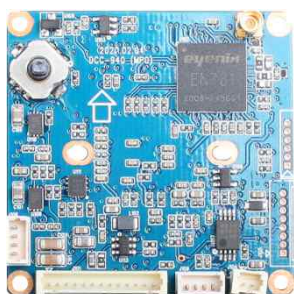
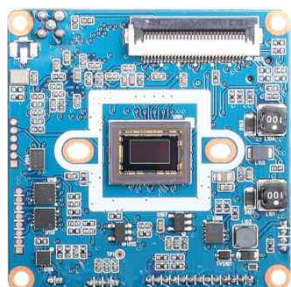


DCC-9420

CMOS VIDEO MODULE

PARANTEK

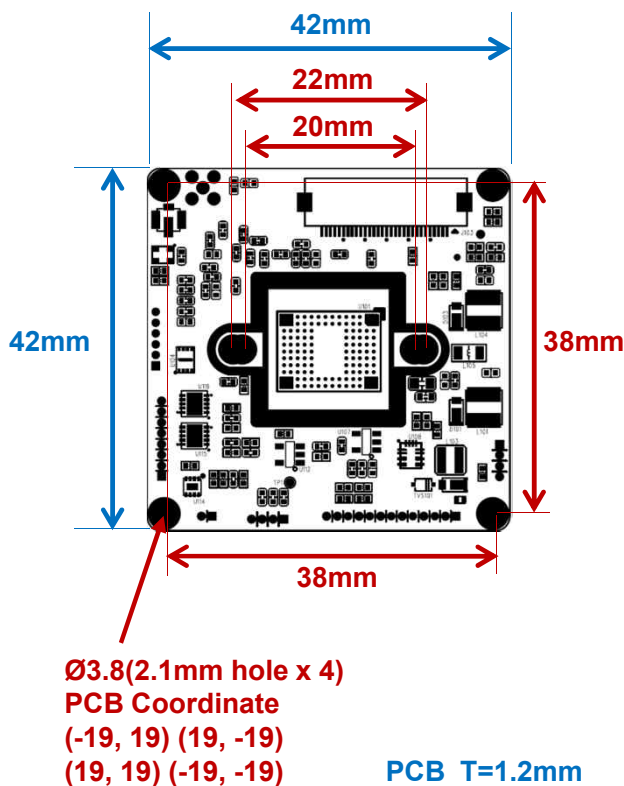


Main Features

- 1/2.8" Sony 2.9μm Pixel Progressive Starvis Color CMOS Sensor
- Approx. 2.12 Mega Pixels (Max. 1080p)
- Mountable Lens: Fixed IRIS, DC Auto IRIS, Auto Focus VF Lens
- WDR / 3D-DNR / DSS (Sens-up) Supported
- Mechanical TDN ICR Available
- Built-in OSD Switch, AD & GPIO OSD Port Available
- Pelco-D and Parantek Serial Protocol Supported (UART Control)
- BT.1120 & SDI Video Out (Analog Video Outputs Supported)
- CMOS Video Module (42x42mm 1-board)



Dimension



Ø3.8(2.1mm hole x 4)
PCB Coordinate
(-19, 19) (19, -19)
(19, 19) (-19, -19)

PCB T=1.2mm

Option

- Lens
- TDN ICR

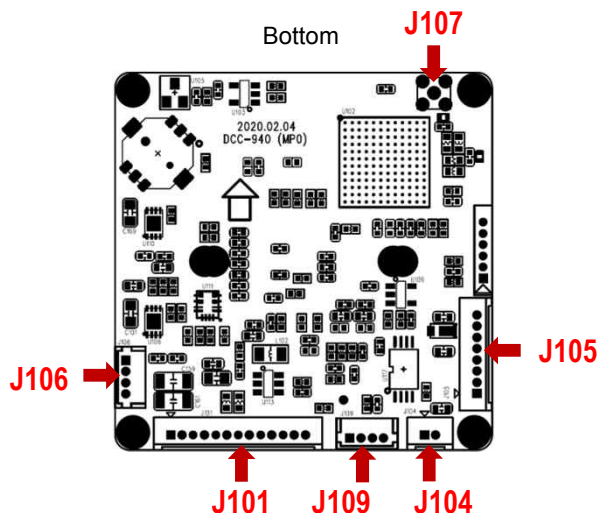
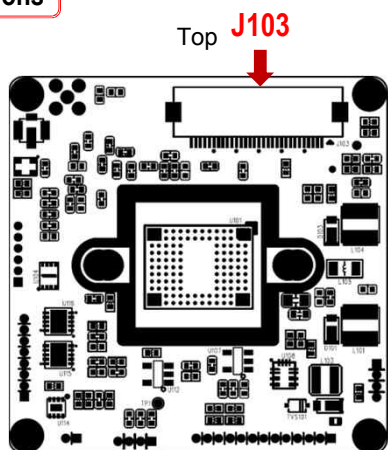
Specification

Model	DCC-9420
Signal System	BT.1120
Pickup Device	1/2.8"(D-6.46mm) 2.12M Sony CMOS Sensor
Scanning System	Progressive Scan (16:9)
Sync. System	Internal
Total Pixels	2.16MP [1,945(H)x1,109(V)]
Active Pixels	2.12MP [1,937(H)x1,097(V)]
Min. Illumination	0.01Lux(F2.5 - 30IRE), 0.005Lux(ICR on), 0.0003Lux(DSS on)
Mechanical ICR	Available (Option)
Video Out (1)	BT.1120: 1080p25/30/50/60, 720p25/30/50/60, 1080i50/60
Video Out (2)	AHD, TVI, CVI or Analog CVBS AHD, TVI and CVI: 1080p@25/30 / Analog CVBS: D1
Lens	Option (Fixed & DC Auto IRIS & AF Stepping Motor Lens)
Lens (Mount)	Board/Pinhole Mount(M12), VF (Ø14) & C/CS Mount
OSD	Via OSD Switch, AD or GPIO OSD Port, Serial Communication
Camera Title	Off, On(Max. 8 Characters)
Language	English, Chinese(Simplified), Chinese(Traditional), Japanese, Korean
Exposure	DC, Manual
White Balance	AUTO, AUTOext, Preset, Manual
BLC	Off, HLC, BLC, WDR
Day & Night Mode	AUTO, COLOR, B/W, EXT. D&N
Gain Control	AGC (0~10)
Electronic Shutter	Auto, Manual, Flickerless
DSS(Sens-up)	X32
Noise Reduction	3DNR (Off, Low, Middle, High)
Mirror	Off, On(Mirror, Flip, Rotation)
Other Features	Motion Detection (4 Zones), Privacy Mask (16 Zones), ACE, D-Zoom, Defog, Gamma, Shading etc.
Communication	Pelco-D and Parantek Serial Protocol Supported RS-232C TTL 3.3V (Default: 9600bps, ID1)
Microphone	N/A
Power Source	DC 7~15V (±5%)
Power Consumption	Less than 3.6 Watts (300mA@DC12V)
Operating Temp.	-10℃ ~55℃ (Humidity :0%RH ~ 90%RH)
Size (mm)	42x42 1-board
Weight	9 g (without OLPF)

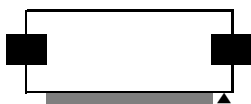
DCC-9420

CMOS VIDEO MODULE

Pin Connections



J103 – BT.1120 & Etc.



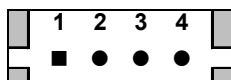
No.	Pin Item	No.	Pin Item
1	RXD	16	Y4
2	TXD	17	Y5
3	GND	18	Y6
4	GND	19	Y7
5	VCC (7~15V)	20	GND
6	VCC (7~15V)	21	PIXEL CLOCK
7	VCC (7~15V)	22	GND
8	GND	23	C0
9	MOTION (OUT)	24	C1
10	nRESET IN (Camera Reset)	25	C2
11	GND	26	C3
12	Y0	27	C4
13	Y1	28	C5
14	Y2	29	C6
15	Y3	30	C7

Wafer SMD type: 0.5mm pitch – 30 pin

Manufacturer: **Yeonho**

MFG Part Number: **05002HR-H30J05**

J109 – DC IRIS



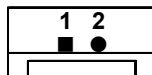
No.	Pin Item	No.	Pin Item
1	DAMP +	3	DRV +
2	DAMP -	4	DRV -

Wafer DIP type: 1.25mm pitch – 4 pin

Manufacturer: **Molex**

MFG Part Number: **53047-0410**

J104 – TDN ICR



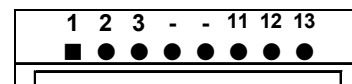
No.	Pin Item	No.	Pin Item
1	ICR (+)	2	ICR (-)

Wafer DIP type: 1.25mm pitch – 2 pin

Manufacturer: **Yeonho**

MFG Part Number: **12512WS-02B**

J101 – User Interface



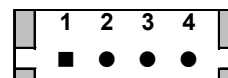
No.	Pin Item	No.	Pin Item
1	CVBS Out	8	Key RIGHT
2	GND	9	Key LEFT
3	DC12V In	10	TXD Out (3.3V TTL)
4	GND	11	RXD In (3.3V TTL)
5	Key DOWN	12	GND
6	Key UP	13	DC3.3V Out
7	Key SET (AD Key)		

Wafer DIP type: 1.25mm pitch – 13 pin

Manufacturer: **Yeonho**

MFG Part Number: **12512WS-13B**

J106 – LED



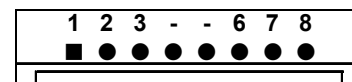
No.	Pin Item	No.	Pin Item
1	LED VCC	3	EXT_DN
2	GND	4	LED_CTL

Wafer DIP type: 1.25mm pitch – 4 pin

Manufacturer: **Molex**

MFG Part Number: **53047-0410**

J105 – Motor Control



No.	Pin Item	No.	Pin Item
1	FOCUS A-	5	ZOOM B+
2	FOCUS A+	6	ZOOM B-
3	ZOOM A-	7	FOCUS B-
4	ZOOM A+	8	FOCUS B+

Wafer DIP type: 1.25mm pitch – 8 pin

Manufacturer: **Yeonho**

MFG Part Number: **12512WS-08B**

J107 – MMCX for SDI Output

SETUP MENU	SUB MENU 1	SUB MENU 2	SUB MENU 3	VALUE
LENS				MANUAL / DC
ZOOM/FOCUS	FOCUS MODE			AUTO / MANUAL
	D&N FILTER			SYNC OFF / SYNC ON
	ONEPUSH AF			Press ENTER Key
	LENS RESET			Press ENTER Key
EXPOSURE	BRIGHTNESS			0 ~ 20 (10)
	SHUTTER	AUTO	Lens Mode DC	INDOOR / OUTDOOR / DEBLUR
			Lens Mode Manual	NORMAL /DEBLUR
		MANUAL		NTSC : 1/30 ,60,120,250,500,1K,2K,4K,8K,15K,30K PAL : 1/25 ,50,100,200,400,800,1.6K,3.2K,6.4K,12.8K,25.6K
		FLICKER		
	SENS-UP			OFF / X2/ X4/ X8 / X16 / X32
	AGC			0 ~ 10 (6)
BACKLIGHT	OFF			
	HLC	LEVEL		0 ~ 20 (10)
		COLOR		BLK ,WHT,YEL,CYN,GRN,MAG,RED,BLU
	BLC	H-POS		0 ~ 20 (6)
		V-POS		0 ~ 20 (5)
		H-SIZE		0 ~ 20 (7)
		V-SIZE		0 ~ 20 (7)
	WDR	WEIGHT		LOW/ MIDDLE / HIGH
DAY&NIGHT	AUTO	D>N THRES		0(bright) ~ 20(dark) (6)
		N>D THRES		0(bright) ~ 20(dark) (8)
		DELAY		0 ~ 9sec, 10sec, 15sec (0 Sec)
		BURST		OFF/ ON
	COLOR			
	B&W	BURST		OFF/ ON
	EXT. D&N	SMART IR		OFF /ON
		SAT. LEVEL		0 ~ 20 (10)
		EXTERN SW		HIGH /LOW
		DELAY		0 ~ 9sec, 10sec, 15sec (0sec)
		BURST		OFF/ ON
WHITE BAL	AWB	AUTO		
		AUTOext		
		PRESET		Press ENTER key
		MANUAL	C-TEMP.	3000K/ 5000K / 8000K
			R-GAIN	0 ~ 20 (10)
			B-GAIN	0 ~ 20 (10)
	COLOR GAIN			0 ~ 20 (10)
DNR				OFF/ LOW/ MIDDLE / HIGH
IMAGE	SHARPNESS			0 ~ 10 (8)
	GAMMA			0.45/ 0.55 / 0.65/ 0.75
	MIRROR			OFF /ON
	FLIP			OFF /ON
	D-ZOOM			1.0X~16.0X (1.0X)
	ACE			OFF /LOW/ MIDDLE/ HIGH

SETUP MENU	SUB MENU 1	SUB MENU 2	SUB MENU 3	VALUE
IMAGE	DEFOG	OFF		
		ON	MODE LEVEL	AUTO/MANUAL LOW/ MIDDLE/ HIGH
	SHADING	OFF		
		ON	WEIGHT	0~100% (100%)
	PRIVACY	BOX	OFF/ON	
			ZONE NUM	0~15
			ZONE DISP	OFF/ON
			H-POS	0~60
			V-POS	0~34
			H-SIZE	0~60
			V-SIZE	0~34
			Y LEVEL	0~20
			CB LEVEL	0~20
			CR LEVEL	0~20
			TRANS	0~3
		POLYGON	OFF/ON	
			ZONE NUM	0~7
			ZONE DISP	OFF/ON
			POS0-X ~POS3-X	0~120
			POS0-Y~POS3-Y	0~68
			Y LEVEL	0~20
			CB LEVEL	0~20
			CR LEVEL	0~20
			TRANS	0~3
MOTION	OFF			
	ON	DET WINDOW	WINDOW USE	0~3
			WINDOW ZONE	OFF/ON
			DET H-POS	0~60
			DET V-POS	0~34
			DET H-SIZE	0~60
			DET V-SIZE	0~34
		SENSITIVITY		0~10 (5)
		MOTION OSD		OFF/ON
		TEXT ALARM		OFF/ON
		SIGNAL OUT		OFF/ON
SYSTEM	COMM	CAM ID		0 ~ 255 (1)
		BAUDRATE		2400,4800,9600,57600,115200
		CAM ID DISPLAY		OFF/ON
	OUTPUT	FRAME RATE		1080_30p(25p), 720_30p(25p), 720_60p(50p), 1080_60i(50i), 1080_60p(50p) * 1080_60p(50p) will be available only for BT.1120 mode.
		FREQ		50Hz(PAL) / 60Hz(NTSC)
		ANALOG MODE		OFF / CVBS / HD_T / HD_C / HD_A
		CVBS OUT MODE		CUT / FULL
	LANGUAGE			ENG/ CHINESE/ CHINESE(S)/ JAPANESE/ KOR
	CAM TITLE	OFF		
		RIGHT UP		0 ~ 9, A ~ Z, blank
		LEFT DOWN		0 ~ 9, A ~ Z, blank
FACTORY DEFAULT				Reset to factory setting
EXIT				Exit SETUP menu