

# Photo Frame Reference Design

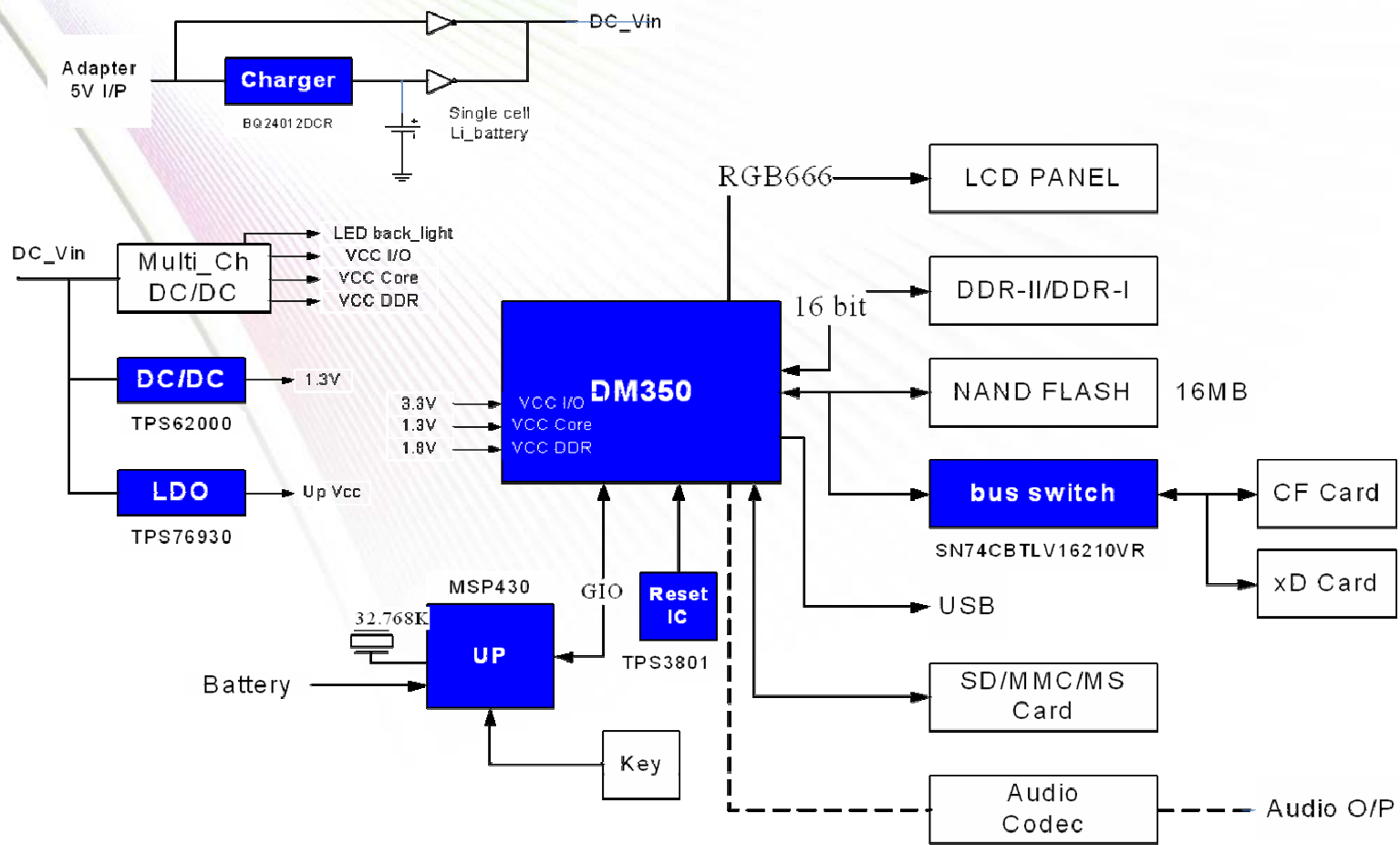
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# Photo Frame System Block



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# Photo Frame Feature List

- **LCD**

- Digital Interface (7 inch LCD)
- Brightness
- Color Adjustment

- **TV**

- TV out

- **BootLoader**

- NAND User BootLoader
- SD User BootLoader
- NAND Programming
- Update Programming
- PC Converter Reference Program

- **OS**

- Kernel / ultron
- System Structure

- **Internal Memory**

- NAND

- **External Memory**

- CF
- SD/MMC
- xD
- MS / MS PRO / MS DUO

- **JPEG**

- JPEG Decode / Baseline
- *JPEG Decode / Progressive*
- JPEG Encode

- **USB**

- USB / Mass Storage Class
- System Structure

- **File System**

- FAT 16
- FAT32
- Copy
- Delete
- Move

# Photo Frame Feature List

- **OSD**
  - OSD Function
- **UI**
  - UI sample code
- **Playback**
  - playback
  - Thumbnail
  - Rotate 90/180/270
  - Hue
  - Saturation
  - Edge Enhancement
  - Zoom in/out
  - Pan
- **Slideshow**
  - Slideshow
  - 12 Effect
  - Frequency

- **Exif**
  - Parser
  - Encode
- **Micro Processor**
  - Key Scan
  - RTC
  - Battery
  - Power control
  - Communication Protocol
- **Misc.**
  - Orientation
  - Time setting
  - Clock

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## Platform selection guideline for Digital Photo Frame

**Flexibility**

**Quality : resize , image enhancement, color adjust**

**Performance**

**OS support**

**Power Consumption**

**Platform , System cost**

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# Why Use TI DM350 Platform

## Flexibility

- Have DM350UH, DM350H, DM350L can adopt different performance
- More than 800 MIPS can do different image processing

## Quality

- Resize : DM350 → Bi-cubic  
Others → Bi-linear or average
- Image processing capability  
DM350 → support most of the features  
Others → without or only support few features

## Performance

- DM350 → 75MP or 50MP per second Jpeg decode  
→ support HD Mpeg4 SP(720P,30fps) for DM350UH
- Others → the same or lower speed

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# Why Use TI DM350 Platform

## OS support

- DM350 support both u-Itron & Linux

## Power Consumption

- DM350 : less than 200 mW
- Others : About 1000mW to 1500mW

## Platform System Cost

- DM350 : About the middle range of the platform

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# TI Developer Conference

19 - 26 June 2007 • Beijing • Shanghai • Shenzhen • Taipei

# Thanks!

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