Illustrated Parts & Service Map

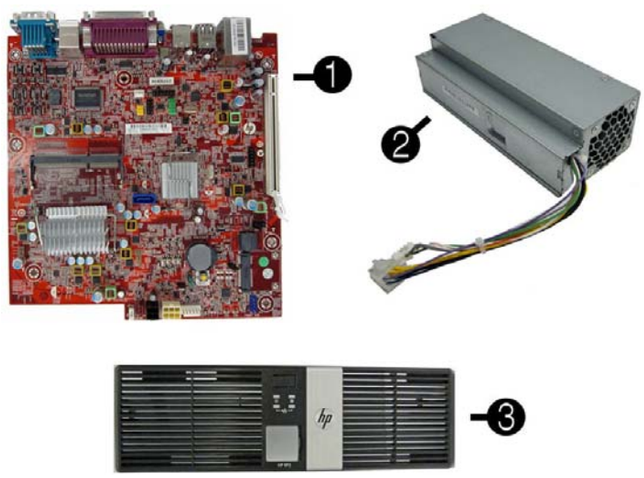
HP RP3 Retail System, Model 3100

Document Number 719219-001. 1st Edition December 2012.

Key Specifications

Processor Type	Intel® Celeron® Processor 807UE with Intel HD Graphics
RAM Type	Non-ECC DDR3 PC3-10600 (1333 MHz)
Maximum RAM	8 GB
Ports	• Three (3) port 12 Volt USB + PWR Card (optional) • Two (2) port Power Configurable RS232 Serial Card COM 3 & 4 (optional) • Power Configurable Serial Ports (COM 1, 2, 3 and 4) using the HP BIOS
Chipset	Intel HM65 Express
Graphics Adapter	Integrated Intel HD graphics
I/O Interfaces	5 USB 2.0; 1 standard + 3 optional USB+PWR 12; 1 USB+PWR 24V (Printer); 1 RJ-12 Cash Drawer (dual drawers via optional Y cable); 2 standard + 2 optional RS-232 Powered (+5V/+12V, F-10 Setup Configurable); 1 Parallel2 PS/2 for keyboard and mouse; 1 VGA; 1 DisplayPort v1.1a; 1 RJ-45 10/100/1000 LAN; 1 Audio line-in; 1 Audio line-out
Operating Systems	• Windows 7 Professional 32/64 • Windows Embedded POSReady 2009 • FreeDOS

Spare Parts



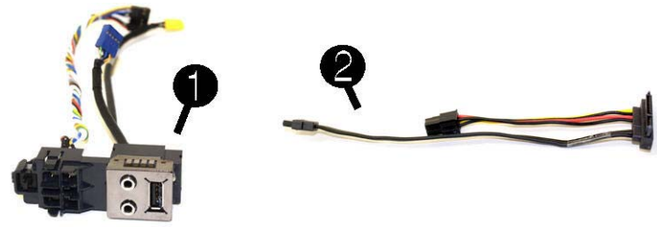
System Unit

1	System board (includes Intel Celeron 807UE processor; includes thermal material)	682426-001
2	Power supply, 115W	682435-001
3	Front bezel	682430-001
*	Access panel	682429-001

** Not shown*

Mass Storage Devices (not illustrated)

320 GB, 7200 rpm SATA hard drive	639135-001
256 GB Solid State Drive (SSD)	661842-001
128 GB Solid State Drive (SSD)	665961-001
32 GB Solid State Drive (SSD), MLC	686616-001



Cables

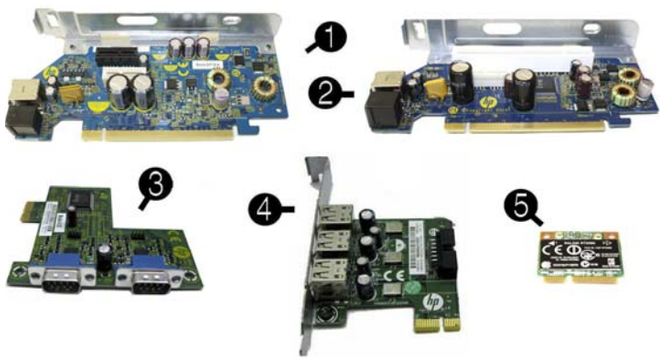
1	Front I/O cable and power switch assembly	682432-001
2	Hard drive power/data cable assembly	682433-001
*	Adapter, DisplayPort to VGA	632484-001
*	Adapter, DisplayPort to DVI	662723-001
*	Adapter, DisplayPort to HDMI	617450-001
*	DisplayPort cable	487562-001

**Not shown*

Keyboards (not illustrated)

PS/2 **USB** **Washable**		**674312-xx1**** **674313-xx1** **613125-xx1**	
Arabic	-171	LA Spanish	-161
F Arabic	-DE1	Norwegian	-091
BHCSY	-B41	People's Republic of China*	-AA1
Belgian	-181	Portuguese	-131
Brazilian Portuguese	-201	Romanian	-271
Czech	-221	Russian	-251
Danish	-081	Slovakian	-231
French	-051	South Korea*	-KD1
French Canadian	-121	Spanish	-071
German	-041	Swedish	-101
Greek	-151	Swiss	-111
Hebrew	-BB1	Taiwanese*	-AB1
Hungarian	-211	Thai*	-281
India*	-D61	Turkish	-141
International English	-L31	U.S.	-001
Italian	-061	U.K.	-031
Japanese*	-291		

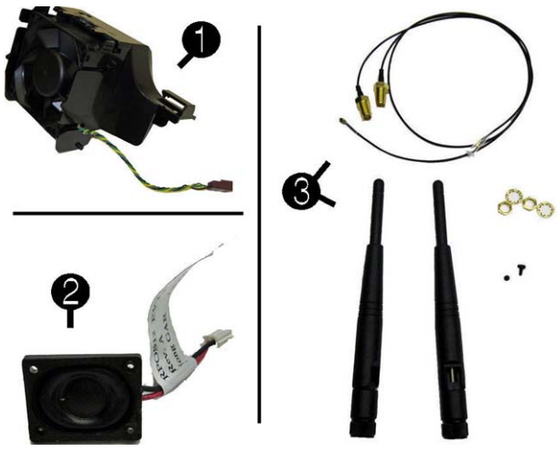
not for 674312-xx1* *-181 for 674312-xx1 only*



System Board, Memory, Expansion Boards

1	PCIe to PCIe riser	711791-001
2	PCIe to PCI riser	711790-001
3	2-port powered serial card	638947-001
4	Powered USB card, 12V	711788-001
5	Ralink RT5390R 802.11bgn 1x1 Wi-Fi Adapter (WLAN module)	701396-001
*	Atheros AR9462 802.11b/g/n Wi-Fi Adapter (WLAN module)	701398-001
Memory modules (PC3-12800, CL11)		
*	2 GB	689372-001
*	4 GB	689373-001
*	8 GB	689374-001

** Not shown*



Miscellaneous Parts

1	Fan assembly	682431-001
2	Speaker	647447-001
3	Antenna kit for use with WLAN modules	711789-001
*	Hard drive grommet	594220-001
*	Rubber feet	583654-001
*	Cover, powered serial port	353054-001
*	Mouse, PS2, optical	609250-001
*	Mouse, washable	619580-001
*	Mouse, optical, black	537749-001
*	Mouse, laser, black	570580-001

**Not shown*

Password Security

Establishing a Setup or Power-On password:

1. Turn on or restart the computer.
2. As soon as the computer turns on, press the **Esc** key while “Press the ESC key for Startup Menu” message is displayed at the bottom of the screen.
3. Press the **F10** key to enter Computer Setup.
4. To establish Setup password, select **Security > Setup Password** and follow the instructions.
   - or -
   To establish a Power-On password, select **Security > Power-On Password** and follow the instructions on the screen
5. Before exiting, click **File > Save Changes and Exit**.

Resetting a Setup or Power-On password:

1. Turn off the computer and disconnect the power cord from the power outlet.
2. Remove the access panel.
3. On the system board, locate the header labeled PSWD.
4. Remove the jumper from the header.
5. Replace the jumper.
6. Replace the chassis access panel and reconnect the power cord.
7. Turn on the computer and allow it to start.

Clearing CMOS

1. Turn off the computer and disconnect the power cord from the power outlet.
2. Remove the access panel.
3. On the system board, press and hold the CMOS button for 5 seconds.
4. Replace the chassis access panel and reconnect the power cord.
5. Turn on the computer and allow it to start.

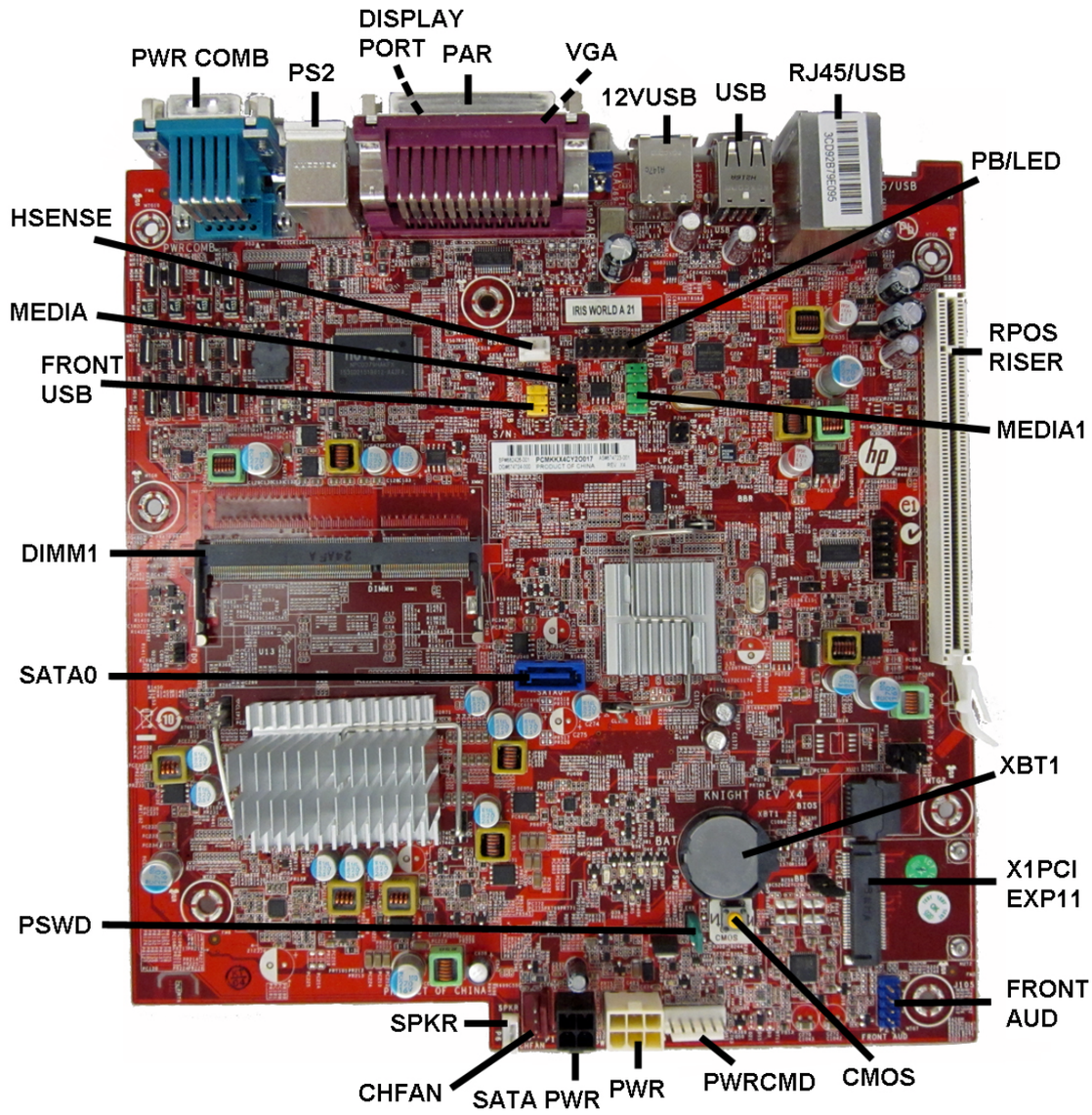
Diagnostic LEDs

LED	Color	LED Activity	State/Message
Power	Green	On	Computer on
Power	Green	1 blink every 2 seconds.	Normal Suspend Mode.
Power	Red	1 blink every second followed by a 2 second pause.	CPU thermal shutdown.
Power	Red	3 blinks, 1 blink every second followed by a 2 second pause.	Processor not installed.
Power	Red	4 blinks, 1 blink every second followed by a 2 second pause.	Power failure (power supply overload).
Power	Red	5 blinks, 1 blink every second followed by a 2 second pause.	Pre-video memory error.
Power	Red	6 blinks, 1 blink every second followed by a 2 second pause.	Pre-video graphics error.
Power	Red	7 blinks, 1 blink every second followed by a 2 second pause.	System board failure (ROM).
Power	Red	8 blinks, 1 blink every second followed by a 2 second pause.	Invalid ROM based on Checksum.
Power	Red	9 blinks, 1 blink every second followed by a 2 second pause.	System powers on but is unable to boot.
Power	Red	10 blinks, 1 blink every second followed by a 2 second pause.	Bad option card.
Power	Red	12 blinks, 1 blink every second followed by a 2 second pause. Beeps stop after a third iteration and computer reboots.	Health timer expired.
none	none	System does not power on and LEDs are not flashing.	System unable to power on.

Computer Setup Menu

Heading	Option/Description
File	System Information - Lists the following main system specifications: • Product name • SKU number (some models) • Processor type/speed/stepping • Cache size (L1/L2/L3) • Installed memory size/speed/chan • Integrated MAC Address • System BIOS • Chassis serial number • Asset tracking number • ME firmware version • ME Management mode
	About - Displays copyright notice.
	Set Time and Date - Allows you to set system time and date.
	Flash System ROM - Allows you to select a drive containing a new BIOS.
	Replicated Setup - Save to Rmvble Media and Restore from Rmvble Media
	Default Setup: Save Current Settings as Default, Restore Factory Settings as Default
	Apply Defaults and Exit - Applies the selected default settings and clears any established passwords.
	Ignore Changes and Exit - Exits Computer setup without saving changes.
	Save Changes and Exit - Saves changes to system configuration or default settings and exits Computer Setup.
Storage	Device Configuration - Lists all installed BIOS-controlled storage devices. The following options are available: • CD-ROM - Let you view drive size, model, firmware version, serial number, connector color. • Hard Disk - Let you view drive size, model, firmware version, serial number, connector color, SMART. Also lets you set Translation Mode (Automatic, Bit-Shift, LBA Assisted, User, and Off). • Diskette Drive - model and firmware version. • SATA Defaults - lets you set Translation Mode (Automatic, Bit-Shift, LBA Assisted, User, and Off). • eSATA port - Allows you to set a SATA port as an eSATA port for use with an external drive. • SATA Emulation - IDE, RAID, or AHCI. • Removable Media Boot - Enables/disables ability to boot the system from removable media. • Max eSATA Speed - Allows you to choose 1.5 Gbps or 3.0 Gbps as the maximum eSATA speed.
	DPS Self-Test - Allows you to execute self-tests on ATA hard drives.
	Boot Order - Allows you to specify boot order. • Shortcut to Temporarily Override Boot Order
Security	Setup Password - Allows you to set and enable the setup (Admin) password.
	Power-On Password - Allows you to set and enable power-on password.
	Password Options - When any password exists allows you to lock legacy resources, enable/disable Setup Browse Mode, set password prompt, enable/disable network server mode, specify password requirement for warm boot, and set stringent passwords.
	Smart Cover (some models) - Allows you to lock/unlock cover lock and set status of cover removal sensor.
	Device Security - Allows you to set Device Available/Device Hidden for: embedded security devices, serial and parallel ports, system audio, network controller, and SATA ports.
	USB Security - Allows you to set Device Available/Device Hidden for front USB ports 1-4, rear USB ports 1-6, accessory USB ports 1-4.
	Slot Security - Allows you to disable any PCI or PCI Express slot.
	Network Boot - Enables/disables boot from OS (NIC models only).
	System IDs - Allows you to set Asset tag, Ownership tag, Chassis serial number or UUID, and keyboard locale setting.
	System Security (some models) - Allows you to enable/disable: • Data Execution Prevention (enable/disable) • Virtualization Technology (VTx) (enable/disable) • Virtualization Technology Directed I/O (VTd) (enable/disable) • Intel TXT (LT) (enable/disable) • Embedded Security Device Support (enable/disable) • OS management of Embedded Security Device (enable/disable) • Reset of Embedded Security Device through OS (enable/disable)
	DriveLock Security - Assign/modify master or user password for hard drives.
Power	OS Power Management - Allows you to enable/disable Runtime Power Management, Idle Power Savings, Unique Sleep State Blink Rates.
	Hardware Power Management - Allows you to enable/disable SATA bus power management and S5 maximum power savings.
	Thermal - Allows you to control minimum fan speed.
Advanced	Power-On Options - Allows you to set: • POST mode-QuickBoot, FullBoot, Clear Memory, FullBoot every x days • POST messages - Enable/disable • Press the ESC key for Startup Menu - Enable/disable • Option ROM prompt - Enable/disable • After Power Loss - Off/on/previous state • POST Delay - None, 5, 10, 15, or 20 seconds • System Recovery Boot Support - Enable/disable • Remote Wakeup Boot Source - Remote server/local hard drive • Bypass F1 Prompt on Configuration Changes - Enable/disable
	BIOS Power-On - Allows you to set the computer to turn on at a preset time.
	Onboard Devices - Allows you to set: • resources or disable Legacy devices • serial port A-D voltage settings - set to 0V, +5V, +12V
	Bus Options (some models) - Allows you to enable/disable PCI SERR# Generation and PCI VGA palette snooping.
Advanced (*continued*)	Device Options - Allows you to set: • Turbo Mode - enable/disable • Printer Mode - Bi-Directional, EPP & ECP, Output Only • Num Lock State at Power-on - off/on • Integrated Video - enable/disable • Internal Speaker - enable/disable • NIC Option ROM Download - enable/disable • Multi-Processor - enable/disable • Hyper-threading - enable/disable
	VGA Configuration - Displayed only if there are multiple PCI video adapters in the system. Allows you to specify which VGA controller will be the “boot” or primary VGA controller.
	AMT Configuration - Allows you to set: • AMT-enable/disable functions of the embedded Management Engine (ME) such as Active Management Technology (AMT). • Unconfigure AMT/ME-unconfigure any provisioned management settings for AMT. • Watchdog Timer-set amount of time for a operating system and BIOS watchdog alert to be sent if the timers are not deactivated.

System Board



System Board Connectors and Jumpers (component location may vary)

PWR COMB	Powered serial port	FRONT AUD	Front panel connector
PS/2	PS2 connectors	CMOS	CMOS reset button
X1PCIEXP1	PCIe X1 slot	PWRCMD	Power connector
DISPLAYPORT	DisplayPort connector	PWR	Main power connector
PAR	Parallel port	SATA PWR	Hard drive power connector
VGA	Monitor connector	CHFAN	Main fan connector
12VUSB	Powered USB connector	SPKR	Speaker connector
USB	USB connectors	PSWD	Password header
RJ45/USB	Network/USB connector	SATA0	Hard drive connector
PB/LED	Front I/O power button connector	DIMM1	Memory socket
RPOS RISER	Riser card connector	FRONT_USB	Front I/O USB connector
MEDIA1	USB media header	MEDIA	USB media header
XBT1	RTC battery slot	HSENSE	Hood sensor connector
X1PCIEXP11	WLAN module slot		