

the world's frst camera solution that supports recompilation of FHD MJPEG into H.264 format. An advanced ISP is



## ARM Cortex-A7 CPU, Advanced ADAS Algorithm

Allwinner V3 packs an ARM Cortex-A7 core that runs up to 1.2GHz to deliver higher computing capability, enabling support for advanced ADAS (Advance Driver Assistant System) algorithm to provide more secure driving experience,



## WiFi or 3G/4G Supported, Android/iOS APKs

WiFi or 3G/4G function can be available in V3 to enable interaction with mobile phones after installing

OS

## Linux OS or Allwinner's Camdroid OS

Allwinner V3 runs on the Linux operating system or Allwinner's Camdroid OS, an Android-lite operation system that



Allwinner V3 integrates a wide range of connectivity and interfaces, including MIPI & parallel CSI controllers, RGB/LVDS LCD controller, audio codec, EMAC + PHY, etc.

esp

## Features and Specifications

	• Supports 1080p@60fps or 2-channel 1080p@30fps H.264 video encoding, supports 8M JPEG encoding • Supports H.264 1080p@60fps decoding, MJPEG 1080@30fps decoding
™ ISP	<ul> <li>Integrated ISP up to 8M pixels</li> <li>Supports two channel outputs for display and encoding respectively</li> <li>Supports various input and output formats</li> <li>Supports AE/AF/AWB</li> <li>Supports saturation adjustment/ noise reduction/ defect pixel correction/distortion correction</li> </ul>
Video Input/Output	Supports 8/10/12-bit parallel CSI and 4-lane MIPI CSI2     Supports BT1120 input     Supports up to 8M CMOS sensor     Supports RGB/i80/LVDS LCD up to 1024x768 resolution     Supports Allwinner's next-gen SmartColor display technology for better visual effects for images & videos
CPU	• ARM Cortex™-A7 @1.2GHz
Memory	<ul> <li>Supports 16-bit DDR3/LPDDR3/DDR3L SDRAM controller, up to 1333Mbps</li> <li>Supports 16-bit DDR2 up to 800Mbps, 16-bit LPDDR2 up to 1066Mbps</li> <li>Supports memory size up to 2GB</li> </ul>
	<ul> <li>Integrated 92dB audio codec</li> <li>Supports two ADC channels and two DAC channels</li> <li>Supports 3 MIC-in, a stereo Line-in, a headphone output and a stereo line-out output</li> </ul>
	• Supports AES/DES
	• 3 x SD card controllers • LRADC/SPI/TWI/UART/PWM • USB, EMAC+PHY
OS	Supports Camdroid OS, an Android-lite operating system     Supports Linux OS
Package	• TFBGA 259 pins, 12mm x 12mm, 0.65 pitch

