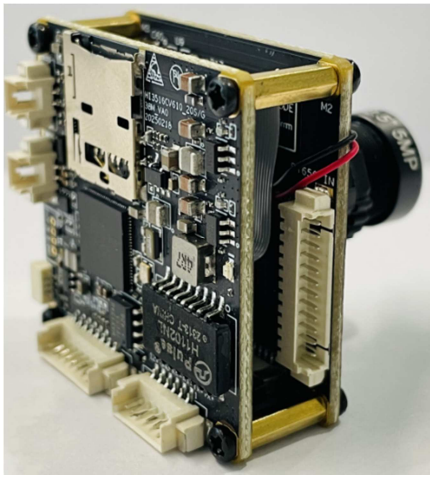
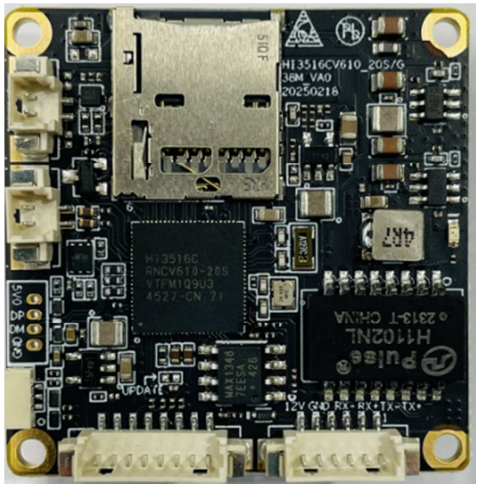
HIVIEW-TECH
海 视 通

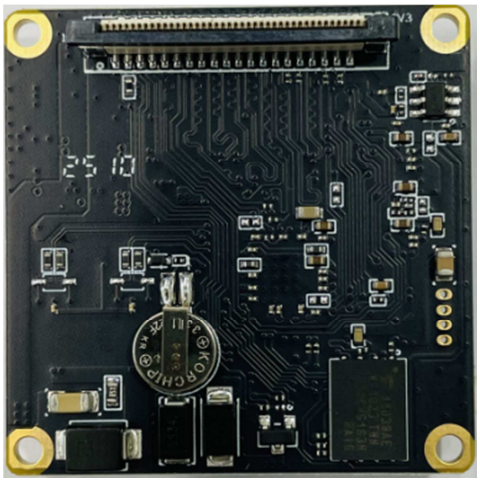
HI3516CV610-20S 4MP module Specification

HV-PM16CV610-20S-C1



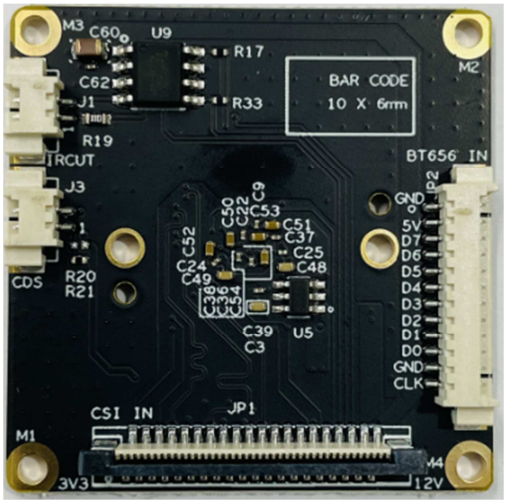


Top side



Bottom side
CPU main board

Top side



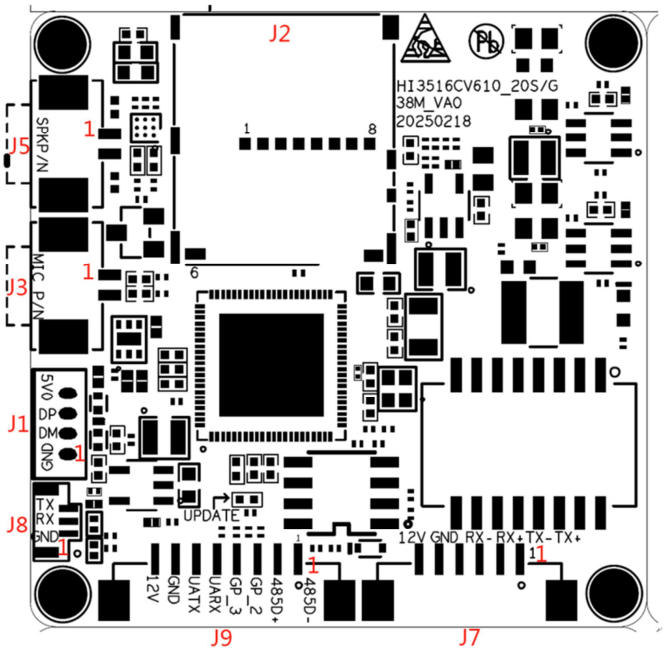
Bottom side
Sensor board

Technical parameter

CPU	HI3516CV610-20S
Intelligent analysis	1 TOPS NPU
DDR	Build-in DDR3,128MB
Flash	SPI NAND FLASH,128MB
Sensor	SC4336P(1/3')
Resolution	4MP/30fps
Lens	M12,6mm,
Ethernet	10/100Mbps RJ45
Networking protocol	Support DHCP,NTP,RTSP,TCP,UDP,ARP,DNS
Platform protocol	Suppot Onvif
SD storage	Support TF card, max 2TB
Audio	1 audio in(mic in),1 audio out(speaker out)
Other interface	USB 2.0 UART/RS485 GPIO *2 BT656 input
Software system	Linux-Ubuntu ,Openhisilicon (http://hiview-tech.cn)
Power in	DC12V
Board size	CPU main board:38*38mm,sensor board: 38*38mm, Mount hole size:34*34mm(M2*4 screw hole) Module size:38*38*20mm
Operating temperature	-30～70℃

Interface definition

Main board



1. J7(power in and RJ45)-SMD6pin_1.25mm.

Order	Name	Power domain	Order	Name	Power domain
1	TX+		2	TX-	
3	RX+		4	RX-	
5	GND		6	DC12V	

2. J9(power out,uart,gpio and RS485)-SMD8pin_1.25mm.

Order	Name	Power domain	Order	Name	Power domain
1	RS485D-		2	RS485D+	
3	GPIO1_2	3.3V	4	GPIO1_2	3.3V
5	UART2_RX	3.3V	6	UART2_TX	3.3V

Note:The UART2 and RS485 use the same UART interface,so user just select the one function of 2 to use in mass production,by adjust the resistor to select the different function in the board.

3. J8(Debug UART0)-SMD3pin_0.8mm.

Order	Name	Power domain	Order	Name	Power domain
1	GND		2	UART0_RX	
3	UART0_TX	3.3V			3.3V

4. J1(USB2.0)-SIP4pin_1.25mm.

Order	Name	Power domain	Order	Name	Power domain

1	GND		2	USB2_DM	
3	USB2_DP		4	DV5V	

5. J3(Mic in)-SMD2pin_1.25mm.

Order	Name	Power domain	Order	Name	Power domain
1	MIC_P		2	MIC_N	GND

Note:single-ended mic is support by default.

6. J5(Speaker out)-SMD2pin_1.25mm.

Order	Name	Power domain	Order	Name	Power domain
1	SPEAKER_P		2	SPEAKER _N	

Note:it can drive 4R,1.5W or 8R 0.8W device.

7. JP1(VI input)-SMD40pin_0.5mm FPC.

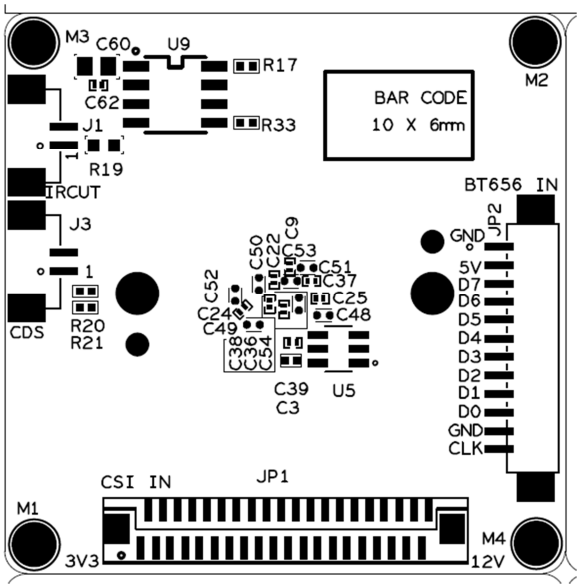
It can support: 1*4 lans sensor,

2*2 lans sensor,

1*2 lans sensor + 1*BT656,

1*BT1120

Sensor board



1. JP1(Sensor output + BT656 output)-SMD40pin_0.5mm FPC.

2. JP2(BT656 input(1.8V))-SMD12pin_1.25mm