

Features

- ◆ Mobile storage device with MP3 player function
- ◆ Support bi-direction data transfer from memory card to hard drive
- ◆ Support bi-direction data transfer from USB devices (ex. Pen Drive, Flash Card, DSC, MP3 Player...) to hard drive
- ◆ Play MP3 from hard drive, memory card and external USB devices
- ◆ On-Chip USB On-The-Go host and device controller module
- ◆ Compliant with OTG specification and USB specification version 2.0 for full-speed (12Mbps) USB hosts and devices
- ◆ Support USB Mass Storage Compliant Devices
- ◆ Support CF memory card interface (The others memory cards support by CF adaptor)
- ◆ Adaptive power management
- ◆ Companion with CSA3001 MP3 decoder to form a complete MP3 player solution
- ◆ LQFP-128 pin package

Introduction

The CHESEN CSC1221 USB On-The-Go (OTG) portable hard drive with MP3 player controller is a special design for portable data bank solution plus MP3 player function. It can direct file transfer between external memory card and internal hard disk. Besides, its OTG feature makes it can direct connect with flash disk, card reader, MP3 player and digital camera without needed of the computer.

It is an ideal and cost effective portable data bank turnkey solution for directly files sharing system. It is not only data backup, one more thing; you can enjoy the MP3 song.

About USB-OTG

USB OTG is a new supplement to the USB 2.0 specification. It challenges the capability of existing mobile devices and USB peripherals by giving them an added host capability for connection to other USB devices. These new features were needed to upgrade standard USB technology for mobile, peripheral devices and gateway bridge. These new features include the additional host capability, smaller connectors, and low power output, which eliminate the current limitation in the USB that requires a PC to act as host.

Specifications

CSM6x51 8-bits Controller Core:

- ◆ 8 bits 8051compatible MCU core
- ◆ Turbo mode with 2 clock per machine cycle
- ◆ 12MHz external ceramic resonator
- ◆ 24MHz internal CPU clock
- ◆ Two 16-bits timer
- ◆ Support power saving mode
- ◆ Built in power on reset with watchdog function

Memory:

- ◆ 64K byte internal ROM
- ◆ 256 byte internal RAM
- ◆ In-chip 12K byte external mode data RAM
- ◆ Support In-System-Programming (External Flash)

USB OTG Module:

- ◆ Fully compliant with the USB specification Rev. 2.0 (full-speed) and OTG supplement Rev. 1.0
- ◆ Support USB Message Storage Compliant Devices and PTP protocol devices
- ◆ Supports Suspend, Resume and Wakeup features
- ◆ Integrated USB transceiver

Interface:

- ◆ Support ATA-66/ATAPI 6.0 hard drive devices interface
- ◆ Support 2.5", 1.8" IDE hard drive or 1" mini hard drive
- ◆ Option companion with USB 2.0 device controller for high speed (480Mbps) transfer with PC
- ◆ Compact Flash Type I/II interface (others flash media support via CF adaptor)

MP3 Interface:

- ◆ Support serial/parallel bit stream type MP3 decoder CSA3001 interface
- ◆ Search all MP3 files format in the select target devices
- ◆ Support MP3 bit rate from 32K ~ 320K
- ◆ Support multiple play mode and play list

Miscellaneous:

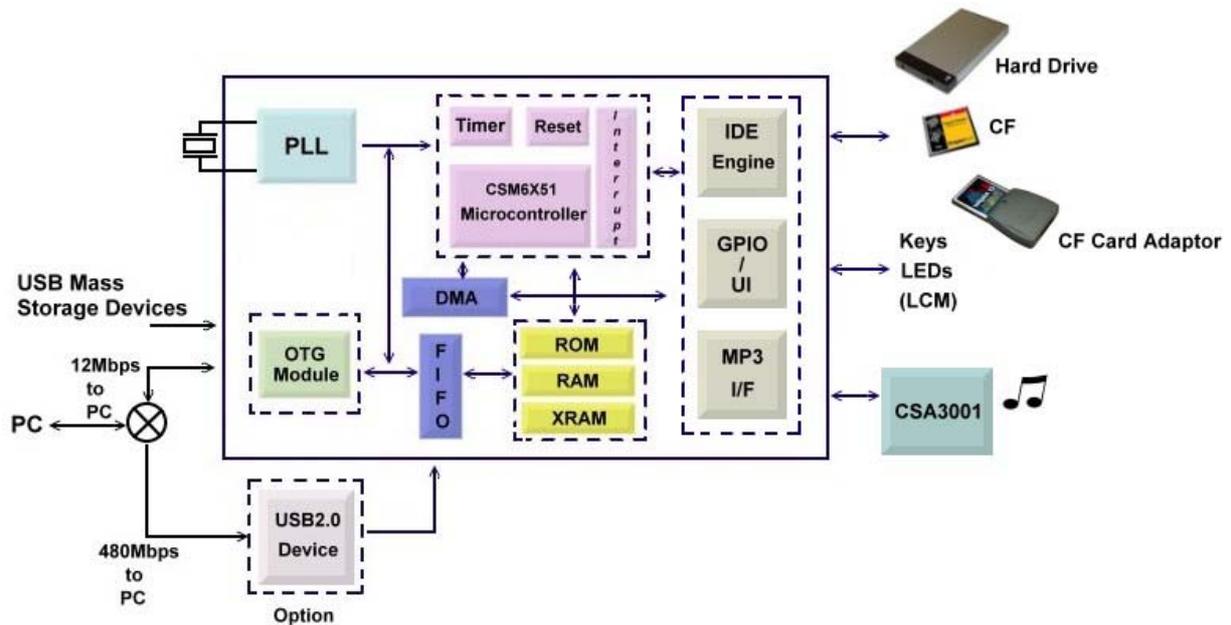
- ◆ Functions buttons
 - Up (V+); Down (V-); Previous; Next
 - Enter (Stop); Execute (Play/Pause); Escape (Menu)
 - Power; Reset
- ◆ LCD Display Module
 - 12 characters with 4 line message display
- ◆ Option Rechargeable Battery Module

Applications

USB Mobile PC Free Data Bank

Digital Camera Direct Backup

Portable Mass Storage MP3 Player



CSC1221 Functional Block Diagram



CSC1221 Typical Application

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