

EmCORE-i2703

Intel® Atom™ N270 ISA Half-size SBC



Features

- **Fanless Design**
- Soldered Onboard Intel® Atom™ N270 Processor
- Dual Channels 24-bit LVDS, TV-out, and Analog RGB
- Dual Independent Displays
- Support 64mA ISA High Drive Buffer
- Integrated Gigabit Ethernet
- **Extended Operating Temp.: -20 ~ 70°C**

System

CPU	Soldered onboard Intel® Atom™ N270 1.6GHz processor with 533MHz FSB
Memory	Soldered onboard 512MB DDR2 SDRAM, upgradable to 1GB
Chipset	Intel® 945GSE + ICH7M
BIOS	AMI PnP Flash BIOS
Watchdog Timer	1~255 levels reset

I/O

I/O Chip	Winbond W83627UHG
Serial Port	4 x COM ports (3 x RS-232, 1 x RS-232/422/485 selectable)
Parallel Port	1 x LPT port, SPP/EPP/ECP mode selectable
USB Port	6 x USB 2.0 ports
KB/MS	6-pin Mini-DIN connector for keyboard and mouse (PS/2 standard via Y-cable)
Digital I/O	8-bit programmable Digital Input/ Output
Expansion Bus	ISA interface, and PC/104 connector (not support ISA master)
Storage	1 x Ultra ATA, supporting 2 IDE devices 2 x Serial ATA ports with 150MB/s HDD transfer rate 1 x CompactFlash Type II socket
Ethernet Chipset	1 x Realtek RTL8111 PCIe GbE controller
Audio Interface	One 1x9-pin wafer connector for optional Audio daughterboard (FCDB-1110 with AC97 Audio Codec or FCDB-1111 with HD Audio Codec)

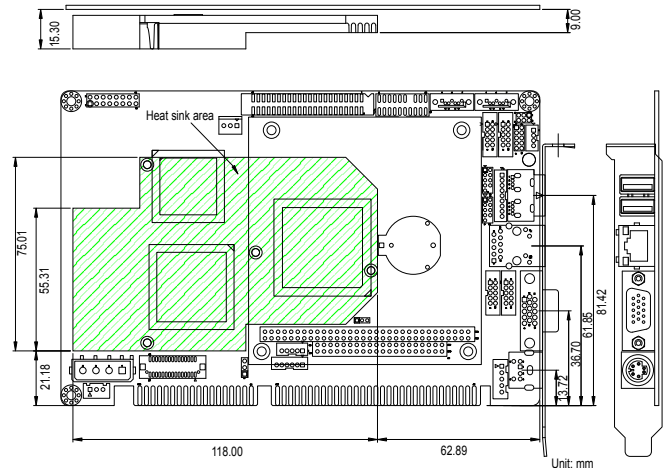
Display

Graphics Chipset	Integrated Intel® Graphics Media Accelerator 950
Graphics Interface	Analog RGB supports resolution up to 2048 x 1536 @60Hz LCD: Dual Channels 24-bit LVDS, resolution up to 1600 x 1200 TV-out: NTSC/PAL, resolution up to 1024 x 768 Dual Independent Displays

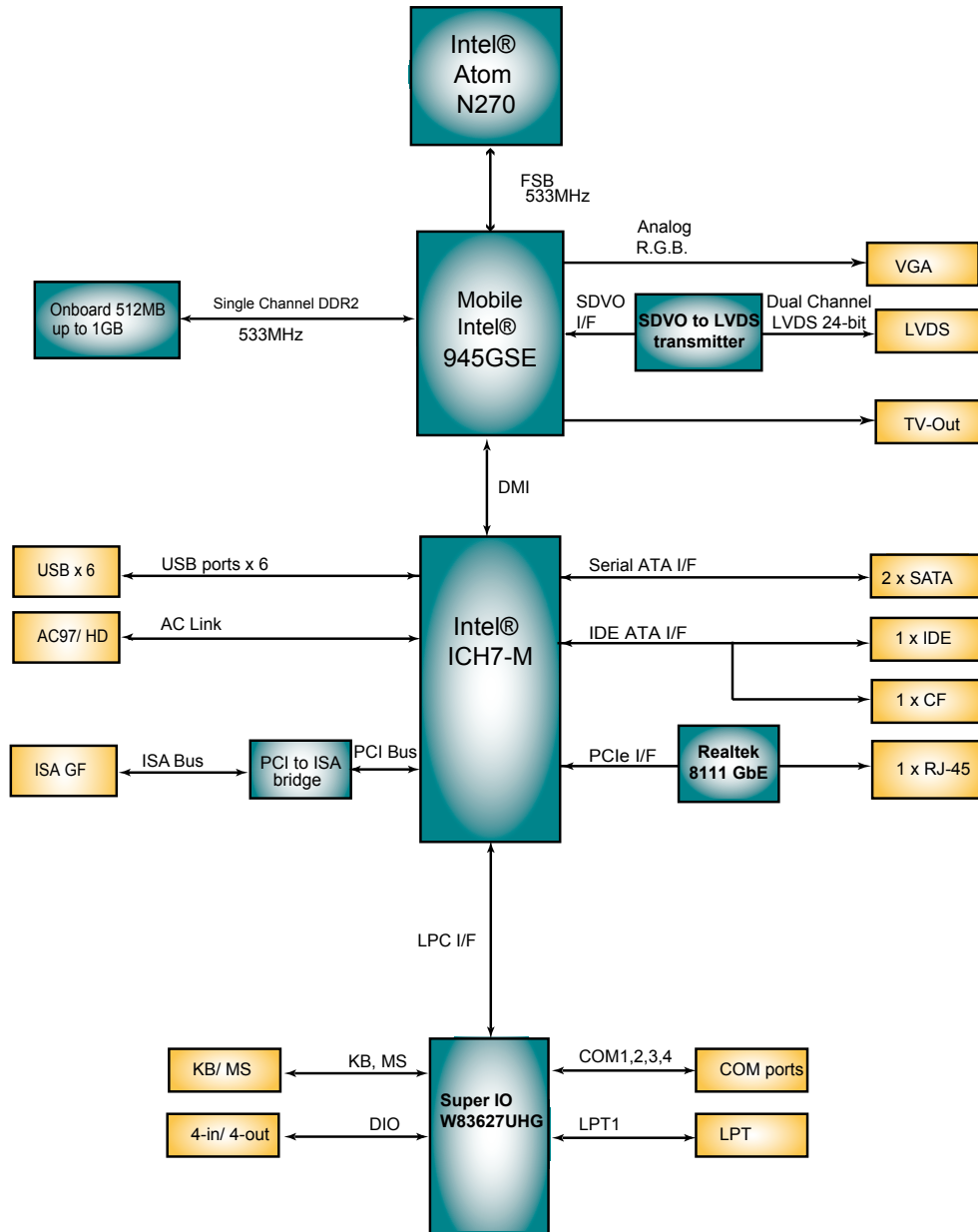
Mechanical & Environmental

Power Connector	Big 4P AT power connector
Power Consumption	0.08A@+12V, 2.39A@+5V (Typical)
Operating Temp.	-20 ~ 70°C (-4 ~ 158°F)
Operating Humidity	10 ~ 95% @ 70°C (non-condensing)
Dimension (L x W)	185 x 122 mm (7.3" x 4.8")

Dimensions



Block Diagram



Ordering Information

EmCORE-i2703VL Intel® Atom™ N270 1.6GHz ISA half-size SBC

Optional Accessories

FCDB-1110 Realtek ALC655 AC97 Audio daughterboard Page 130

FCDB-1111 Realtek ALC888 HD Audio daughterboard Page 130

ISA Backplane Page 135