ACCESSORY
Power Supply Kit
PC850

UNIVERSAL WLAN-AX/BLUETOOTH KIT WITH M.2 CARD

The Shuttle XPC Accessory PC850 is an internal AC to DC switching power supply unit (PSU) meant as upgrade kit for certain Shuttle products. This power supply is guaranteed to deliver an excess of power for power-hungry processors and graphics cards. It provides a maximum output wattage of 850 Watt. Its 80 PLUS® Platinum and Energy Star V5.0 compliance helps save on energy costs as compared to previous power supply models.

COMPATIBILITY

Compatible with the following Shuttle XPCs in cube form factor:

- SH510R4 ■ SH570R6 (Plus) ■ SH570R8 ■ SW580R8
- SH310R4V2 with Serial No. SH310V20501...
- SH370R6V2 with Serial No. SH370V20801...
- SH370R6V2 Plus with Serial No. SH370V20901...
- SH370R8 with Serial No. SH370R80701...

PACKAGE CONTENTS

- Internal power supply (850 W)
- angle holder with screw
- Quick guide

AC INPUT

- Input voltage: 100 - 240 V AC (auto-adjust), 50 - 60 Hz
- Input current: max. 10.0 - 6.0 A
- Active Power Factor Correction (PFC) meet EN61000-3-2
- AC Input Connector: Cold-device plug, 3-pin with PE (IEC-60320/C14)

DC OUTPUT VOLTAGES

- Output voltage (max. output current):
+3.3V (20A), +5V (20A), +12V (70.8A), -12V (0.5A), +5Vsb (3A)
- Low ripple: 120 mV P-P for 12V and 50 mV P-P for 3.3/5V
- Rise time: less than 20ms
- Hold-up Time: 17 ms minimum at nominal input voltage for 75% maximum load
- Power Good Signal: Power on delay time 100 ~ 500ms, off delay 1ms minimum (TTL and CMOS compatible)
- Leakage Current: Less than 3.5mA at 264Vac, 63Hz

MAXIMUM OUTPUT POWER

- +3.3V and +5V combined power: max. 100 W
- Total power output: max. 850 W

DC OUTPUT CONNECTORS

- 1x main mainboard connector (20-pin ATX)
- 1x mainboard AUX connector (4-pin ATX 12V)
- 4x Serial ATA power connectors (15-pin SATA)
- 2x PCIe power with 6+2 pins (for graphics card)
- 2x 4-pin WST connector with 12V (reserved)
- 1x PMBus data cable, 5-pin (reserved)

COOLING FANS

40 mm ball-bearing fan at output side for better acoustic quality

LED Indicator

LED off/blinks/green/red: Off/Standby/Ok/Failure

DIMENSIONS

220 x 81.5 x 40.5 mm (LWH), Flex ATX form factor

HIGH RELIABILITY

- MTBF: 100,000 hours at 25 °C, max. output load
- Short circuit protection on all outputs
- Over Current Protection (OCP)
- Over Temperature Protection (OTP)
- Over Voltage Protection (OVP)
- Dielectric Withstand: Primary frame ground 1800V AC for 2 second

EFFICIENCY

Typical > 92% Efficiency, meets 80 Plus Platinum criteria
90% / 92% / 89% at 20% / 50% / 100% PSU load

ENVIRONMENTAL CRITERIA

- Operating: 0 to 50 °C, max. 90% RH non-condensing
- Storage: -20 to 80 °C, max. 90% RH non-condensing
- Operating altitude: max. 5,000 meters above sealevel

COMLIANCE AND LOGOS

CE, TUV, FCC, UL/cUL, CCC, CB 62368-1 & CB 60950-1
Energy Star 5.0 & ErP, 80 PLUS® Platinum

PSU MANUFACTURER

Fortron Source Technology (FSP Group),
Product ID of manufacturer: FSP850-50FGPH3
(with modified cable lengths and number of connectors)

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Quick Installation Guide

Caution: Do not attempt to open or service this device. Changes or modifications done to this product not approved by the manufacturer will void warranty and violate CE approval. In case you haven't got necessary technical knowledge how to install the device, please consult an expert or have a specialist company install it for you.

Removing the old power supply unit

Unplug the computer from the mains.
Unscrew 3 thumbscrews of the chassis cover (see photo).

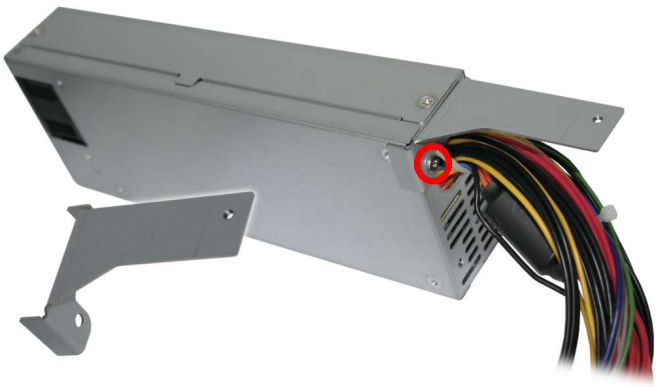
Slide the cover backwards and upwards.

Unscrew the screws that are used to secure the power supply unit to the the computer chassis.

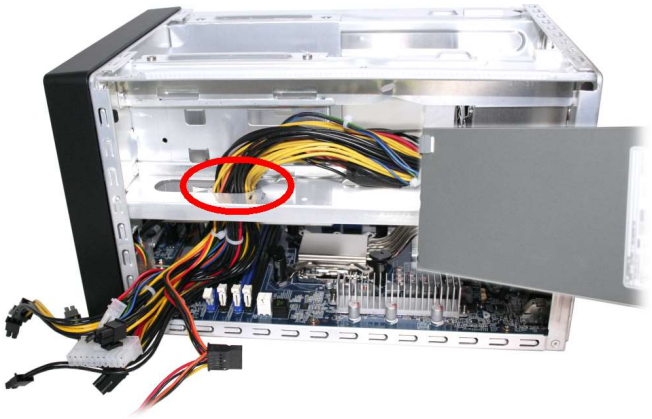
Disconnect all connections between the old power supply unit and the various components such as the mainboard, the hard drive and graphics card, etc.
Then carefully remove the power supply unit.

Installing the new power supply unit

Pick up the new PC850 power supply and install the supplied angle holder with a screw. Use the screw from the angle holder of the previous power supply unit for this purpose.



Push the cables of the power supply through the internal housing opening as shown in the picture.



Fasten the power supply unit to the rear panel with three screws and to the mounting bracket with the supplied screw (see arrow).

Connect the two ATX connectors (20-pin and 4-pin) to the motherboard and proceed with the installation as described in the Shuttle XPC installation guide.