

1. Features

- **Video Decoder**

- Accepts NTSC (M), PAL (B, D, G, H, I, M, Nc) and SONY 960H CCD Camera
- Video decoder could be programmed to operate at 27 or 36MHz.
- 10-bits video ADCs with built in 9/6.5 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**

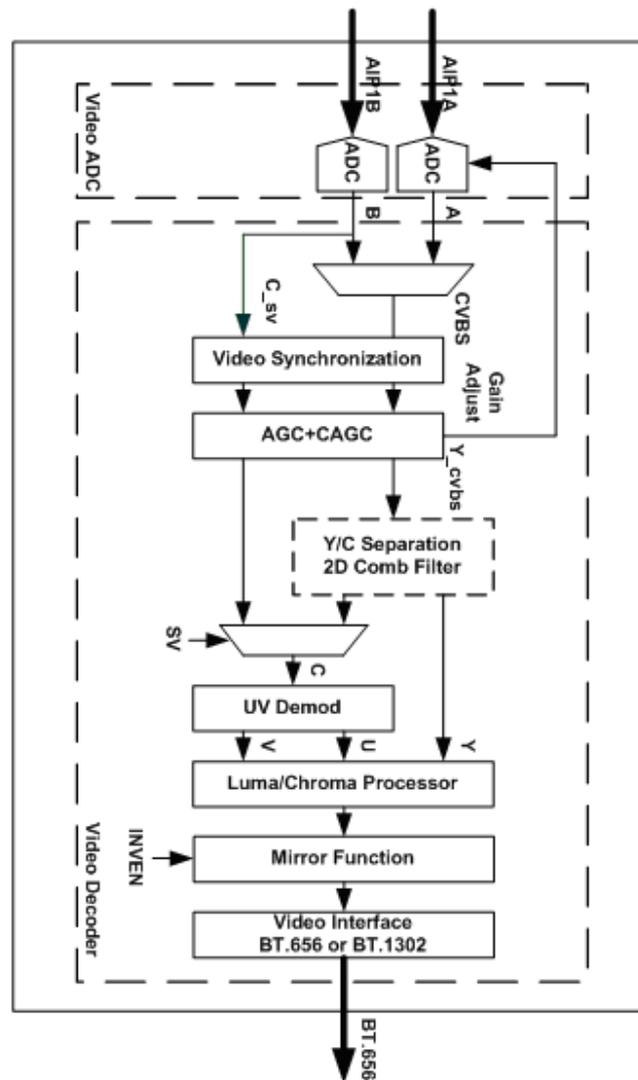
- Use a single external 27MHz crystal to support both 960H and 720H video
- One programmable PLL integrated
- Slave I2C bus
- Ultra low power consumption. Under 150mW for normal operation. Under 50mW for suspend mode.
- 32-pin LQFP (5mmx5mm) or 32-pin QFN (4mmx4mm) package
- 1.8V core power, 3.3V analog power and 1.8V analog power

2. General Description

The DM5160 is a 1-channel video decoder designed for cameras with Sony's new 960H CCD sensor. The DM5160 converts 9/6.5 MHz analog CVBS signals to digital 36/27 MHz CCIR656 signals. The DM5160

integrates an internal PLL, and decodes both 960H and 720H videos using the same (27MHz) external clock source.

3. Block Diagram



6. Applications

- DVR
- Car DVR
- Video capture card

7. Ordering Information

Part Number	Pin Count	Package
DM5160EP	32	LQFP (Pb-Free and Halogen-Free)