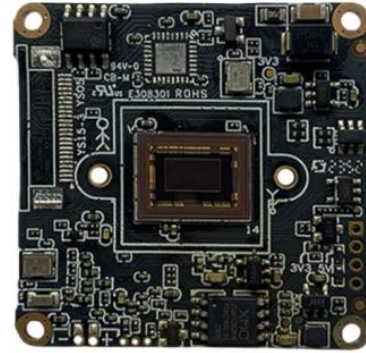


IM20A01 2.0MP Low-illumination HD IPC Module



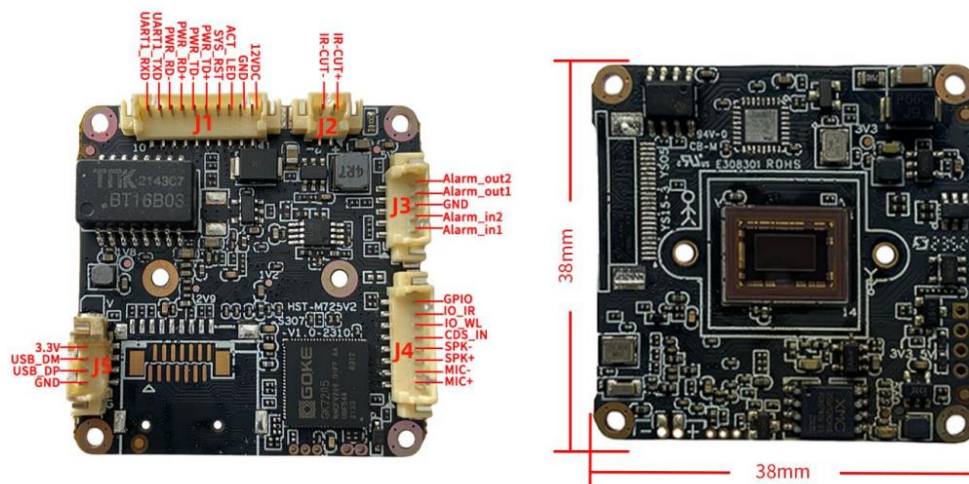
Key Features:

- 1/2.8" 2MP Sony IMX307 STARVIS CMOS
- Maximum resolution up to 1920×1080@30fps
- True Day/Night, 3D DNR, Digital WDR
- Support humanoid detection, motion detection
- Support the Tuya P2P on Android, IOS
- Support two way audio, Built-in audio amplifier function
- Support ONVIF and XM protocol
- Support TCP/IP/HTTP/NTP/DHCP/SMTP/RTSP
- Open SDK(Linux,Windows), CGI,easily to be integrated with other digital systems
- Support OPENIPC development

Technical Specifications:

Image Sensor	
Sensor	1/2.8" 2MP Sony IMX307 STARVIS CMOS
Maximum Resolution	1920x1080@30fps
Minimum Illumination	0.003lux @F1.0(Color) / 0.0005 lux@F1.0 (B/W)
Camera	
AGC	Auto/Manual
S/N Ratio	≥45dB (AGC OFF)
Shutter Speed	1/2 - 1/20 ,000s,Slow shutter support
Wide Dynamic Range	Digital WDR
Exposure Mode	Auto/ Manual/shutter mode
AWB	Yes
Day & Night	External control (IR Cut Filter)
Light Control	Support IR/White/dual light, three mode independent control
Compression	
Video Compression	H.265+/H.265/H.264 Main Profile /M-JPEG
Audio Compression	G711U,G711A,PCM
Image Resolution	
Main Stream	1920 × 1080/ 1280x960/ 1280x720@30fps
Sub Stream	640x480/480x360/352x288/176x144@30fps
General Protocol	
Network Protocol	TCP/IP/HTTP/NTP/DHCP/SMTP/RTSP/P2P
ONVIF protocol	Yes
Compatibility	Support XM protocol
P2P	
Support TUYA APP	Support for Tuya APP (Android, IOS)
Function	
Web Configuration	Yes
OSD	Yes
Motion Detection	Yes
Humanoid Detection	Yes
Reset	Support cable reset button(optical)
Amplifier	Built-in amplifier
Interface	
Wired	1ch 10/100 BaseT Ethernet,RJ45 interface
Audio	Microphone input/output
Alarm	2 ports input, 2 ports output
UART	Support
USB	Support
TF Card	Optional and max. 512G (reserved extended SD slot)
Other	
Power Supply	DC 12V
Size	38x38mm
Operation Temperature	-10°C~50°C
Working Humidity	≤90%RH(non-condensing)

Interface Pin Definition:



Interface	pin	Pin name	Functional parameter
J1	1	12VDC	DC power input, voltage range 5V-13.8V
	2	GND	GND
	3	ACT_LED	Network indicator light interface
	4	SYS_RST	Restore factory settings LOW valid
	5	PWR_TD+	Adaptive network interface, physically receiving/transmitting signals (differential +)
	6	PWR_TD-	Adaptive network interface, physically receiving/transmitting signals (difference -)
	7	PWR_RD+	Adaptive network interface, physically receiving/transmitting signals (differential+)
	8	PWR_RD-	Adaptive network interface, physically receiving/transmitting signals (difference -)
	9	UART1_TXD	Serial communication, sending TX
	10	UART1_RXD	UART1, receive RX
J2	1	IR-CUT+	IRCUT signal +
	2	IR-CUT-	IRCUT signal-
J3	1	Alarm_in1	Alarm input 1
	2	Alarm_in2	Alarm input 2
	3	GND	GND
	4	Alarm_out1	Alarm relay output 1
J4	5	Alarm_out2	Alarm relay output 2
	1	MIC+	MIC+
	2	MIC-	MIC-
	3	SPK+	SPK+
	4	SPK-	SPK-
	5	GDS_IN	Hard light sensitive infrared
	6	IO_WL	Soft photosensitive white light
	7	IO_IR	Soft photosensitive infrared
8	GPIO	8 preview GPIO (PWM not supported)	
J5	1	3.3V	3.3V power supply
	2	USB_DM	data D-
	3	USB_DP	data D+
	4	GND	GND