

Introduction

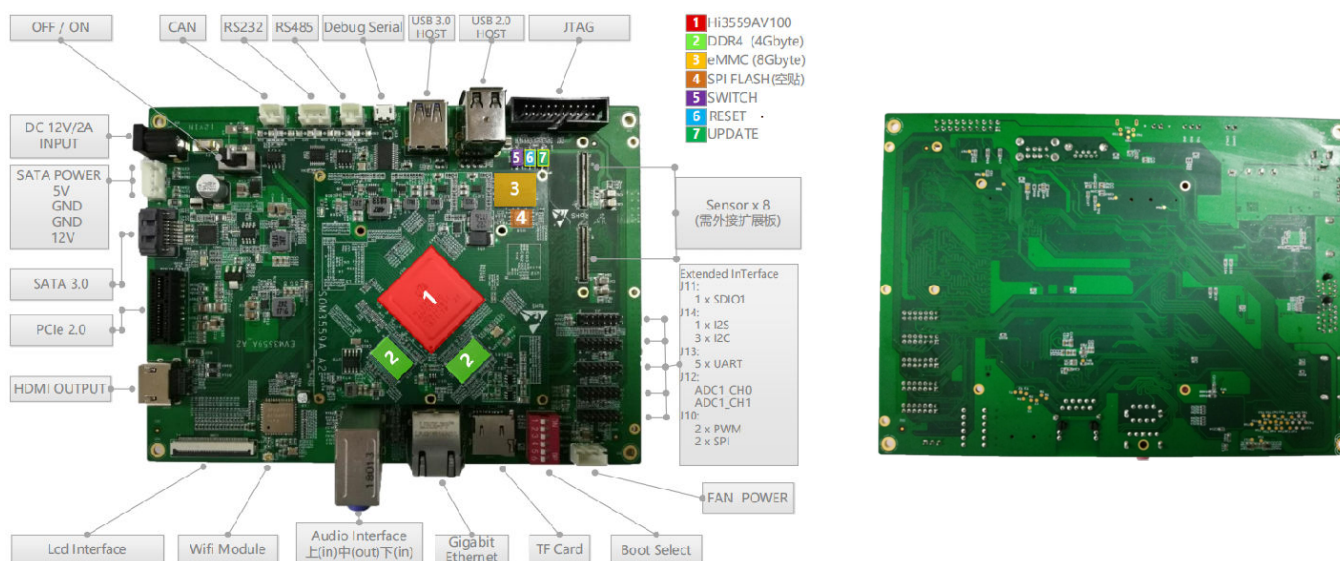
HIVIEW provides a set of development boards. The kit is mainly composed of a core board and a mother board. The motherboard provides a rich set of interfaces that you can use to evaluate the capabilities of the HI3559AV100 chip, or you can implement the features you need directly on the board; you can also directly use this mother board or the core board to develop a mass-produced product; or the core board. If none of the above is met, you can re-customize the board. We will provide basic software services to provide you with the necessary help to develop the products you want.



Application Fields

HI3559AV100 is versatile for various video processing applications such as intelligent Security cameras, video conference, intelligent video analysis, 4K video codec and UAV.





Hardware Specification

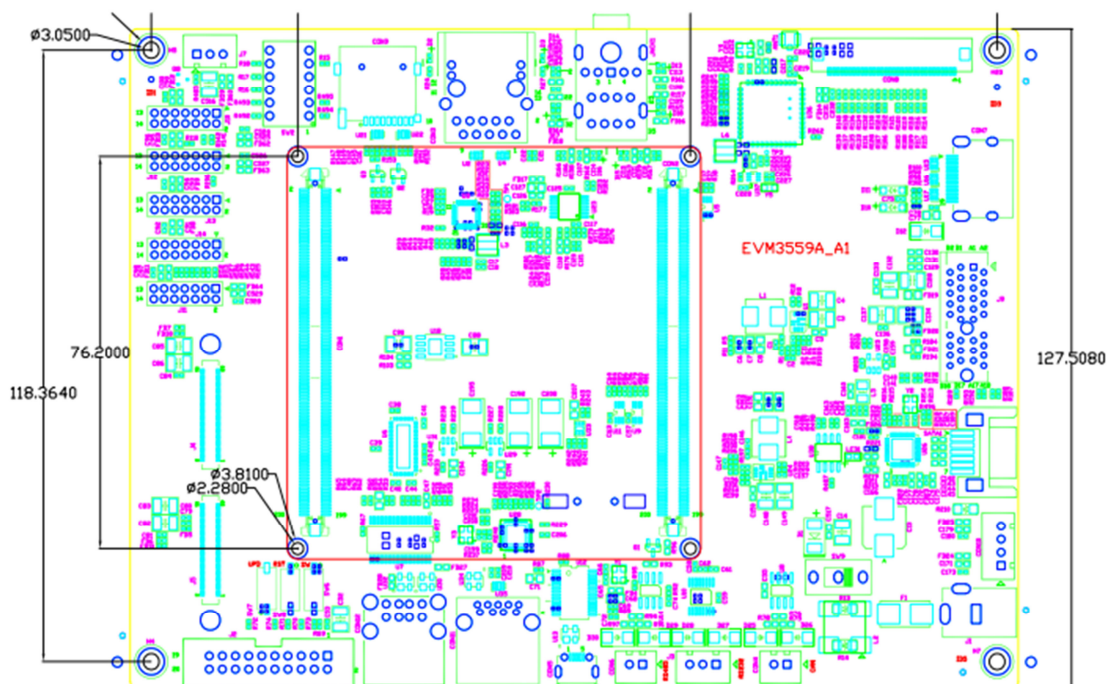
Item	Type	Model	Description
SOM3519A	Hi3559AV100	MPU	Dual-core ARM Cortex-A73@1.6GHz Dual-core ARM Cortex-A53@1.2GHz ARM Cortex-A53@1.2GHz
		DSP	Quad-core 700MHz (The software interface is packaged by Hisilicon SDK. It's not available)
		GPU	Dual-core ARM Mali-G71@900MHz
		NPU	Dual-core 840MHz NPU
	RAM	DDR4	4G Byte
	FLASH	SPI Flash	256M Byte(Optional)
		eMMC	8GB
	Connector	BTB Connector	400PIN,0.635mm
Peripheral	Video Input	8 channel	Support maximum 8x sensors input (External extension board is needed)
	Video Output	1 channel	HDMI2.0,Support maximum 4K@60fps output, Supporting Audio output
	Ethernet	1xGigabit	RTL8211FI-CG RJ45 connector
	WIFI	1x	Protocol: 802.11 b/g/n, External antenna
	Audio Input	2x	Audio LINE-IN
	Audio Output	1x	Audio LINE-OUT
	LCD	1x	Reserved DSI interface
	PCIe	1x	Support hard disk External extension board is needed (PCIE to SATA)
	CAN	1x	Reserved
	RS232	1x	Reserved
	RS485	1x	Reserved
	Debug UART	1x	Micro USB Interface
	USB	2x USB2.0 1x USB3.0	Support USB camera

	JTAG	1X	Reserved
	Extended Connector	1xI2S,3xI2C, 1xADC1, 1xSDIO1 5xUART, 2xSPI,2xPWM	Reserved
	Fan Power connector	1x	Support 3V3/5V/12V Fan
	TF Card Slot	1x	
RTC	External RTC, Powered by button cell		
Operating Temperature:	0℃ ~ 75℃		
Humidity	RH40%~RH90%(Non-condensate)		
Storage Temperature:	-10℃ ~ 80℃		
Operating Voltage:	11.7VDC ~ 12.5VDC Typical Value: 12VDC		

Software Specification

Linux	Uboot	version	U-Boot 2016.11
		Boot Mode	eMMC
		Download Method	Serial Port/TF Card
	Kernel	Kernel Version	Linux 4.9.37
		File System	ext4/yaffs2/jffs2/ubifs
		Download Method	Serial Port/TF Card/Ethernet
	Device Driver	LED	LED Driver
		Serial Port	Serial Port Driver
		RTC	RTC Driver for saving system time
		Ethernet	10/100/1000M Ethernet Driver
		USB host	USB2.0 host driver
		OTG	USB2.0 OTG driver
		MMC/SD	MMC/SD controller driver
		I2S	I2S bus driver
		SPI	SPI bus driver
		eMMC	eMMC driver
		Audio input & output	Audio input/output driver
		TCP/IP	Offer complete TCP/IP driver
	System and Service Configuration	Ifconfig, route	For network configuration and related service program
	Basic Tool	Common Command	Cat , chmod, echo, free, init ,kill, ls, mkdir, mount, ps, reboot, rm, lsmod, rmmod

Physical Dimension Chart



Development Package

- Provide technical reference manual describing hardware design, system software porting, driver development and application software development environment.
- Provide CPU datasheet, SDK and software development environment. So you just need to focus on your core software development.
- Provide QT development environment.
- Provide a variety of Linux DEMO including VIO, AVS, VENC, VDEC, DSP, NNIE, IVE.

Free Technical Support Services

- Locate product fault
- Explain software and hardware resources in our embedded product.
- Help users compile and run correctly the source code we provided.
- Help user solve the abnormal problems while using our embedded product based on the development package we provided.

Value-added Service

- Carrier board custom design service
- System on module custom design service
- Linux/DSP system custom service
- Embedded software development
- Fast-boot solution porting
- Project cooperation and development