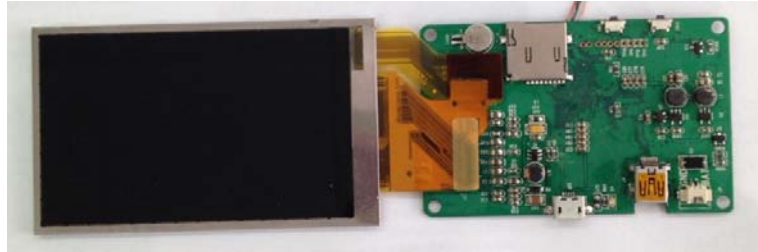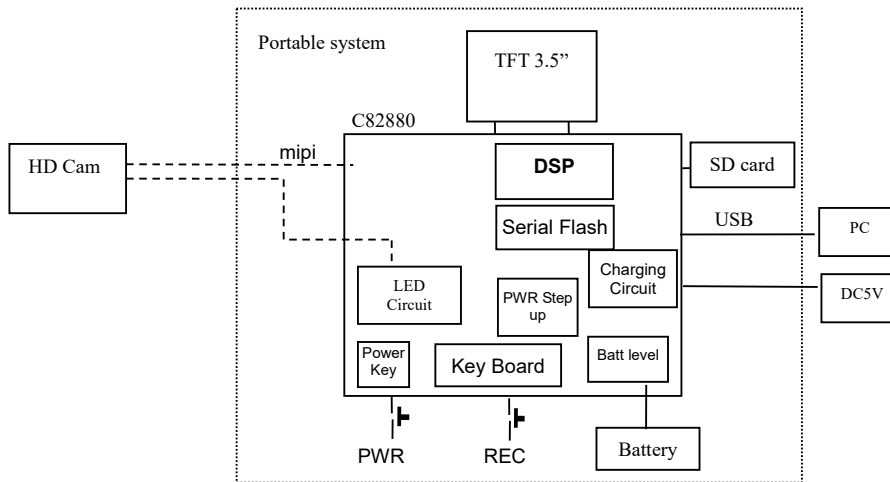## Description

This C82880 is a portable handheld solution for HD camera. It has built in high resolution 3.5" IPS display panel, connect to micro camera module of mipi interface, with LED lighting control. It is good for medical and industrial application.

Features

- Image display in center of panel
- 1280x720 resolution
- Built in 3.5" 16:9 high resolution display (800x480RGB)
- Recording HD720p 30fps
- Max 30 min video clip of HD720p
- Support SDHC to 32G
- Low power consumption

- 3.7v battery operation
- OSD to display battery status
- Power step up for system operation
- Low voltage detect
- Auto power off after idle for 30min
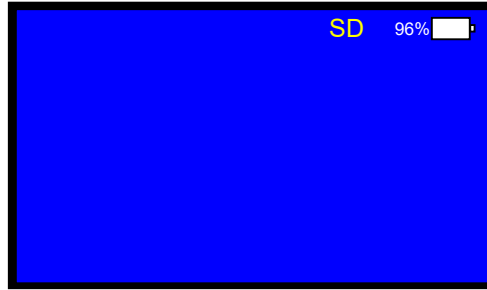- Built in battery charging circuit
- USB Mass storage

Block Diagram

Electrical Characteristics (at room temperature 25C)

Parameter	Condition	Min	Typ	Max	Unit
Operation Voltage		3.5	4.2	5.5	V
Operation Current	No LED on				mA
	With 40mA LED on				mA

Operation

1 Press PWR key to turn on. The screen will show the real time video as well as battery level status and SD card presence.
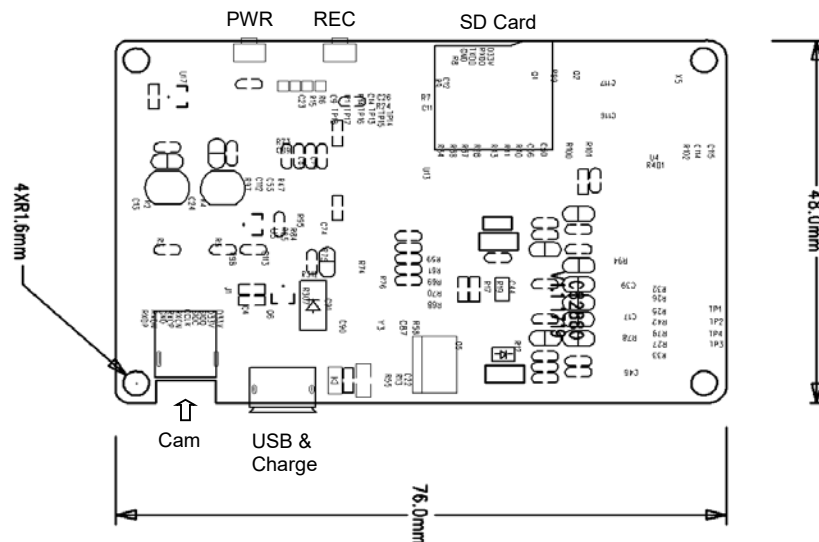

2 Capture AVI
   2.1 Take a video clip - Press **REC** to start recording. During recording a dot will be flashing on the screen. Press **REC** again to stop recording. Max recording time is 30 minutes.
   2.2 All files are saved as IMGxxxxx.AVI (xxxxx starts from 00001 to 09999). If there is the same file name existed, the old file will be overwritten by the new file.

   Note: this module has no on-board memory, so it needs external SD card to store files. User needs to insert SD card before it can perform a snap shot or video capture

3 AWB: point camera tip to white, press **REC** key for 3sec to do white balance calibration. This value will be stored in the memory. By theory, only one time calibration is enough.

4 Battery detect
   4.1 Battery level will always display on the screen.
   4.2 If the battery capacity is less than 10%, "**BATT LOW**" will pop up and flashing for several seconds and then turn off the device automatically.

5 Playing files in PC
   5.1 User can pull out SD card to view files in other device or using USB cable to connect between the device and view directly in PC
   5.2 If play files in PC, turn on the device, in preview mode, connect USB cable to PC. A USB wording will be popped up to indicate the connection
   5.3 Using browser to view the SD card, all files are in the folder DCVD.
   5.4 During USB connection, don't remove SD card from the machine, otherwise, it may cause machine hang problem.

Mechanical Dimension for PCB Module

Mechanical Dimension for TFT