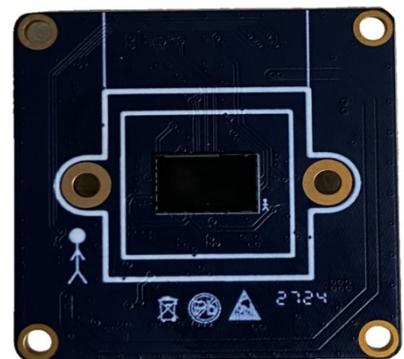
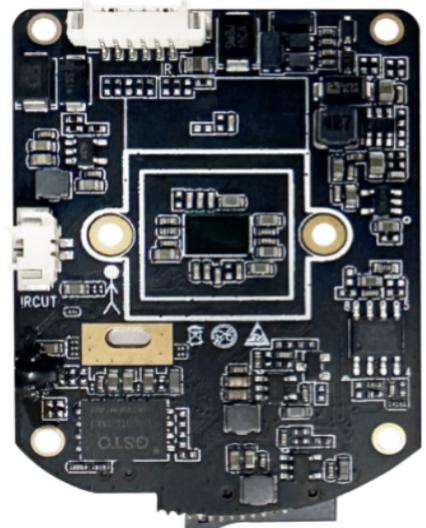




# S44-20

## Features:

- Dual 4M, Main 1/3 inch CMOS, Sub 1/1.88 inch CMOS
- H.265+, H.265, H.264+, H.264 Video Compression
- Supports backlight compensation, strong light suppression, 3D digital noise reduction
- Flip, Mirror, and Rotation with 90 or 270 degree
- Good night-time performance with Smart Supplement Light
- Support Wi-Fi 6
- Line crossing, intrusion, region entrance, region exiting
- Alarm triggering by human and vehicle
- Supports voice intercom, voice broadcast, custom voice
- Support 34 languages on the browser
- Browser plugin-free: supports Edge, Chrome, Safari, Firefox and other mainstream browsers
- Supports image masking to protect private areas.
- Support ONVIF, can be connected to third-party NVR
- Support Mesh CMS functionality on the browser
- 12VDC or 5VDC



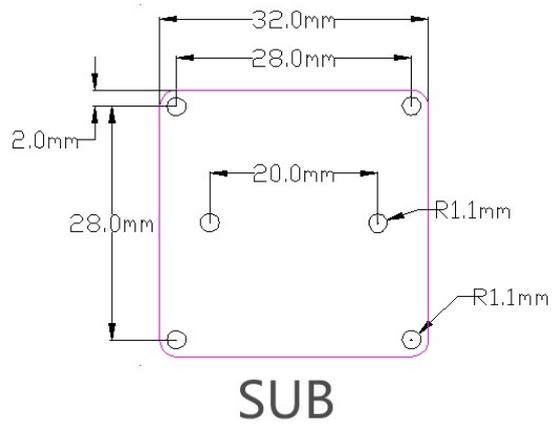
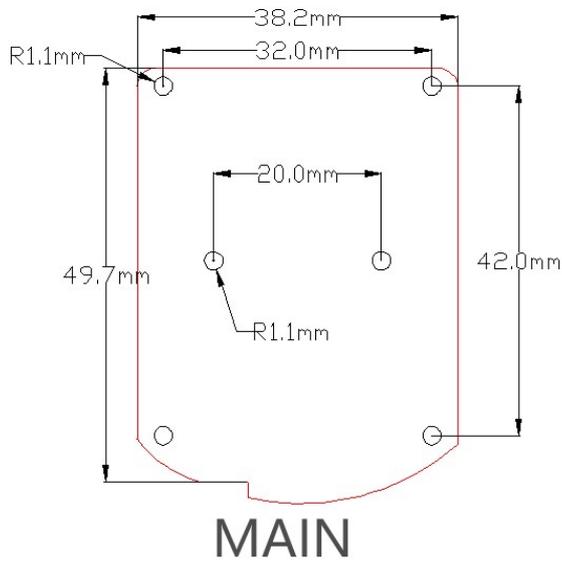
<b>Product model</b>	S44-20
<b>SOC processor</b>	SSC37X, built-in IT computing power
<b>Image Sensor</b>	Dual 4M, Main 1/3 inch CMOS, Sub 1/1.88 inch CMOS
<b>Video main Sensor sub-Sensor</b>	Main Stream 30FPS (2560*1440, 2304*1296, 1920*1080, 1280*720)
	Sub-Stream 30FPS (640*360, 352*240)
	Image effects: Automatic white balance, support for digital wide dynamic range, support for backlight compensation, adjustable brightness, contrast, and chroma parameters.



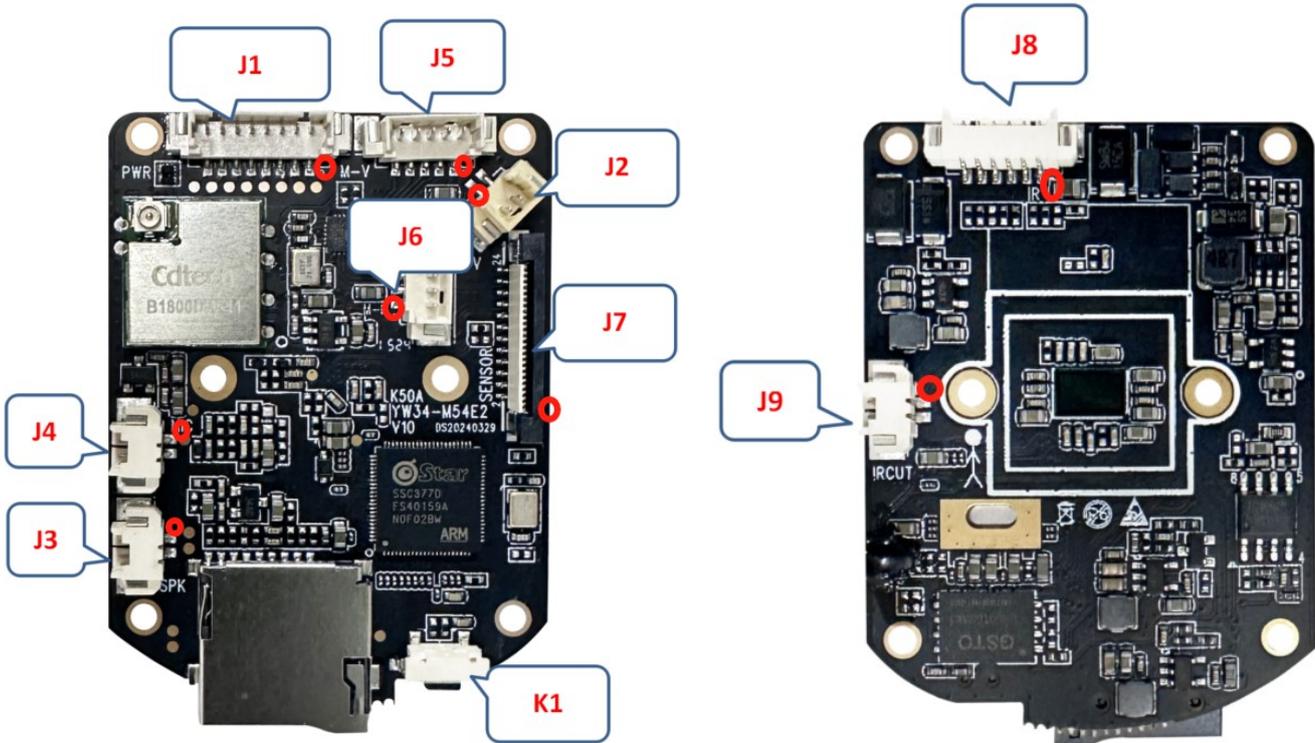
<b>Network</b>	1 RJ45 10 M/100 M self-adaptive Ethernet port
	Protocols:TCP/UDP/IP/HTTP/RTSP/DHCP/P2P/ONVIF
<b>Motor</b>	2 channels STM driver 64 u-step driving
<b>WIFI</b>	IEEE802.11b/g/n/ax 2.4G
<b>Smart Supplement Light</b>	Infrared/white light control by electrical level or PWM
	Adjustable brightness depend on Sensor or photoresistor
<b>TF</b>	Yes
<b>Reset Key</b>	Yes
<b>Network indicator light</b>	Yes
<b>Emc</b>	GB/T17626.5, IEC61000-4-5
<b>Intelligent applications</b>	Face Capture: Enables configurable detection zones. When a face is detected within the designated area, an alarm is triggered based on predefined conditions.
	Face Recognition: Employs a local face database for recognition with a precision rate exceeding 99.9%.
	Pet Monitoring: detect and track pets, specifically cats and dogs.
	Traffic Surveillance: Detects vehicle congestion and provides traffic statistics.
	License Plate Recognition: Identifies and recognizes common license plates with an accuracy rate surpassing 99.8%.
	Infant Monitoring: Provides real-time monitoring of a baby's cries with event reporting.
	Noise Detection: Monitors high-decibel barking sounds in real-time and generates event reports.
	Obstruction Detection: Detects obstructions in specified areas of the image and reports obstruction events based on trigger conditions.
	Perimeter Security: Alerts upon human or vehicle intrusion into designated alarm zones.
	Boundary Crossing Detection: Identifies human movement with directional detection capabilities (A->B, B->A, and A<->B).
	Absentee Detection: Triggers alarms when personnel leave designated areas for a defined period, automatically ceasing upon their return.
People Counting: Counts individuals entering and exiting, displaying real-time overlays on the image, and providing daily data.	
Voice Alerting: Links with voice broadcasting systems, allowing customizable recorded messages for alerts.	
<b>Power</b>	12 VDC or 5VDC
<b>Operating Conditions</b>	-30°C~65°C
<b>Dimension</b>	Main Board: 38*52mm Sensor Board: 32*32mm



# Board



# Main board



Note: The circle point to pin 1



## Interface Description:

### J1 (SMT-8P-1.25MM-V) -----12V Power and ETH

Pin	Name	Function
1	12V_VIN	12 VDC IN ---not used when 5V input
2	GND	GND
3	RX-	Receive Data- 6
4	RX+	Receive Data+ 3
5	TX-	Tranceive Date- 2
6	TX+	Tranceive Date+ 1
7	LED_LINK	Network indicator light
8	RST	Factory recovery

### J2 (SMT-2P-1.25MM-V) -----5V Power

Pin	Name	Function
1	5V_VIN	5 VDC IN ---not used when 12V input
2	GND	GND

### J3 (SMT-2P-1.25MM-H) ----Speaker

Pin	Name	Function
1	SPK+	Speaker+(8 Ω 1W )
2	SPK-	Speaker- (8 Ω 1W )

### J4 (SMT-2P-1.25MM-H) ----MIC

Pin	Name	Function
1	MIC0	Line in
2	GND	GND

### J5 (SMT-5P-1.25MM-V) -----Vertical motor

Pin	Name	Function
1	5V_MOTOR	Motor_COM
2	V01+	Motor V01+
3	V01-	Motor V01-
4	V02+	Motor V02+
5	V02-	Motor V02-

### J6 (SMT-5P-1.25MM-V) -----Horizontal motor

Pin	Name	Function
1	5V_MOTOR	Motor_COM
2	H01+	Motor H01+
3	H01-	Motor H01-
4	H02+	Motor H02+
5	H02-	Motor H02-



J7 (SMT-2\*12P-0.5MM-FPC) ----Panoramic

K1 (KEY-H) ----Factory recovery

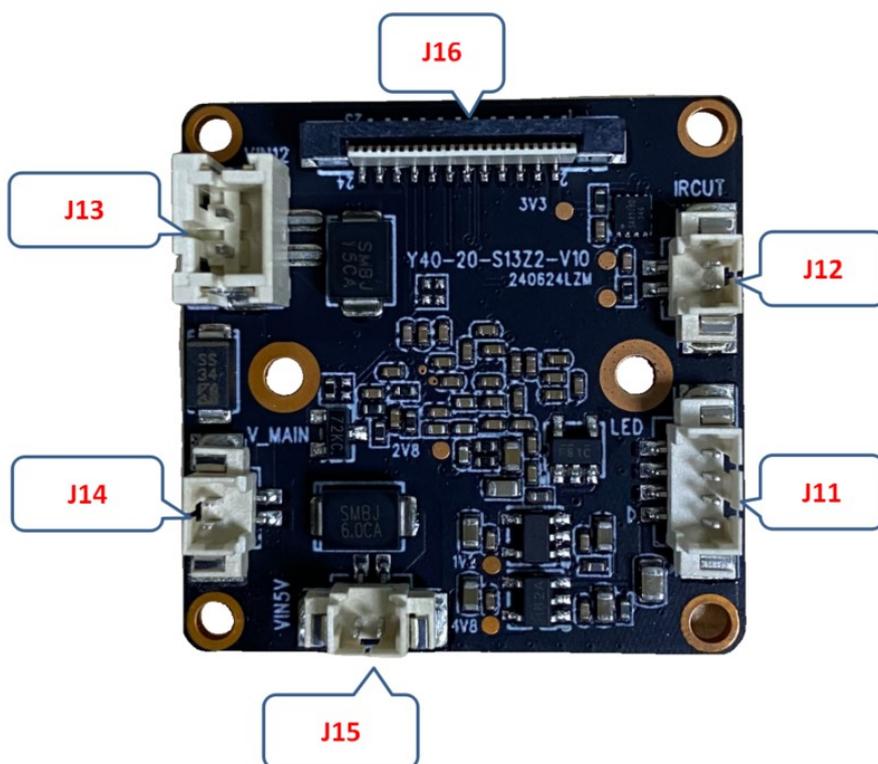
J8 (SMT-6P-1.25MM-H) ----Supplement Light

Pin	Name	Function
1	12V_L	12 VDC Output for Supplement Light
2	GND	GND
3	IR_CTRL	Infrared light enable,active high,usable PWM
4	WL_CTRL	White light enable,active high,usable PWM
5	ADC_DET	Photoresistor for ambient brightness detection
6	LED_S	Network indicator light,same as J1.7

J9 (SMT-2P-1.25MM-H) ----IRCUT

Pin	Name	Function
1	IRCUT1+	IRCUT1+
2	IRCUT1-	IRCUT1-

## Sub-board



Note:The circle point to pin 1



J11 (SMT-4P-1.25MM-V) ----**Supplement light for the second sensor**

Pin	Name	Function
1	VLED	12/5 VDC Output for Supplement Light
2	GND	GND
3	IR_CTRL	Infrared light enable,active high,usable PWM,same as J6.3
4	WL_CTRL	White light enable,active high,usable PWM,same as J6.4

J12 (SMT-2P-1.25MM-V) ----**IRCUT2**

Pin	Name	Function
1	IRCUT2+	IRCUT2+
2	IRCUT2-	IRCUT2-

J13 (SMT-2P-2.0MM-V) ----**12V Supplement light power**

Pin	Name	Function
1	12V	12 VDC input for Supplement Light ---not used when 5V input
2	GND	GND

J14 (SMT-2P-1.25MM-V) ----**5V power output**

Pin	Name	Function
1	5V	5 VDC out ---not used when 12V input
2	GND	GND

J15 (SMT-2P-1.25MM-V) ----**5V power input**

Pin	Name	Function
1	5V	5 VDC in ---not used when 12V input
2	GND	GND

J16 (SMT-2\*12P-0.5MM-FPC) ----**Panoramic**