

### Features

- Intel® Atom™ N270 Processor
- Intel® 945GSE + ICH7M Chipset
- 200-Pin Non-ECC DDR2 400/533 SODIMM x 1, Up to 1 GB
- 10/100Base-TX Ethernet x 1 & Gigabit Ethernet x1
- Integrated Graphics Media Accelerator GMA950
- AC97 Codes Audio Daughter Board Optional
- ATA100 x 1, SATA 3.0Gb/s x 2, CompactFlash™ Type 2 x 1
- USB2.0 x 5, RS-232/422/485 x 1, RS-232 x 3, Parallel x 1, Digital I/O
- PCI Expansion
- ATX 2.1 Power



### Specifications

System	
Form Factor	PICMG/PCI Half-Size card
Processor	Onboard Intel® Atom™ N270 1.6 GHz Processor
System Memory	200-pin DDR2 400/533 SODIMM x 1, up to 1 GB
Chipset	Intel® 945GSE + ICH7M Chipset
Ethernet	10/100Base-TX x 1, 10/100/1000Base-TX x 1 LAN1: Intel® 82562GZ (10/100Base-TX)/ 82573L (10/100/1000Base-TX) LAN2: Intel® 82574L (10/100/1000Base-TX)
BIOS	Award Plug & Play SPI BIOS – 8 Mb ROM
Watchdog Timer	1 ~ 255 steps, can be set with software on Super I/O
H/W Status Monitor	Monitoring system temperature, voltage, and cooling fan status
Expansion Interface	PICMG/PCI interface
Power Requirement	ATX +12V (4 Pin power connector)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)
Operating Humidity	10~80%, non-condensing
Board Size (L x W)	7.3" x 4.8" (185mm x 122mm)
Gross Weight	0.66 lb (0.3 kg)
MTBF (Hours)	37,000
Power Consumption (Typical)	7.2W, with Intel® Atom™ N270 1.6 GHz
Display	
Chipset	Intel® 945GSE + Chromtel 7307
Graphic Engine	VGA Integrated in Intel® Graphic Engine GMA-950
Resolution	Analog up to 1600 x 1200 @ 75 Hz
Output Interface	VGA x 1, DVI-D x 1
I/O	
Storage	SATA 3.0Gb/s x 2 onboard & 40-pin IDE slot x 1, CompactFlash™ Type 2 x 1
Serial Port	COM x 4: (Internal Pin Header x 4) RS-232 x 3 RS-232/422/485 x 1
KB & Mouse	Mini-DIN PS/2 K/B and Mouse x 1 Internal keyboard pin header x 1
Universal Serial Bus	USB2.0 Port on CPU card x 5 (Internal 5x2 pin header x 2, up to 4 USB, Onboard TYPE-A Connector x 1)
Digital I/O	Onboard Programmable 8-bit Digital I/O interface (4 input/4 output)
Audio	AC97 codec audio daughter board optional

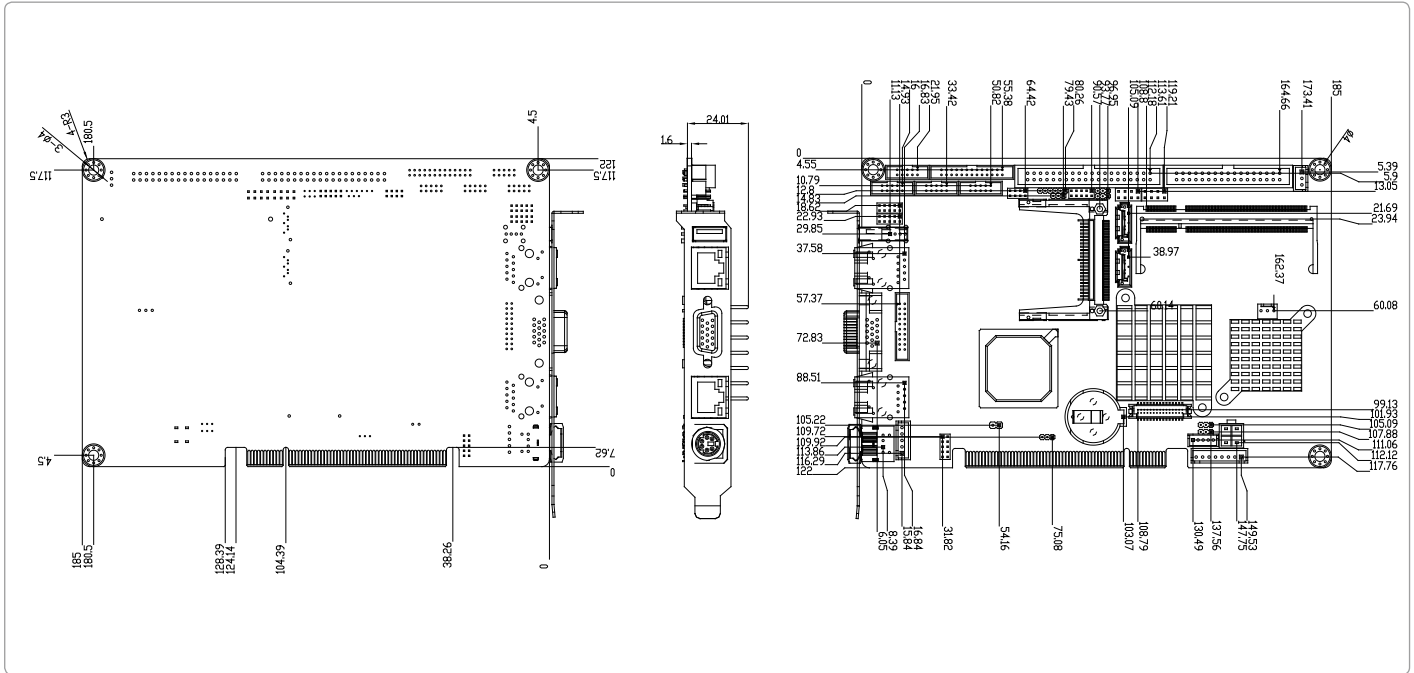
### Packing List

- Floppy Cable
- ATA-100 Cable
- PS/2 Keyboard & Mouse Cable
- USB Cable
- SATA Cable
- Product CD
- HSB-945P

# HSB-945P

## Dimension

Unit: mm



## Passive Backplane Options

P/N	Description	Master Interface	Slots (PCI/ISA/PICMG_PCI)	Power ATX Extend Function
BP-206SP-P4	Wallmount, PCI, 6-Slot Backplane, 4 PCI, Single Segment, ATX	PCI	4/0/2	ATX, 3-Pin ATX extend
BP-204SP-P3	Wallmount, PCI, 4-Slot Backplane, 3 PCI, Single Segment, AT/ATX	PCI	4/0/1	AT/ATX, 3-Pin ATX extend

## Ordering Information

Part Number	CPU	RAM	Fan/Fanless	Display	Storage	LVDS	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Temp.
TF-HSB-945P-A10-VE	Intel® Atom™ N270	SODIMM	Fanless	VGA + DVI-D + LVDS	SATA2 x 2, IDE x 1, Floppy x 1, CF x 1	18/24-bit Dual-channel	FE x 1	USB2.0 x 5	3	1	PCI	ATX +12V	0°C ~ 60°C
TF-HSB-945P-A10-G2	Intel® Atom™ N270	SODIMM	Fanless	VGA + DVI-D + LVDS	SATA2 x 2, IDE x 1, Floppy x 1, CF x 1	18/24-bit Dual-channel	GbE x 2	USB2.0 x 5	3	1	PCI	ATX +12V	0°C ~ 60°C

## Optional Accessories

- **TF-PER-U00A**  
AC97 Audio Daughter Board