

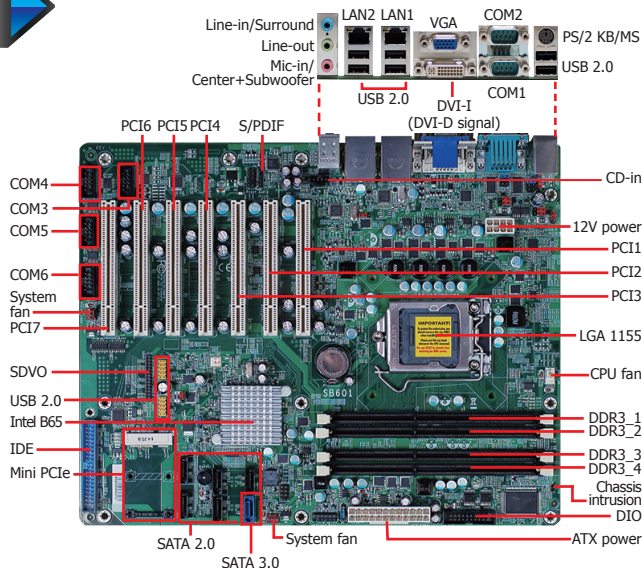


3rd/2nd Gen Intel® Core™
ATX

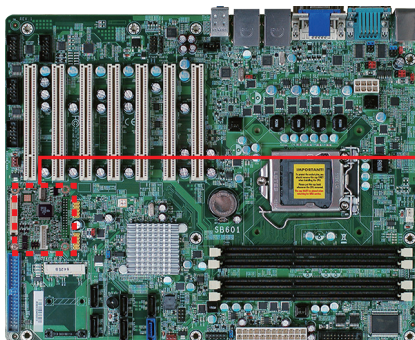
SB601-C

Desktop

B65



SB601-C+
SDVO-LVDS

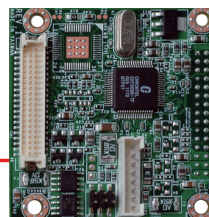


Features

MEMORY	4 DDR3 DIMM up to 32GB
EXPANSION	1 Mini PCIe 7 PCI
DISPLAY OUTPUTS	1 DVI-I (DVI-D signal), 1 VGA
LAN	2 LAN
COM	6 COM
USB	10 USB 2.0
STORAGE	6 SATA: 1 SATA 3.0, 5 SATA 2.0 1 IDE
DIO	8-bit DIO



SDVO-LVDS Daughterboard (optional)



Top



Bottom

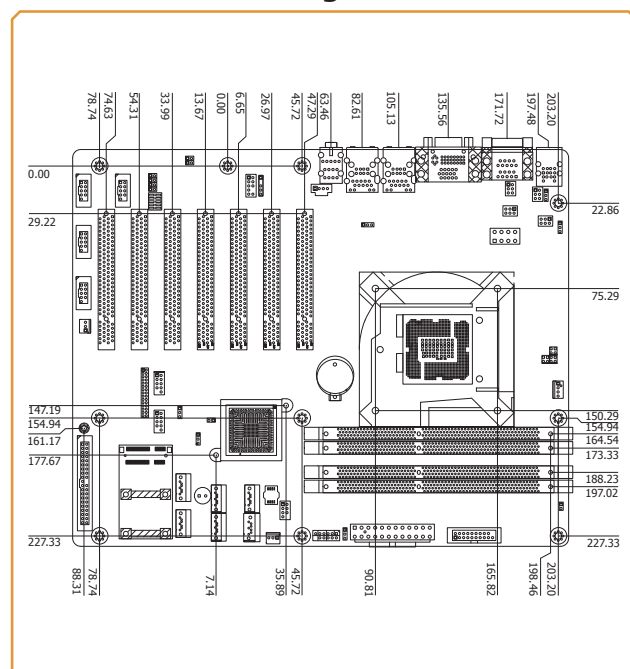
I/O PORTS

- Chronitel CH7308B
- Supports 18/24-bit 1600x1200 LVDS panel
- 1 LVDS LCD panel connector
- 1 LCD/Inverter power connector
- SDVO interface
- Supports dimming control via hot keys

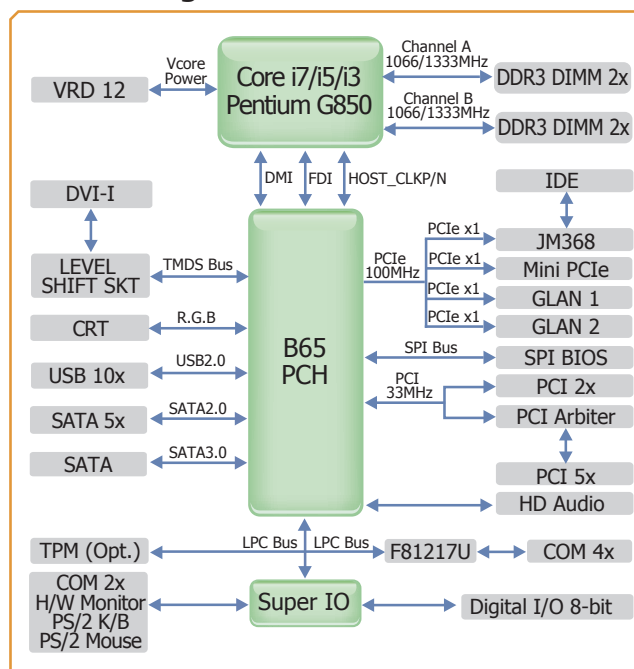
DIMENSIONS

- 45mm (1.77") x 38mm (1.49")

Mechanical Drawing



Block Diagram



SB601-C

► Specifications

PROCESSOR

- LGA 1155 socket for:
 - 3rd generation Intel® Core™ processors (22nm process technology) (Rev. A00 or later)
 - : Intel® Core™ i7-3770 (8M Cache, up to 3.9GHz); 77W
 - : Intel® Core™ i5-3550S (6M Cache, up to 3.7GHz); 65W
 - : Intel® Core™ i3-3220 (3M Cache, 3.3GHz); 55W
 - : Intel® Pentium® G2120 (3M Cache, 3.1 GHz); 65W
 - 2nd generation Intel® Core™ processors (32nm process technology)
 - : Intel® Core™ i7-2600 (8M Cache, up to 3.8 GHz); 95W
 - : Intel® Core™ i5-2400 (6M Cache, up to 3.4 GHz); 95W
 - : Intel® Core™ i3-2120 (3M Cache, 3.3 GHz); 65W
 - : Intel® Pentium® G850 (3M Cache, 2.9 GHz); 65W
- Intel® Advanced Vector Extensions (Intel® AVX) Instructions
- Intel® Turbo Boost Technology

CHIPSET

- Intel® B65

SYSTEM MEMORY

- Four 240-pin DDR3 DIMM sockets
- Supports DDR3 1333/1600MHz (3rd generation processors)
- Supports DDR3 1066/1333MHz (2nd generation processors)
- Supports dual channel memory interface
- Supports up to 32GB system memory
- DRAM device technologies: 1Gb, 2Gb and 4Gb DDR3 DRAM technologies are supported for x8 and x16 devices, unbuffered, non-ECC

EXPANSION SLOTS

- 1 Mini PCIe slot (PCIe 2.0)
 - Supports half size and/or full size Mini PCIe card
- 7 PCI slots (PCI 2.3: supports universal PCI card)

ONBOARD GRAPHICS FEATURES

- Intel® HD Graphics
- Display ports: DVI-I (DVI-D signal) and VGA
- DVI-I supports up to 1920x1200 @ 60Hz resolution
- VGA supports up to 2048x1536 @ 75Hz resolution
- Supports 6 Graphics Execution Units (EUs)
- Intel® Clear Video Technology
- DirectX Video Acceleration (DXVA) support for accelerating video processing

ONBOARD AUDIO FEATURES

- Realtek ALC886 5.1-channel High Definition Audio
- Audio outputs: Mic-in/Center+Subwoofer, line-in/surround and line out
- S/PDIF audio interface

ONBOARD LAN FEATURES

- 2 Realtek RTL8111DL PCI Express Gigabit Ethernet controllers
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

SERIAL ATA (SATA) INTERFACE

- 6 Serial ATA ports
 - 5 SATA 2.0 ports with data transfer rate up to 3Gb/s
 - 1 SATA 3.0 port with data transfer rate up to 6Gb/s
- Integrated Advanced Host Controller Interface (AHCI) controller

TRUSTED PLATFORM MODULE (TPM) - optional

- Provides a Trusted PC for secure transactions
- Provides software license protection, enforcement and password protection

REAR PANEL I/O PORTS

- 1 mini-DIN-6 port for PS/2 mouse/keyboard
- 2 DB-9 serial ports
 - Supports RS232/422/485 (RS232 and/or Power)
- 1 DB-15 VGA port
- 1 DVI-I port (DVI-D signal)
- 2 RJ45 LAN ports
- 6 USB 2.0/1.1 ports
- Line-in/Surround, Line out, Mic-in/Center+Subwoofer jacks

► Packing List

• 1 SB601-C motherboard
• 2 Serial ATA data cables
• 1 IDE cable
• 2 USB port cables (with bracket)
• 2 COM port cables (with bracket)
• 1 I/O shield
• 1 DVD

I/O CONNECTORS

- 2 connectors for 4 external USB 2.0/1.1 ports
- 4 connectors for 4 external RS232 serial ports
- 1 SDVO connector for the optional SDVO-LVDS daughterboard
- 1 8-bit Digital I/O connector
- 1 front audio connector for line-out and mic-in jacks
- 1 CD-in connector
- 1 S/PDIF connector
- 6 Serial ATA ports
- 1 IDE connector
- 1 24-pin ATX power connector
- 1 8-pin 12V power connector
- 1 chassis intrusion connector
- 1 front panel connector
- 3 fan connectors

BIOS

- AMI BIOS
 - 64Mbit SPI BIOS

ENERGY EFFICIENT DESIGN

- Supports ErP Lot6 power saving (optional)
- Supports ACPI
- System Power Management
- Wake-On-Events include:
 - Wake-On-PS/2 KB/Mouse
 - Wake-On-USB KB/Mouse
 - Wake-On-LAN
 - RTC timer to power-on the system
- CPU stopped clock control
- AC power failure recovery

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors VCore/5V/3.3V/V_DIMM/12V/5VSB voltages and failure alarm
- Monitors CPU/system fan speed and failure alarm
- Read back capability that displays temperature, voltage and fan speed
- Watchdog timer function

POWER CONSUMPTION

- 99.55 W with i7-2600 at 3.40GHz and 2x 2GB DDR3 DIMM

OS SUPPORT

- Windows XP Professional x86 & SP3 (32-bit)
- Windows XP Professional x64 & SP2 (64-bit)
- Windows 7 Ultimate x86 & SP1 (32-bit)
- Windows 7 Ultimate x64 & SP1 (64-bit)
- Windows 8 Enterprise x86 (32-bit)
- Windows 8 Enterprise x64 (64-bit)

TEMPERATURE

- Operating: 0°C to 60°C
- Storage: -20°C to 85°C

HUMIDITY

- 10% to 90%

DIMENSIONS

- ATX form factor
- 305mm (12") x 244mm (9.6")

CERTIFICATION

- CE
- FCC Class B
- UL
- RoHS
- KC

► Optional Items

• SDVO-LVDS daughterboard
• USB port cable
• Serial ATA data cable
• Serial ATA power cable
• COM port cable
• IDE cable
• I/O shield
• PS/2 Keyboard/Mouse cable