



JEILIN Technology Co., Ltd.

JL4205A Multimedia Controller

General Description

The JL4205A is a low cost multimedia controller targeted for Digital Photo Frame with analog panel. It is capable of reading/playing the photo (JPEG), video (Motion JPEG), and audio (MP3) from memory cards and internal NAND Flash. All of your favorite digital photos can be played back in slide show or in still display while MP3 music is playing back. There are various slide transition effect are added between each photo slide. All of above playback doesn't need the use of PC. Besides photo frame function, the JL4205A has High Speed USB 2.0 Device port to transfer data to PC (MassStorage). It can read/write the files from/to different kinds of memory card such as SD/SDHC, MMC/MMCplus, MS/MS PRO, XD or NAND Flash. JL4205A cannot support both XD and NAND Flash at the same time.

Features

- ◆ Embedded Turbo 8051 MPU
- ◆ Hardware JPEG Codec
- ◆ IMA ADPCM Audio Codec
- ◆ MP3 Decoder
- ◆ NOR Flash Boot
- ◆ In-system Programming
- ◆ 128-pin LQFP (14x14mm)

Memory card and storage:

- ◆ SD/SDHC/MMC/MMCplus
- ◆ MS (Duo)/MS PRO (Duo)
- ◆ XD or NAND Flash

Playback:

- ◆ Photo: JPEG up to 268 mega pixels
- ◆ Video: Motion JPEG up to 30fps@VGA
- ◆ Audio: PCM/ADPCM/MP3
- ◆ Combo Playback: JPEG+MP3

Video:

- ◆ Composite Video Output
- ◆ Include TCON (LCD Timing Control)
- ◆ Analog (RGB) TFT Panel
- ◆ CCIR601/656 Output Interface

USB:

- ◆ High-Speed USB 2.0 Device port
- ◆ MassStorage Class

Peripheral:

- ◆ Interface for RTC
- ◆ IR Remote Control
- ◆ Buttons
- ◆ I2S Interface
- ◆ ADC for battery monitoring or MIC

Applications

- ◆ Digital Photo Frame (DPF)
 - Viewing Photos (JPEG)
 - Viewing Movie (Motion JPEG AVI)
 - Listening to MP3 music
- ◆ USB2.0 Card Reader
- ◆ DPF with Clock/Calendar/Alarm

Functional Diagram

