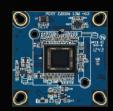




ZBC-4(ZBC-IMX104) The Best low light HD ZBC







- 1.3 mega pixel progressive CMOS
- 18x optical zoom
- Supper low light sensitivityColor 0.1lux / B & W 0.01lux @F1.4
- Advance / Adaptive 2D & 3D noise filter
- More than 100dB WDR
- YUV 16bit (Y8bit/C8bit) digital output.

ZBC-IMX104(ZBC-3)

- Platform: TI TMS320DM368(432MHz)
- Sensor: Sony 1.3M CMOS sensor(IMX104)
- Resolution : $1280 \times 960(30/25 \text{fps}) / 1280 \times 720(30/25 \text{fps})$

- Active array size: 1280x1024
- Temperature range:

Operating: -10°C to 60°C Stable image: -10°C to 60°C

- Pixel Size: 3.75um x 3.75um
- Package dimensions: 12.8mm x 11.6mm

- Lens: Tamron DF003N01300
- Focal length: Fw: 4.70±0.235mm / Ft: 84.6±4.23mm
- Zoom Ratio: 18X
- Max Aperture: Fw:1.6 / Ft: 2.8
- Angle of View: Fw: 42.1~67.3 / Ft: 2.4~4.0
- Focus Range: 1m~INF
- Back focus with IR-CUT

Min illumination

- Color: 0.1 lux @ F1.4
- B/W: 0.01 lux @ F1.4
- More than 100dB WDR
- 2D/3D Noise Filter

- Focus: Manual focus, Auto Focus, Continuous Focus(3M~ infinite / full range)
- Preset position: 256 positions are supported
- PTZ Schedule: support up to 4 shedules, and 64 preset positions in 1 schedule.
- AWB range: AWB Wide(2000~10000K), AWB Normal(4000~6500K), SUNNY, SHADOW, INDOOR, LAMP, FL1, FL2
- AES: 1/2~1/10000 sec
- Power frequency: 50 / 60Hz
- Configuration: WDR, Brightness, Contrast, Frame rate priority, Quality priority, AWB, Sharpness, Saturation, Denoise, EV compensation
- Motion Detection : 3 levels
- Digital Zoom: 4X

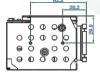
External Interface

- Serial port : RS-232C
- Connector type: 36PIN FPC / 40PIN Micro coaxial
- Digital output: YUV422-16bit (Y8bit+C8bit+HSYNC+VSYNC+CLOCK)

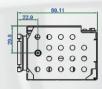
- Firmware update: upgrade with SD/HTTP
- Power requirement : DC 12V
- Operation Temperature : 0°C ~60°C
- Dimension: $60(W) \times 50(H) \times 89(L)$ mm

Dimension(mm)













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FPC 36pin define	
No.	Name
1	GND
2	Y-OUT[0]
3	Y-OUT[1]
4	Y-OUT[2]
5	Y-OUT[3]
6	GND
7	Y-OUT[4]
8	Y-OUT[5]
9	Y-OUT[6]
10	Y-OUT[7]
11	GND
12 13	C-OUT[0]
	C-OUT[1]
14	C-OUT[2]
15	C-OUT[3]
16	GND
17	C-OUT[4]
18	C-OUT[5]
19	C-OUT[6]
20	C-OUT[7]
21	GND
22	VSYNC
23	HSYNC
24	GND
25	DIGITAL CLOCK
26	GND
27	GND
28	GND
29	GND
30	GND
31	DC 12V
32	DC 12V
33	DC 12V
34	GND
35	SD (For RS232C)
36	RD (For RS232C)

Micro coaxial 40pin define

No.	Name
1	GND
2	Y-OUT[0]
3	Y-OUT[1]
4	Y-OUT[2]
5	Y-OUT[3]
6	GND
7	Y-OUT[4]
8	Y-OUT[5]
9	Y-OUT[6]
10	Y-OUT[7]
11	GND
12 13	C-OUT[0]
13	C-OUT[1]
14	C-OUT[2]
15	C-OUT[3]
16	GND
17	C-OUT[4]
18	C-OUT[5]
19	C-OUT[6]
20	C-OUT[7]
21	GND
22	VSYNC
23	HSYNC
24	GND
25	DIGITAL CLOCK
26	GND
27	GND
28	GND
29	GND
30	GND
31	GND
32	GND
33	DC 12V
34	DC 12V
35	00 121
36	DC 12V
37	DC 12V
38	DC 12V
39	SD (For RS232C)
40	RD (For RS232C)

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