

XH61 – Sandy Bridge performance packed into a 3-litre case

The ultra-compact Shuttle Slim-PC Barebone XH61 is the best choice for those seeking an inexpensive desktop PC which is significantly smaller than a tower PC. The XH61's LGA1155 socket supports Intel's powerful Sandy Bridge processors that stand for superior integrated graphics performance and improved energy efficiency. The XH61 also scores with an elegant design consisting of coated surfaces and shiny drive doors. Measuring merely 3.5 liters in volume, around a tenth of the size of a traditional tower PC, it is designed to provide the perfect balance of aesthetics and meeting daily computing demands in homes and offices.

Shuttle Slim-PC Barebone **XH61**



Feature Highlights

Slim-Design	<ul style="list-style-type: none"> • Slim 3.5 litre chassis, black • Dimensions: 24.2 x 20 x 7.3 cm (L/W/H) • Bays: 1x 6.35cm/2.5" for hard disk or SSD and 1x slim optical drive
Processor	<ul style="list-style-type: none"> • Supports Socket 1155 CPUs, max. 65W TDP • Supports Core i7 / i5 / i3, Pentium, Celeron • Including 80mm processor fan
Chipset	<ul style="list-style-type: none"> • Intel H61 Express Chipset (B3 stepping)
Memory	<ul style="list-style-type: none"> • 2x 240 pin DDR3-1333, max. 2x 8 GB
Graphics	<ul style="list-style-type: none"> • Integrated Intel HD graphics, DX 10.1 • Shared memory max. 1692MB (UMA) • Video-outputs: HDMI and D-Sub/VGA
Drive Connectors	<ul style="list-style-type: none"> • 4x SATA II (3 Gbit/s) with UEFI support • Two pre-installed SATA cables
Other Connectors	<ul style="list-style-type: none"> • 5.1 HD Audio (7.1 digital audio via HDMI) • 6x USB 2.0 (4x rear, 2x front) + 2x onboard • Gigabit LAN (RJ45), supports WOL, PXE • PS/2 keyboard and PS/2 mouse
Power Supply	<ul style="list-style-type: none"> • External 90W fanless power adapter
Application	<ul style="list-style-type: none"> • Basic home and office applications

Product name: **XH61**
Order no.: **PIB-XH6111**



Images for illustration purposes only.
The optical drive and the vertical stand are not included.

Shuttle Slim-PC Barebone XH61 – Product Features



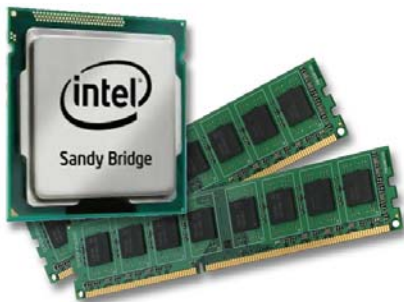
A clean and modern 3-litre chassis

Shuttle has always placed great emphasis on the interior and exterior aesthetics of their Mini-PCs with the belief that a good blend of style and form factor allow the Mini-PC to be attractive, versatile and work well in almost any environment. And the XH61 was designed just like that and shines in a clean and modern appearance. The optical drive and front panel connectors are elegantly concealed behind drive doors to provide maximum protection. This tiny tot barely stands 7.3 cm in height with a volume of 3.5 litres.



What does Barebone mean?

The Shuttle Slim-PC Barebone XH61 consists of a stylish case with pre-installed mainboard, processor cooling fan and external power adapter. Despite its small form factor it offers outstanding connectivity, functionality and performance. For a complete Mini-PC system, a few components still need to be added. The Mini-PC is customisable and takes socket 1155 processors (max. 65W), standard DDR3 memory, slim-line SATA DVD drive, 2.5" hard disk (or SSD). Once the desired operation system is installed, the XH61 is ready to use. Moreover, the system features pre-routed cables that are tied down from factory to reduce clutter, increase airflow and ease component installation.



Supports socket 1155 processors and up to 16 GB DDR3

A wide range of socket 1155 Intel processors is available starting from Celeron up to Core i7 processors with a maximum TDP of 65W. Plus, the system memory can be installed accordingly to individual needs up to a maximum capacity of 16 GB DDR3 memory.



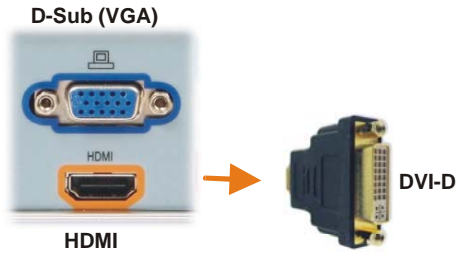
Great Connectivity

On the front, elegantly hidden from view behind drive doors, the panel reveals two USB 2.0 ports for external drives, MP3 players etc. There are also two 3.5mm jacks for headphone and microphone. In addition, the back panel offers a wide range of I/O connectivity as well.



Supports Dual View Technology

Dual View technology offers multiple display support on up to two separate monitors. This helps to improve on productivity by allowing for spreading multiple windows across two monitors while working with them simultaneously. XH61 features two video outputs.



Video outputs

XH61 features two video outputs: D-Sub/VGA and HDMI. With optional adapters DVI-D devices can be connected to the HDMI port.

D-Sub/VGA means analog video signals are put out.

HDMI supports digital video plus multi-channel digital audio output.

DVI-D means the connector only outputs digital video signals.



Kensington Lock

This is a small, metal-reinforced hole as part of an anti-theft system. (The lock and cable are not included)



Optional stand for vertical operation (PS01)

XH61 is to be used in horizontal position as standard. With the optional stand accessory (PS01), it can also be placed in vertical position.

Optional VESA mount (PV02)

Its optional VESA75/100 wallmount allows it to be installed on to walls or to be attached to the rear side of a monitor which is particularly interesting for the industry segment, company buildings and public institutions.

Socket 1155 processor overview (January 2011)

Name	Model	Cores	HT	Clock	Turbo	Cache	TDP	Graphics	Graphics clock
Celeron	G440	1	-	1.6 GHz	-	1 MB	35W	HD	650~1000 MHz
	G460	1	-	1.8 GHz	-	1 MB	35W	HD	650~1000 MHz
	G530	2	-	2.4 GHz	-	2 MB	65W	HD	850~1000 MHz
	G530T	2	-	2.0 GHz	-	2 MB	35W	HD	650~1100 MHz
	G540	2	-	2.5 GHz	-	2 MB	65W	HD	850~1000 MHz
Pentium	G620T	2	-	2.2 GHz	-	3 MB	35W	HD	650~1100 MHz
	G620	2	-	2.6 GHz	-	3 MB	65W	HD	850~1100 MHz
	G630	2	-	2.7 GHz	-	3 MB	65W	HD	850~1100 MHz
	G630T	2	-	2.3 GHz	-	3 MB	35W	HD	650~1100 MHz
	G840	2	-	2.8 GHz	-	3 MB	65W	HD	850~1100 MHz
	G850	2	-	2.9 GHz	-	3 MB	65W	HD	850~1100 MHz
	G860	2	-	3.0 GHz	-	3 MB	65W	HD	850~1100 MHz
Core i3	2100T	2	Yes	2.5 GHz	-	3 MB	35W	HD 2000	650~1100 MHz
	2100	2	Yes	3.1 GHz	-	3 MB	45W	HD 2000	850~1100 MHz
	2105	2	Yes	3.1 GHz	-	3 MB	45W	HD 3000	850~1100 MHz
	2120	2	Yes	3.3 GHz	-	3 MB	45W	HD 2000	850~1100 MHz
	2120T	2	Yes	2.6 GHz	-	3 MB	35W	HD 2000	650~1100 MHz
	2125	2	Yes	3.3 GHz	-	3 MB	65W	HD 3000	850~1100 MHz
	2130	2	Yes	3.4 GHz	-	3 MB	65W	HD 2000	850~1100 MHz
Core i5	2390T	2	Yes	2.7 GHz	3.5 GHz	3 MB	35W	HD 2000	650~1100 MHz
	2300	4	-	2.8 GHz	3.1 GHz	6 MB	95W	HD 2000	850~1100 MHz
	2310	4	-	2.9 GHz	3.2 GHz	6 MB	95W	HD 2000	850~1100 MHz
	2320	4	-	3.0 GHz	3.3 GHz	6 MB	95W	HD 2000	850~1100 MHz
	2380P	4	-	3.1 GHz	3.4 GHz	6 MB	95W	-	-
	2400S	4	-	2.5 GHz	3.3 GHz	6 MB	65W	HD 2000	850~1100 MHz
	2405S	4	-	2.5 GHz	3.3 GHz	6 MB	65W	HD 3000	850~1100 MHz
	2400	4	-	3.1 GHz	3.4 GHz	6 MB	95W	HD 2000	850~1100 MHz
	2450P	4	-	3.2 GHz	3.5 GHz	6 MB	95W	-	-
	2500T	4	-	2.3 GHz	3.3 GHz	6 MB	45W	HD 2000	650~1250 MHz
	2500S	4	-	2.7 GHz	3.7 GHz	6 MB	65W	HD 2000	850~1100 MHz
	2500	4	-	3.3 GHz	3.7 GHz	6 MB	95W	HD 2000	850~1100 MHz
	2500K	4	-	3.3 GHz	3.7 GHz	6 MB	95W	HD 3000	850~1100 MHz
2550K	4	-	3.5 GHz	3.8 GHz	6 MB	95W	-	-	
Core i7	2600S	4	Yes	2.8 GHz	3.8 GHz	8 MB	65W	HD 2000	850~1100 MHz
	2600	4	Yes	3.4 GHz	3.8 GHz	8 MB	95W	HD 2000	850~1350 MHz
	2600K	4	Yes	3.4 GHz	3.8 GHz	8 MB	95W	HD 3000	850~1350 MHz
	2700K	4	Yes	3.5 GHz	3.9 GHz	8 MB	95W	HD 3000	850~1350 MHz

Please note, that XH61 support a maximum TDP of 65W. Don't use the processors which are market in grey color.

K = unlocked, S = Performance optimized lifestyle, T = Power optimized lifestyle, HT = Hyper Threading

Intel HD graphics HD 3000/2000 supports 12/6 Execution Units (Shader-Quads) and DirectX 10.1

Note: Intel® H61 Express Chipset does not enable overclocking features of unlocked 2nd generation Intel Core processor family (K series: Core i5-2500K/2600K/2700K).

Certain processor models do not include the integrated graphics, e.g. Intel Core i5-2380P, Core i5-2450P and Core i5-2550K. Please don't use these models, since XH61 cannot support an additional graphics card.

Please refer to the support list at global.shuttle.com for detailed processor support information.

Shuttle Slim-PC Barebone XH61 Specifications

Chassis	<p>Nettop PC, slim X-type chassis, black Dimensions: 242 x 200 x 73 mm (LWH) = 3.5 litres Front doors for optical drive and front panel connectors Hole for Kensington Lock at the back panel Operation position horizontal or vertical with the optional stand PS01</p>
Storage Bays	<p>1x for optical drive in slimline format with 12.7 mm height 1x 6.35cm/2.5" for hard disk with 9.5 mm height With pre-installed SATA cables and mounting screws included.</p>
Mainboard Chipset BIOS	<p>Mini-ITX Mainboard "FH61": 17 x 17 cm Chipset: Intel® H61 Express Chipset (B3 stepping) AMI BIOS in 8Mbit EEPROM with SPI interface All capacitors are high quality solid capacitors Supports hardware monitoring and watch dog functionality Supports Unified Extensible Firmware Interface (UEFI) **) Supports resume after power failure</p>
Power Supply	<p>External 90W power adapter (fanless) Input: 100~240V AC, 50/60 Hz Output: 19V DC, 4.74A, max. 90W Internal DC-DC daughter board</p>
Processor Support	<p>Socket 1155 (LGA 1155) supports next generation of Intel Celeron, Pentium, Core i3 / i5 / i7 desktop processors Maximum power consumption: TDP = 65W max. Codename "Sandy Bridge", 32nm process technology Not compatible with older Socket-1156 processors. The Processor integrates PCI-Express, memory controller and the graphics engine on the same die Please refer to the support list for detailed processor support information.</p>
Processor Cooling	<p>Provided processor cooler with fan. Fan: 80mm x 80 mm x 15mm (L x W x H) Temperature-controlled fan speed</p>
Memory Support	<p>2 x 240 pin slots Supports DDR3-1066/1333 SDRAM memory (PC3-8500/10600) Supports Dual Channel mode Supports max. 8 GB per DIMM, maximum total size of 16 GB Supports two unbuffered DIMM modules of 1.5V</p>

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<p><i>Integrated Graphics</i></p>	<p>Intel® HD Graphics 2000/3000 integrated in the processor Supports Pixel Shader 4.1, DirectX 10.1 Maximum shared memory size: 1692MB HDMI 1.4*) port: max. resolution up to 1920x1200 @ 60Hz D-Sub port: max. resolution up to 2048x1536 @ 75Hz Supports dual independent display (dual view) Supports Full HD 1080p Blu-ray playback with HDCP via the HDMI port</p>
<p><i>Audio</i></p>	<p>Audio Realtek® ALC 887 codec Supports 7.1-channel High-Definition Audio Three analog audio connectors (3.5mm) at the Back-Panel: 1) Line out (active speakers or head phone) 2) Line input 3) Microphone input Digital audio output via HDMI</p>
<p><i>Gigabit LAN Controller</i></p>	<p>Realtek 8111E Ethernet network controller (Gigabit) Supports 10 / 100 / 1.000 MBit/s operation Supports WAKE ON LAN (WOL) Supports network boot by Preboot eXecution Environment (PXE)</p>
<p><i>Drive Connectors</i></p>	<p>4x Serial-ATA II, 3 Gb/s (300 MB/s) bandwidth Supports Unified Extensible Firmware Interface (UEFI) **) Note: This barebone system comes with two pre-installed SATA cables for a 2.5" hard disk and for an optical slim drive.</p>
<p><i>Front Panel Connectors</i></p>	<p>Microphone input Audio Line-out (headphone) 2x USB 2.0 Power button Power LED (blue) HDD LED (yellow)</p>
<p><i>Back Panel Connectors</i></p>	<p>HDMI 1.4*) connector - supports DVI-D with optional adapter D-Sub VGA 4x USB 2.0 GigaBit LAN (RJ45) Audio Line-in Audio Line-out Audio Mic-in PS/2 keyboard PS/2 mouse Hole for Kensington Lock</p>

<p><i>Other Onboard Connectors</i></p>	<p>4x USB 2.0 (two 2x5 pin header) - two of them are occupied by the front panel USB ports 24+4 pin ATX power supply connector 2x fan connectors (3 pin and 4 pin) Clear CMOS jumper (2 pins) TPM module header (7x2 pins) Digital audio S/PDIF connector (3 pins) 2x front panel connectors (2x5 pins each)</p>
<p><i>Accessories</i></p>	<p>Multi-language user guide Driver DVD (Windows 7 32 /64 bit, Windows Vista 32 /64 bit and Windows XP) 2x cable for SATA (preinstalled for 2.5 HDD/SSD drive and optical slim drive) External power adapter with power cord CPU cooling fan with heat-sink compound Screws</p>
<p><i>Optional Accessories</i></p>	<p>Vertical stand (PS01) VESA mount (PV02)</p>
<p><i>Conformity Certifications</i></p>	<p>EMI: FCC, CE, BSMI, C-Tick Safety: CB, BSMI, ETL Others: RoHS, Energy Star V5.0, EuP Lot 6 This device is classed as a technical information equipment (ITE) in class B and is intended for use in living room and office. The CE-mark approves the conformity by the EU-guidelines: - EMV-guideline 89/336/EWG electromagnetic tolerance - LVD-guideline 73/23/EWG use of electric devices within certain voltage-limits</p>

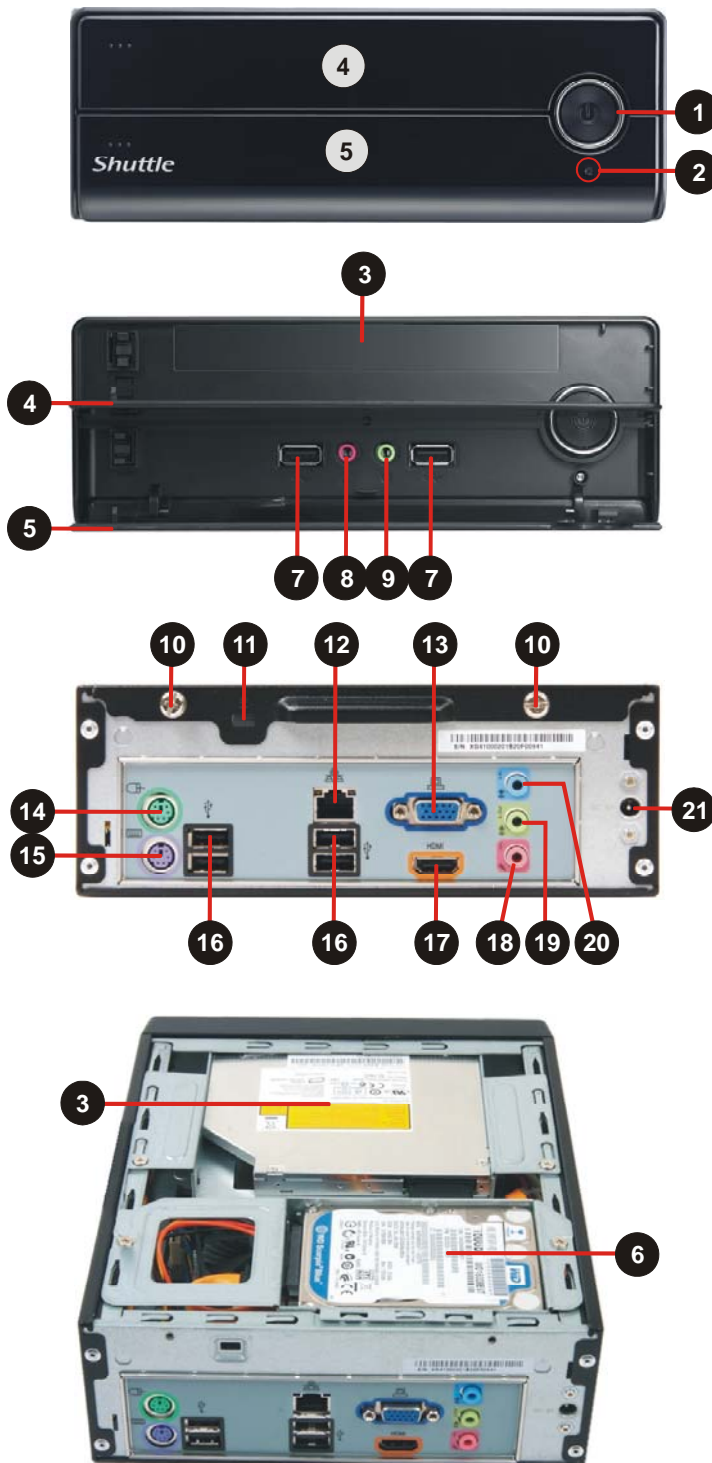
***) HDMI version supported**

HDMI 1.4 is only supported with 2nd Intel® Generation Core i3/i5/i7 Processors. Pentium and Celeron Processors support HDMI 1.3

*****) Unified Extensible Firmware Interface (UEFI)** - required when booting from hard disks larger than 2.2 TB under Windows 64 bit operating systems such as Windows 7, Windows Vista SP1 and Windows Server 2008/2003 SP1.

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Shuttle Slim-PC Barebone XH61 – Front and Back Panel



Front Panel

- 1 Power Button
- 2 Power LED
- 3 Bay for optical Slim DVD drive
- 4 Front door for DVD drive
- 5 Front door for I/O connectors
- 6 Bay for 2.5" hard disk drive or SSD
- 7 2x USB 2.0 ports
- 8 Microphone input
- 9 Headphone output

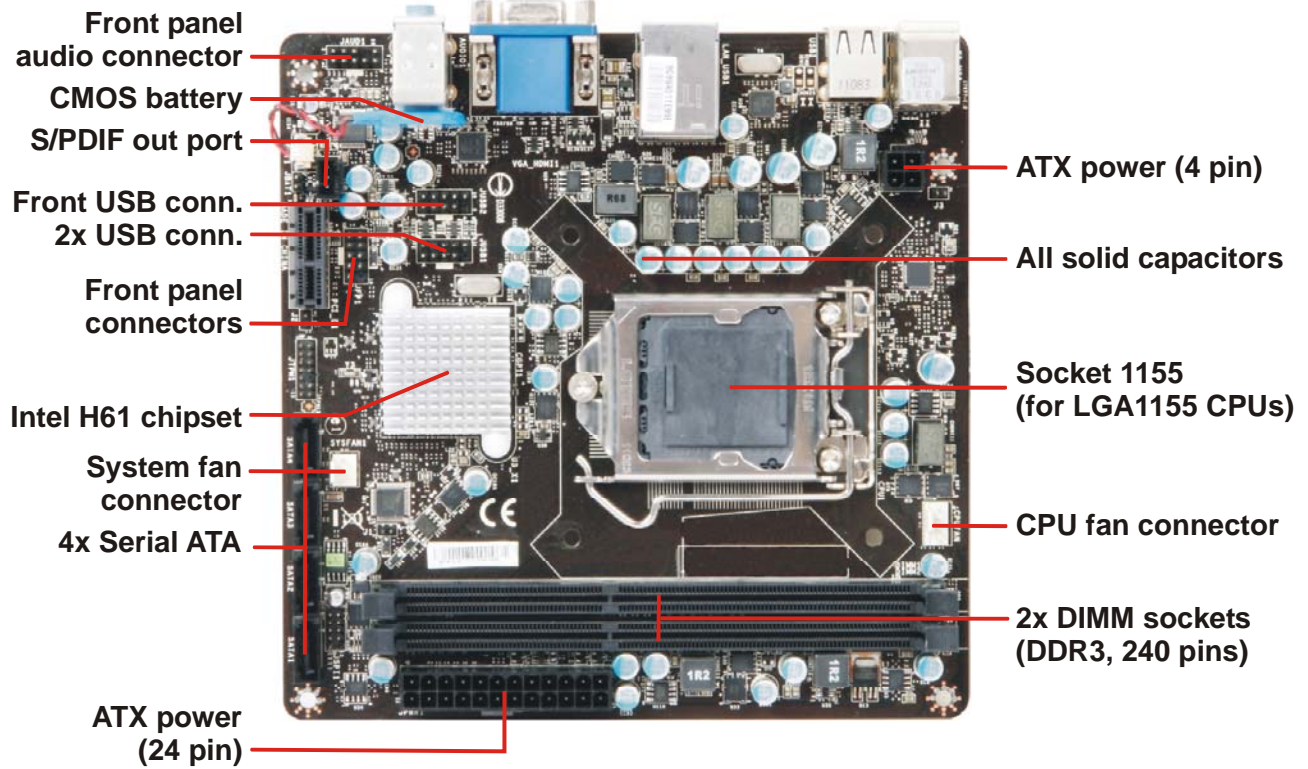
Back Panel

- 10 Two thumbscrews
- 11 Hole for Kensington Lock
- 12 Gigabit network port (RJ45)
- 13 D-Sub VGA video port
- 14 PS/2 mouse port
- 15 PS/2 keyboard port
- 16 4x USB 2.0 ports
- 17 HDMI – digital video/audio output
- 18 Microphone input
- 19 Headphone / line-out
- 20 Audio line-in
- 21 Connector for the power adapter

Note: the storage drives (hard disk and optical slimline drive) are not included in the delivery of XH61.

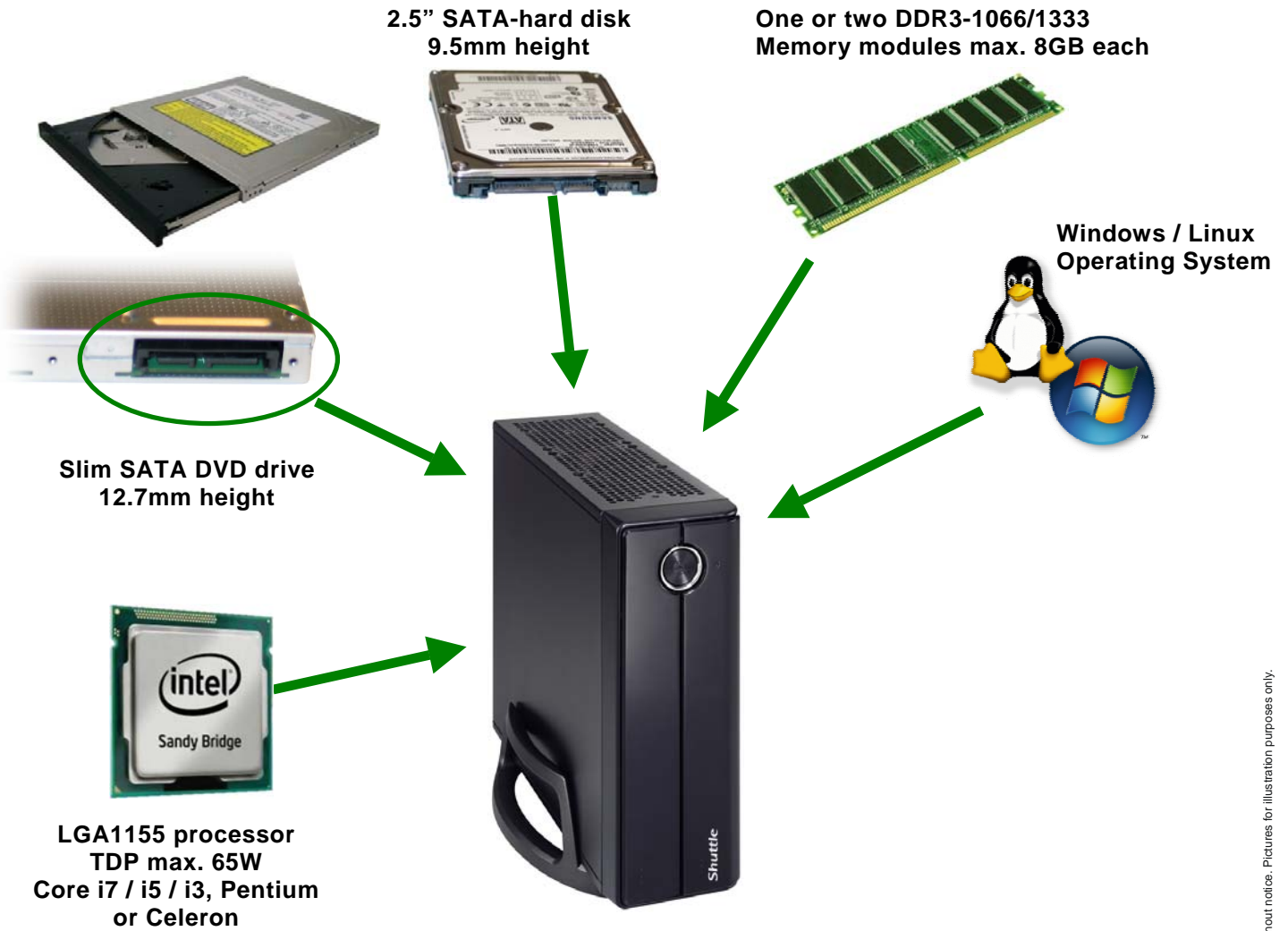
Shuttle Slim-PC Barebone XH61 – Mainboard

Back Panel Connectors



Shuttle Slim-PC Barebone XH61 – Required Components

The following components need to be added to make it a fully-configured Mini-PC:



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