Slim design, robust performance

The Shuttle XPC Barebone SG31G2V2 Silver offers some of the latest and greatest technologies in the classic G2 chassis design. It features the Intel® Graphics Media Accelerator 3100, Gigabit LAN, 7.1 audio and PCIe x16 graphics slot. By combining the powerful Intel Core 2 Duo processors with this machine, it can handle all the requirements of today's computing needs, with plenty of capacity for tomorrow's emerging technology.

XPC Barebone
SG31G2v2 Silver
V2 Version: with COM ports instead of floppy

Feature Highlight

G2 chassis	• Aluminum chassis (silver) • Bays: 1x 13.5cm (5.25"), 2x 8.9cm (3.5")
Chipset	• Intel G31 + ICH7 • Integrated Intel GMA 3100 graphics Shared Memory (UMA): 384MB DualView: you can connect DVI and VGA monitor at the same time
CPU	• Socket 775 • Supports Core 2 Quad, Core 2 Duo Pentium Dual Core & Celeron D 4xx • Supports 800, 1066 & 1333 MHz FSB • Shuttle I.C.E. Heatpipe-cooling
Slots	• 1x PCI-Express (x16) • 1x PCI (32 Bit)
Memory	• Supports 2x DDR2-667/800 • Supports up to a total size of 4 GB
Drive connectors	• 3x Serial-ATA 3 Gb/s • 1x IDE ATA 100
Other connectors	• 8-channel HD audio • 2x Firewire • USB 2.0 (2x front, 4x rear, 2x onb.) • GigaBit LAN • 2x Serial ports onboard (back panel bracket included) • Optional parallel port (PC8 required)
Power supply	• Efficient 250 Watt mini power supply
Application	• Business

Images for illustration purpose only.

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Shuttle order code: PC-SG31G2V2

intel
G31
EXPRESS CHIPSET

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Shuttle XPC Barebone SG31G2V2 Silver – Special Product Features

The Shuttle XPC Glamor series is the keyword in artistic design from Shuttle.

There are different chassis designs to choose from. No matter whether it's for use in the home or the office, for high adrenaline or laid back users, there is a Shuttle XPC in the Glamor series to suit every taste. The front panel and cover of the classic G2 chassis is completely made of aluminum. This leads to a stylish-robust appearance and makes it to a popular design for many users. The drive bays and media connectors are open which makes them easy accessible in the daily usage.

Supports 1333 MHz FSB and 45nm processors

This Shuttle product supports the Intel® Core™2 Duo and Intel® Core™2 Quad processors with up to 1333 MHz front side bus and the latest 45nm technology. Multi core brings multi power!

Dual View Technology with DVI and VGA

Dual View technology offers multiple display support on up to two separate monitors. This improves the capabilities and productivity of the user by allowing them to spread multiple windows over two monitors and view them simultaneously.

Intel G31 Express chipset with GMA 3100 graphics

The integrated Intel GMA 3100 graphics processor delivers best-in-class 3D performance and leading graphics compatibility to play top games the way they are meant to be played.

Gigabit LAN Network

Today's media-rich communications across the Internet and within organizations are creating new demands on clients in Local Area Networks. For that reason Shuttle introduces the Gigabit LAN performance even in the business and entry level segment of their XPC line.

User Friendly Dynamic OverClock feature*)

The user can easily overclock the system through the bios from 3%,5%,7%,10%,15%, to 20%.

Solid Capacitors

The new generation of solid capacitors is used in the temperature sensitive part of the CPU voltage regulator. The lifespan of solid capacitors is in fact up to six times longer than the more common electrolytic capacitors.

Serial ports

Serial ports are still a requirement for certain industrial applications. SG31G2V2 provides two serial ports via the back panel bracket adapter which is included in the accessory box.

*) Overclocking Warning:
Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS or using the third-party overclocking tools. Overclocking may affect your system stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. Shuttle is not responsible for possible damage caused by overclocking.

Shuttle XPC Barebone SG31G2V2 Silver Specification

Chassis	G2-type aluminum chassis, silver color Storage bays: 1x 13.5cm (5.25"), 2x 8.9cm (3.5"), 1 internal Dimensions: 30 x 20 x 18.5 cm (LWH), Weight: 3.2 kg net / 4.8 kg gross
Mainboard	Shuttle FG31, Shuttle form factor, proprietary mainboard design for Shuttle XPC Barebone SG31G2 Chipset: Intel G31 (Bearlake-G) + ICH7 Dimensions: 25.4 x 18.5 cm
Power Supply	250 Watt mini power supply unit Input voltage range: 100~240V Connectors: 20-pin ATX, 4-pin ATX12V Dimensions: 190 (L) x 82 (W) x 43 (H) mm EMI certified: FCC, CE, BSMI, CCC Safety certified: UL, TÜV, CB, BSMI, CCC Active PFC (Power Factor Correction)
Processor Support	Socket 775 supports Intel processors with 800, 1066 or 1333 MHz front side bus: Core 2 Quad, Core 2 Duo, Pentium Dual Core, Celeron 4xx Processors with 533MHz FSB are not supported. Please refer the support list for detailed processor support information.
Overclocking *)	Overclocking settings: CPU frequency, CPU voltage, RAM frequency, RAM voltage Dynamic Overclock feature: Easily overclock from 3/5/7/10/15/20% through the BIOS.
Processor Cooling	Shuttle I.C.E. (Integrated Cooling Engine) advanced I.C.E. Heatpipe technology, linear controlled 92mm fan SilentX cooling and noise reduction technology with Active Airflow
Memory Support	2 x 240 pin slots, supports Dual Channel supports DDR2-667/800 SDRAM memory up to a total size of 4 GB, max. 2 GB per DIMM
Expansion Slots	1 x PCI-Express (16X) supports 8 GB/s data transfer 1 x PCI (32 bit)
Integrated Graphics	Intel Graphics Media Accelerator 3100 (GMA 3100) 256bit 3D engine with a powerful 400MHz core DirectX 9.0 support Dynamic Video Memory Technology (DVMT) 3.0 Shared Memory size up to 384MB DualView: Digital DVI out and analog VGA out can be used at the same time.

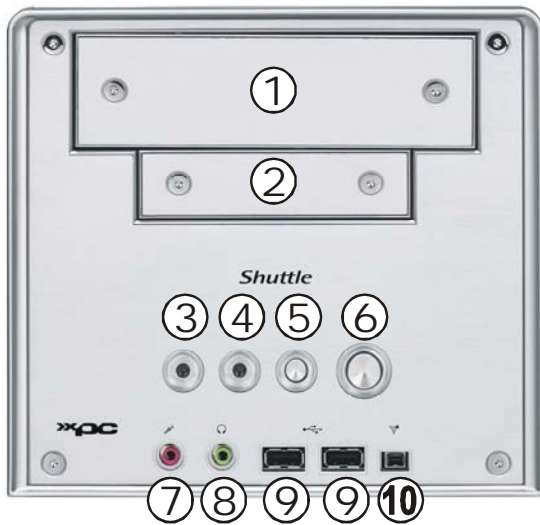| 8-channel Audio	7.1 channel High Definition Audio, Realtek ALC888 codec analog: line-out (8-ch), line-in, microphone Optional digital SPDIF I/O (Accessory PC17)
Gigabit-LAN Controller	Marvell 88E8057 Ethernet network controller (Gigabit) Supports 100 / 1.000 MBit/s operation, Supports Wake-on-LAN (WOL)
Firewire-Controller	Firewire controller VIA VT6308, IEEE1394 OHCI V1.0 compliant with 2 Firewire connectors (front and rear) supports 400Mb/s, 200Mb/s, 100Mb/s data transfer rate
Drive connectors	3x Serial-ATA II, 3 Gbit/s (300 MB/s) bandwidth 1 x IDE ATA 100 drives
Front panel connectors	Microphone, Headphone (Line-out) 2x USB 2.0, Firewire (Mini 4 pin connector) Power button, Reset button Power LED, HDD LED
Back panel connectors	DVI output (digital) VGA output (D-sub, analog) 4x USB 2.0 GigaBit LAN (RJ45) IEEE1394 Firewire (6 pin) PS/2 keyboard, PS/2 mouse 8-ch Audio line-out (2x rear/front, bass/center, surround/back) Audio Line-in CMOS button optional Wireless LAN module (PN20) Optional Parallel Port (PC8) Back panel bracket for dual COM port **
Other connectors	2x fan connectors (3 pin and 4 pin) 2x USB 2.0 (2x5 pins header) 2x Serial Ports (RS-232, COM)**
Accessories	Multi-language user guide, Driver CDROMs (Windows Vista, Windows XP 32/64 bit) Shuttle Extras CDROM, I.C.E. heat-pipe module, Cable for SATA (1x), PATA (1x) Power cord, Screws, Heatsink Compound

*) Overclocking Warning: Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS or using the third-party overclocking tools. Overclocking may affect your system stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. Shuttle is not responsible for possible damage caused by overclocking.

**) Serial COM Ports: The mainboard features two 2x5 pin headers for one serial RS-232 port each. A suitable back panel bracket can be found in the accessory box of this product. This adapter provides two 9 pin D-Sub connectors to the back panel. Note that this bracket will occupy one expansion slot (either PCI or PCI Express x16).
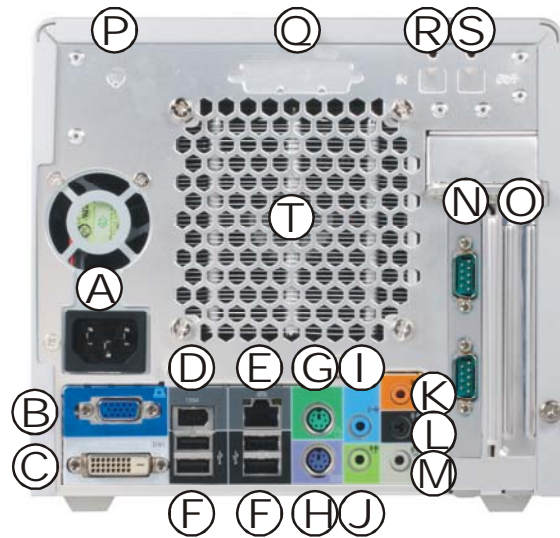
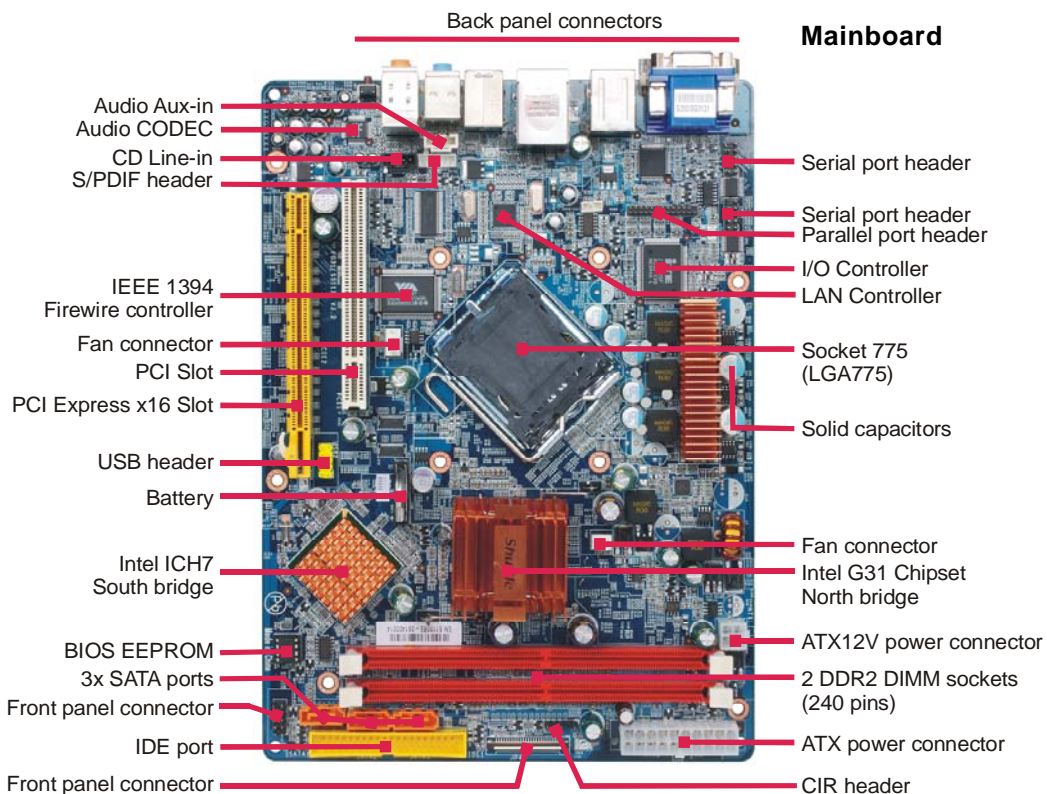## Shuttle XPC Barebone SG31G2V2 Silver – Connectors

Front View

Rear View

(1) 5.25" bay
(2) 3.5" bay
(3) Hard disk LED
(4) Power LED
(5) Reset button
(6) Power button
(7) Microphone input
(8) Headphone output
(9) 2x USB ports
(10) IEEE 1394 Firewire

(A) Power supply
(B) VGA video port
(C) DVI video port
(D) IEEE 1394 Firewire
(E) Gigabit LAN port
(F) 4x USB ports
(G) PS/2 mouse port
(H) PS/2 keyboard port
(I) Audio Line-in
(J) Audio Line-out (front)

(K) Audio Line-out (Center/Bass)
(L) Audio Line-out (Back)
(M) Audio Line-out (Side)
(N) PCI-Slot (here occupied
    with COM port bracket)
(O) PCI-Express x16 slot
(P) Wireless LAN perforation
(Q) Parallel port perforation
(R) S/PDIF input perforation
(S) S/PDIF output perforation
(T) Heatpipe cooling system

Mainboard

Back panel connectors

Audio Aux-in
Audio CODEC
CD Line-in
S/PDIF header

IEEE 1394
Firewire controller
Fan connector
PCI Slot
PCI Express x16 Slot
USB header
Battery
Intel ICH7
South bridge
BIOS EEPROM
3x SATA ports
Front panel connector
IDE port
Front panel connector

Serial port header
Serial port header
Parallel port header
I/O Controller
LAN Controller
Socket 775
(LGA775)
Solid capacitors
Fan connector
Intel G31 Chipset
North bridge
ATX12V power connector
2 DDR2 DIMM sockets
(240 pins)
ATX power connector
CIR header