User's Guide

for

Shuttle XPC SB61G2 3 in 1

Shuttle®
User's Guide for SB61G2 Mirror Accessories Product
Manual Version 1.0

FCC Regulation Information

The equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

■ Reorient or relocate the receiving antenna.
■ Increase the separation between the equipment and receiver.
■ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
■ Consult the dealer or an experienced radio/TV technician for help.

The equipment is for home or office use.

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Table of Contents

1. INTRODUCTION

The accessories product aims to let your XPC quickly expending functionality and seamlessly communicates with different devices of multiple formats.

Card Reader is input drive, design for easy access and stable transport between PC's and flash memory device. It provides you the easiest and fastest way to access your storage cards. It allows you to use the device easier and quickly than ever before, and with a faster access speed. The card reader is an easy-to-use digital device companion product, which can transfer data to your desktop PC rapidly, and therefore it can save your valuable time and boost the speed when acquiring more data in a few seconds.

The DVD-ROM drive is mass optical storage access device. This device shall be a random access, read only storage with capable of retrieving data from standard removable CD/DVD disc data and high capacity disc media. The benefit of this device is quickly access and playing multi media from standard format, for entertainment use.

Wireless LAN is local area networking without wires, which use radio frequencies to transmit and received data. You can operate the network in two types of modes, either an independent mode or an infrastructure mode. With this module, surfing the Internet couldn't be any easier.

To obtain the complete benefits your accessories USB module provides, please read this manual carefully before using it. This module is applicable for: SB61G2 Mirror

1.1 Features

Card Reader :

✽ Hi-speed USB interface access to storage card reaches 480 Mb/ sec.

✽ Support mass storage class drive

✽ Support Hot-Swapping

✽ Allow data exchange in defferent sockets.

DVD ROM :

✽ 16X read speed

✽ ATAPI interface

✽ Sustained transfer rate of up to 22160KB/S in DVD - ROM Media

✽ Sustained transfer rate of up to 7200KB/S in CD - ROM Media

✽ MPC level 2/3 compatible

✽ Analog Line out

✽ Digital Audio through ATAPI Interface

✽ Energy conservation modes

✽ Horizontal and vertical operation

Wireless LAN USB Module :

✽ Exchange data over the air, which minimizes the need for wired connections

✽ Possess the portability and mobility of wireless networking connectivity wherever you are

✽ Operate Ad-Hoc or Infrastructure modes

✽ Utilize up to 128-bit WEP encryption

✽ Enjoy high-speed data transfer rate up to 11 Mbps

✽ Employ automatic data rate switching which offers maximum reliability, throughput and connectivity

✽ Monitor and configure the network via the supplied friendly-interfaced application ~ **Shuttle Wireless LAN Tool**

1.2 Package Contents

Before starting installation, please make sure the package includes the following list items :

Card Reader:
- ✔ Internal USB Cable

DVD ROM:
- ✔ IDE Cable
- ✔ Audio Cable
- ✔ Software CD

Wireless LAN Module:
- ✔ Antenna

If any of the items listed above are missing or damaged, please contact your distributor.

1.3 System Requirements

To properly operate your accessories module, your XPC must meet the following minimum requirements:

- ✔ 400 MHz processor or higher
- ✔ 64 MB RAM or above
- ✔ HDD 1Gbytes free space(exclude OS)
- ✔ Microsoft Windows 2000 or Windows XP; Linux Kernal code 2.4.0 or later

2. INSTALLATION

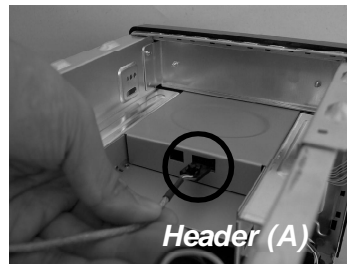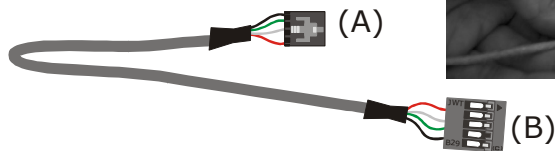## 2.1 Step by Step installation for Card Reader, DVD ROM, and Wireless LAN Module

STEP1
Power off your computer and its peripherals. Then disconnect all cables from its front / back panel and remove the system case.
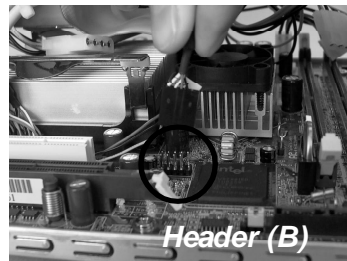

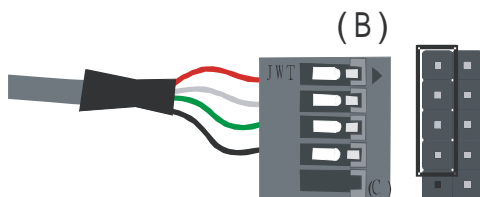### STEP2   Card Reader - connect cable
The cable header (A) to connect at rear of the card reader.

(A)

Header (A)

(B)

STEP3
Link the cable connector (B) on M/B of 4 pin USB header.

(B)

Header (B)

> **Note :** Please make sure the cable connector (B) is connectong in-line
> to reserve 4 pin USB header.

STEP4 DVD ROM - Jumper Configuration

It is necessary to properly fix the configuration jumper on the back
panel of your DVD-ROM drive prior to installation. Refer to the
instructions:

Fix the jumper on "Slave"   Setup your Hard Drive as
master to the primary IDE port; DVD ROM to the secondary of
primary IDE port.

**The picture below illustrates the back panel of your DVD-ROM
drive. You may refer to information on the top of each drive
to learn the audio, jumper, IDE interface, and power settings.**
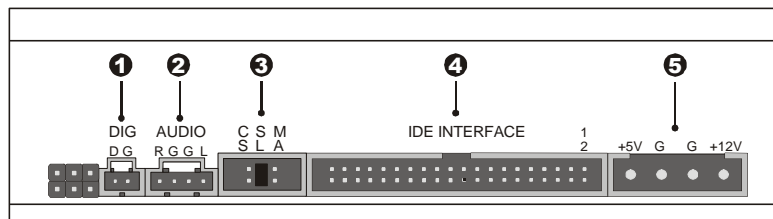
❶ Digital Audio Output Connector

❷ Analog Audio Output Connector

❸ Configuration Jumper (on the "Slave" position)

❹ IDE Interface Connector

❺ Power Connector

STEP5

Connect the other end of the IDE cable
to the IDE interface connector (Please refer to
the previous diagram) for drive's back panel details.
Noted that the red edge of the IDE cable
refers to the pin 1 position on the IDE 2 interface
connector and primary/secondary IDE port.)
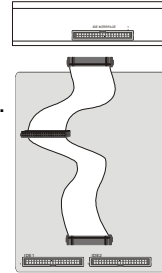
> **Note :** For more details on IDE port connect. Please refer to your XPC
> installation guide.

STEP6

Connect one end of the audio cable to the
analog audio output connector on the drive's
back panel; connect the other end of it to
the audio input port (CD_IN) on the
mainboard.
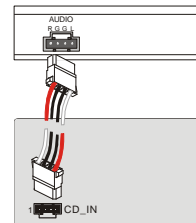
STEP7

Connect the system's power supply cable
to the unit power connector located at the
back of your drive.
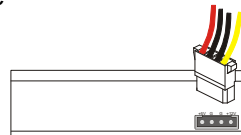
### STEP8

Replace the system case and reconnect
all the cables.

Note : In case of an emergency, such as power malfunction, follow the remedy below to remove a disc manually from the tray of your DVD-ROM drive.

1. Power off your computer;
2. Get a big paper clip and make it straight;
3. Insert the paper clip straight into the emergency eject hole, which is above the play button on the DVD-ROM' s front panel;
4. And you can remove the disc manually from the tray.

Do not use any accustomed tools like screwdrivers to force the tray out for removing the disc manually since such tools may do harm to your disc or DVD-ROM drive.

Headphone Jack

Volume Knob

Play Button

Eject Button

Emergency Eject Hole
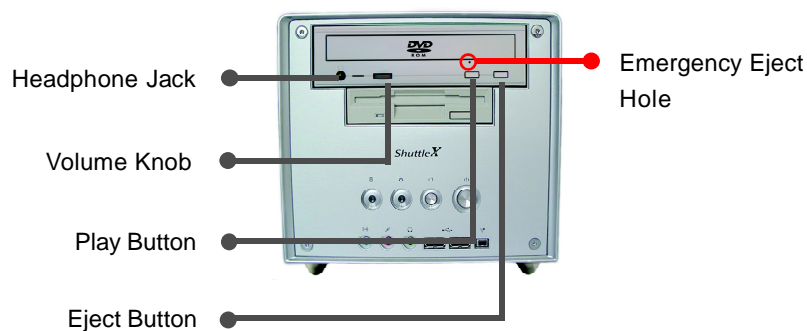
Important:
For more Information about technical questions please visit the following web sites for more detail:
1. Shuttle Inc.
   http://www.shuttle.com
2. SFF(XPC) Accessories & Other's Q&A
   http://www.shuttle.com/support/faq/others/other.asp

STEP9   Wireless LAN - Antenna installation
Connecting the antenna with header and turning clockwise until secure it properly. Adjust the antenna to the vertical position for good reception.
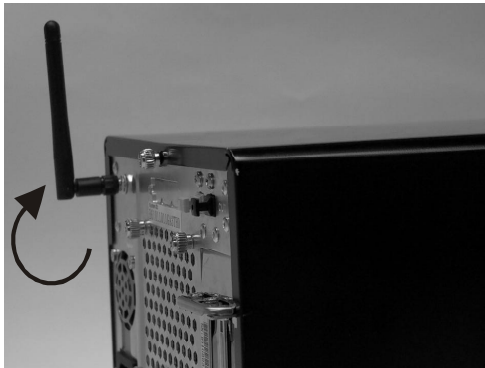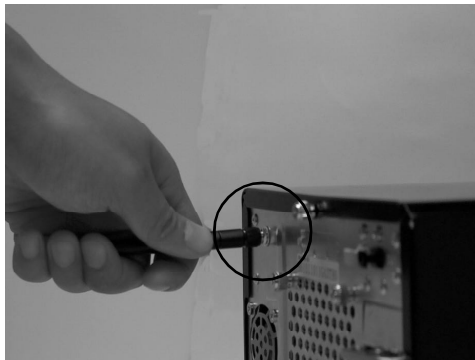
2.2 Software Installation

2.2.1 Installation Precaution

Before the installation, please ensure the operation system is installed successfully and the 802.11b WLAN USB Module has been setup in your XPC. To detect the existence of the Module, please follow the procedures below.

1. Click **Start** on the taskbar and choose **Control Panel** from the **Settings** menu.

2. Select **System** to open the **System Properties** dialog box, and then under the **Hardware** tab, click the **Device Manager** button to open the **Device Manager** dialog box.

3. Double-click **Other devices** from the list to display the item - **IEEE 802.11b PRISM3 USB**, and this presents the existence of your 802.11b WLAN USB Module.
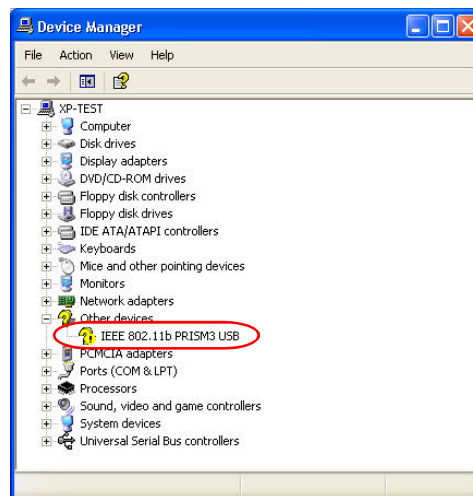


The Device Manager Dialog Box

Now you may proceed with the next topic to start installing the drivers for the module.

Note : If you don't find the module, please turn off the XPC and replug the module, or contact your dealer immediately.

2.2.2 Installing the WLAN Driver

a) Insert the attached CD into your CD-ROM drive, and the CD AutoRun screen should appear. If the AutoRun screen does not appear, double click on Autorun icon in My Computer to bring up Shuttle Mainboard Software Setup screen.

b) Select by using your pointing device(e.g.mouse) on the "Install Mainboard Software" bar to run into sub-menu.
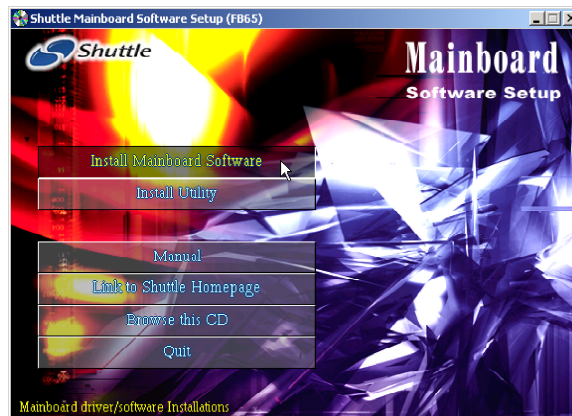
c) Select by using your pointing device (e.g.mouse) on the "Install PN11 (Wireless LAN) driver" bar to install Shuttle Wireless LAN.

c) Click **Next** in the **Shuttle Wireless LAN** window to proceed. The system will start to copy the drivers found.
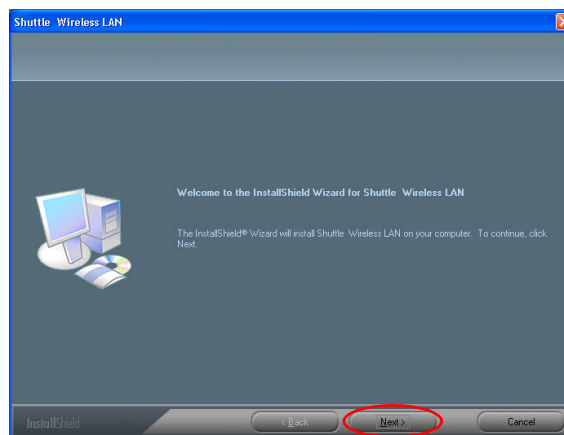
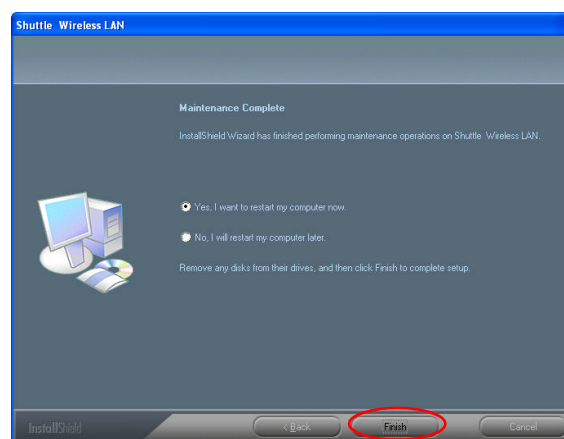

d) On the **Maintenance Complete** screen, choose **Yes, I want to restart my computer now**, and then click **Finish** to restart the computer.

> **Note:** Instead, if the system displays the Update WLAN Driver Failed
> message box, click OK, and then refer to the last topic - Installation
> Precaution for more details.

e) After rebooting, you shall find the **Shuttle Wireless LAN** icon appearing in the system tray. The installation is entirely finished at the moment. Double-click the icon to launch the application and open the **PRISM Wireless Settings** dialog box, in which you may freely arrange your network connection afterwards.

2.2.3 Installation Notes - Windows XP

If your current system is running Windows XP, you shall find that two tabs are contained in the **PRISM Wireless Settings** dialog box after you've followed the instructions above and successfully installed the drivers. However, normally, the dialog box should consist of four tabs. This is because Windows XP has its built-in configuration tools - **Windows XP Zero Configuration** to assist you in networking activities. It is recommended to utilize the attached **Shuttle Wireless LAN** to enjoy the maximum benefits it can bring. Thus, to employ your **Shuttle Wireless LAN** under Windows XP, please proceed to the next step to change the default settings of **Windows Zero Configuration to Shuttle Wireless LAN**.
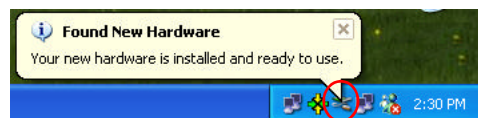
The Shuttle Wireless LAN Tray Icon

The PRISM Wireless Settings Dialog Box

13
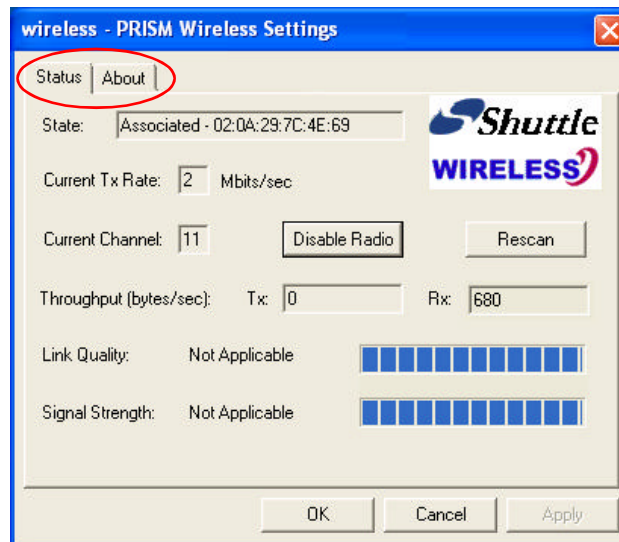
a) Right-click the **Network Connections** icon on the task bar to open the **Wireless Network Connection Status** dialog box, then select **Properties**.
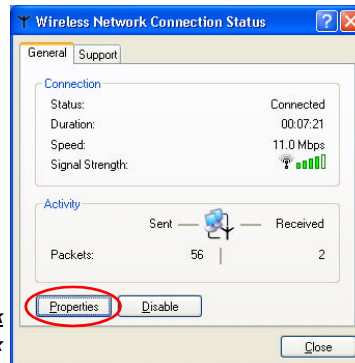
b) Choose the **Wireless Networks** tab in the **Wireless Network Connection Properties** dialog box, and remove the tick from the **Use Windows to configure my wireless network settings** checkbox.

c) Click **OK**. Now, you have successfully removed the **Windows Zero Configuration**.
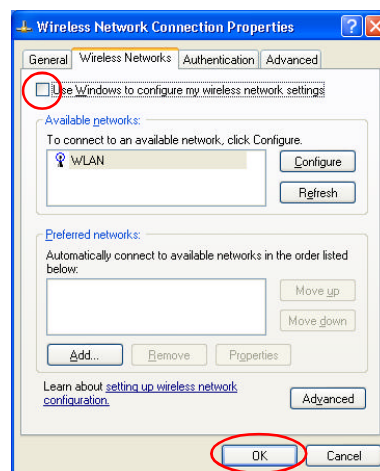
The <u>Wireless Network ConnectionProperties</u> Dialog Box

To monitor and configure the network via **Shuttle Wireless LAN**, double-click its tray icon, and you shall find four tabs contained in the popped up **PRISM Wireless Settings** dialog box this time.

2.2.4 Verifying a Successful Installation

To confirm that your 802.11b Wireless LAN USB Module is properly installed, please follow the procedures below.

1. Right-click the **My Computer** desktop icon and choose **Properties** from the opened menu.

2. In the **System Properties** dialog box, choose **Device Manager** if you are under Windows 98 or Me. If you are operating Windows 2000 or XP, click the **Hardware** tab, and then choose the **Device Manager** button.

3. In the opened window, expand **Network adapters** to find the USB Module - **Wireless LAN PRISM3 IEEE802.11b WM168 USB Module**. Right-click on the item and choose **Properties**.

4. From the opened dialog box, on the **General** tab, find the descriptions under the **Device Status** panel to learn if the module is working properly. However, if there's an error message shown, right-click the USB Adapter item and select **Uninstall** from the opened menu; (red or yellow icon is attached beside, in the **Device Manager** dialog box). Then restart your system and go through the installation procedures again.

The following picture indicates a successful installation of the 802.11b Wireless LAN USB Module.
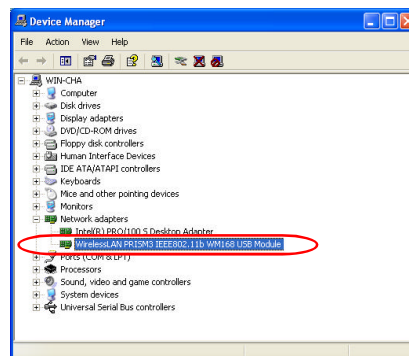
The <u>Device Manager</u> Dialog Box

Note : For more details about software configuration please visit
http://www.shuttle.com

2.2.5 Installation Notes - Windows 98 / ME Card Reader Driver

a) After successfully installed previous driver (PN11- Wireless LAN Driver), back to the Shuttle Mainboard Software Setup screen

b) Select by using your pointing device (eg. Mouse) on the "Install Mainboard Software" bar to run sub-menu.
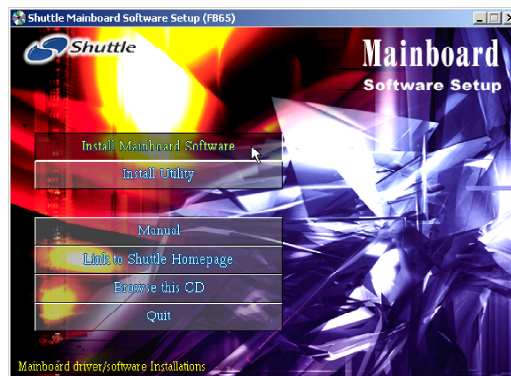
> **Note**: For Microsoft Windows 98/ME are mandatory to install USB driver before use USB interface card reader.

c) Select by using your pointing device (eg. Mouse) on the "Install PC12 (Card Reader) Driver" bar to install Shuttle Card Reader.

d) Follow the Installshield Wizard instruction to complete install USB 2.0 card reader driver.

APPENDIX I : CARD READER SPECIFICATION

The Shuttle Card Reader Characterize USB 2.0 interface, with 4 sockets
The specification of device are describe below:

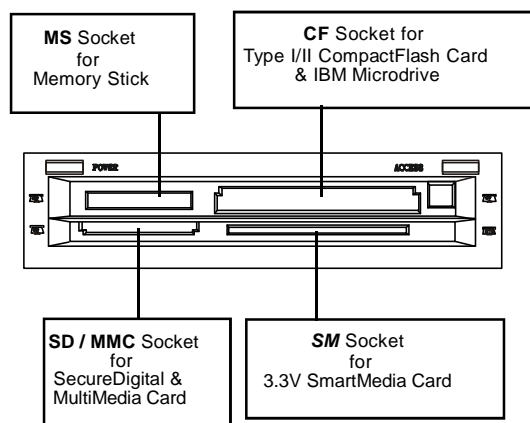| Specification	
Function	8-512 MB Secure Digital Card (SD) 8-128 MB MultiMedia Card (MMC) 4-128 MB Memory Stick (or MagicGate) (MS) 256MB-1GB Memory Stick pro (MS Pro) 4-128 MB 3.3V SmartMedia Card (SM) 4-512 MB Type I/II ComactFlash Card (CF) 340MB/512MB/1GB IBM Microdrive
Standards Compliant	USB specifications Rev. 2.0 (High-Speed) SD card system specification Rev. 1.0 MultiMedia Card system specification Rev. 3.3 Memory Stick Pro Standard Specification ver. 1.00 SmartMedia standard 2000 CompactFlash Specification Rev. 1.4
Socket	1X SD/MMC socket 1X MS socket 1X 3.3V SM socket 1X Type I/II CF socket
Interface	Internal USB 2.0 (Hi-Speed) device
Power Supply	DC+5.0V from USB port directly
Data transfer rate	480Mb/sec(MAX)
Environment	temperature: operating temperature 0^0C-70^0C storage temperature -40^0C -70^0C relative humidity: operating RH 50% (max. without condensing) storage RH 95% (Max. without condensing)
Mean Time between Failtures	>12,000 insertion cycles

MS Socket
for
Memory Stick

CF Socket for
Type I/II CompactFlash Card
& IBM Microdrive

SD / MMC Socket
for
SecureDigital &
MultiMedia Card

SM Socket
for
3.3V SmartMedia Card

APPENDIX II : DVD-ROM SPECIFICATION

The Shuttle DVD-ROM characterizes 16x read speed. The specifications of device are described below:

Product Name		DVD-ROM Player
Disc Formats Supported		DVD-5/9/10/18, DVD+/-R, DVD+/-RW, CD-ROM Mode1/2, CD-DA, CD-XA/CD-I Mode 2 (Form 1/2), Video CD, CD-Extra/ Plus, UDF, I-Trax, Photo CD (Single/Multi Session), CD-R, CD-RW, CD-Text, SVCD
Access Time/Buffer Memory		120 ms (random, typ.)/512 KB
MTBF		25,000 POH (25% duty cycle at room temperature)
System Minimum Requirements	CPU	400 MHz processor or higher
	System Memory	64 MB at least
	Hard Drive Free Space	1 Gbytes for DVD-ROM
	OS	MS-DOS, Win98/ME/2000/XP
EMI/Safety/Others		CE, FCC, BSMI, CSA, C-Tick,UL, CUL, TUV, CB/VDE, WHQL, FDA
Temperature		0 ~ 50 °C (operating)/-20 ~ 60 °C (storage)
Interface Type/Mounting Method		E-IDE, ATAPI/Horizontal, Vertical
Operating Voltage		5V DC+-5%/12V DC+-10%
Front Panel		Headphone Jack, Volume Knob, Emergency Eject Hole, Play Button, and Eject Button
Back Panel		Digital and Analog Audio Output Connectors, Configuration Jumper, IDE Interface Connector, and Power Connector
Dimension/Weight		149 (W) x 43 (H) x 196 (D) mm/1.0 kg +-5% (Body Only)

APPENDIX III : WIRELESS LAN SPECIFICATION

The Shuttle Wireless LAN characterices IEEE802.11b. standard with USB 1.1 interface.The specification of module are describe below:

Product Name	802.11b 11Mbps WLAN USB Module
Host Interface	Std.USB 1.1 I/F
Dimensions	25 (W) x 60 (L) x 4.3 (H) mm
Weight	7.5g
Frequency Band	2.400~2.4835GHz (subject to local regulations)
Number of Channel	11 channels (US, Canada); 13 channels (ETSI); 14 channels (Japan)
Operating Voltage	5V +/- 5%
Current Consumption	Tx: 300mA / Rx: 285mA / Standby: 38mA / Sleep: < 1mA
Spreading	DSSS (Direct Sequence Spread Spectrum)
Data Rate	11Mbps, 5.5Mbps, 2Mbps, 1Mbps
Transmit Power	Typ. 15 dBm @ Nominal Temperature Range
Receive Sensitivity	11 Mbps @ -82 dBm, Typical
Modulation	11Mbps and 5.5Mbps CCK; 2Mbps: DQPSK; 1Mbps: DBPSK;
Security	64/128 bit WEP Encryption
Antenna	Two GSC Type RF Connector
LED Indicator	Defined By I/F Pin No.5
Supplied Driver	Windows 98SE/2K/ME/XP
Standards	IEEE 802.11b Wi-Fi compliant
Media Access Protocol	CSMA/CA with ACK
Warranty	1 year
Temperature Range	0 ~ 65°C (Operating), -20 ~ 70°C (Storage)
Humidity	Max. 95% Non-condensing
Operating Range	Open Spance: 100m - 300m; Indoor: 40m - 100m The transmission speed varies in the surrounding environment.
Roaming	Full mobility and seamless roaming from cell to cell and across access points
Network Protocol	TCP/IP, IPX, NetBEUI
Management Utility	Link Configuration for network join and diagnostics
Software Certification	WHQL
EMC certification	FCC, CE