

1. Features

- **Video Decoder**

- Accepts NTSC (M), PAL (B, D, G, H, I, M, Nc).
- Video decoder could be programmed to operate at 27MHz.
- 10-bits video ADCs with built in 6.5 MHz analog low pass filter
- Automatic gain control for Luminance and Chrominance
- Programmable brightness, contrast, saturation, hue, and sharpness
- Support video interface YCbCr 4:2:2, 4:1:1, 4:2:0 format
- Support mirror function
- 5-H comb filter for YC separation
- Chrominance line filter for PAL phase error
- DLL for video synchronization, supports 27MHz crystal within +/-1000 ppm variance
- Advanced video synchronization for weak and noisy CVBS. Supports video signal transmitted by 500-meter long cable
- Support line lock camera

- **Miscellaneous**

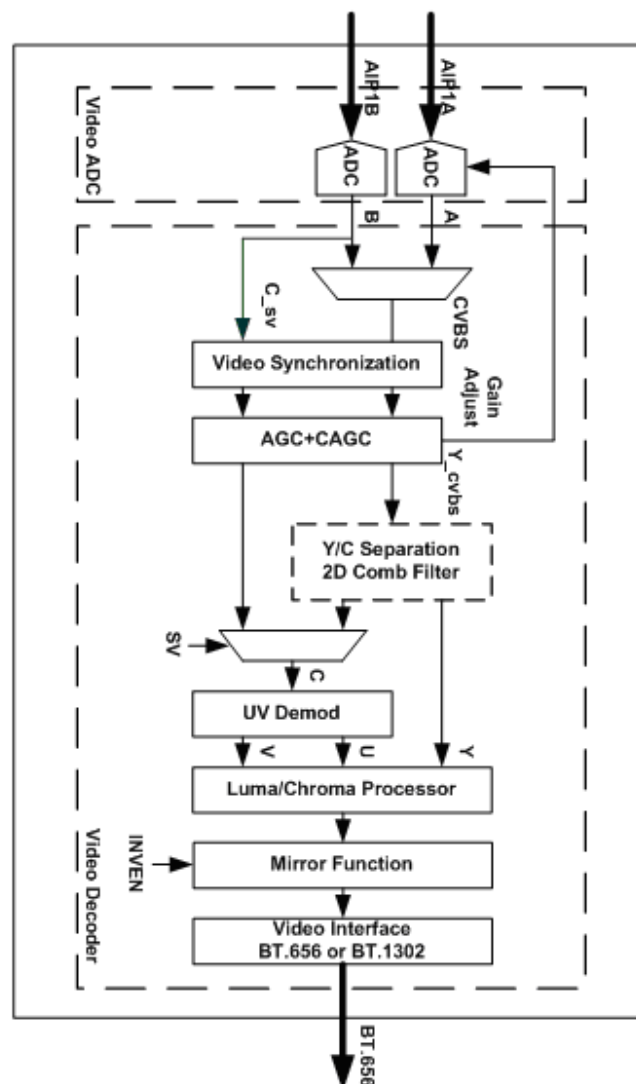
- Use a single external 27MHz crystal to support 720H video
- One programmable PLL integrated
- Slave I2C bus
- Ultra low power consumption. Under 150mW for normal operation. Under 50mW for suspend mode.
- 32-pin LQFP (5mmx5mm) or 32-pin QFN (4mmx4mm) package
- 1.8V core power, 3.3V analog power and 1.8V analog power

2. General Description

The DM5150 is a 1-channel video decoder designed for cameras with 720H CCD sensor. The DM5150 converts 6.5 MHz analog CVBS signals to digital 27

MHz CCIR656 signals. The DM5150 integrates an internal PLL, and decodes 720H videos using 27MHz external clock source.

3. Block Diagram



6. Applications

- DVR
- Car DVR
- Video capture card

7. Ordering Information

Part Number	Pin Count	Package
DM5150EP	32	LQFP (Pb-Free and Halogen-Free)