

# DH110

## SLIM PC



<b>PROCESSOR</b>	Supports Intel® 6th and 7th generation Core® i3/i5/i7 series, Pentium, and Celeron® LGA 1151 65W processors	
<b>MEMORY</b>	2 x 204 pin DDR3L 1600 MHz SODIMM slots, Supports dual channel up to 32GB (16GB x 2)	
<b>VIDEO GRAPHICS</b>	Intel HD Graphics	
<b>VIDEO OUTPUT</b>	HDMI + DisplayPort, Supports dual independent displays, Supports 4K Ultra HD	
<b>AUDIO</b>	Realtek ALC662, 5.1 channel HD audio	
<b>ETHERNET</b>	Intel i211 + i219LM 10/100/1000 MB/s operation	Supports Wake on LAN function Supports Teaming mode
<b>STORAGE INTERFACE</b>	SATA 6 GB/s	
<b>ONBOARD CONNECTORS</b>	(1) 4 pin fan connector (1) SATA 6.0 connectors (1) SATA power w/ connector (1) Front audio header (1) 1x4 pin USB header	(1) VGA connector (1) Auto power on header (1) External power on (1) RS232 voltage switch
<b>FRONT PANEL</b>	(1) Power Button (1) Power LED (1) HDD LED (2) USB 2.0	(2) USB 3.0 (1) External microphone jack 1/8" (1) External headphone jack 1/8" (1) SD Card Reader
<b>BACK PANEL</b>	(1) HDMI 1.4 (1) DisplayPort 1.2 (2) USB 3.0 (2) Gigabit LAN ports (2) Kensington Lock (1) RS232*	(1) RS232/RS422/RS485* (1) Clear CMOS button (1) eSATA + USB 2.0 combo port (1) PS/2 combo port (2) Wireless Antenna holes (1) DC-in
<b>DRIVE BAYS</b>	(1) 2.5" HDD/SSD bay	
<b>DIMENSIONS</b>	7.5(L) x 6.5(W) x 1.7(H) inches	
<b>POWER</b>	Input: 100 - 240V AC Output: 19V 4.47A DC	90W power supply
<b>ACCESSORIES</b>	Quick Guide Screw package SATA cable Power cord	VESA mount VESA mount quick guide Driver DVD 802.11 b/g/n WLAN module (optional)
<b>EXPANSION SLOT</b>	(1) M2. MAX to 2260 Type M	(1) M.2 MAX to 2230 Type AE key socket
<b>OS SUPPORT</b>	Windows 7, Windows 8.1, Windows 10, Linux	

\*RS232 ports support a max of 500mA, 0/5/12V output (please refer to voltage settings in quick guide)

For more information on all products, please contact us at [sales@us.shuttle.com](mailto:sales@us.shuttle.com) or **626.820.9000**

© 2018 Shuttle Computer Group, Inc. All rights reserved. Specifications are subject to change without notice. Not responsible for any photographic or typographic errors. Photos shown may vary from actual look. Intel, the Intel logo, and Intel Core are trademarks of Intel Corporation or its subsidiaries in the US and/or other countries. ©Intel Corporation

# DH110

## SLIM PC

<b>CHASSIS</b>	<p>Black slim type metal chassis Kensington lock slot on the back as part of anti-theft system Dimensions: 7.5 (L) x 6.5 (W) x 1.7 (H) inches Weight: 2.8 LBS (net) / 4.6 LBS (gross)</p>
<b>MAINBOARD AND CHIPSET</b>	<p>Shuttle mainboard H110, Platform Controller Hub (PCH) as Single-Chip-Solution Chipset: Intel® H110 (Codename: Sunrise Point) Supports hardware monitoring and watch dog functionality Solid capacitors for sensitive areas provide excellent heat resistance for enhanced system durability</p>
<b>BIOS</b>	<p>AMI BIOS, SPI Interface, 8 MB EEPROM with SPI interface Supports PnP, ACPI 3.0, Hardware Monitoring Supports boot up from external USB flash memory Supports Unified Extensible Firmware Interface (UEFI) Supports power on after power failure [8]*</p>
<b>POWER SUPPLY</b>	<p>External 90W power adapter (fanless) AC input voltage: 100 - 240V, 50 - 60 Hz Output: 19V DC 4.74A This system can also be powered by a power adapter with an output voltage of 12V or 19V DC</p>
<b>OPERATING SYSTEM</b>	<p>The system comes without an operating system installed. Compatibility: Windows 7, Windows 8.1, Windows 10, Linux 64bit Windows 7 and 8.1 is only supported in combination with 6th generation Intel® Core® processors [6]*</p>
<b>PROCESSOR SUPPORT</b>	<p>LGA 1151 (H4) Socket supports Intel® Core® i3/i5/i7, Pentium, and Celeron processors -6th generation (Skylake) -7th generation (Kabylake) [10]* Max supported processor power consumption (TDP): 65W 14nm process technology, up to 8MB of L3 cache Not compatible with Intel® Xeon E3 V5 processors for processors with LGA 1150 and LGA 1151 sockets The unlock function for Intel® K-Series processors is not supported with this model The processor integrates PCI-Express, the memory controller, and graphics engine on the same die (performance features depend on the processor type) Please refer to the support list for more detailed processor information at <a href="http://global.shuttle.com">global.shuttle.com</a></p>
<b>SYSTEM COOLING</b>	<p>Shuttle I.C.E. (Integrated Cooling Engine) advanced heatpipe cooling technology, two 60 mm fans</p>
<b>MEMORY SUPPORT</b>	<p>2 x 204 pin SODIMM slots Supports DDR4 1333/1600 MHz memory (PC3-10600/12800) at 1.35V Supports Dual Channel mode Supports a max. of 16GB per DIMM, up to 32GB total Supports two unbuffered DIMM modules (no ECC) The mainboard only supports 1.35V DDR3L memory modules</p>
<b>DRIVE BAYS</b>	<p>1 x 2.5" drive bay supports one hard disk or SSD drive, max height 12.5 mm</p>
<b>M.2 SLOTS</b>	<p>M.2 2260 BM slot provides the following interfaces: PCI-Express Gen 2.0 X4, SATA v3.0 (6 GB/s) interface</p> <p>Supports M.2 cards with a width of 22 mm and a length of 42 or 60 mm (type 2242/2260). Cards with 80 mm length (type 2280) are not supported. Supports M.2 SSD cards with PCI-E or SATA interface.</p> <p>M.2 2230 AE slot provides the following interfaces: PCI-Express v2.0 X1, USB 2.0 interface</p> <p>Supports M.2 cards with a width of 22 mm and a length of 30 mm. This slot is intended for Wireless LAN (WiFi), Bluetooth, GSM/UMTS cards and others. A SATA interface for SSD cards is not available.</p>
<b>AUDIO</b>	<p>Realtek® ALC 662 5.1 channel HD audio Two analog audio connectors (3.5 mm) on the front panel: 2 channel line-out (headphones), Microphone input Digital multi-channel audio output (HDMI and DisplayPort)</p>

For more information on all products, please contact us at [sales@us.shuttle.com](mailto:sales@us.shuttle.com) or 626.820.9000

# DH110

## SLIM PC

<b>INTEGRATED GRAPHICS</b>	<p>Intel HD graphics function features depend on the processor type used</p> <p>This model has two video outputs: DisplayPort 1.2 and HDMI 1.4</p> <p>Supports two independent Full HD displays simultaneously [3]*          Supports Full HD resolution (1920x1200), 1080p/60Hz          Supports 4K UHD resolution (3840x2160), max 2160p/60Hz on DisplayPort or max 30Hz on HDMI [4]*          Supports Blu-Ray playback with HDCP content protection          Supports HD video plus multi-channel digital audio via a single cable          Optional analog VGA video output [5]*</p>	
<b>MULTI-CHANNEL AUDIO</b>	<p>High Definition Audio with Realtek ALC662 codec          Front: MIC in, Headphones in          Back: Line-in (blue), line-out (green), MIC in (pink)          5.1 channel Digital Audio via HDMI and DisplayPort outputs</p>	
<b>GIGABIT LAN CONTROLLER</b>	<p>Two RJ45 ports          Intel i211 Ethernet Controller with MAC, PHY, and PCIe interface          Intel i219LM PHY connected to MAC of the processor          Supports 10/100/1000 MB/s operation          Supports Wake-on-LAN          Supports Teaming mode [9]*          Supports network boot by Preboot eXecution environment (PXE)</p>	
<b>SATA CONNECTORS</b>	<p>The mainboard provides one Serial-ATA interface, max 6GB/s supported          Serial-ATA power connector (onboard)</p>	
<b>CARD READER</b>	<p>Integrated card reader supports SD, SDHC, SDXC memory flash cards          Supports boot up from SD card</p>	
<b>FRONT PANEL CONNECTORS</b>	<p>Microphone input          Headphone output (line-out)          2 x USB 3.0          2 x USB 2.0</p>	<p>Power button          Power indicator (Blue LED)          Hard disk drive indicator (Yellow LED)</p>
<b>BACK PANEL CONNECTORS</b>	<p>HDMI v1.4 [1]*          DisplayPort v1.2 [2]*          VGA connector (optional PVG01) [5]*          USB 3.0 x 2          eSATA/USB 2.0 combo x 1          Kensington Lock x 2</p>	<p>Clear CMOS button          Gigabit LAN (RJ45) x 2          WLAN antenna holes x 2          RS232 x 2 (1 x RS232/RS422/RS485) [3]*          DC-input connector for external power adapter (12V/19V)          PS/2 combo x 1 (for keyboard/mouse)</p>
<b>OTHER CONNECTORS (ONBOARD)</b>	<p>Analog VGA graphics (2x1 pin) [5]*          RS232 COM port x 2          Connector for CMOS battery</p>	<p>Fan connectors x 1 (4 pin), one occupied by cooling system          Power on after power failure (hardware solution by jumper) [8]*</p>
<b>INCLUDED ACCESSORIES</b>	<p>XPC installation guide          Driver DVD          SATA and power cables          Heatsink compound</p>	<p>External 90W power adapter with cord          VESA mount (75/100mm standard)          Screw pack          Protector cap for CPU socket (don't use if heatpipe/fan is mounted)</p>
<b>OPTIONAL ACCESSORIES</b>	<p>Vertical stand (PS02)          WLN-M (WLAN module)</p>	<p>VGA port adapter (PVG01) [5]*</p>
<b>ENVIRONMENTAL CRITERIA</b>	<p>Operating temperature: 0 - 50°C [7]*</p>	<p>Humidity: 10 - 90% (non-condensing)</p>
<b>CERTIFICATIONS</b>	<p>EMI: FCC, CE, BSMI, C-Tick          Safety: ETL, CB, BSMI</p>	<p>Other: RoHS, Energy Star 5.0, ErP</p>
	<p>This model is classed as a technical information equipment (ITE) in class B and is intended for use in living rooms and offices. The CE mark approves conformity by the EU directives:          (1) 2004/108/EC relating to electromagnetic compatibility (EMC)          (2) 2006/95/EC relating to Electrical Equipment designed for use within certain voltage limits (LVD)          (3) 2009/125/EC relating to eco-design requirements for energy related products (ErP)</p>	

For more information on all products, please contact us at [sales@us.shuttle.com](mailto:sales@us.shuttle.com) or 626.820.9000

# DH110

## SLIM PC

### [1] HDMI OUTPUT

HDMI output supports DVI-D with optional adapter

### [2] HOW TO CONVERT DISPLAYPORT TO HDMI/DVI

The DisplayPort output can be converted into a HDMI or DVI output using an additional passive adapter cable.

The integrated graphics automatically detects the connected display and outputs the appropriate electric signal - either DisplayPort (without an adapter) or HDMI/DVI (with an adapter). However, a monitor with a DisplayPort connector cannot be connected to the HDMI port with a simple passive adapter.

### [3] SERIAL PORTS

This PC features two serial RS232 ports with 9 pin VGA connectors on the back panel (pin 9 is a multi-functional signal). The left COM port can also be configured as RS422 and RS485 in the BIOS setup. Based on the Jumper JP1 configuration on the mainboard, it can be configured as Ring Indicator (RI) or external power supply with a voltage level of either 5V or 12V (each COM port can be configured separately; the maximum current is 500 mA per connector).

### [4] 4K ULTRA HD RESOLUTION

A 4K display with Ultra HD resolution (3840 x 2160) should be connected via DisplayPort (this port only supports a higher refresh rate of 60 Hz). There are certain displays will require a MST (Multi-Stream Transport) mode to be enabled, which sends two separate images at half resolution each to the display. The two images are then combined and put in the correct order by the Intel graphics driver when in Collage mode. HBR2 mode (High Bit Rate 2) must be supported by each display to have two of them run at 4K resolution. The video playback performance depends on the video format, bit rate, and processor used. For HBR2 mode (High Bit Rate 2), it must be supported by each display to have more than one of them run at 4K resolution.

### [5] OPTIONAL VGA CONNECTOR

The mainboard features one analog graphics port (CN6). This 15 pin VGA connector can be lead to the outside of the back panel by using an optional adapter PVG01. Doing so will occupy one serial port (COM2) on the back panel.

### [6] INSTALLATION OF WINDOWS 7

The Intel® 100 chipset series no longer supports the Enhanced Host Controller Interface (EHCI), which is the driver software for USB 2.0 ports. The new chipset only supports the updated Extensible Host Controller Interface (xHCI for USB 3.0) which is not supported by the original Windows 7 installation disk. This means that peripheral devices connected by USB (like a keyboard or mouse) will not work during the Windows 7 installation. There are two solutions that can be used: (1) use a PS/2 keyboard or mouse and connect an external DVD drive via eSATA or (2) add the required USB 3.0 drivers to the Windows 7 installation files (the steps for this solution can be found in the Shuttle FAQ section of [global.shuttle.com](http://global.shuttle.com)).

### [7] HIGH AMBIENT TEMPERATURE

For high ambient temperature over 40°C, SSDs are strongly recommended instead of hard disk drives (supporting at least 70°C) and rugged SODIMM memory modules for temperature ranges up to 95°C.

### [8] POWER ON AFTER POWER FAIL

The BIOS setup provides a "Power-On after Power Fail" function that can be found under "Power Management Configuration". As the name indicates, this function determines the PC's behavior after a power failure: (1) unconditional power on, (2) restore former status, or (3) keep system turned off. This function may fail after short power failures, but the DH110 comes with a hardware based solution in these cases. By removing the Jumper JP2 on the mainboard (behind the power button), the system will start unconditionally once power is supplied.

### [9] TEAMING MODE

The teaming function allows for grouping both available network adapters to work as one single adapter. This mode enables load balancing and failover (driver downloads can be found here: <https://downloadcenter.intel.com/download/21642>)

### [10] KABYLAKE PROCESSOR SUPPORT

7th generation Intel Core processors are supported from BIOS version DH110000.200. Download website: <http://global.shuttle.com/products/productsDownload?productId=1992>. If a Kabylake processor is used, the DH110 will only support Windows 10 and Linux operating systems.

**BIOS DOWNLOADS:** <http://global.shuttle.com/products/productsDownload?productId=1992>

**SUPPORT LIST:** <http://global.shuttle.com/products/productsSupportList?productId=1992>

**FAQ LIST:** <http://global.shuttle.com/support/faq>

For more information on all products, please contact us at [sales@us.shuttle.com](mailto:sales@us.shuttle.com) or 626.820.9000

# DH110

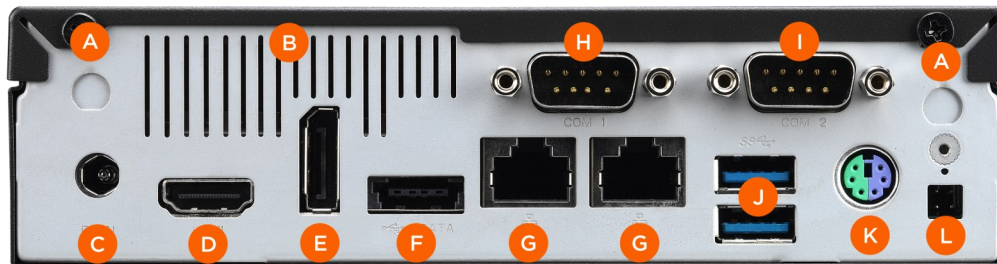
SLIM PC

## Front View



- |                    |                  |
|--------------------|------------------|
| 1 Microphone input | 5 Power Button   |
| 2 Headphone input  | 6 SD Card Reader |
| 3 Power LED        | 7 USB 3.0 x 2    |
| 4 Hard Disk LED    | 8 USB 2.0 x 2    |

## Back View



- |                            |                               |
|----------------------------|-------------------------------|
| A WLAN antenna hole x 2    | G RJ45 Gigabit LAN x 2        |
| B Ventilation grille       | H RS232 (COM1)                |
| C DC power input           | I RS232/RS422/RS485 (COM2)    |
| D HDMI video output        | J USB 3.0 x 2                 |
| E DisplayPort video output | K PS/2 combo (keyboard/mouse) |
| F eSATA/USB 2.0 combo      | L Clear CMOS connector        |



Kensington lock hole on left and right side

For more information on all products, please contact us at [sales@us.shuttle.com](mailto:sales@us.shuttle.com) or 626.820.9000

© 2018 Shuttle Computer Group, Inc. All rights reserved. Specifications are subject to change without notice. Not responsible for any photographic or typographic errors. Photos shown may vary from actual look. Intel, the Intel logo, and Intel Core are trademarks of Intel Corporation or its subsidiaries in the US and/or other countries. ©Intel Corporation

# DH110

SLIM PC



## SUPPORTS INTEL<sup>®</sup> 6TH AND 7TH GENERATION PROCESSORS

Equipped with a LGA 1151 socket, the DH110 supports both Intel<sup>®</sup> 6th Generation (Sky Lake) and Intel<sup>®</sup> 7th Generation (Kaby Lake) Core i3/i5/i7, Pentium<sup>®</sup>, and Celeron<sup>®</sup> 65W processors. Compared to the previous Haswell/Haswell refresh processors, CPU and GPU performance is significantly increased and saves more power.



## VESA MOUNTABLE

The supplied 75/100mm VESA mount allows for installation of the DH110 on walls or monitors, for use in company buildings, public institutions, or other industry buildings. With a thickness of 43mm, it allows for versatile integration into hardware systems and well suited for areas with limited space.



## EXPANSION SLOTS

One M.2 2260 Type M and one M.2 2230 Type AE slot are built-in for a M.2 SSD, a Wi-Fi card, or other compatible devices. M.2 cards with a width of 22 mm and length of 42/60 mm are supported. The M.2 2230 slot can be used for a WLAN module, Bluetooth, GSM/UMTS card, or other cards.



## GREAT CONNECTIVITY

With multiple USB 2.0 ports, USB 3.0, PS/2 ports, as well as two RS232, peripherals such as thermal printers, label printers, bar code scanners, and other devices can be easily connected. An adapter to convert from RS232 to USB allows for support of more devices.



## SMART FAN DESIGN

A heat-pipe cooling system with smart fan design can be set in the BIOS for faster fan speed automatically when CPU temperature increases for high stability and low noise during long term operation.

For more information on all products, please contact us at [sales@us.shuttle.com](mailto:sales@us.shuttle.com) or **626.820.9000**

© 2018 Shuttle Computer Group, Inc. All rights reserved. Specifications are subject to change without notice. Not responsible for any photographic or typographic errors. Photos shown may vary from actual look. Intel, the Intel logo, and Intel Core are trademarks of Intel Corporation or its subsidiaries in the US and/or other countries. ©Intel Corporation

# DH110

## SLIM PC



<b>ACCESSORY</b>	<b>PS02</b>
<b>DESCRIPTION</b>	The PS02 stand is required for placing 1.3L slim PC models into a vertical orientation.
<b>COMPATIBILITY</b>	DX30, DL10J, DS61, DS81, DH110, DH110SE, DH170, DQ170, DH270, DH310, DH370, DH02U



<b>ACCESSORY</b>	<b>PVG01</b>
<b>DESCRIPTION</b>	The PVG01 equips compatible slim PCs with an analog VGA output. For slim 1L PCs, this means only one serial interface (COM 1) can be used after installation.
<b>SPECIFICATIONS</b>	Length: 6.3 inches, Back panel connector: 15 pin Mini D-sub female socket, Internal connector: Subminiature 2x10 pin female
<b>REMARKS</b>	Slim PCs with H81/H110 chipsets can support up to two displays at the same time, so only two out of the available video outputs can be used.



<b>ACCESSORY</b>	<b>PV04</b>
<b>DESCRIPTION</b>	The PV04 (VESA 75/100 mm) can be attached to a wall, monitor, or TV with a VESA standard mounting hole pattern. The PC affixes securely in the metal mount with the screw fittings included.
<b>ITEMS INCLUDED</b>	VESA mount x 1, Thumbscrews x 4 (screws mount to PC), Screws x 4 (screws mount to external device), Quick Guide
<b>REMARKS</b>	Supports 75 and 100 mm VESA standards



<b>ACCESSORY</b>	<b>WLN-M</b>
<b>DESCRIPTION</b>	The WLN-M wireless LAN kit can be used to equip XPC cube and slim series models with the wireless LAN standard 802.11 n/ac at 2.4/5 GHz. The combo device supports Bluetooth 4.0.
<b>REMARKS</b>	M.2 2230 (NGFF) WLAN card, Antenna cable (XPC slim) x 2, Antenna cable (XPC cube) x 2, Dipole antenna x 2, Quick Guide, Driver DVD
<b>OS SUPPORT</b>	Windows 7, Windows 8.1, Windows 10, Linux (32/64 bit)

For more information on all products, please contact us at [sales@us.shuttle.com](mailto:sales@us.shuttle.com) or 626.820.9000

# DS87 vs DH110

SLIM PC



MODEL	DS87	DH110
CHIPSET	Intel H87	Intel H110
PROCESSOR SUPPORT	LGA 1150, max TDP 65W 22nm Haswell (4th Gen Core CPU) Intel® Core™ i3/i5/i7, Pentium, Celeron	LGA 1151, max TDP 65W 14nm Skylake (6th Gen Core CPU) 14nm Kabylake (7th Gen Core CPU) Intel® Core™ i3/i5/i7, Pentium, Celeron
MEMORY	2 x 8GB DDR3 1333/1600 MHz max	2 x 16GB DDR3L 1333/1600 MHz max
VIDEO OUTPUT	HDMI + DisplayPort, Supports triple displays, Supports 4K Ultra HD	HDMI + DisplayPort, Supports dual displays, Supports 4K Ultra HD
AUDIO	Realtek ALC662VC, HD audio	Realtek AL662, 5.1 channel HD audio
ETHERNET	Realtek 8111G 10/100/1000 MB/s operation Supports Wake on LAN function Supports Teaming mode	Intel i211 + i219LM 10/100/1000 MB/s operation Supports Wake on LAN function Supports Teaming mode
SATA ONBOARD	SATA 6G x 1 SATA 3G x 1	SATA 6G x 1 eSATA x 1
FRONT PANEL	Power button with LED, HDD LED, MIC-in, Headphone out, SD Card Reader, USB 2.0 x 4	Power button with LED, HDD LED, MIC-in, Headphone out, SD Card Reader, USB 3.0 x 2, USB 2.0 x 2
BACK PANEL	HDMI, DisplayPort USB 2.0 x 2, USB 3.0 x 2 Gigabit LAN (Realtek 8111G) RS232 x 2 WLAN antenna x 2 (optional) Clear CMOS button	HDMI, DisplayPort USB 3.0 x 2 PS/2 combo port Gigabit LAN (Intel i211 + i219LM) x 2 RS232 + RS232/RS422/RS485 WLAN antenna x 2 (optional) Clear CMOS button
DRIVE BAYS	(1) 2.5" HDD/SSD bay	(1) 2.5" HDD/SSD bay
OPTIONAL ACCESSORIES	Vertical stand (PS01) VESA mount (PV02) Cover for slimline drive bay WLAN kit (WLN-S) 3.5" HDD rack (PHD4)	Vertical Stand (PS02) VGA adapter (PVG01) WLAN kit (WLN-M)
EXPANSION SLOT	Full-size mini PCI-E socket Half-size mini PCI-E socket	M.2 2260 BM slot M.2 2230 AE slot, Supports optional WLAN
OS SUPPORT	Windows 7, Windows 8, Linux	Windows 7, Windows 8.1, Windows 10, Linux 64 bit

For more information on all products, please contact us at [sales@us.shuttle.com](mailto:sales@us.shuttle.com) or 626.820.9000



# DH110

## SLIM PC

### 6th Generation Intel Core Desktop Processors (LGA 1151 14 nm Skylake-S)

Processors with a TDP > 65W are not supported (marked in red)

Name	Model	Cores/Threads	CPU Clock	Turbo Clock	Cache	TDP	Graphics	Graphics Clock
Core i7	6700K	4 / 8	4.0 GHz	4.2 GHz	8 MB	91W	HD 530	350 - 1150 MHz
	6700	4 / 8	3.4 GHz	4.0 GHz	8 MB	65W	HD 530	350 - 1150 MHz
	6700T	4 / 8	2.8 GHz	3.6 GHz	8 MB	35W	HD 530	350 - 1100 MHz
Core i5	6600K	4 / 4	3.5 GHz	3.9 GHz	6 MB	91W	HD 530	350 - 1150 MHz
	6600	4 / 4	3.3 GHz	3.9 GHz	6 MB	65W	HD 530	350 - 1150 MHz
	6600T	4 / 4	2.7 GHz	3.5 GHz	6 MB	35W	HD 530	350 - 1100 MHz
	6500	4 / 4	3.2 GHz	3.6 GHz	6 MB	65W	HD 530	350 - 1150 MHz
	6500T	4 / 4	2.5 GHz	3.1 GHz	6 MB	35W	HD 530	350 - 1100 MHz
	6400	4 / 4	2.7 GHz	3.3 GHz	6 MB	65W	HD 530	350 - 1150 MHz
	6400T	4 / 4	2.2 GHz	2.8 GHz	6 MB	35W	HD 530	350 - 1100 MHz
Core i3	6320	2 / 4	3.9 GHz	-	4 MB	65W	HD 530	350 - 1150 MHz
	6300	2 / 4	3.8 GHz	-	4 MB	65W	HD 530	350 - 1150 MHz
	6300T	2 / 4	3.3 GHz	-	4 MB	35W	HD 530	350 - 1100 MHz
	6100	2 / 4	3.7 GHz	-	4 MB	65W	HD 530	350 - 1150 MHz
	6100T	2 / 4	3.2 GHz	-	4 MB	35W	HD 530	350 - 1100 MHz
Pentium	G4520	2 / 2	3.6 GHz	-	3 MB	51W	HD 530	350 - 1150 MHz
	G4500	2 / 2	3.5 GHz	-	3 MB	51W	HD 530	350 - 1150 MHz
	G4500T	2 / 2	3.0 GHz	-	3 MB	35W	HD 530	350 - 1100 MHz
	G4400	2 / 2	3.3 GHz	-	3 MB	51W	HD 530	350 - 1150 MHz
	G4400T	2 / 2	2.9 GHz	-	3 MB	35W	HD 530	350 - 1100 MHz
Celeron	G3920	2 / 2	2.9 GHz	-	2 MB	51W	HD 530	350 - 1050 MHz
	G3900	2 / 2	2.8 GHz	-	2 MB	51W	HD 530	350 - 1050 MHz
	G3900T	2 / 2	2.6 GHz	-	2 MB	35W	HD 530	350 - 950 MHz

K = unlocked, T = power optimized, HT = hyper threading. The DH110 does not support the unlock function of Intel K-series processors.

See more support information at [global.shuttle.com](http://global.shuttle.com)

For more information on all products, please contact us at [sales@us.shuttle.com](mailto:sales@us.shuttle.com) or 626.820.9000

# DH110

## SLIM PC

### 7th Generation Intel Core Desktop Processors (LGA 1151 14 nm Kabylake-S)

Processors with a TDP > 65W are not supported (marked in red)

Name	Model	Cores/Threads	CPU Clock	Turbo Clock	Cache	TDP	Graphics	Graphics Clock
Core i7	7700K	4 / 8	4.2 GHz	4.5 GHz	8 MB	91W	HD 630	350 - 1150 MHz
	7700	4 / 8	3.6 GHz	4.2 GHz	8 MB	65W	HD 630	350 - 1150 MHz
	7700T	4 / 8	2.9 GHz	3.8 GHz	8 MB	35W	HD 630	350 - 1150 MHz
Core i5	7600K	4 / 4	3.8 GHz	4.2 GHz	6 MB	91W	HD 630	350 - 1150 MHz
	7600	4 / 4	3.5 GHz	4.1 GHz	6 MB	65W	HD 630	350 - 1150 MHz
	7600T	4 / 4	2.8 GHz	3.7 GHz	6 MB	35W	HD 630	350 - 1100 MHz
	7500	4 / 4	3.4 GHz	3.8 GHz	6 MB	65W	HD 630	350 - 1100 MHz
	7500T	4 / 4	2.7 GHz	3.3 GHz	6 MB	35W	HD 630	350 - 1100 MHz
	7400	4 / 4	3.0 GHz	3.5 GHz	6 MB	65W	HD 630	350 - 1000 MHz
	7400T	4 / 4	2.4 GHz	3.0 GHz	6 MB	35W	HD 630	350 - 1000 MHz
Core i3	7350K	2 / 4	4.2 GHz	-	4 MB	60W	HD 630	350 - 1050 MHz
	7320	2 / 4	4.1 GHz	-	4 MB	51W	HD 630	350 - 1050 MHz
	7300	2 / 4	4.0 GHz	-	4 MB	51W	HD 630	350 - 1050 MHz
	7300T	2 / 4	3.5 GHz	-	4 MB	35W	HD 630	350 - 1100 MHz
	7101E	2 / 4	3.9 GHz	-	3 MB	54W	HD 610	350 - 1100 MHz
	7101TE	2 / 4	3.4 GHz	-	3 MB	35W	HD 610	350 - 1100 MHz
	7100	2 / 4	3.9 GHz	-	3 MB	51W	HD 630	350 - 1100 MHz
	7100T	2 / 4	3.4 GHz	-	3 MB	35W	HD 630	350 - 1100 MHz
Pentium	G4620	2 / 4	3.7 GHz	-	3 MB	51W	HD 630	350 - 1100 MHz
	G4600	2 / 4	3.6 GHz	-	3 MB	51W	HD 630	350 - 1100 MHz
	G4600T	2 / 4	3.0 GHz	-	3 MB	35W	HD 630	350 - 1050 MHz
	G4560	2 / 4	3.5 GHz	-	3 MB	54W	HD 610	350 - 1050 MHz
	G4560T	2 / 4	2.9 GHz	-	3 MB	35W	HD 610	350 - 1050 MHz
Celeron	G3950	2 / 2	3.0 GHz	-	2 MB	51W	HD 610	350 - 1050 MHz
	G3930	2 / 2	2.9 GHz	-	2 MB	51W	HD 610	350 - 1050 MHz
	G3930T	2 / 2	2.7 GHz	-	2 MB	35W	HD 610	350 - 1000 MHz

For more information on all products, please contact us at [sales@us.shuttle.com](mailto:sales@us.shuttle.com) or 626.820.9000