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
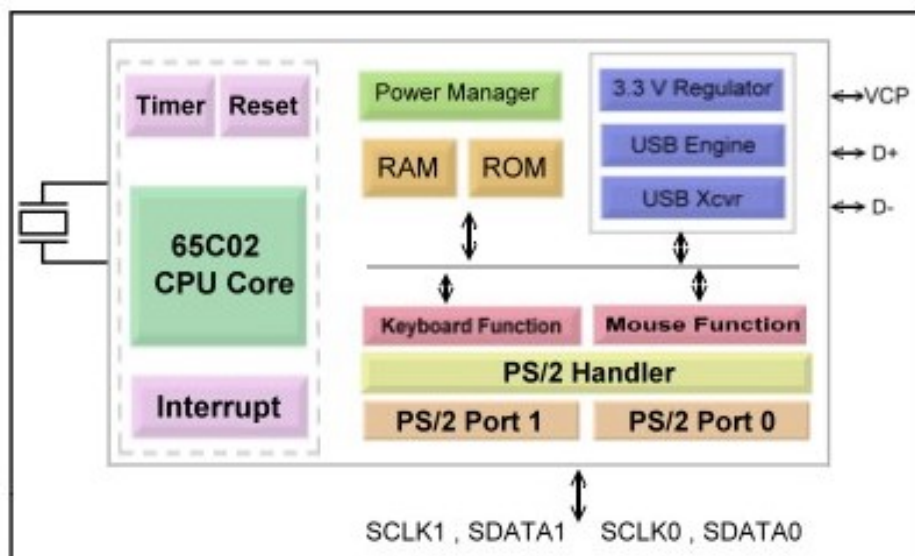
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Applications

PS/2 Keyboard/Mouse to USB   PS/2 Barcode Reader to USB   Wireless PS/2 Keyboard/Mouse Set to USB

CSC0101A Functional Block Diagram

Computer Peripheral Product Series