

# CSC0101A

## Dual PS/2 to USB Data Converter Controller

### Features

- ◆ Interface legacy PS/2 devices to USB
- ◆ Provides two PS/2 port
- ◆ PS/2 ports support 3 dimensions 3keys wheel mouse and multimedia keyboard function
- ◆ No driver needed
- ◆ Hot pluggable
- ◆ USB Specification 1.1 low-speed compliant
- ◆ PS/2 ports are auto selectable and hot swappable
- ◆ Mice or keyboard can be used in either port without limitation
- ◆ Cost-effective and easy to implement for PS/2 to USB bridge solution
- ◆ SOP-16 package or dice form

### Introduction

The CHESEN CSC0101A is an integral micro-controller for converting PS/2 interface signal to USB applications, which includes 8 bits high performance micro-controller core, combined USB1.1 low-speed interface and dual PS/2 handler module. It is ideal for the legacy system support, enabling seamless connections of traditional PS/2 interfaces devices of mouse and keyboard to USB.

The CSC0101A is a USB 1.1 low-speed compliant device that interfaces to PS/2, it support the Human Interface Device (HID) class specification. The CSC0101A handles the merging of the PS/2 data and sends the data to the host system via the USB port.



### Specifications

#### 8-bits Controller Core:

- ◆ 8 bits 65C02 controller
- ◆ 6MHz external ceramic resonator
- ◆ 3MHz internal CPU clock
- ◆ One 8-bits timer / counter
- ◆ Support power saving mode
- ◆ Built in power on reset with watchdog function

#### Memory:

- ◆ 8K byte internal ROM
- ◆ 256 byte internal RAM

#### USB Port:

- ◆ Fully compliant to USB 1.1 specification
- ◆ Conforms to USB HID specification, version 1.1
- ◆ Supports 1 low speed device address and 3 endpoints
- ◆ Integrated USB transceiver
- ◆ Build in 3.3V regulator
- ◆ 8 bytes FIFO for each endpoint
- ◆ Interface transfer rate: 1.5Mbits/sec

#### PS/2 Port:

- ◆ Suitable for legacy PS/2 interface keyboard, mouse, wireless peripheral or bar code reader
- ◆ Compatible with PS/2 protocol
- ◆ Two PS/2 ports
  - . Standard PS/2 keyboard with multimedia function
  - . Standard PS/2 3D/3Keys mouse
- ◆ Mice or keyboard can be used in either port

#### Miscellaneous:

- ◆ Works with PC Win98 SE, Win Millennium, Win 2000, Win XP Netware4.11, 5.0 HP Unix, Linux, Apple computer MAC OS8.6 or higher and Sun Microsystems

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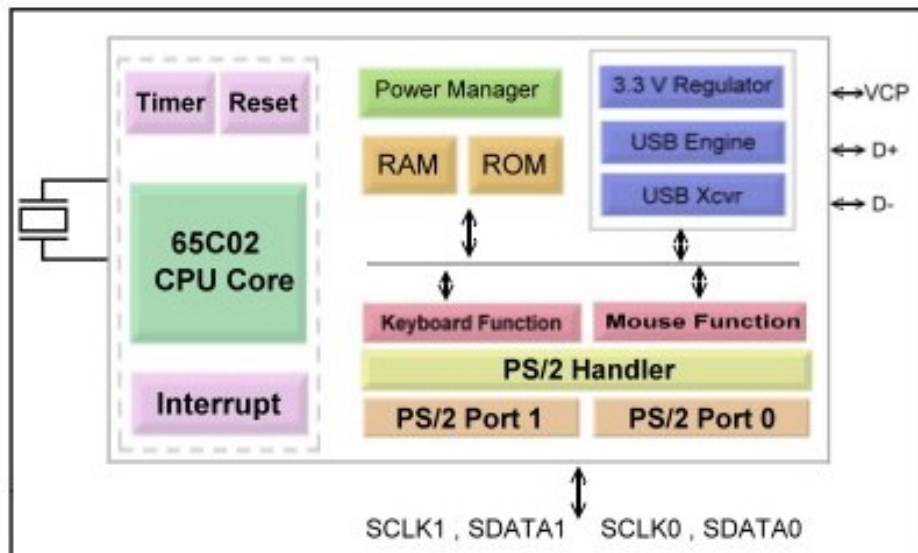
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### Applications

PS/2 Keyboard/Mouse to USB

PS/2 Barcode Reader to USB

Wireless PS/2 Keyboard/Mouse Set to USB



DataSheet4U.com  
CSC0101A Functional Block Diagram

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