

Cool RoadRunner-945GSE

PC/104-Plus Single Board Computer

Intel® Atom™ N270 Processor



Feature

Intel Atom N270, 1.6GHz, 512MB/1 GB/2 GB soldered DDR2-RAM

Graphics up to 2048 x 1536 pixel, CRT and LVDS, with backlight

Gigabit LAN, 8 x USB 2.0

2 GB Solid State Disk, 2 x SATA

2 x serial, RS232/RS422/RS485

Optional, extended temperature range -40 °C...+85 °C

Specifications

Board Format	PC/104-Plus with wings, 115.6 x 95.9mm
Processor	Intel Atom N270
Speed	1.6GHz
Core Logic	Northbridge Intel 945GSE Southbridge Intel ICH7-M
RAM	512 MB or 1 GB SDDR2, 533 MHz opt. 2 GB. Soldered on board
FSB	533MHz
Graphics	Intel Graphics Media Accelerator 950
CRT	Analog VGA 2048 x 1536 pixel at 85 Hz max.
LVDS	Single channel, 18 bits 1600 x 1200 pixel at 60 Hz max.
Audio	HD Audio - Analog input/output (max 96/192 kHz sampling rate) - S/PDIF input/output (max. 24 bit, max. 192 kHz sampling)
USB	8 x USB 2.0 host
Ethernet	1000/100/10 MBit
Serial	2 x RS232/RS422/RS485, selectable in BIOS
SATA	2 host ports

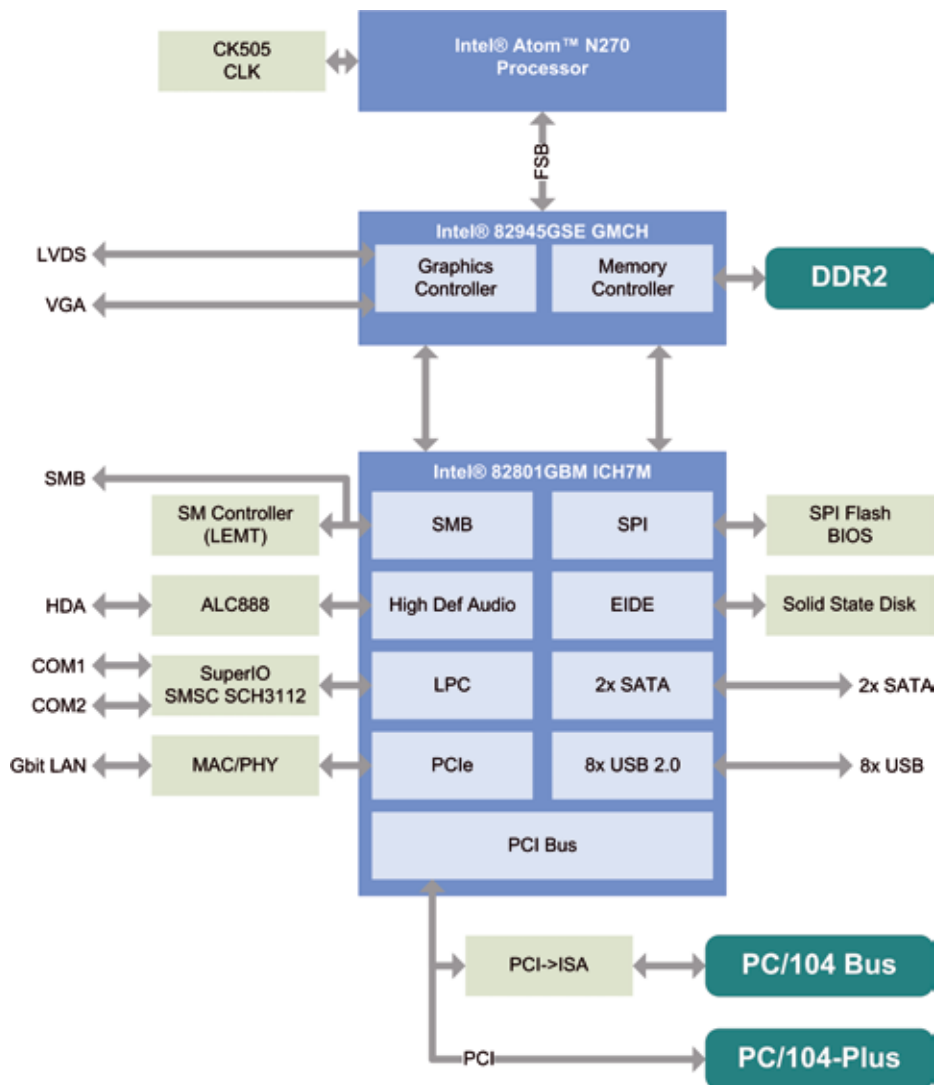
SSD	2 GB Solid State Disk with > 100.000 write cycles and wear levelling
Watchdog	Yes
PCI Bus	PC/104-Plus
ISA Bus	PC/104
I²C bus	Supported
RTC Backup	On-board battery
Status LED	HDD, power, standby, power mode, life, 3x Ethernet, watchdog
Power Supply	5 V ±5 % All necessary voltages are generated on-board.
Power Consumption	12.5 watts
Operating temperature	0 °C...+60°C (commercial, all versions) -20 °C...+60°C (industrial, all versions) -40°C...+85°C (extended, optional)
Cooling	Passive A heat spreader is included with the board
MTBF	159 899 hours @ 25 °C
BIOS	Award BIOS BIOS parameters are also saved in EEPROM
Supported OS	Windows XP, XP Embedded, Windows CE, Linux, QNX

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Block Diagram



Ordering Information

Ordering Number	Description
t03-0022-10	PC/104-Plus processor module with Intel Atom N270, 1 GB, including heat spreader

Note: t denotes the temperature range. Use 7 for commercial, 8 for industrial and 9 for extended temperature range
Other memory configurations are available on request.