



# HP ProBook 4415s Notebook PC

# HP ProBook 4416s Notebook PC

# HP ProBook 4515s Notebook PC

## Maintenance and Service Guide Addendum

Addendum Part Number: [577544-001](#)

### Addendum revision history

Part number	Publication date	Description
-001	September 2009	Updated commodities in the Product Description table. Updated spare parts throughout MSG.

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# Product description changes

The item descriptions in the table below are supplemental to the Product Description table in chapter 1.

Description	14.0-in UMA RS880M 4415s	14.0-in Discrete RX881 4416s	15.6-in UMA RS880M 4515s	15.6-in Discrete RX881 4515s
AMD Turion™ II Ultra Dual-Core Mobile M600 processor, 2.4-GHz with 2-MB L2 cache	X	X	X	X
AMD Turion II Dual-Core Mobile M520 processor, 2.3-GHz with 1-MB L2 cache	X	X	X	X
AMD Turion II Dual-Core Mobile M500 processor, 2.2-GHz with 1-MB L2 cache	X	X	X	X
AMD Athlon™ II Dual-Core M320 processor, 2.1-GHz with 1-MB L2 cache	X	X	X	X
AMD Athlon II Dual-Core M300 processor, 2.0-GHz with 1-MB L2 cache for use only in Japan, South Korea, Taiwan, and Thailand	X	X	X	X
AMD Sempron™ M100 processor, 2.0-GHz with 512-GB L2 cache	X	X	X	X
Northbridge: AMD RX881 chipset		X		X
Northbridge: AMD RS880M chipset	X		X	
Southbridge: SB710	X	X	X	X
ATI Mobility Radeon™ HD 3200 (UMA) graphics	X		X	
ATI Mobility Radeon HD 4330 (discrete) graphics		X		X
IDT High Definition audio	X	X	X	X
Wireless personal area network (WPAN) by way of Bluetooth® module: Bluetooth 2.1 module	X	X	X	X
Wireless wide area network (WWAN): GPS support		X	X	X
<b>Operating system, preinstalled:</b>				
Windows® 7 Pro 32 with Microsoft® Basics	X	X	X	X
Windows 7 Home Premium 32 with Microsoft Basics	X	X	X	X
Windows XP Pro with Microsoft Basics (with Windows 7 Professional COA)	X	X	X	X
<b>Operating system, preinstalled with Microsoft Office:</b>				
Windows 7 Home Basic 32 with Office 2007 Ready (for use in all countries or regions except Japan)	X	X	X	X
Windows 7 Home Premium 32 with Office 2007 Ready (for use in all countries or regions except Japan)	X	X	X	X
Windows 7 Home Premium 32 with Office 2007 Personal (for use only in Japan)	X	X	X	X
Windows 7 Home Premium 32 with Office 2007 Personal with Powerpoint (for use in all countries or regions except Japan)	X	X	X	X
Windows 7 Home Premium 32 with Office 2007 Professional (for use only in Japan)	X	X	X	X
Windows 7 Pro 32 with Office 2007 Ready (for use in all countries or regions except Japan)	X	X	X	X
Windows 7 Pro 32 with Office 2007 Personal (for use only in Japan)	X	X	X	X
Windows 7 Pro 32 with Office 2007 Personal with Powerpoint (for use only in Japan)	X	X	X	X
Windows 7 Pro 32 with Office 2007 Professional (for use only in Japan)	X	X	X	X
<b>Restore media:</b>				
Windows 7	X	X	X	X
Windows 7 Home Basic 32	X	X	X	X
Windows 7 Home Premium 32	X	X	X	X
Windows 7 Professional 32	X	X	X	X
<b>Web-only support:</b>				
Windows 7 Professional 64	X	X	X	X

## Spare part additions - processors

The processor descriptions in the table below are supplemental to the Computer Major Components and Sequential Part Number Listing tables in chapter 3 and to the processor replacement procedure section in chapter 4.

Description	Spare part number
AMD Turion II Ultra Dual-Core Mobile M600 processor, 2.4-GHz with 2-MB L2 cache (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)	576254-001
AMD Turion II Dual-Core Mobile M520 processor, 2.3-GHz with 1-MB L2 cache (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)	583055-001
AMD Turion II Dual-Core Mobile M500 processor, 2.2-GHz with 1-MB L2 cache (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)	576253-001
AMD Athlon II Dual-Core M320 processor, 2.1-GHz with 1-MB L2 cache (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)	576252-001
AMD Athlon II Dual-Core M300 processor, 2.0-GHz with 1-MB L2 cache (for use only in Japan, South Korea, Taiwan, and Thailand) (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)	578024-001
AMD Sempron M100 processor, 2.0-GHz with 512-GB L2 cache (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)	576251-001

## Spare part additions - WWAN module

The WWAN module description in the table below is supplemental to the Computer Major Components and Sequential Part Number Listing tables in chapter 3 and to the WWAN module replacement procedure section in chapter 4.

Description	Spare part number
WWAN module, including GPS, UNDP (United Nations Development Program)(not available with Linux)	531993-001

## Spare part additions and description updates - system boards

The system board descriptions in the table below are either supplemental to the listings or modifications of the listings in the Computer Major Components and Sequential Part Number Listing tables in chapter 3 and in the system board replacement procedure section in chapter 4.

Description	Spare part number
<b>Spare part additions:</b>	
System board for use in computers with a WWAN module, UMA graphics subsystem memory, and AMD Mxxx processors	585218-001
System board for use in computers without a WWAN module, with UMA graphics subsystem memory, and AMD Mxxx processors	585219-001
System board for use in computers with a WWAN module, discrete graphics subsystem memory, and AMD Mxxx processors	585220-001
System board for use in computers without a WWAN module, with discrete graphics subsystem memory, and AMD Mxxx processors	585221-001
<b>Spare part description updates:</b>	
System board for use in computers with a WWAN module, with UMA graphics subsystem memory, and with an AMD ZM, RM, QL, or SI processor	535802-001
System board for use in computers with a WWAN module, with discrete graphics subsystem memory, and with an AMD ZM, RM, QL, or SI processor	535803-001
System board for use in computers without a WWAN module, with UMA graphics subsystem memory, and with an AMD ZM, RM, QL, or SI processor	574505-001
System board for use in computers without a WWAN module, with discrete graphics subsystem memory, and with an AMD ZM, RM, QL, or SI processor	574506-001

## Spare part description updates - hard drives

The hard drive descriptions listed in the table below are modifications to the descriptions in the Computer Major Components, Mass Storage Devices, and the Sequential Part Number Listing tables in chapter 3 and in the hard drive replacement procedure in chapter 4.

Description	Spare part number
<b>Spare part description updates:</b>	
160-GB, 5400-rpm hard drive for use only in models with the following system boards: 535802-001, 535803-001, 574505-001, 574506-001	535811-001
250-GB, 5400-rpm hard drive for use only in models with the following system boards: 535802-001, 535803-001, 574505-001, 574506-001	535812-001
320-GB, 5400-rpm hard drive for use only in models with the following system boards: 535802-001, 535803-001, 574505-001, 574506-001	535813-001

## Spare part description update - Bluetooth module

The Bluetooth module description in the table below is a modification to the description in the Computer Major Components and Sequential Part Number Listing tables in chapter 3 and in the Bluetooth module replacement procedure section in chapter 4.

Description	Spare part number
Broadcom Bluetooth module for use only in models with the following system boards: 535802-001, 535803-001, 574505-001, 574506-001	398393-002

## Spare part additions and updates - Sequential Part Number Listing

The spare part descriptions in the table below are either supplemental to the listings or modifications to the listing in the Sequential Part Number Listing table in chapter 3.

<b>Spare part number</b>	<b>Description</b>
398393-002	Broadcom Bluetooth module for use only in models with the following system boards: 535802-001, 535803-001, 574505-001, 574506-001
531993-001	WWAN module, GPS, UNDP (United Nations Development Program)(not available with Linux)
535802-001	System board for use in computers with a WWAN module, with UMA graphics subsystem memory, and with an AMD ZM, RM, QL, or SI processor
535803-001	System board for use in computers with a WWAN module, with discrete graphics subsystem memory, and with an AMD ZM, RM, QL, or SI processor
535811-001	160-GB, 5400-rpm hard drive for use only in models with the following system boards: 535802-001, 535803-001, 574505-001, 574506-001
535812-001	250-GB, 5400-rpm hard drive for use only in models with the following system boards: 535802-001, 535803-001, 574505-001, 574506-001
535813-001	320-GB, 5400-rpm hard drive for use only in models with the following system boards: 535802-001, 535803-001, 574505-001, 574506-001
574505-001	System board for use in computers without a WWAN module, with UMA graphics subsystem memory, and with an AMD ZM, RM, QL, or SI processor
574506-001	System board for use in computers without a WWAN module, with discrete graphics subsystem memory, and with an AMD ZM, RM, QL, or SI processor
576251-001	AMD Sempron M100 processor, 2.0-GHz with 512-GB L2 cache (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)
576254-001	AMD Turion II Ultra Dual-Core Mobile M600 processor, 2.4-GHz with 2-MB L2 cache (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)
576252-001	AMD Athlon II Dual-Core M320 processor, 2.1-GHz with 1-MB L2 cache (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)
576253-001	AMD Turion II Dual-Core Mobile M500 processor, 2.2-GHz with 1-MB L2 cache (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)
578024-001	AMD Athlon II Dual-Core M300 processor, 2.0-GHz with 1-MB L2 cache (for use only in Japan, South Korea, Taiwan, and Thailand) (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)
583055-001	AMD Turion II Dual-Core Mobile M520 processor, 2.3-GHz with 1-MB L2 cache (for use only with the following system boards: 585218-001, 585219-001, 585220-001, 585221-001)
585218-001	System board for use in computers with a WWAN module, UMA graphics subsystem memory, and AMD Mxxx processors
585219-001	System board for use in computers without a WWAN module, with UMA graphics subsystem memory, and AMD Mxxx processors
585220-001	System board for use in computers with a WWAN module, discrete graphics subsystem memory, and AMD Mxxx processors
585221-001	System board for use in computers without a WWAN module, with discrete graphics subsystem memory, and AMD Mxxx processors

## Spare part deletions - system board

The system board described in the table below should be deleted from the Computer Major Components and Sequential Part Number Listing tables in chapter 3 and from the system board replacement procedure section in chapter 4.

Description	Spare part number
System board for use in computers with a WWAN module and UMA graphics subsystem memory	535802-001

## Spare part deletions - processors

The processor described in the table below should be deleted from the Computer Major Components and Sequential Part Number Listing tables in chapter 3 and from the processor replacement procedure section in chapter 4.

Description	Spare part number
AMD Athlon QL-64, 2.1-GHz processor with 1-GB L2 cache	506053-001

## Spare part deletions - 14.0-inch display assembly

The display assembly described in the table below should be deleted from the Computer Major Components and Sequential Part Number Listing tables in chapter 3 and from the 14.0-inch display assembly replacement procedure section in chapter 4.

Description	Spare part number
14.0-in HD BrightView display assembly for use in red computers equipped with a webcam and WWAN module	578367-001

## Spare part deletions - Sequential Part Number Listing

The spare parts described in the table below should be deleted from the Sequential Part Number Listing table in chapter 3.

Spare part number	Description
506053-001	AMD Athlon QL-64, 2.1-GHz processor with 1-GB L2 cache
535802-001	System board for use in computers with a WWAN module and UMA graphics subsystem memory
578367-001	14.0-in HD BrightView display assembly for use in red computers equipped with a webcam and WWAN module