by RJ-45, Wake On LAN
USB	2 x USB 2.0 (type A) stack ports
	2 x USB 2.0 Pin header
Serial	1 x RS-232 (COM1)
	1 x RS-422/485 (COM2)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	1 x CF, 1 x IDE/ZIF
KB/Mouse	1 x PS/2 KB/MS by 1 x 6 Pin wafer connector
Battery	CR2032

Mechanical & Environment

|	
Board Size (L x W)	115mm x 85mm (4.5" x 3.35")
Operating Temperature	0°C ~ 60°C (32°F~140°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

Power Management	DC 12V input only
Power Connector	1 x 3 Pin power input connector

Ordering Information

PB-701	PB-701 R1.0_/Single LAN, CF/ZIF for ASB-S700

External I/O

Dimension

PB-702
x86 Baseboard for ASB-S700
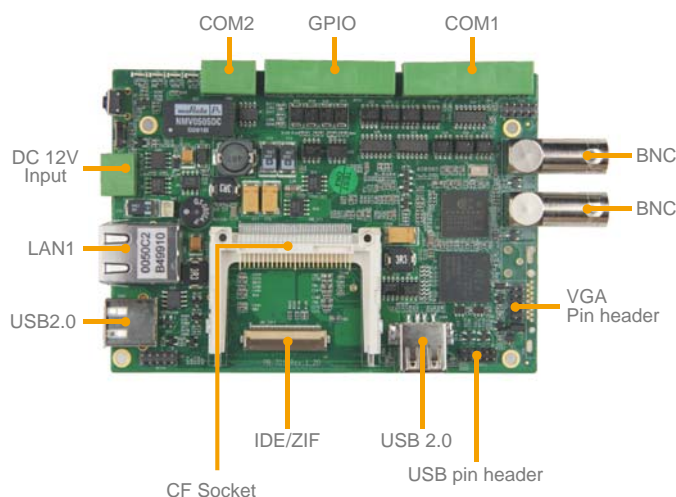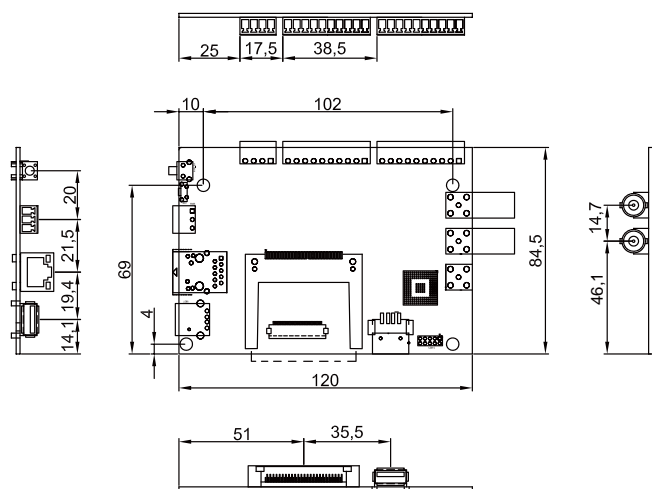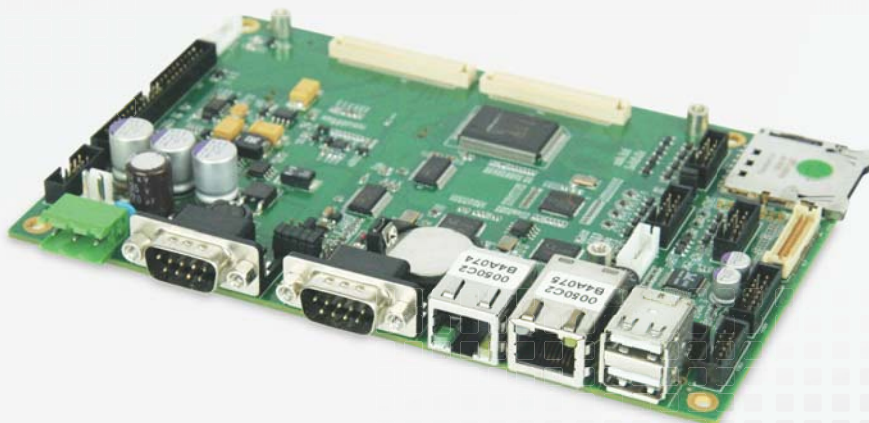
- Baseboard for Mini-Express Core Module
- Wide Range DC 11~32V input
- External SD card slot
- Standard EPIC size
- Selectable AT/ATX mode

Specifications

System

Controller	Chrontel CH7317 Display Controller
VGA Interface	1 x 2x5 Pin header
LVDS Interface	1 x 18/24-bit single channel LVDS
Other Interface	SDVO CH7021 TV-out by BNC
Resolution	Up to 1600 x 1200 for VGA
	Up to 1600 x 1200 for single 18/24-bit LVDS

I/O

Super I/O	Winbond W83627UHG
Ethernet	2 x GbE port by RJ-45, Wake On LAN
USB	2 x USB 2.0 (type A) stack ports
	4 x USB 2.0 Pin header
Serial	3 x RS-232 (COM1/3/4)
	1 x RS-232/422/485 (COM2)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	1 x CF, 1 x ZIF/IDE, 1 x SD/ SDHC
Audio	Realtek ALC662, Line-in/ Line-out / MIC-in by
	2 x 5 Pin header
KB/Mouse	1 x PS/2 KB/MS by 1 x 6 Pin wafer connector
Battery	CR2032

Mechanical & Environment

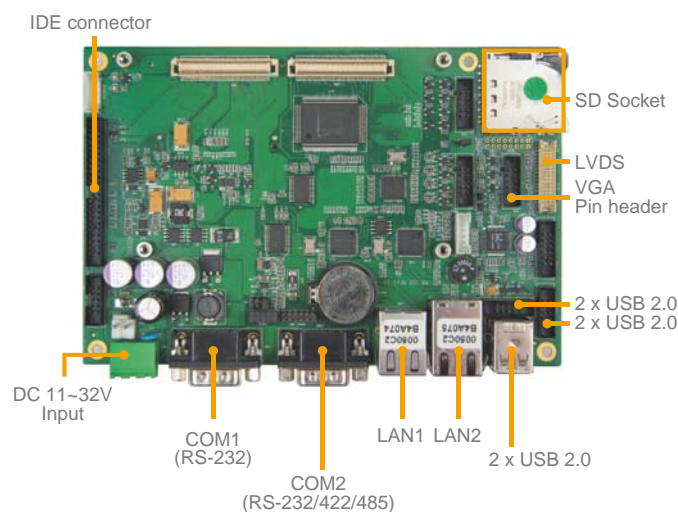|	
Board Size (L x W)	154mm x 115mm (6" x 4.5")
Operating Temperature	-0°C ~ 60°C (32°F ~ 140°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC Class A

Power Connectors

Power Management	Wide Range DC 11~32V input
Power Connector	1 x 3 Pin power input connector

Ordering Information

PB-702	PB-702 R1.0_/Dual LAN, SD for ASB-S700

External I/O

IDE connector
SD Socket
LVDS
VGA
Pin header
2 x USB 2.0
2 x USB 2.0
DC 11~32V Input
COM1 (RS-232)
COM2 (RS-232/422/485)
LAN1 LAN2
2 x USB 2.0

Dimension

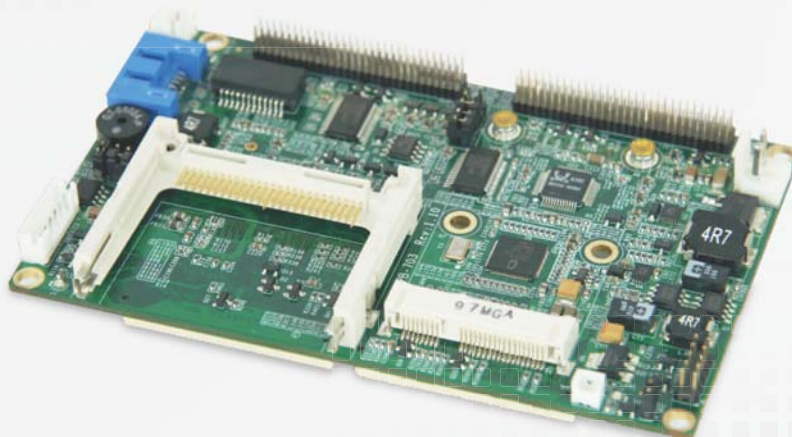Specifications are subject to change without notice, all brand name and trademarks are their registered properties of their respective owners.

PB-703

x86 Baseboard for ASB-S700

- Baseboard for Mini-Express Core Module
- Two mini PCIe slots
- Support SATA device
- Selectable AT/ATX mode
- DC 12V input only

Specifications

System

Controller	Chrontel CH7317 Display Controller
VGA Interface	1 x 2x5 Pin header
LVDS Interface	1 x 18/24-bit single channel LVDS
Resolution	Up to 1600 x 1200 for VGA
	Up to 1600 x 1200 for single 18/24-bit LVDS

I/O

Super I/O	Winbond W83627UHG
Ethernet	2 x GbE port by RJ-45, Wake On LAN
USB	2 x USB 2.0 (type A) stack ports
	2 x USB 2.0 Pin header
Serial	3 x RS-232 (COM1/3/4)
	1 x RS-232/422/485 (COM2)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	1 x CF, 1 x SATA II
Audio	Realtek ALC662, Line-in/ Line-out / MIC-in by
	2 x 5 Pin header
Battery	CR2032

Mechanical & Environment

Board Size (L x W)	115mm x 70mm (4.5" x 2.75")
Operating Temperature	0°C~60°C(32°F~140°F)
Storage Temperature	-20°C~70°C(-4°F~158°F)
Humidity	10% - 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC class A

Expansion

Expansion	1 x mini PCIe (full/half size)

Power Connectors

Power Management	DC 12V input only
Power Connector	1 x 3-pin power input connector

Ordering Information

PB-703	PB-703 R1.2-02/5COM/GBE/MPCIE/CF/SATA/0~5VBL

External I/O

SATA power
SATA II connector
CF Socket
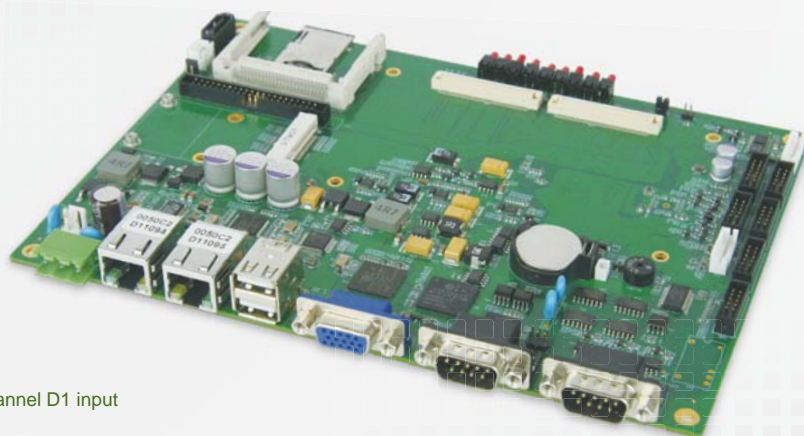Mini PCIe (full/half size)
USB pin header
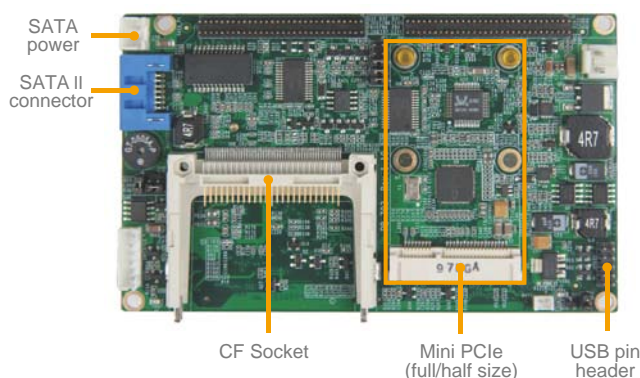
Dimension
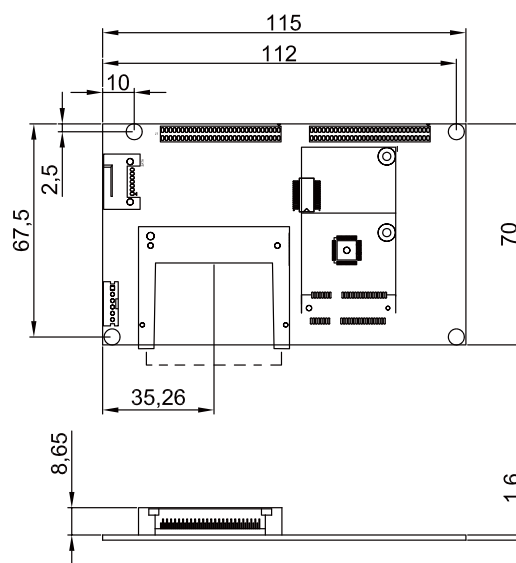
PB-705

x86 Baseboard for ASB-S700

Baseboard

- Baseboard for Mini-Express Core Module
- Video Capture with CX23820 and CX25850 for 4 channel D1 input
- RJ-45 FE-LAN for IP camera
- Onboard SIM card slot
- Wide Range DC 11~32V input

Specifications

System

Controller	Chrontel CH7317 Display Controller
VGA Interface	1 x 2x5 Pin header
LVDS Interface	1 x 18/24-bit single channel LVDS
Resolution	Up to 1600 x 1200 for VGA
	Up to 1600 x 1200 for single 18/24-bit LVDS

I/O

Super I/O	Winbond W83627UHG
Ethernet	1 x GbE port by RJ-45 with Intel 82574L
	1 x FE-LAN port by RJ-45 for IP Camera
USB	2 x USB 2.0 (type A) stack ports
	2 x USB 2.0 Pin header
Serial	1 x RS-232 (COM1)
	3 x RS-485 (COM2/3/4)
GPIO	8-bit digital I/O by header (4 x DI, 4 x DO)
Storage	1 x SATA II,1 x CF (shared IDE), 1 x IDE
Audio	Realtek ALC662, Line-in/ Line-out / MIC-in by
	2 x 5 Pin header
Battery	CR2032

Mechanical & Environment

Board Size (L x W)	203mm x 146mm (8" x 5.75")
Operating Temperature	0°C~60°C(32°F~140°F)
Storage Temperature	-20°C~70°C(-4°F~158°F)
Humidity	10% - 95%, non-condensing, operating
EMI/EMS	Meet CE/FCC class A

Expansion

Expansion	1 x mini PCIe (full/half size)

Power Connectors

Power Management	Wide Range DC 11~32V input
Power Connector	1 x 3 Pin power input connector

Ordering Information

PB-705	PB-705 R1.0/5COM/GBE/MPCIE/CF/SATA/IDE

External I/O

CF Socket

Mini PCIe (full/half size)

GPIO

2 x USB 2.0

RS-232

DC 11~32V Input

LAN1

LAN2

2 x USB 2.0

VGA

RS-232

RS-485

Dimension

203
197,89
5,1
5,1
146
140,9
19,46
39,23
19,5
27,6
34,92
34,29
20,12
13,35
1,6

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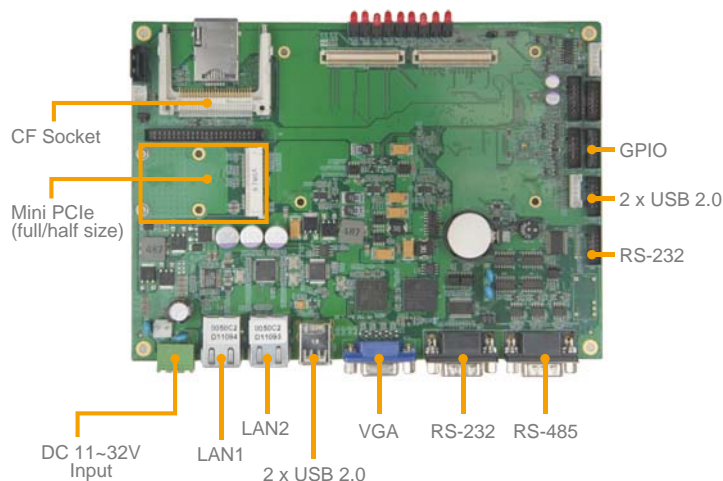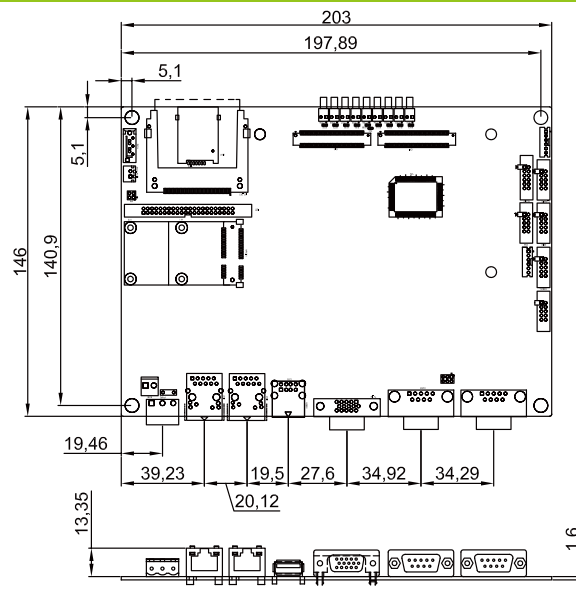
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