

# User Manual

## 1. Introduction

### 1.1 Document Description

This document defines the features, performance, and manufacturing requirements for the USB 2.0 USB HUB, supporting one media standards in four card slots.

The HUB will be supplied to interface to an industry standard USB port. The HUB shall provide read and write capabilities for the following formats : Fast data/File access and transfer rate up to 480Mbp/Sec

### 1.2 Purpose

This document is a specification to be provided to customers to qualify the USB 2.0 All in One HUB

## 2. General Specifications:

The following general requirement list is to be achieved by this product offering:

Interfaces

- HUB supports USB 2.0 standard (also compatible to USB 1.1 ports).

Media Supported Fast data/File access and transfer rate up to 480Mbp/Sec

Link up to 127 USB Devices

Operation System Supported

- Microsoft – Win 98 SE, ME, 2000, XP, VISTA
- Apple MAC – OS 9.1/X

## 3. Electrical Specifications

### 3.1 USB Interface

#### 3.1.1 USB Compliance

The HUB shall be compliant with the USB 2.0 standards.

#### 3.1.2 ESD Protection

The HUB shall provide ESD protection to prevent damage to the flash HUB due to external ESD sources.

### 3.2 Flash Media Connectivity

The HUB media ports shall designate along with a LED to show if a card is properly inserted and when data is being read or written to and from the Media card.

### 3.3 HUB Power

The HUB shall be powered through the USB connection leading from the motherboard USB connector.

The USB HUB shall draw no more than 0.15 amps of power from the motherboard USB connector.

DC:output:5v/2A

## 4. Mechanical Specifications

### 4.1 Dimensions (Detail see the mechanical drawing)

- Dimensions

### 4.2 HUB Weight

- HUB weight About 29g

### 4.3 Frame Material

The housing of the HUB shall be constructed of ABS plastic

## 5. Driver Support

### 5.1 Operating System Support

Driver should include installation driver for Windows 98 SE. ( Driver program will be provided at the appointed website for download )

### 5.2 Language Support

Any supplied drivers shall include English language support only.

### 5.3 Plug and Play

No driver is needed for the following operating system:

- Microsoft – ME, 2000, XP Home and XP Pro, VISTA
- Apple – Mac 10.1.2 and above

## **6. Performance**

The HUB shall provide data throughput at a rate up to 12Mb/Sec in USB 1.1 and 480 Mb/Sec for USB2.0  
Link up to 127 USB Devices

## **7. Environmental**

The HUB shall not be affected by subjecting it to any (or any combination) of the following conditions during operation, storage, or shipment.

### **7.1 Temperature**

#### **7.1.1 Operating**

The HUB shall perform to specification when exposed to ambient temperatures of 0°C to 60°C.

#### **7.1.2 Storage**

The HUB shall be able to withstand prolonged exposure to temperatures from -40°C to 85°C encountered during transportation or storage.

### **7.2 Humidity**

#### **7.2.1 Operating**

The HUB shall perform to specification when exposed to relative humidity between 0% and 90% relative humidity without condensation.

#### **7.2.2 Storage**

The HUB shall be able to withstand exposure to relative humidity ranging from 0% to 90% internal to the package system.

FCC warning:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This 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 communications. 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.