Overview

SBC-4220-Q77 is based on Intel® Q77 chipset and CoreTM i7/i5 sku processor. It’s suitable for Medical, Factory Automation, and Digital Signage applications.

Specification

Processor
Intel® CoreTM i7/i5 processor in LGA1155 package
IDMI x4 Link: 5.0 GT/s
Supports Intel® Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and SpeedStep® Technology (depends on CPU sku)
Chipset
Intel® Q77 PCH
BIOS
Phoenix UEFI BIOS
Memory
Supports up to 16GB DDR3 1333/1600 SDRAM on two 240-pin DIMM sockets
Storage Devices
Supports 2x SATA III drives and 4x SATA II drives (Dual SATA II ports via Backplane) RAID 0,1,5,10
Watchdog Timer
Programmable via S/W from 0.5 sec. to 254.5 sec.
Hardware Monitoring
System monitor (Voltage, Fan Speed and Temperature)
Expansion Interface
From CPU: 1x PCI Express x16
From PCH: 1x PCI Express x4 or 4x PCI Express x1 by different bios support
4x PCI devices at 32 bit 33 MHz
Super I/O
ITE IT8728F Audio
Intel® BD82C216 PCH built-in High Definition Audio up to 192-kHz 32-bit- Realtek ALC886-GR HDA codec, 5.1 channels
Ethernet
Intel® 82579LM+82574L gigabit ethernet controller
Dual 10BASE-T/100BASE-TX/1000BASE-T Ethernet- PCI Express x1 interface based on gigabit Ethernet
Dual RJ-45 connector with two LED indicators
Serial Port
1x RS232 and 1x selectable RS232/422/485 on board
USB
10x USB 2.0 ports (four ports through backplane)
480M/bus capable of high-speed/full-speed/low-speed data ranges
4x USB 3.0 ports on board (two ports on board, two ports on bracket) 5Gbps bus capable of high-speed/ full-speed/low-speed data ranges

Features

• Supports Intel® CoreTM i7/i5 processors in LGA1155 package
• Delivers up to 16GB maximum DDR3 1333/1600 SDRAM on two DIMM sockets
• Supports multiple display by DVI-I (DVI-D+VGA) and HDMI
• Supports iAMT 8.0 on Intel® CoreTM i7/i5 processors
• High speed dual Gigabit Ethernet based on PCI Express x1, high bandwidth I/O interface
• Rich I/O connections such as FDD, two Gigabit Ethernet, serial ports, parallel port, USB 2.0/3.0
• On-board two SATA II and two SATA III ports support RAID 0,1,5,10

Keyboard & Mouse
2x USB 3.0 ports on bracket dedicated to keyboard & mouse
GPIO
On board programmable 8-bit Digital I/Os
Others
1x parallel port
Graphic Controller
Intel® CoreTM i7/i5 processors integrated graphics engine
Provides improved 3D multimedia capabilities including Microsoft DirectX 11, Shader Model 4.0, MPEG-2 and OpenGL 3.1
Display Interface
CRT on bracket: Resolution up to 2048x1536 @75Hz
DVI-I/D: up to 1920x1200 @60Hz
HDMI: up to 1920x1200 @60Hz(CRT+DVI-I port)
Dimension
338.5(L) x 126.39(W) mm; 13.33”(L) x 4.98”(W)
PCB: 12 layers
Power Supply
Typical: +12V@4.85A, +5V@3.4A
Supports ATX mode
Environment
Operation Temperature: 0~60 °C (with highest performance on 50 °C)
Storage Temperature: -20~80 °C
Relative Humidity: 5~90%, non-condensing
MTBF
Over 100,000 hours at 40°C
Packing List
Standard
SATA II cable
SATA III cable (Black)
Cable kit for FDD+PRN with bracket
Dual head COM port cable with bracket
DVI-I + VGA cable
PICMG SBC Handling and Installation Notice
Installation CD
Optional
PS/2 Keyboard / Mouse Cable with bracket
USB port cable with bracket
USB 3.0 cable with bracket
PA-M1AU Multiple Media kit

All systems are fully integrated and are configurable to meet your application requirements

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