# MSB – Multi-Media Storage Box is positioned as a digital data storage with imaging, audio and video playback/record capabilities

- Media / Data Enclosure box
- Subset of DVR (Digital Video Recorder)
- Image / Video playback



## Why MSB

- Connect with your PC to be HDD based enclosure box
- Plug in your existing SD/MMC storage device to be photo viewer
- Simply video formats converter without PC requirement



#### **Function Block**





## **Applications**



















IR remote control



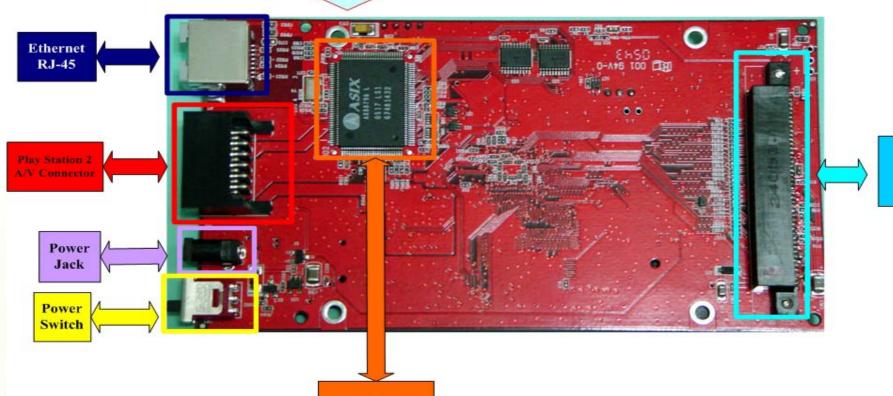
#### PCBA Block Diagram -(1/3)**TOP View** Front Rear View View SDRAM SD/MMC Flash Connector DROCORN PROCORN Telephonomichano NO MINISTER DE Power Jack Ethernet IrDA Comment Hillitte TI Video **SigmaTel** Decorder USB2.0 **PR818S** Tranceiver

GL811E

### PCBA Block Diagram -

(2/3)

## **Bottom View**



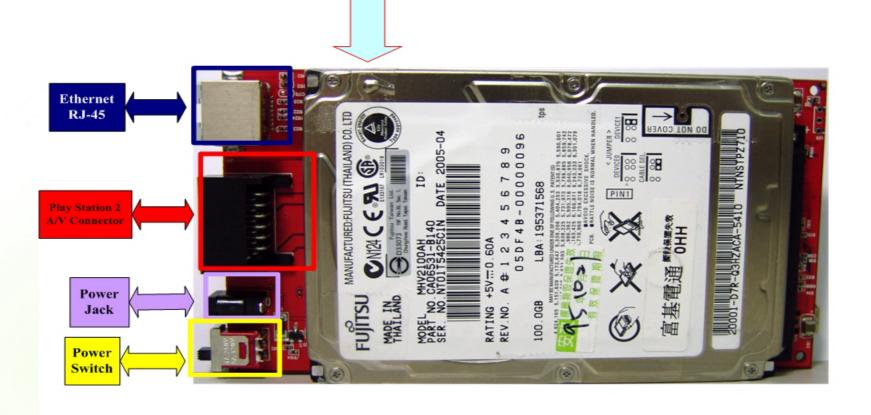
2.5'/1.8' IDE Connector

ASIX Ethernet Controller

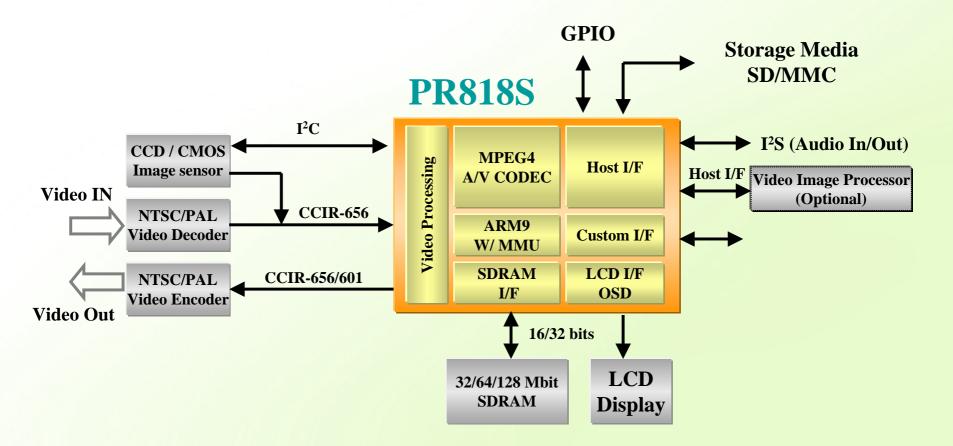
## PCBA Block Diagram -

(3/3)





## System Block Diagram





#### What we have in MSB

#### USB storage functions

- USB 2.0 Device mode as a typical enclosure

#### Photo viewer

- JPEG format up to 16M pixel
- Photo view control with next, previous, rotate Clockwise and Slideshow



#### What we have in Video Converter Box

#### Video recording

MPEG-4 ASP and stereo sound, optimized resolution for TV up to D1 (720 \* 480) @ 30 f/s, in AVI format



#### What we have in Video Converter Box

#### Video playback

- MPEG-1 (\*.mpg, \*.dat)
- MPEG-2 (\*.mpg)
- MPEG-4 (\*.avi)
- DivX / Xvid (\*.avi)
- Audio playback
  - **MP3**
  - ADPCM



#### What we have in Video Converter Box

#### Video/Audio Output Interface

- NTSC/PAL (720:480/720:576)Composite Video
- Stereo Audio

#### Power supply

AC adapter



## MP4 Video converter box solution -- BOM Cost estimation

- MP4 codec SOC : USD \$20.00
- Audio Codec : USD \$ 2.0
- Linear flash/SDRAM: USD9.50
- Video codec: USD5.50
- USB2.0: USD1.20
- Others (passive, connector, PCB, cable...): USD8.50
- Power adapter: USD2.00

Total BOM: US\$49.00 for basic function (reference only & w/o labor cost for assembly)



