



WM6235C: High Quality Coaxial HD CMOS ISP

WM6235C is a cost effective and high quality CMOS sensor ISP (Image Signal Processor) chip for security and automatic camera application. The integrated high quality ISP including 2A (AE/AWB), 2DNR and other enhancement functions give stable and high quality images for various camera applications. WM6235C supports up to 5M@25fps HDcctv analog video output and CVBS analog video output.

WM6235C integrates video driver and comparator to achieve low BOM cost. The embedded powerful CPU enables flexible software application.

Features	
CPU	<ul style="list-style-type: none"> ● 32-bit CPU
VI	<ul style="list-style-type: none"> ● DVP 8/10/12bit @98MHz ● 4Lane MIPI CSI-2 @Max 800Mbps/Lane ● BT.1120 for external ISP input
VO	<ul style="list-style-type: none"> ● Analog video output ● Supports HDcctv 1M/2M/3M/4M/5M RT analog video output ● Supports HDcctv 6M/8M NRT analog video output with external ISP ● Supports CVBS (960H) analog video output
ISP	<ul style="list-style-type: none"> ● 2DNR ● DWDR ● BLC ● DPC ● DRC ● GIC ● LSC ● Dehaze ● AE, AWE ● CCM ● Edge enhanced process
Audio	<ul style="list-style-type: none"> ● Supports down-stream audio data over video to remote DVR device
Video and Graphic Processing	<ul style="list-style-type: none"> ● Scaling and crop ● Mask and OSD

Peripherals

Video Interfaces	VI	<ul style="list-style-type: none"> ● DVP 8/10/12bit ● 4Lane MIPI CSI-2 ● BT.1120
	VO	<ul style="list-style-type: none"> ● Analog video output
Other Interfaces		<ul style="list-style-type: none"> ● UART ● I2C ● SPI ● PWM ● ADC ● GPIO ● I2S

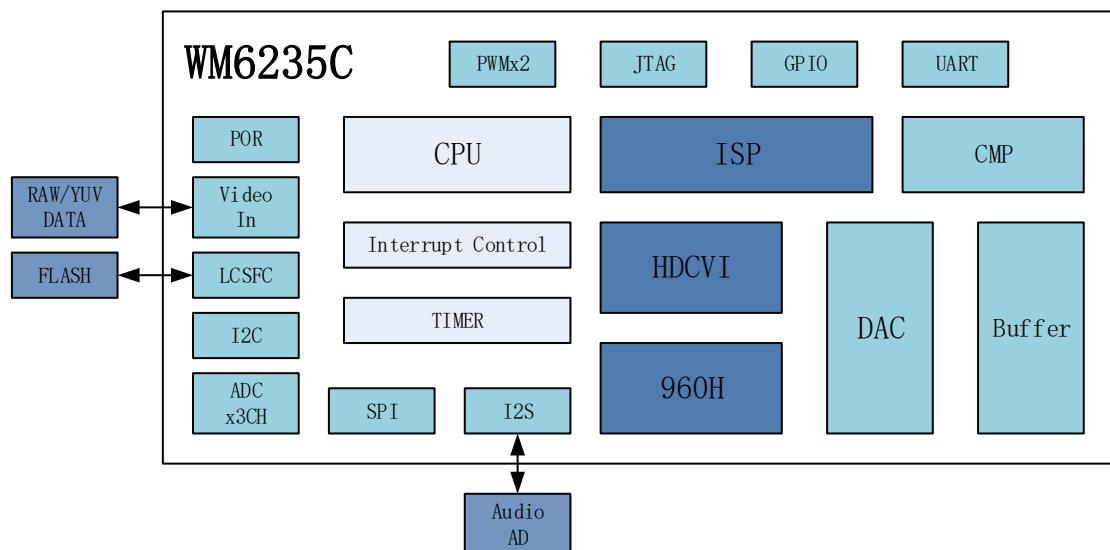
Startup

- Boot from SPI Flash

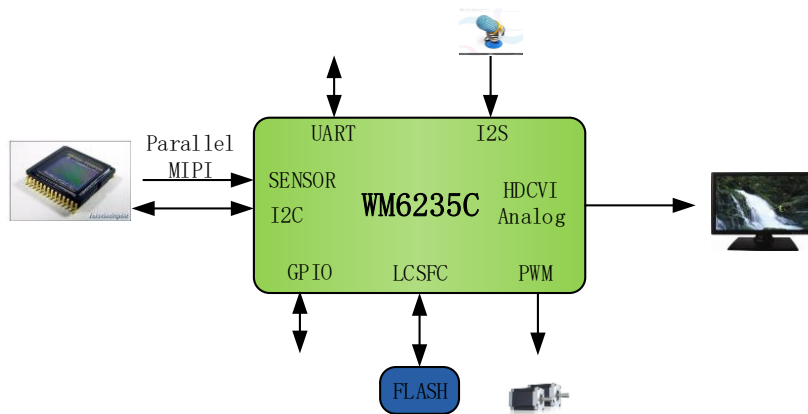
Physical Specs

Operating Voltage	<ul style="list-style-type: none"> ● 1.2V core voltage ● 3.3V I/O voltage ● 3.3V analog voltage ● 1.8V/3.3V sensor voltage
Package	<ul style="list-style-type: none"> ● 6 mm × 6 mm TFBGA97

WM6235C Block Diagram



CMOS Camera Solution with Internal ISP



CMOS Camera Solution with External ISP

