



## Digital Photo Frame

Digital Photo Frame (DPF) is a new product developed in recent years for home or office use. It allows users to view and share the digital photos from cameras, memory cards, USB drivers or websites conveniently on a high-resolution LCD display with unique interface, animations, background music and transition effects.

### AppoTech's solution for digital photo frame (DPF)

Our image application experts have developed an advanced digital photo frame (DPF) solution. Customers can merge this advanced DPF solution with our AX series image processor (AX102, AX203, AX1003, and AX2002) for different DPF designs. With AX series solution, photos can be easily transferred from memory cards, digital cameras, and USB drives...etc. to the DPF through a USB interface, and displayed with background music, animations and transition effects. We offer our customers a choice of remarkable and low cost reference designs and development kits.

### General Features

- 1" to 7" LCD display
- JPEG decode
- Support USB interface
- Support SPI Flash, Nand Flash, and SD cards
- Support background music
- Voice record and playback
- Photo management

### Advantages

- **A total solution: own designed IC + advanced application solution**
- **Low Cost + Short lead-time**
- **Reference designs and can be modified according to customer's needs**
- **Firmware support for unique functions and user interface**

A brief outline of AppoTech's DPF Solution

LCD size	1" – 2.4"	1" – 2.2"	1" – 2.4"	1" – 7"
IC	AX102	AX203	AX1003	AX2002
Transfer interface	<b>USB 2.0</b>	<b>USB 2.0</b>	<b>USB 2.0</b>	<b>USB 2.0</b>
Memory	SPI Flash / Nand Flash / SD Card	SPI Flash / Nand Flash / SD Card	SPI Flash & Nand Flash & SD Card	SPI Flash & Nand Flash & SD Card
Auto slide show and transition effects	Yes	Yes	Yes	Yes
Start-up picture and logo display	Yes	Yes	Yes	Yes
Background music	Yes	Yes	Yes	Yes
<b>Sound record and playback</b>	Yes	N/A	Yes	Yes
Auto-off power save mode	Yes	Yes	Yes	Yes
Image up/down	Yes	Yes	Yes	Yes
Delete single/all	Yes	Yes	Yes	Yes
Power type	Battery	Battery	Battery	Battery / AC
USB charging	Yes	Yes	Yes	Yes / N/A
JPEG decode	N/A	N/A	Yes	Yes
<b>Reference designs</b>	Yes	Yes	Yes	Yes
<b>Modifications</b>	Yes	Yes	Yes	Yes



## 1" – 2.4" LCD display DPF Solution (AX102)

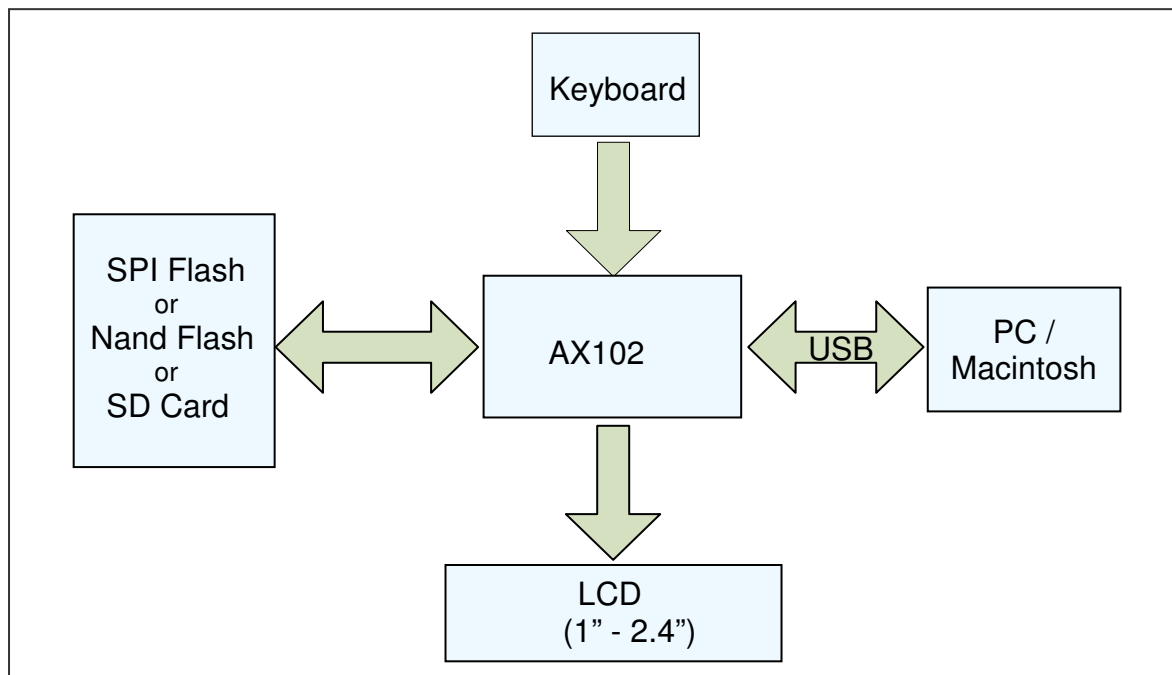
### Advantages:

- A total solution: own designed IC + advanced application solution
- Low Cost + Short lead-time
- Internal SPI Flash / Nand Flash / SD Card memory
- Reference designs and can be modified according to customer's needs
- Firmware support for unique functions and user interface
- High Speed
- Support Macintosh and PC

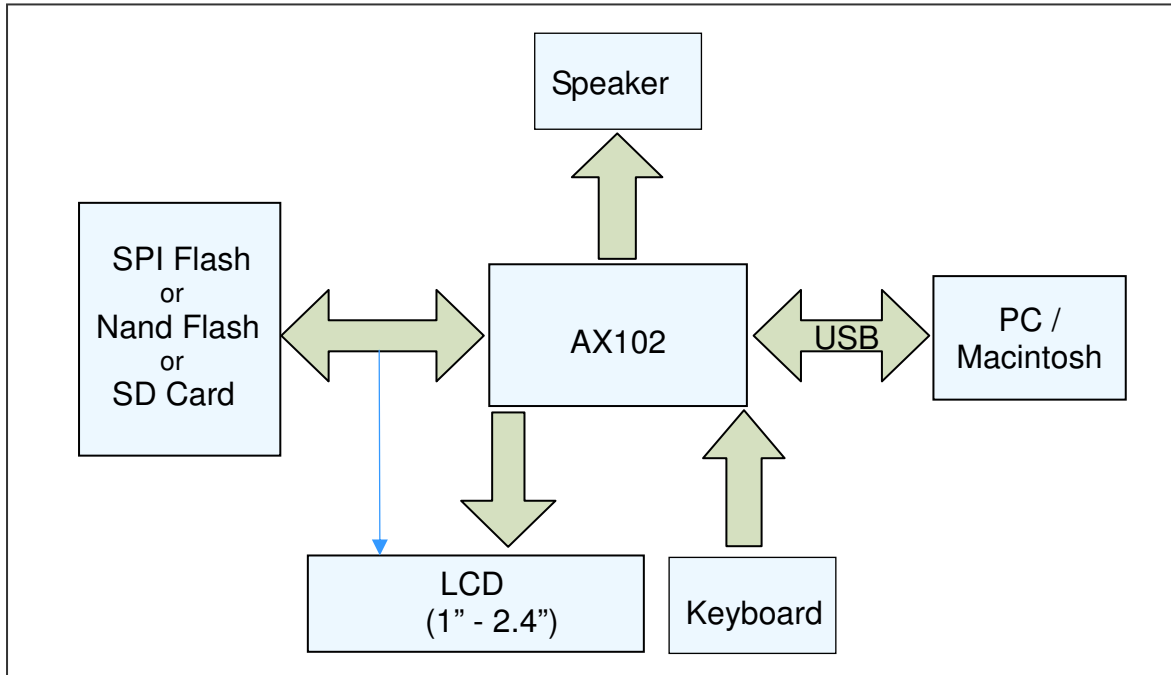
### DPF Features

- 1" -2.4" display
- Auto slideshow with transition effects
- Support USB 2.0 transfer with specific software DPFMate
- Photo file compression
- Support USB battery charging and power management
- LCD contrast adjustment
- Start-up picture and logo display
- Auto-off power save mode
- Image up/down
- Delete single/all
- Support Chinese and English language (With DPFMate)
- ◇ Support background music
- ◇ Sound record and playback

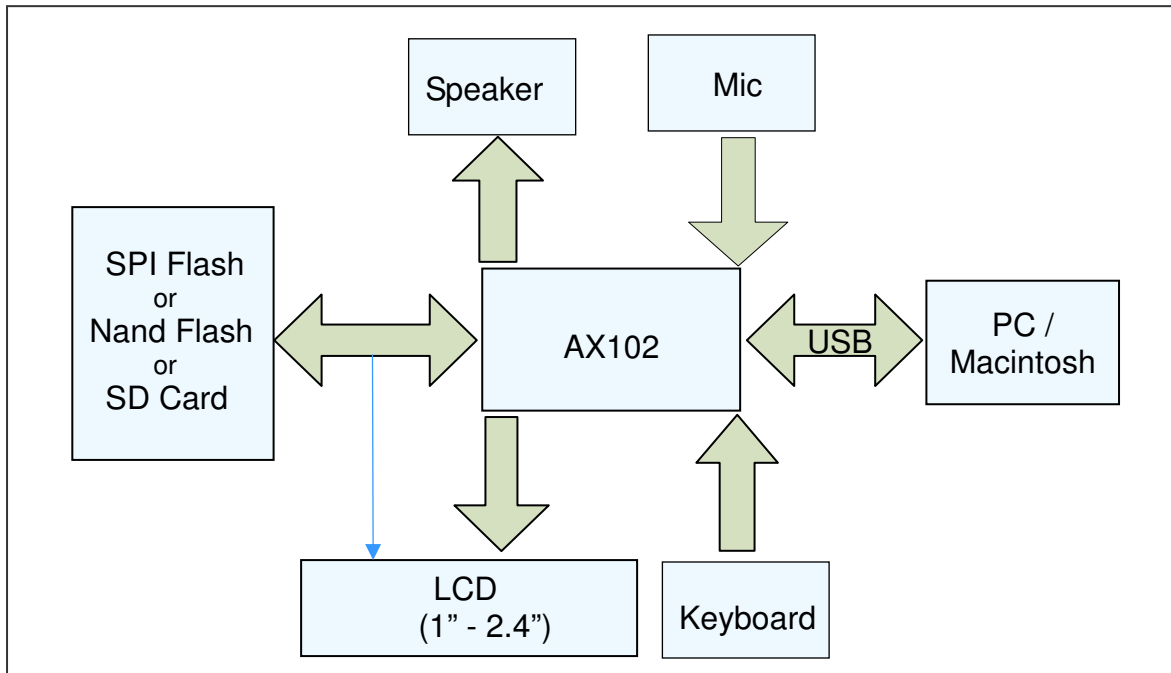
### Solution Diagram 1



**Solution Diagram 2 (with background music)**



**Solution Diagram 3 (with sound record and playback)**





## 1" – 2.2" LCD display DPF Solution (AX203)

Similar to AX102 with the following extra advantages

- Support Real time clock function without external RTC
- PC software auto-start function
- Image data compression and storage
- Lower power consumption

## 1" – 2.4" LCD display DPF Solution (AX1003)

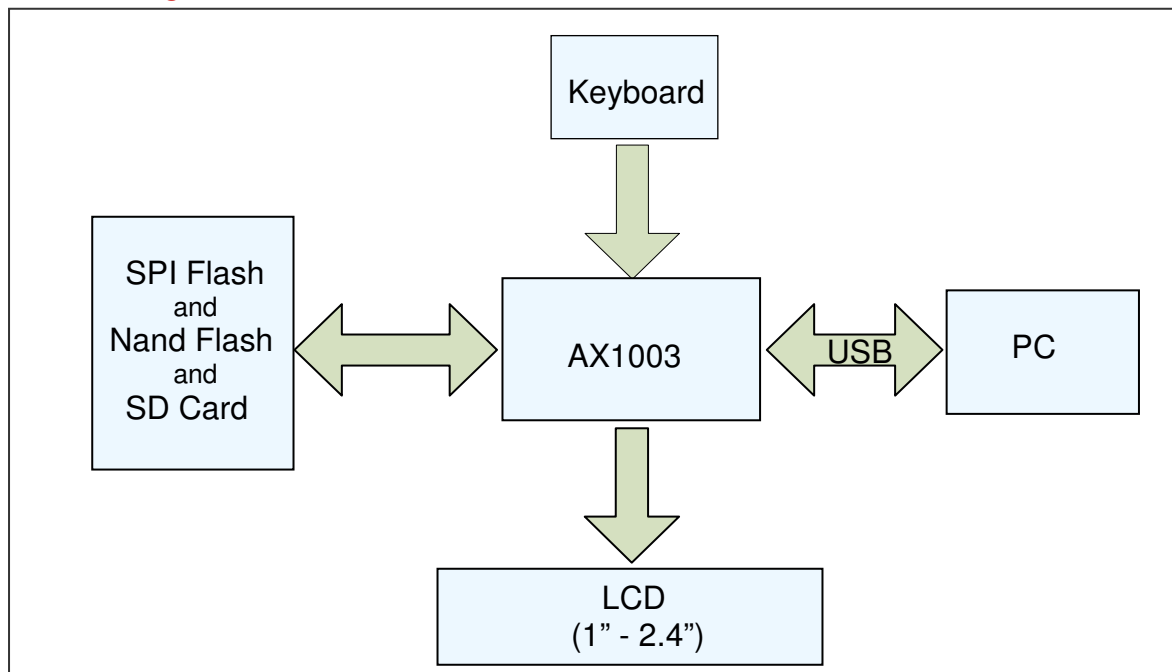
### Advantages:

- A total solution: own designed IC + advanced application solution
- Low Cost + Short lead-time
- Internal SPI Flash & Nand Flash & SD Card memory
- Reference designs and can be modified according to customer's needs
- Firmware support for unique functions and user interface

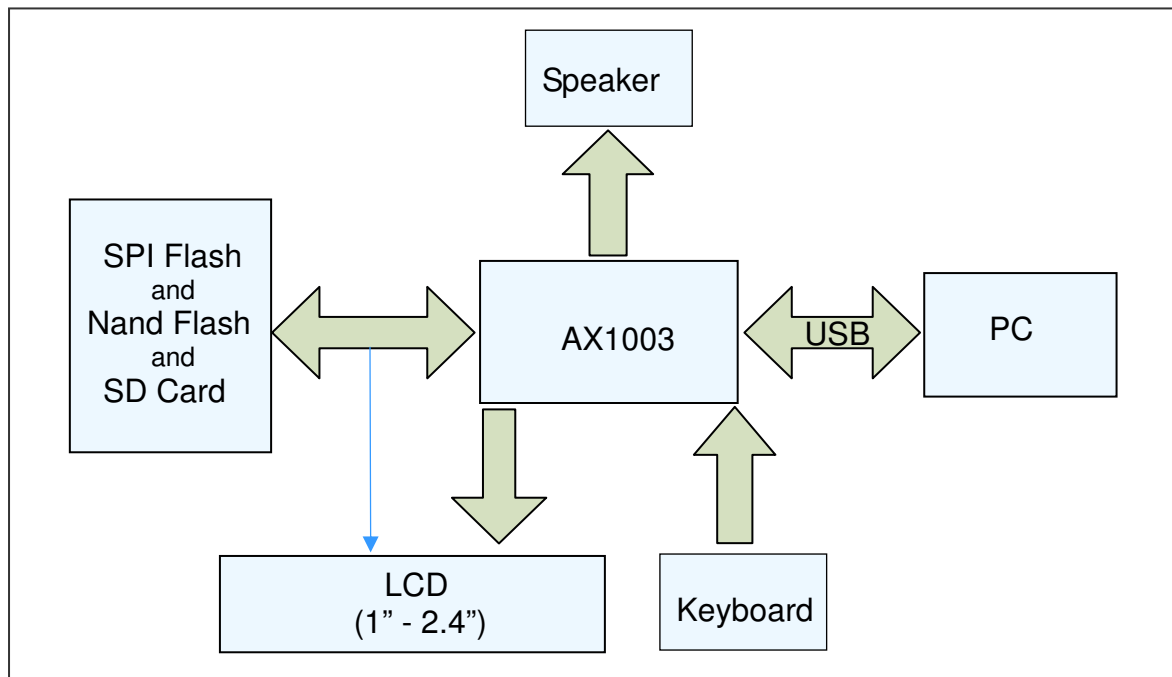
### DPF Features

- 1" -2.4" display
- Auto slideshow with transition effects
- JPEG decode
- Support USB 1.1
- Support USB battery charging and power management
- LCD contrast adjustment
- Start-up picture and logo display
- Auto-off power save mode
- Image up/down
- Delete single/all
- ◇ Support background music
- ◇ Sound record and playback

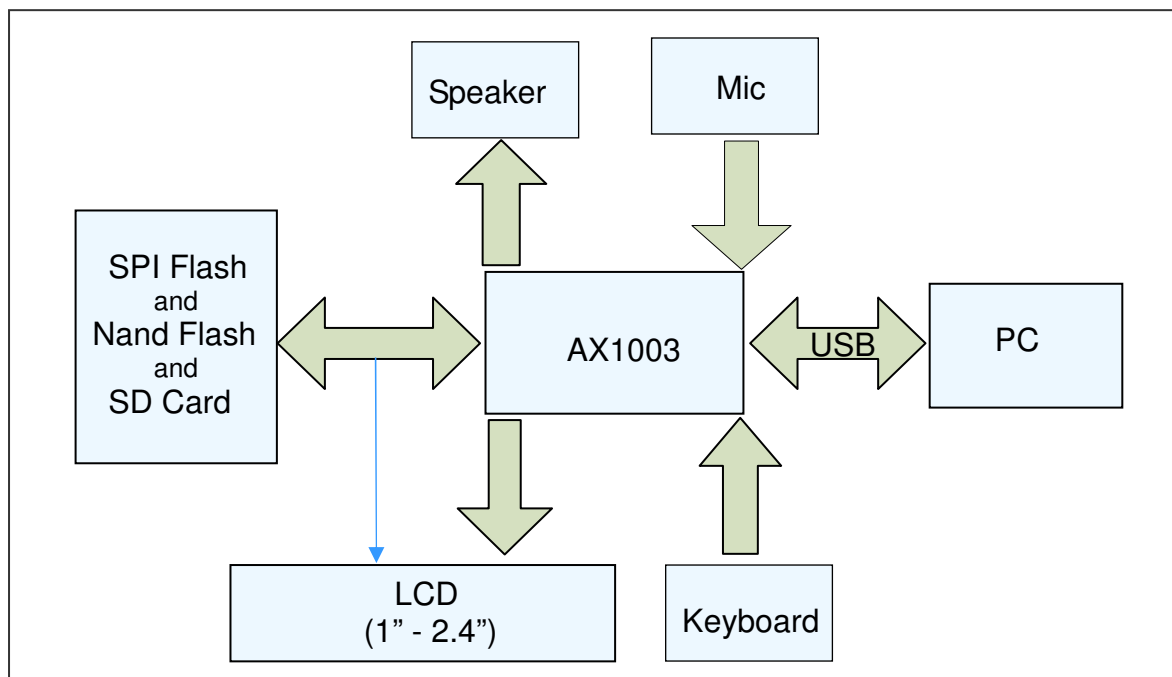
### Solution Diagram 1



**Solution Diagram 2 (with background music)**



**Solution Diagram 3 (with sound record and playback)**



## 1" – 7" LCD display DPF Solution (AX2002)

### Advantages:

- A total solution: own designed IC + advanced application solution
- Low Cost + Short lead-time
- Internal SPI Flash & Nand Flash & SD Card memory
- Reference designs and can be modified according to customer's needs
- Firmware support for unique functions and user interface
- Support Analog & Digital panel

### DPF Features

- 1" – 7" display (High pixel: 480X360)
- JPEG decode
- Support USB OTG (HOST / SLAVE)
- LCD contrast adjustment
- Start-up picture and logo display
- Auto-off power save mode
- Image up/down
- Delete single/all
- Infrared Remote Control
- ◇ Support background music
- ◇ Sound record and playback

### Solution Diagram

