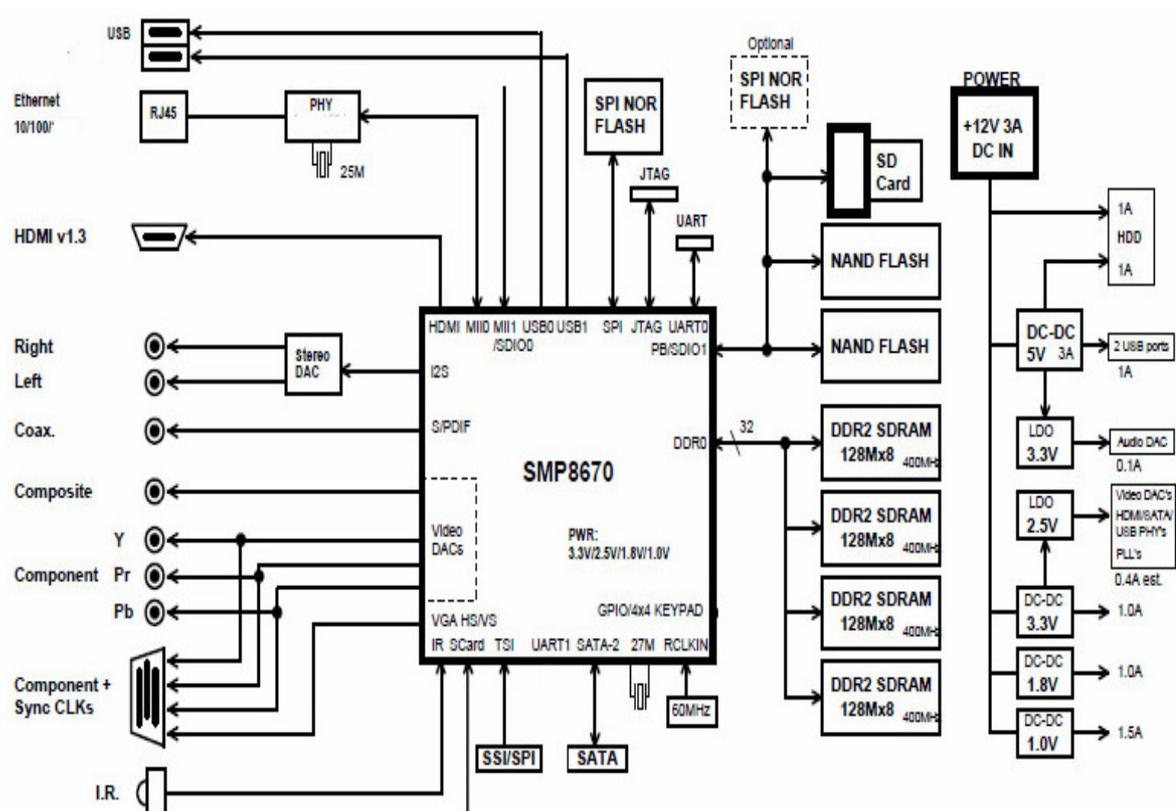


## SMP8671 PCBA Introduce Ver1.3

Welcome use smp8671 Board of Logicgrass!!!

1. SMP8671 PCBA introduce
2. SMP8671board interface
3. SMP8671board quick use and test
4. SMP8671board port's name and function

### SMP8671/0 board frame picture



## 1. SMP8671 board introduce

Logicgrass's SMP8671 engineering board is use SMP8671 multimedia processor as the core unit. SMP8671 chip is now in mass production, some large companies have to do with the chip out of the players and other products. The chip will be the alternative sigma design before the 865X series chip, the chip clocked at 700M, 865X series before the frequency is 500M, enhance performance. And lower 30% of the heat, but also provides a 2D video acceleration, which will be an application of a very lethal. The smp8671 performance and cost is very high, the SMP8671 the CPU core is very advantageous, higher than the ARM11 DMPIS ,it can compare with CortexA8. But the cost is lower than the current CortexA8 . So this product is able to enhance customer competitiveness of their products.

Range of applications: 1) IPTV: can be directly connected to the Internet to watch video streaming, or to receive other devices of the local area network to send over the audio and video content (such as DVR or Slingbox is). The core of Sigma Design SMP8670 can perform the XBMC, Adobe AIR and the Flash 2) advertising player: multimedia network advertising machine system, the multimedia network advertising system servers, networks, the player terminal, the display device composed of the server information through a variety of are applicable to network (WAN / LAN / private network, including wireless network) is sent to the player terminal, and then by the player terminal combination of audio and video, pictures, text and other information (including the playback position and playback of content, etc.), transportation to the LCD TV display device, thus forming a combination of audio and video files playback, thus forming a set of all the server information is sent through the network-to-end link, in order to achieve a server can control the city, the country and even worldwide network information of the advertising machine terminal) network HD player: support all video formats, the needs of the market up to 1920 \* 1080P support the needs of the market a variety of high-definition audio decoding and source output, including the DTS, DOLBY 7.1 channel, and the next generation of track the smp8671 board

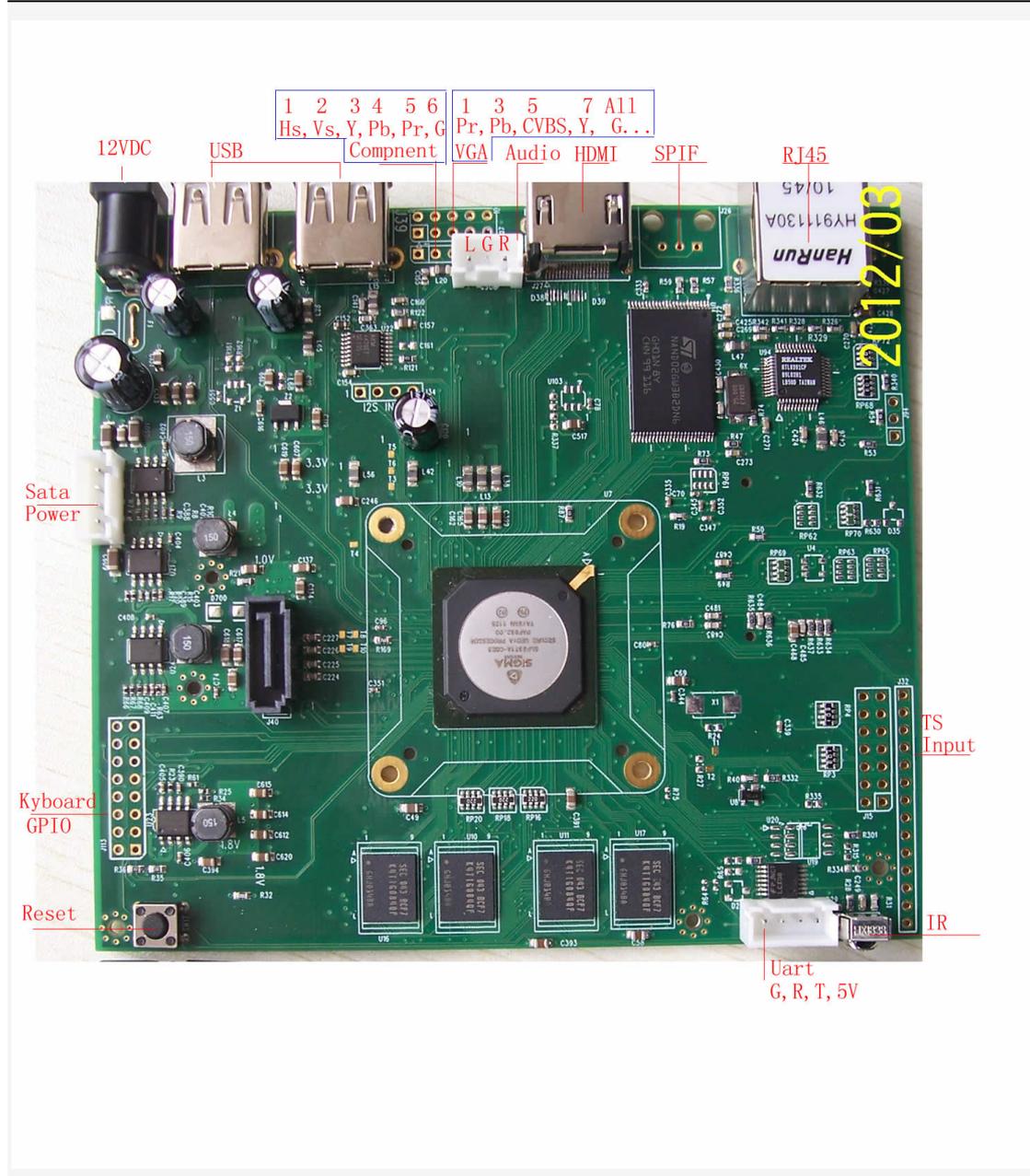
4) hard disk player to play HD movies through rigorous testing for a long time, the board is very stable

5) professional equipment

## 2 Board interface and function

- 1.CPU SMP8671
- 2.Memory 512MB DDR2
- 3.Nand Flash 2Gbits
- 4.Video HDMI Out port, socket: VGA Vprpb CVBS
- 5.Audio output: optical output port, the outlet: cable left and right channels
6. Audio input: I2S input
- 7 .Ethernet: 10/100M (can be extended for two Gigabit)
- 8 .serial ports: 3
- 9.TS: standard video stream synchronization input
- 10.USB: standard USB2.0 host interface
11. Power supply: 12V power input
- 12 .Hard Disk: SATA hard disk interface, ensuring playback of high-capacity film to watch
- 13 .infrared remote control
- 14.Keyboard and expansion port
- 15.Reset button
- 16.SD card to facilitate advertising applications (Optional, No welding socket )

Detail can refer to the following diagram



● 3.SMP8671 board Quick Start and test

1.Connect Serial board to SMP8671 board serial port (**near infrared receiving head and do not and SATA disk drives and power seat even with a fancy diagram**), host to the target serial cable is the cross-serial . Computer to configure HyperTerminal to 115200 8N1

1. connect the network cable to the the SMP8671 circuit board
2. connected HD TV HDMI ports to the board's HDMI port
3. USB disk into the the SMP8671 motherboard USB port
4. notebook SATA hard drive connected to the SMP8671 motherboard
5. 12V power supply interface. Open HyperTerminal on the computer

- In HyperTerminal, and quickly press the keypad '0' then the system will enter yamon. Input
  - a) "net init" to initialize the Ethernet. Before this time, the tftp service. Linux kernel is ready.

b) load -b tftp://192.168.1.105/zbimage-sm8671 0xa7000000

c) dump romfs 0xa7000000

d) load zbf 0xa7000090

e) go after the whole system up and running. Root login linux

f) The Linux system configured with the:" ifconfig eth0 192.168.1.199 up  
" smp8671 motherboard to run up network

To the network by routing the:" route add default gw 192.168.1.1 netmask 255.255.255.0"

g) mkdir / test, create a directory to prepare the system to be tested nfs mount over

mount-t nfs-o nolock 192.168.1.140 :/ opt / nfsdir / test /

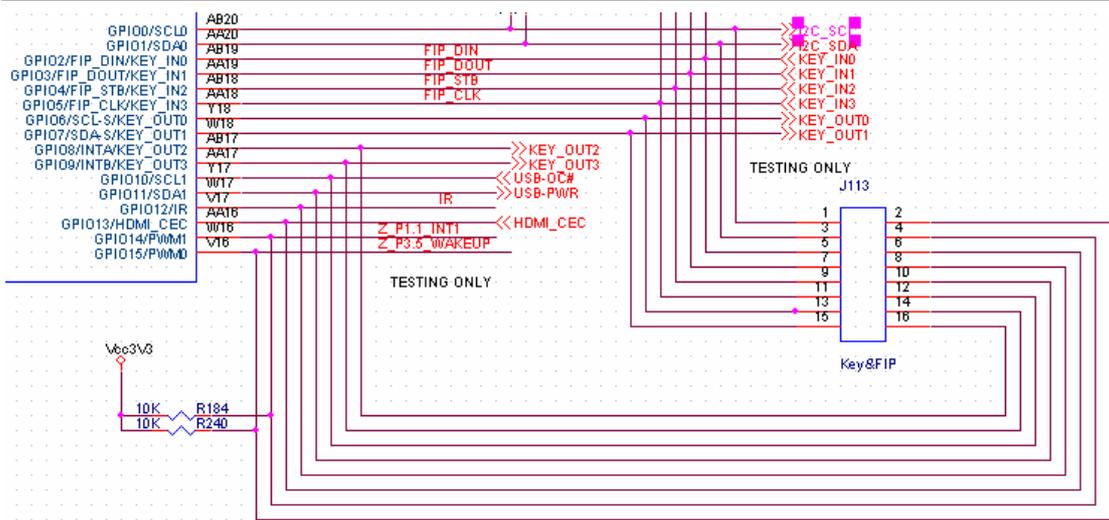
h) in the test mrua directory execute the following command source run.env

fw\_reload can run after the whole multimedia test routines. Use test\_rmfp to play the hard disk, U disk, network and more every day files, etc., etc., to test the hardware features one by one.

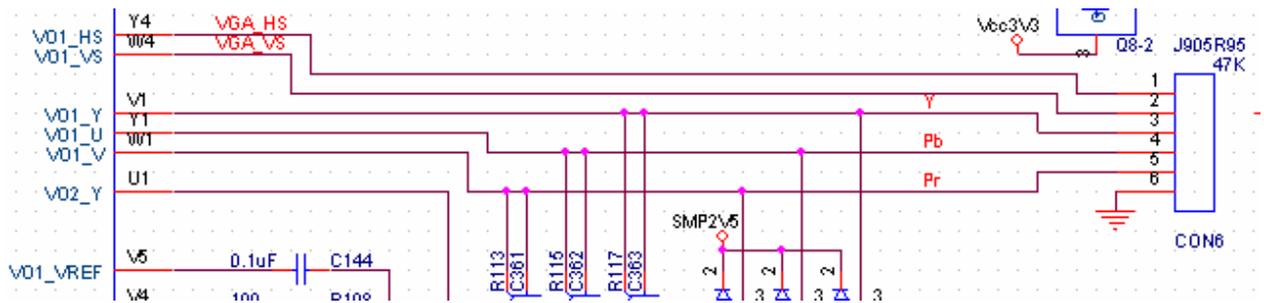
Steps of the above basic operations, the development board documentation guide, please refer to the Sigma designs SDK package.

4 . connector signal, mainly to facilitate the needs of different customers

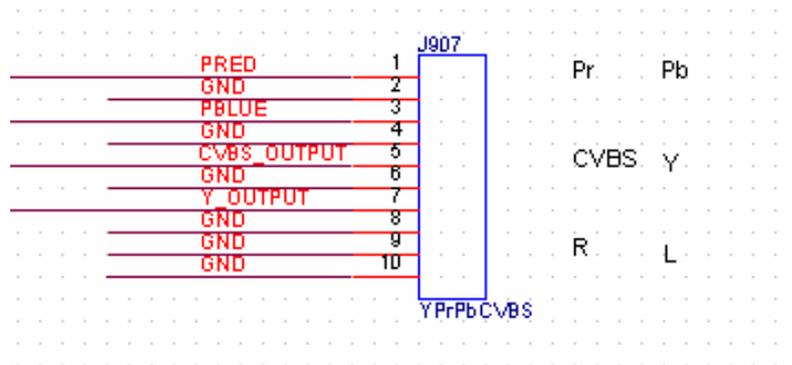
a. J113 Signal is defined as follows



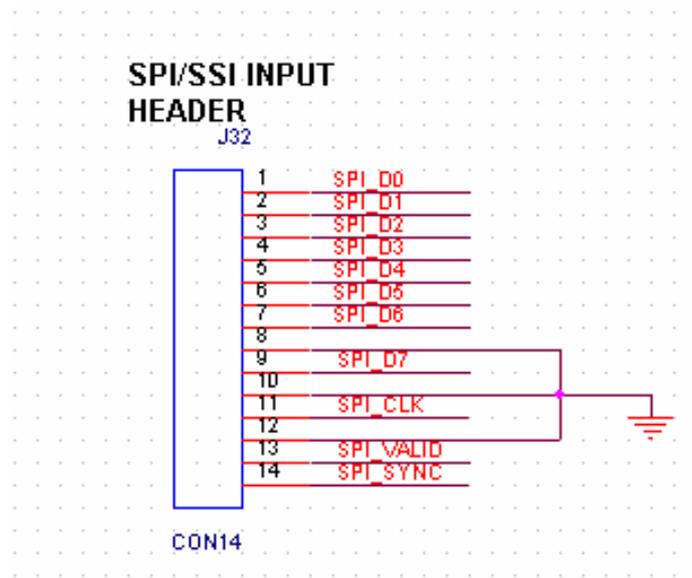
b. J905 Signal is defined as follows



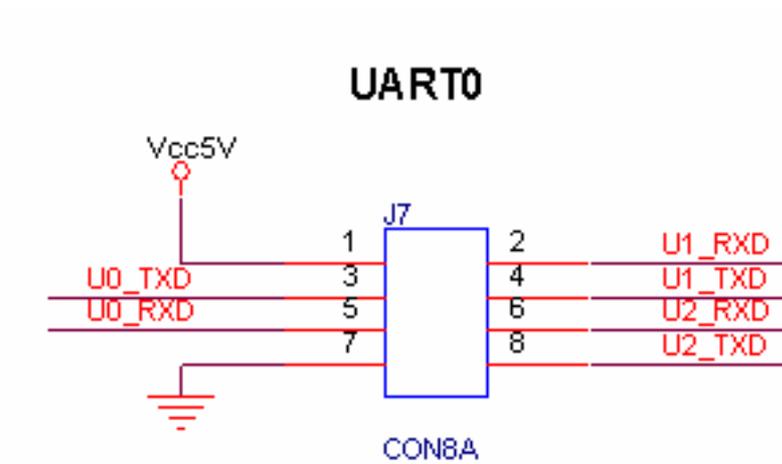
c. J907 Signal is defined as follows



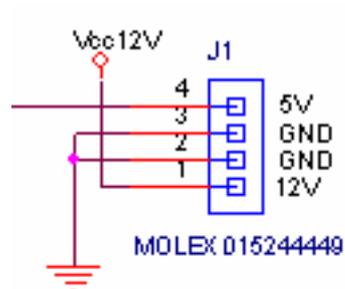
d. J32 Signal is defined as follows



E,J7 define



F, SATA Power define





Thanks you

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