# HP ProLiant ML110 G6 Server

# Installation Sheet



### A Important Safety Information

Before installation, read *Important Safety Information* on the Documentation CD. .Documentation CD قبل التشرب، الارأ معلومات هامة حول المدلامة على القرص المضغوط Před instalací si přečtěte příručku *Důležité bezpečnostní informace* na disku CD. 安装之前,请阅读文档 CD 上的*重要安全信息*。

安裝前,請閱讀說明文件光碟上的「重要的安全性資訊」。

Pirms instalācijas, izlasiet drošības informāciju dokumentācijas CD. Prieš diegdami perskaitykite *Svarbią saugos informaciją* dokumentacijos CD. Telepītės elött olvassa el a dokumentációs CD *Fontos biztonsági tudnivalók* dokumentumāt.

Lees de Belangrijke veiligheidsinformatie op de documentatie-cd voordat u de installatie uitvoert. Les "Viktig sikkerhetsinformasjon" på dokumentasjons-CDen før du installerer dette produktet. Przed instalacją przeczytaj Ważne informacje dotyczące bezpieczeństwa na dysku CD Documentation. Antes da instalacião, leia as Informacões Importantes sobre Segurança no CD da Documentação.

Antes aa instalaçao, tela as Intormações Importantes sobre Segurança no CD da Documentação Перед установкой ознакомьтесь с разделом Указания по технике безопасности на компакт-диске «Документация».

Pred inštaláciou si prečítajle časť *Dôležité bezpečnostné informácie* na disku Documentation CD. Pred namestitvijo preberite *Pomembne varnostne informacije* na CD-ju Documentation. Tärkeisiin turvatietoihin" Documentation CD -levyllä ennen tuotteen asentamista. Läs dokumentet Viktig säkerhetsinformation på dokumentations-cd:n innan du installerar denna produkt. Yüklemeden önce, Documentation CD'sindeki Önemli Güvenlik Bilgileri'ni okuyun. Перед установкою прочитайте *Важливі відомості з безпеки* на CD документації. For translated instructions, see the Easy Set-up CD or http://www.hp.com/support

Para obter instruções traduzidas, consulte Easy Set-up CD ou HP.com Übersetzte Gebrauchsanleitungen finden Sie auf der Easy Set-up CD oder unter HP.com

Para obtener las instrucciones traducidas, consulte el Easy Set-up CD o la página web HP.com

Pour obtenir des instructions traduites, reportez-vous au CD Easy Set-up ou visitez le site HP.com

翻訳された手順については、Easy Set-up CDまたはHP.comを参照してください。

请参见 Easy Set-up CD 或访问 HP.com 以查看经过翻译的说明

### Configuring the server

- **1.** Connect all peripherals to your server.
  - o Keyboard
  - o Mouse
  - o Monitor
- 2. Determine the server BIOS version.
  - a. Power up the server.
  - **b.** Press the **Esc** key at the HP logo screen, and then press the **Pause** key to halt screen movement.
  - c. Note the server BIOS version.
  - Verify the server BIOS version against the latest BIOS version listed for this server on the HP website: <u>http://www.hp.com</u>
  - e. If you do not have the latest BIOS, update the BIOS now. Refer to the server's *Server Maintenance and Service Guid*e available on the HP website: <u>http://www.hp.com</u>

### Default boot priority

By default, the server searches for boot devices in the following order:

- 1. Removable devices
- 2. CD-ROM/DVD-ROM drive
- 3. Hard drive
- 4. Embedded NIC, PXE (Preboot Execution Environment—remote boot over LAN)

### Server configuration guidelines

Read the following items before performing any of the installation procedures described in later sections.

- ▲ **WARNING:** Failure to properly turn off the system power before you open the server or before you start removing or installing hardware components may cause serious damage as well as bodily harm.
- **WARNING:** To reduce the risk of personal injury from hot surfaces, allow the chassis and any installed hardware component to cool before touching them.
- △ CAUTION: Observe the ESD precautions, pre- and postinstallation procedures, and proper cabling management described in Chapter 2 of the server's Maintenance and Service Guide when performing any installation procedure.

### Identifying server components

Front panel components



ltem	Component	ltem	Component
1	Optical disc drive (ODD)	6	External ambient thermal sensor
2	ODD manual eject hole	7	HDD EMI shield thumbscrew
3	ODD eject button	8	HDD EMI shield
4	Power button	9	2 <sup>nd</sup> removable media drive bay EMI shield
5	USB ports		
-			

**NOTE:** The location of items 2 and 3 may vary depending on the model of the installed removable media drive.

Rear panel components



ltem	Component	ltem	Component
1	Kensington lock notch	10	Management NIC port (RJ-45)
2	Cable lock provision notch	11	Video port
3	Access panel thumbscrew	12	Serial port
4	Expansion slot cover retainer thumbscrew	13	USB ports
5	Expansion slot cover retainer	14	Embedded NIC port (RJ-45)
6	Expansion slot 1 cover	15	PS/2 keyboard port
7	Expansion slot 2 cover	16	PS/2 mouse port
8	Expansion slot 3 cover	17	Power supply cable socket
9	Expansion slot 4 cover	_	

#### System board components



ltem	Code	Component	
1	ATXPWRCN2	4-pin ATX processor power connector	
2	DIMM4B	Channel B 1 <sup>st</sup> DDR3 DIMM slot	
3	DIMM3D	Channel B 2 <sup>nd</sup> DDR3 DIMM slot	
4	DIMM2A	Channel A 1 <sup>st</sup> DDR3 DIMM slot	
5	DIMM1C	Channel A 2 <sup>nd</sup> DDR3 DIMM slot	
6	ATXPWRCN1	24-pin ATX system board power connector	
7	CPU1	Processor	
8	CPUFAN1	CPU heatsink fan connector	
9	PCHSW1	System configuration switch	
10	FPCN1	Power button / front panel LED cable connector	
11	SATA1	1 <sup>st</sup> HDD SATA cable connector	
12	SATA2	2 <sup>nd</sup> HDD SATA cable connector	
13	SATA3	3 <sup>rd</sup> HDD SATA cable connector	
14	SATA4	4 <sup>th</sup> HDD SATA cable connector	
15	SATA5	1 <sup>st</sup> ODD SATA cable connector	
16	SATA6	2 <sup>nd</sup> ODD SATA cable connector	
17	USBCONN2	Internal USB connector for STD USB	
18	USBCONN3	Internal USB connector for tape device	
19	FPUSBCONN1	Front panel USB port connector	
20	HDDLEDCN1	External SAS HDD LED cable connector	
21	TPMCN1	TPM (Trusted Platform Module) connector	
22	Full-height full-length Slot 4 PCle x16 (16) 45W	Full-height/full-length PCIe Gen2 x16 slot (x16)	
23	Full-height full-length Slot 3 PCIe x8 (4) 25W	Full-height/full-length PCIe Gen1 x8 slot (x4)	
24	Full-height full-length Slot 2 PCI 32-bit 33 MHz 25W	Full-height/full-length 32-bit/33 MHz PCI slot	
25	THERSNRCN 1	Cable connector for the external ambient thermal sensor	

ltem	Code	Component
26	Full-height half-length Slot 1 PCle x4 (1)	Full-height/half-length PCle Gen1 x4 slot (x1)
27	BATSOCKET1	System battery
28	REARFAN1	System fan cable connector

### Opening the server

#### Access panel removal



Front bezel removal



### Installing a memory module

The system has four DIMM slots that support up to 8 GB maximum system memory (2 GB in each of the four DIMM slots).

Observe the following important guidelines when installing memory modules:

- Use only HP supported PC3-10600 unbuffered DIMM in 1 or 2 GB capacities.
- Supported DIMM configurations include:
  - Single DIMM (non-interleaving) It must be installed in the DIMM2A slot.
  - Two DIMMs (interleaving) For optimum memory performance, install in the DIMM2A and DIMM4B slots.

**NOTE:** To allow an interleaving memory configuration, the **Memory Interleaving** field in the *Advanced | Advanced Chipset Control* menu of the BIOS Setup must be set to **Enabled**.

o Four DIMMs

Memory module installation



### Installing an expansion board

The server has four expansion slots. From top to bottom these are:

- 22 Full-height/full-length PCIe Gen2 x16 slot (x16)
- 23 Full-height/full-length PCIe Gen1 x8 slot (x4)
- 24 Full-height/full-length 32-bit/33 MHz PCI slot
- 26 Full-height/half-length PCIe Gen1 x4 slot (x1)

\* The numbers indicated above correspond to the "System board components" figure label.

#### Expansion board installation

1. Remove the slot cover retainer and the slot cover opposite the expansion slot compatible with your expansion board.



#### 2. Install the expansion board.



**NOTE:** For a full-length expansion board installation: Remove first the full-length card retainer (see the zoomed in section in the figure above) opposite the expansion slot you are using and secure the board in it, and then install the board in the slot.

# Installing a hard drive

The two upper drive bays are primarily for removable media drives, while the four lower drive bays are only for hard drives (3.5-inch non-hot-plug SAS or SATA drives).



ltem	Component	ltem	Component
1	1 <sup>st</sup> removable media drive	5	2 <sup>nd</sup> SAS/SATA hard drive
2	2 <sup>nd</sup> removable media drive	6	1 <sup>st</sup> SAS/SATA hard drive
3	4 <sup>th</sup> SAS/SATA hard drive	7	HDD spare screws
4	3 <sup>rd</sup> SAS/SATA hard drive	8	Removable media drive spare screws

**IMPORTANT:** Install a SAS controller board first before configuring a SAS hard drives. It is recommended that this controller board be installed in the full-height/ full-length PCIe Gen2 x16 expansion slot.

### Hard drive installation

1. Remove the HDD EMI shield.



- 2. Remove four spare HDD screws from the front chassis, and then insert them into the new drive.
- 3. Install the new hard drive. SATA HDD



SAS HDD



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