

ECR500
ExpressCard
5-IN-1 Card Reader

User's Manual

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Overview

ECR500 ExpressCard Card Reader allows users to install and operate the flash card reader easily. It is able to support up to 480 Mbps **USB 2.0** High Speed data transferring rate with the host PC when read/write on flash memory cards. ECR500 provides accesses to the most popular five kinds of flash memory cards in the market: **Memory Stick Card**, **Memory Stick PRO Card**, **Secure Digital Card**, **Multi Media Card**, and **xD-Picture Card**.

ECR500 contains a single monolithic SOC (System-On-Chip) integrated with an enhanced 8051 MCU core, internal program/data memory banks and a variety of flash peripheral cores on it.



Figure1: Front Panel

System Requirements

- ◆ Notebook computer with one available ExpressCard slot.
- ◆ ExpressCard compliant Card Services and Socket Services.

Features

- ◆ Compliant with USB Mass Storage Class Bulk only Transport Specification Revision 1.0
- ◆ Compliant with USB Specification Revision 2.0
- ◆ HS (480 Mbps) and FS (12 Mbps) transfer
- ◆ File Manager with Auto Disk Drive Icon
- ◆ Error Correction Control (ECC) capability
- ◆ Support USB suspend mode (< 500 μ A)
- ◆ Supports Memory Stick-PRO 4-bit parallel transfer mode

Hardware Installation

This chapter describes how to install the ECR500 ExpressCard to your computer.

When you connect the ECR500 card to the PCI-Express Slot, the PC Card has the ability of automatic sensing and operating on either speed without manual reconfiguration.

1. Hold the ExpressCard with wide connector toward the slot and the brand label facing upward.
2. Insert the ExpressCard and push it firmly into the ExpressCard slot of your computer.
3. Check the Power Led status is on, and then you can insert the memory card into the ECR500 memory card slot.



Figure2 Power LED

Software Installation

Windows 2000/XP/2003 Installation

Windows 2000, XP and Server 2003 automatically detects and installs the correct driver for the 5-in-1 ECR500 ExpressCard. No driver installation is needed.

Setup Diagnostics

To verify if the device exists in your computer and is enabled, go to **Start → Control Panel → System → Hardware → Device Manager**. If the **USB Mass Storage Device** is found in **Universal Serial Controllers**, it means that your device is properly installed and enabled.

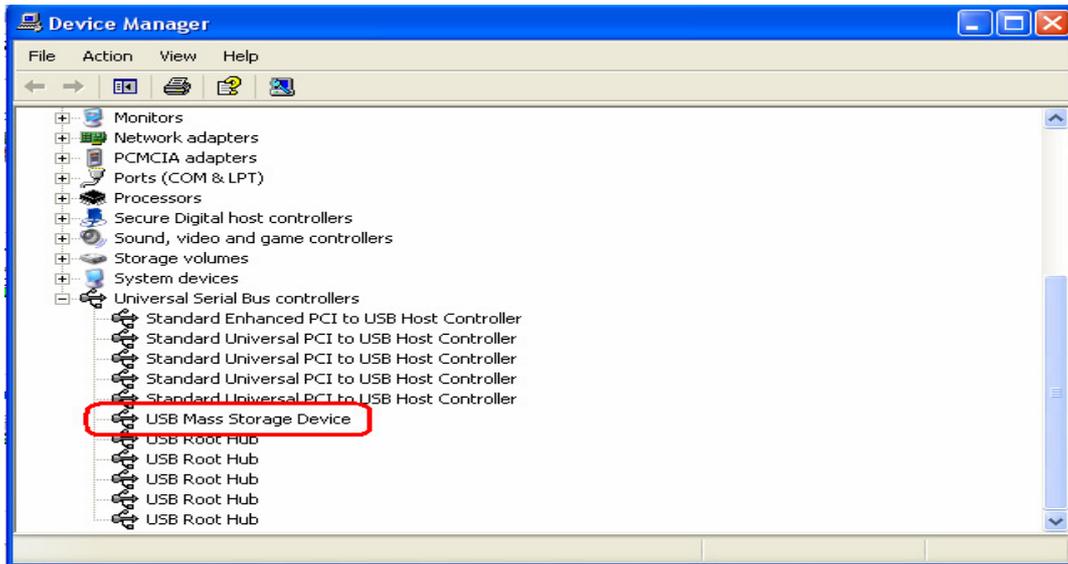


Figure3: USB Mass Storage

After you open **My Computer** or **File Explorer**, you can find a removable disk .

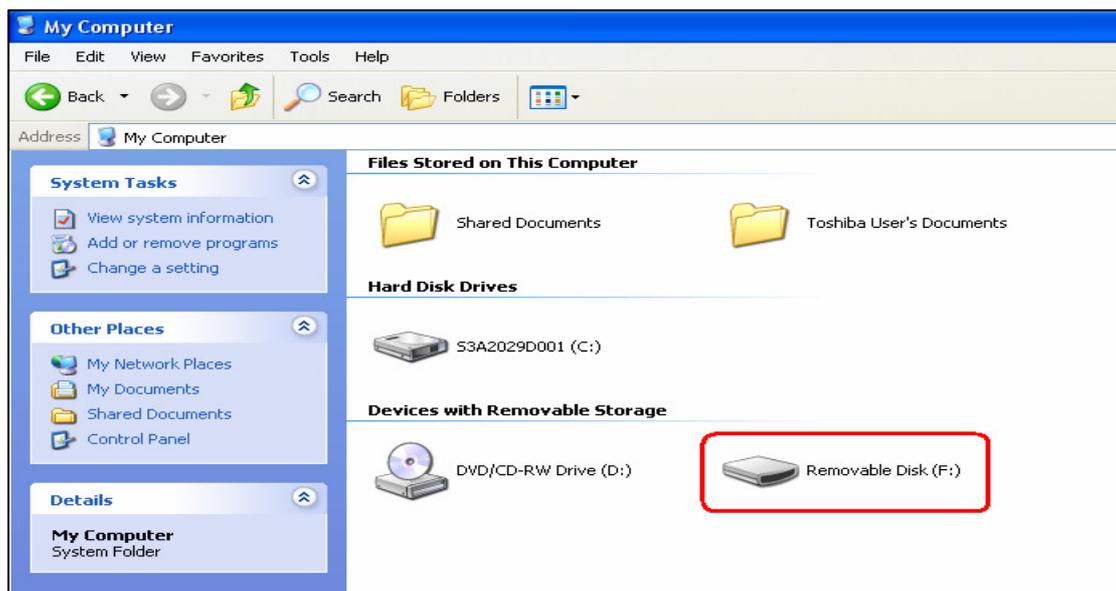


Figure4: Removable Disk

After you insert the memory card into ECR500 card slot, you can open My Computer or Explorer, and double click the removable disk to access the data within the memory card.

During you access the data from ECR500, the Access Led will brink.



Figure5: Access LED

Note:

If the **USB Mass Storage Device** want to run with HS (480 Mbps) speed, you must to check your PC already support USB 2.0. To verify it , go to **Start → Control Panel → System→ Hardware → Device Manager**. If “**Standard Enhanced PCI to USB Host Controller**” is found in **Universal Serial Controllers** ,it will support USB 2.0. Sometimes the string “Standard” will be replaced by another chip name. If not found, please perform the windows update or install the USB 2.0 driver from the PC mother board setup CD.

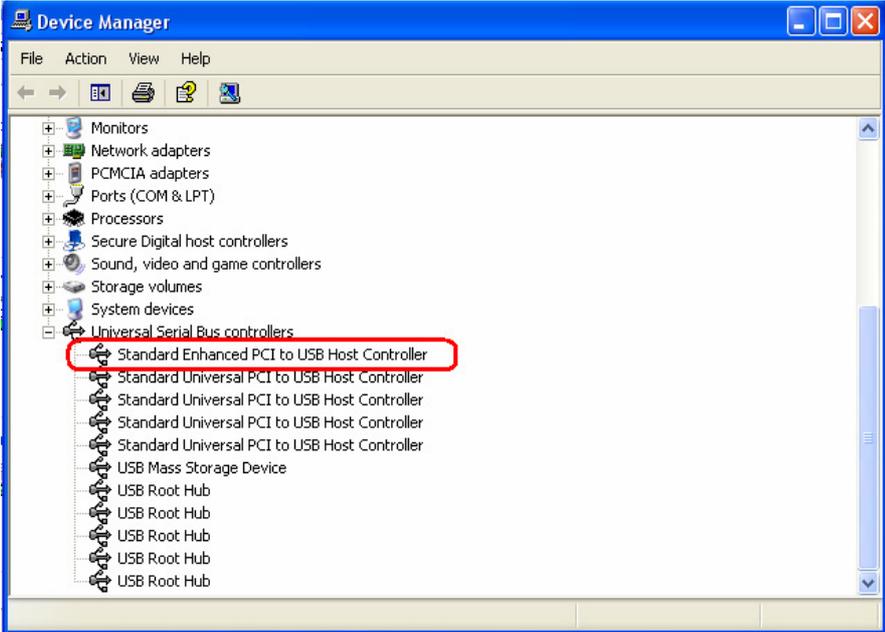


Figure6: Standard Enhanced PCI to USB Host Controller

Removing the ExpressCard

Before ejecting the ECR500 ExpressCard from the PC ExpressCard slot, to click the “**Safely Remove Hardware**” utility to stop it. “Safely Remove Hardware” icon is located in the task bar. Click the icon, and then click the “**Safely remove USB Storage Device** “ to stop the card. The reason is to avoid system crashing, data corruption or loss.



Figure7: Safely Remove

Specification

Card Supported:	<ul style="list-style-type: none"> • Memory Stick Card : 8MB ~ 128MB • Memory Stick PRO 4bit : 256MB ~ 4GB • Secure Digital Card : 8MB ~ 1GB • Multi Media Card : 8MB ~ 1GB • xD-Picture Card : 8MB ~ 1GB
USB Port	Complies with USB 2.0 High Speed standard
Data Transfer Rate	<ul style="list-style-type: none"> •Max Speed @ 480 Mbit/s for USB Bulk Transfer •Memory Stick Card : Read 1430 KB/s 、 Write 1202 KB/s •Memory Stick PRO : Read 3809 KB/s 、 Write 2938 KB/s •Secure Digital Card : Read 3141 KB/s 、 Write 1168 KB/s •Multi Media Card : Read 2206 KB/s 、 Write 2080 KB/s •xD-Picture Card ; Read 6240 KB/s 、 Write 1211 KB/s
Power Supply	DC3.3V, supplied by ExpressCard’s USB port
EMC Certification	FCC Part 15B,Class B, CE EN55022/EN55024
Operating Systems	Supports Windows 98/98SE and Linux kernel 2.4 and Red Hat Linux8.0 which all need driver’s installation, and 2000/ME/XP, Mac OS 9.x, OS10.x, which all don’t need driver’s installation.