

USB Data Viewer

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ABSTRACT

Our Multi-media terminal is equipped for playing computerized media, for example, sound, pictures, video, slideshows, and so forth the information is commonly put away on a hard or small scale drive, or (FM) streak memory. This task is to outline and build up a minimal effort highlight which depends on inserted framework for (AV) audio and video player and other GUI interface.

KEY WORDS: USB, GUI.

1. INTRODUCTION

There are various electronic innovations accessible in the business sector created with embedded system. The inserted framework innovation is one of the most astounding development territories on the grounds that these frameworks are utilized as a part of every single business sector portions these days like hardware, computerization, biomedical and remote correspondence. The proposed project uses, "AN USB MEDIA PLAYER" (King, 2001; Simpson, 2004; King, 1998; Karthik, 2013; Jasmin, 2015).

Nowadays only high end televisions like LED television and LCD television support USB flash drives. That too some specific extension files like avi, mp3 and mp4 in HD clarity. But its cost is not affordable for all the people. In our proposal we are going to implement the very low budget USB player which can be used even in a low budget television. In that we can read all type of file extensions more than the existing system which is affordable for everyone (Philomina, 2014; Karthik, 2014).

Existing System: Currently there are many DVD players and led TVs available in the market which has USB port in them but they are not cost effective. It's not easy to carry a DVD player around everywhere when required and it's not portable. Nowadays pen drives are being used everywhere than compact disks there are more chances of damage to the compact disks compared to the pen drives. So the USB media player is easier to be used (Vijayaragavan, 2014, Saravanan, 2014, Gopalakrishnan, 2014).

Monitoring Techniques: There are different methods of monitoring. They are:

- DVD players with USB port
- Led TV's with USB port

System Analysis

Video Processing: The decoder is going to optimize for sound and video spilling applications. With the architecture partition of the application particular interface (e.g. USB document framework), and the yield arrange, the decoders can be utilized as a part of a vast assortment of uses. The decoder uses outside SDRAM for info video, photograph, sound, sub-pictures, route, OSD information supports, and decoded buffer frames.

Audio Processing: The (AP) depends on the Audio-AMRISCTM processor with direct hardware help capacities from the sound decoder equipment. The Audio-AMRISCTM processor is a smaller scale coded motor, the AML8613 gadget is fit for supporting the disentangling of all current sound organizations and can be customized specific audio requirements. The Audio processor has its own particular inward code/information RAM/ROM for high recurrence necessities for reasonable sound multiplication.

The AML8613 A/V processor can be joined with an assortment of peripherals, including USB OTG, card peruser interfaces.

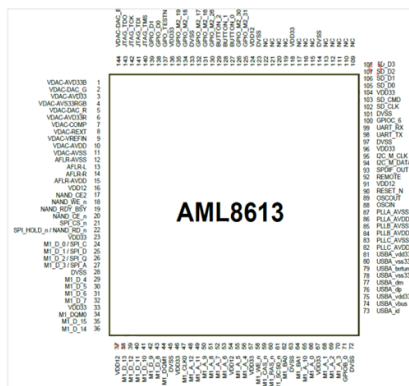
The processor has one built-in USB controller and phy. Then OTG is prepared to do fast (480Mbps) information exchange between outer USB host/gadgets and inner RAM. It has assembled in DMA motors to handle information exchange with negligible center CPU preparing.

The AML8613 processor likewise coordinates various FLASH memory card controllers and an adaptable programmable card controller for interfacing with fluctuates FLASH card principles. Current firmware can bolster SD/MS/MMC card gauges. The AVOS firmware incorporates gadget drivers for the card peruse controllers and the upper layer file system drivers.

SDRAM-synchronous dynamic random access memory: This RAM is evolving D-RAM which is coordinated with the system transport. Fabulous DRAM has a non-concurrent boundary, which suggests it demonstration accordingly as quick as would be judicious to modifications in control inputs. It has a synchronous interface, inferring that it sits tight for a pulse signal before reacting to control inputs and is hence synchronized with the PC's structure transport. The clock is used to drive an internal restricted state machine that pipelines drawing nearer requests (Karthik, 2014; Vijayaragavan, 2014; Kanniga, 2011, 2014; Gopalakrishnan, 2014).

Pipe Lining implies, the IC can acknowledge another order before it has wrapped up the past one. In a pipelined compose, the compose order can be quickly trailed by another summon, without sitting tight for the information to be composed to the memory cluster.

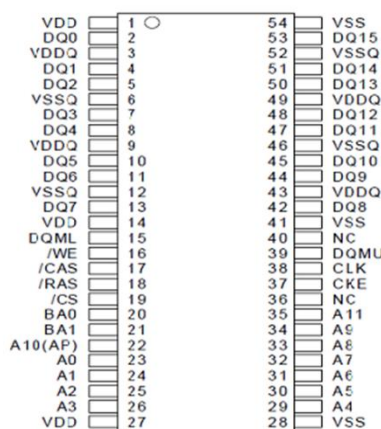
Features: The chip is exceedingly adaptable and greater part of the capacities are under firmware control. The consequent list of elements could conceivably be incorporated into the firmware library or else binary, depending upon the application and platform



EM639165 8MEGA X 16bits SDRAM

Features:

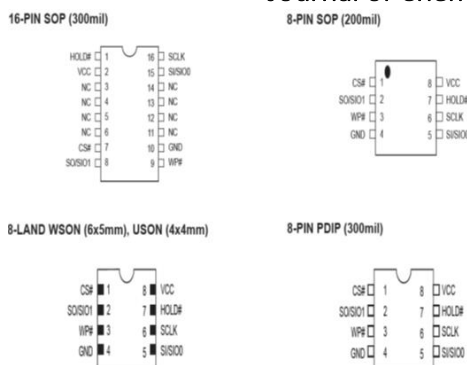
- Single 3.3v/0.3V control supply
- Fast pulse rate
 - PC133: 133 MHz (CL3)
 - PC100: 100 MHz (CL2)
- Synchronous operation
- 4-bank operation controlled by BA0, BA1
- Programmable Mode registers



MX25L3206E

General Features:

- Single Power Supply Operation
- Serial Peripheral Interface compatible -- Mode 0 and 3
- 33,554,432 x 1 bit structure
- 1024 (ES) with 4K byte each
- 64 Blocks
- Program Capability
- Latch-up protected to 100mA



FAN1117A

Adjustable/fixed low dropout linear regulator:

Description: The FAN1117A and FAN1117A-has low dropout three-terminal controllers with 1A yield current capacity. These gadgets have been upgraded for low voltage where transient reaction and least information voltage are basic. The 2.85V rendition is outlined particularly to be utilized as a part of Active Terminators for SCSI transport. Current cut off is trimmed to guarantee determined yield present and controlled short out current. On-chip warm constraining gives security against any mix of over-burden and surrounding temperatures that would make unreasonable intersection temperatures. Not at all like PNP sort controllers where up to 10% of the yield current is squandered as calm current, the quiet current of the FAN1117A streams into the heap, expanding productivity. The FAN1117A arrangement controllers are accessible in the business standard SOT-223, TO-220, and TO-252 (DPAK) power packages.

Features:

- Low dropout voltage
- Load regulation
- Current limit
- On-IC thermal limiting
- Standard SOT-223, TO-220, and TO-252 packages
- 3-terminal adjustable or fixed voltages.

Software Requirements

C Programming For Embedded Systems: C used for embedded is slightly different from C used for general purpose. The Standard C compiler communicates with the hardware components through the OS of the system but the C compiler for the ES must communicate directly with the processor and its components.

Project development cycle: The following procedure to develop 89C52 project by software Keil

- Create source documents in C.
- Compile source records.
- Correct error in source records.
- Link item records from compiler and assembler
- Test connected application.

Creating Projects: To open software click on start menu,

- At that point select keil4.
- Start with new project take following procedure
- Click on undertaking menu and select new project
- Create another folder for your undertaking named "first".
- Give the name of undertaking as "test". Of course it will be spared as *.v2 expansion.
- Choose the objective gadget for which program ought to be composed and click OK.
- Now on the screen show target1 list completely. Now click on record menu and select new document. Presently begin written work the code.
- After finishing the code spare the document in project controller with "C".
- Click on "file menu 1". Select "add" records to menu 1".
- Choose the 'C' record that have been made and click 'add'
- That C record has been included in group.

Compiling and Debugging

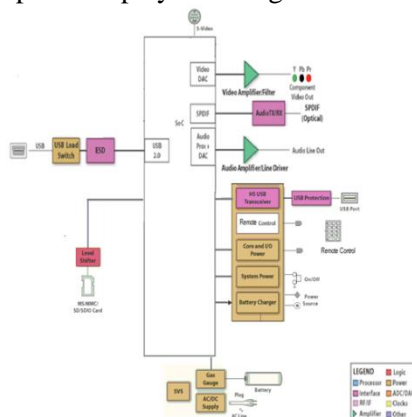
- For compiling the system from undertaking menu select "form target". In the yield window the advancement can be seen.

- If there is any error, remove every one of the mistakes and again construct the objective till zero error has been found.
- Now subsequent to testing the project, the system should be downloaded on the objective board that is 89C52 by making hex record.
- To make hex record right tap on "target 1" and select" target 1".The next window will show up.
- Select yield tag and check "make hex record" box.
- Now while fabricating the project once more, the message in yield window "hex record is made" will be seen.
- This record can be straightforwardly stacked in 89C52 target board and the application can be keep running on the genuine environment.

Project Description

Modules Description: The Power supply unit plays an important role in the device. The basic role of a regulator is to help the rectifier and channel circuit in giving a consistent DC voltage to the gadget. It is used to give the required voltage to IC for operating the device. The USB port and memory card slots are used to take information as input.

The USB is recognized with the help of microprocessor. The processor decides about the formats that can be read. The set of coding are stored in SDRAM about display settings. It is executed with the help of processor. We use remote to operate the device. The output is displayed through the television or projector which is the output unit.



2. RESULT AND CONCLUSION

Our USB media viewer plays audio, images, video, slideshows, Multi audio format support, including WMA, Mp3, including JPEG, BMP Multi Picture format support and PNG Supports Background Music play while Picture is running in side show which supports e-book with txt file format

Future Scope: Future scope of this project is to improve the text reading section. The player should be able to read all the text formats such as pdf, .doc, ppt so that it can be used in educational institutions for presentation purposes.

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