

DB-8002H

Date of Issue

16 SEP. 2019

Revision No.

1.1

1/8

APPROVAL SHEETS

DESCRIPTION : **2Mega Pixels 4in1 BOARD CAMERA**

MODEL NO. : **DB-8000H/ 8002H**

Customer

| APPROVED | CHECKED | ISSUED |
|-----------------|----------------|---------------|
| | | |



DynaLogic Co., Ltd

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| | |
|---|---|
| 1 | Board Camera |
| 2 | Blank ; without OLPF & without lens holder E ; C/CS mount without lens F ; fixed iris lens V ; DC auto iris lens |
| 3 | Board Revision No. 8000 ; with mechanical Day & Night Filter 8002 ; with infrared cut OLPF(Optical Low Pass Filter) |

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2. GENERAL SPECIFICATIONS

| | | |
|--------|------------------------|---|
| Camera | Image Device | 1/2.8 type SONY CMOS (IMX307LQR) |
| | Scanning System | Progressive Scan |
| | Total Pixels | 1945(H) x 1109(V) : 2.16Mega pixel |
| | Effective Pixels | 1945(H) x 1097(V) : 2.13Mega pixel |
| | Min. Illumination | 0.007Lux@F2.6, 30IRE |
| | Sync System | Internal |
| | Electronic Shutter | NTSC : 1/30~1/30,000sec(X2~X32), PAL : 1/25~1/25,600sec(X2~X32) |
| ISP | Manufacturer | EYENIX(EN771T) |
| Lens | Mount (M12) | Fixed Lens f=3.6mm/ Pinhole Lens f=3.7mm (P4) Varifocal Lens f=2.8~12mm (ICR) CS Mount Holder |
| Video | Output 1 | HD-SDI or EX-SDI |
| | Output 2 | AHD/ TVI/ CVT/ CVBS (NTSC, PAL) |
| | Resolution& frame rate | 1080@30p/25p , 720@60p/50p/30p/25p |
| OSD | On Screen Display | Built-in |
| | Language | English, Chinese, Chinese(S), Japanese, Korean, Russian |
| | LENS | DC/ MANUAL |
| | EXPOSURE | BRIGHTNESS/ AGC/ SHUTTER MODE& SPEED/ SENS-UP |
| | WHITE BALANCE | AWB/ATW/ PUSH LOCK/ MANUAL |
| | BACKLIGHT | OFF/ HLC/ BLC/ WDR |
| | DNR | OFF/ LOW/ MIDDLE/ HIGH |
| | DAY&NIGHT | AUTO/ COLOR/ B&W/ IR_EXT |
| | IMAGE | SHARPNESS/ COLOR LEVEL/ MIRROR/ FLIP/ GAMMA/ ACE/ DEFOG |
| | SPECIAL | COMM ADJUST/ PRIVACY/ MOTION |
| | SYSTEM | VIDEO OUTPUT/ FRAME RATE/ LANGUAGE/CAM TITLE |
| Others | Operating Temperature | 14°F~122°F (-10°C~+50°C) |
| | Storage Temperature | -4°F~140°F (-20°C~+60°C) |
| | Humidity | Less than 80% |
| | Power Consumption | DC12V(±10%), Max.90mA |
| | Dimension(mm) | 32 x 32 1board (T=1.2mm) |

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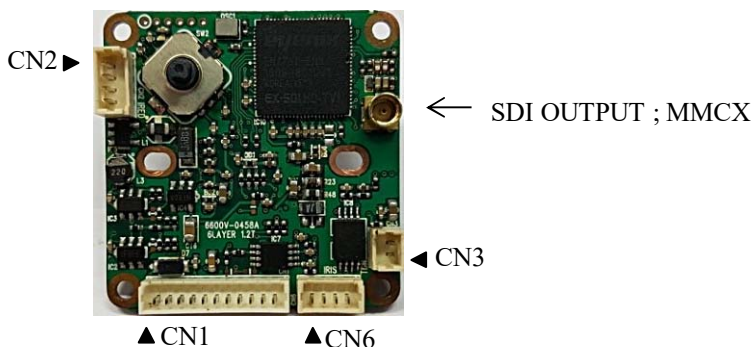
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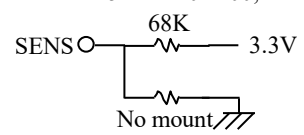
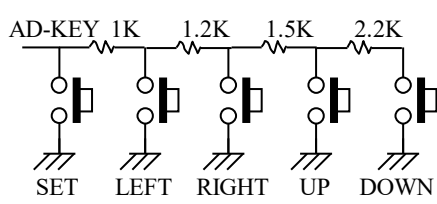
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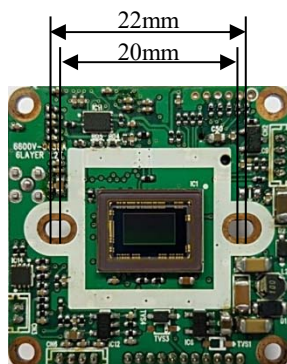
3. INTERFACE



| Allocation | No. | Pin Name | I/O | Description |
|------------|-----|-----------------------------|-----|--|
| CN1 | 1 | AD-KEY | - | Yeonho 12512WS-11A00, Pitch 1.25mm Control signal for OSD & POWER Input & CVBS Output & RS485 Communication |
| | 2 | VIDEO output | OUT | |
| | 3 | GND | - | |
| | 4 | DC12V input | IN | |
| | 5 | GND | - | |
| | 6 | VIDEO output | OUT | |
| | 7 | RS232_TX | OUT | |
| | 8 | RS232_RX | IN | |
| | 9 | RS485_EN | OUT | |
| | 10 | +3.3V | OUT | |
| | 11 | MD_OUT | OUT | |
| CN2 | 1 | DC12V | OUT | Yeonho 12512WS-04A00, Pitch 1.25mm SENS ○ — 68K — 3.3V No mount |
| | 2 | GND | - | |
| | 3 | SENS (3.3V:B/W, 0V:COLOR) | IN | |
| | 4 | LED CTL(ON:3.3V, OFF:0V) | OUT | |
| CN3 | 1 | TDN_2 (High : Day -> Night) | OUT | Yeonho 12512WS-02A00, Pitch 1.25mm Control signal for IR cut filter removable |
| | 2 | TDN_1 (High : Night -> Day) | OUT | |
| CN6 | 1 | DAMP+ | OUT | Yeonho 12512WS-04A00, Pitch 1.25mm Control signal for DC iris lens |
| | 2 | DAMP- | OUT | |
| | 3 | DRV+ | OUT | |
| | 4 | GND | - | |



4. APPEARANCE



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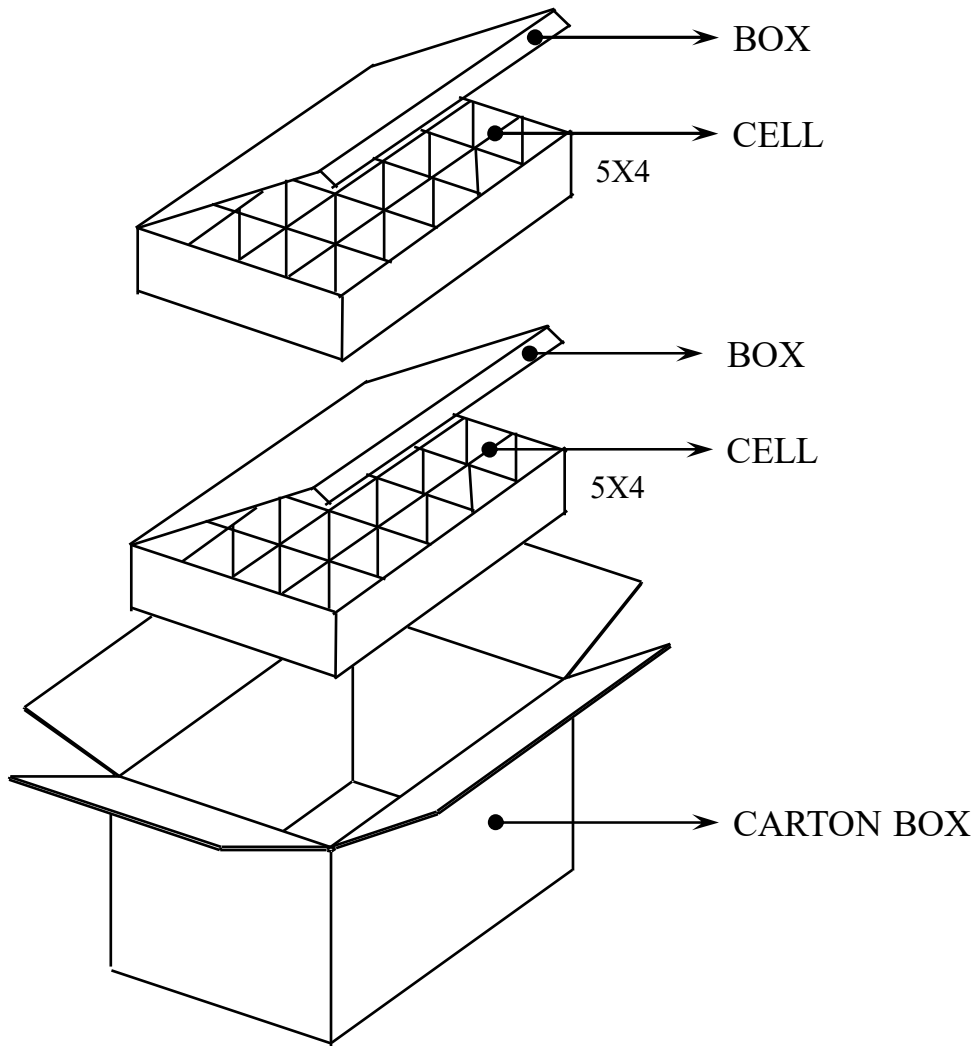
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5. PACKING METHOD



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6. OSD MENU STRUCTURE(1/2)

| SETUP MENU | SUB MENU1 | SUB MENU2 | SUB MENU3 | VALUE | |
|---------------|---------------|-------------------------|------------------------|---|---------------------------------|
| LENS | DC | | | INDOOR/OUTDOOR/DEBLUR | |
| | MANUAL | | | NORMAL/DEBLUR | |
| EXPOSURE | BRIGHTNESS | | | 0 ~ 20 | |
| | AGC | | | 0 ~ 20 | |
| | SHUTTER MODE | | | AUTO/ MANUAL/FLICKERLESS | |
| | SHUTTER SPEED | | | 1/30(25),60(50),120(100),250(200),500(400),1K(800), 2K(1.6K),4K(3.2K),8K(6.4K),15K(12.8K),30K(25.6K) | |
| | SENS-UP | | | OFF/ X2/ X4/ X8 / X16 / X32 | |
| WHITE BALANCE | AWB | | | | |
| | ATW | | | | |
| | PUSH LOCK | | | Press ENTER key | |
| | MANUAL | COLOR TEMP. | | | 3000K/ 5000K/ 8000K |
| | | R-GAIN | | | 0 ~ 20 |
| B-GAIN | | | 0 ~ 20 | | |
| BACKLIGHT | OFF | | | | |
| | HLC | LEVEL | | 0 ~ 20 | |
| | | COLOR | | | BLK,WHT,YEL,CYN,GRN,MAG,RED,BLU |
| | BLC | H-POS | | | 0 ~ 20 |
| | | V-POS | | | 0 ~ 20 |
| | | H-SIZE | | | 0 ~ 20 |
| | | V-SIZE | | | 0 ~ 20 |
| | WDR | MODE / NORMAL | | | |
| | | MODE / ROI | WINDOW SEL | | 0 ~ 3 |
| | | | WINDOW MODE | | OFF/ ON |
| | | | H-POS | | 0 ~ 1920 |
| | | | V-POS | | 0 ~ 1080 |
| | | | H-SIZE | | 0 ~ 1920 |
| | | | V-SIZE | | 0 ~ 1080 |
| WEIGHT | | | | | LOW/ MIDDLE/ HIGH |
| DNR | | | OFF/ LOW/ MIDDLE/ HIGH | | |
| DAY&NIGHT | AUTO | DWELL TIME | | 0 ~ 9sec, 1sec/step | |
| | | AGC THRES | | 0(bright) ~ 20(dark) | |
| | | AGC MARGIN | | 0(bright) ~ 20(dark) | |
| | COLOR | | | | |
| | B&W | | | | |
| | IR_EXT | DWELL TIME | | | 0 ~ 9sec, 1sec/step |
| | | D->N LEVEL | | | 0(bright) ~ 20(dark) |
| | | N->D LEVEL | | | 0(bright) ~ 20(dark) |
| | | SMART IR | | | OFF/ON |
| | | LEVEL | | | 0 ~ 20 |
| IMAGE | SHARPNESS | SDI&CVBS/ HDC/ HDT/ HDA | | 0 ~ 10 | |
| | COLOR LEVEL | | | 0 ~ 20 | |
| | MIRROR | | | OFF/ ON | |
| | FLIP | | | OFF/ ON | |
| | GAMMA | | | 0.45/ 0.55/ 0.65/ 0.75 | |
| | ACE | | | OFF/LOW/ MIDDLE/ HIGH | |
| | DEFOG | OFF | | | |
| | | AUTO/ MANUAL | | | LOW/ MIDDLE/ HIGH |

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6. OSD MENU STRUCTURE(2/2)

| SETUP MENU | SUB MENU1 | SUB MENU2 | SUB MENU3 | VALUE | |
|-----------------|------------------|---------------------|---|--|---------|
| SPECIAL | COMM. ADJUST | CAM ID | | 0 ~ 255 | |
| | | BAUDRATE | | 2400,4800,9600,19200,38400,57600,115200 | |
| | | PROTOCOL | | PELCO-D | |
| | | SET DONE | | Save to Comm Adjust Setting | |
| | PRIVACY | OFF | | | |
| | | ON | MASK SEL | | 0 ~ 15 |
| | | | MASK MODE | | 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 | | |
| | MOTION | OFF | | | |
| | | DET WINDOW | WINDOW SEL | | 0 ~ 3 |
| | | | WINDOW MODE | | OFF/ ON |
| | | | DET H-POS | | 0 ~ 60 |
| | | | DET V-POS | | 0 ~ 34 |
| | | | DET H-SIZE | | 0 ~ 60 |
| | | | DET V-SIZE | | 0 ~ 34 |
| | | DET TONE | | 0 ~ 4 | |
| MDRECT FILL | | | OFF/ ON | | |
| SENSITIVITY | | | 0 ~ 10 | | |
| MOTION OSD | | OFF/ ON | | | |
| TEXT ALARM | | OFF/ ON | | | |
| SYSTEM | VIDEO OUTPUT | MAIN OUTPUT | | SDI OUTPUT / ANALOG OUTPUT | |
| | | SDI OUTPUT | | HD-SDI/ 270M(V1.0)/ 135M(V2.0) | |
| | ANALOG OUTPUT | AHD/ TVI/ CVI/ CVBS | | | |
| | | Y-GAIN | | 0 ~ 32 | |
| | | CB-GAIN | | 0 ~ 255 | |
| | | CR GAIN | | 0 ~ 255 | |
| | | POSITION | | 0 ~ 255 | |
| | | BURST FREQ | | 0 ~ 255 | |
| | | BURST GAIN | | 0 ~ 128 | |
| | | B&W | | BURST OFF / BURST ON(HDT ONLY) | |
| | UCC SELECT | | 8 BYTE / 10 BYTE(HDT ONLY) | | |
| | 720 EX | | OFF/ ON(HDT ONLY) | | |
| | FRAME RATE | | | 1080_30p/ 1080_25p/ 720_30p/ 720_25p/ 720_60p/ 720_50p | |
| | FREQ(NT/PAL) | | | 60Hz(NTSC)/ 50Hz(PAL) | |
| LANGUAGE | | | ENG/ CHINESE/ CHINESE(S)/ JAPANESE/ KOR/ RUSSIA | | |
| CAM TITLE | | | 0 ~ 9, A ~ Z, blank | | |
| FACTORY DEFAULT | | | Reset to factory setting | | |
| RETURN | | | Return to previous menu | | |
| EXIT | SAVE | | | Setup menu to exit saving | |
| | CANCEL | | | Setup menu to exit without saving | |

To open the Menu, Hold down the Center Key

WDR is not operated at 'SHUTTER MODE=MANUAL' or 'CVBS ON' or 'OSD ON'.

3-DNR mode is OFF at 'WDR ON'.

Left + Left + Left + Enter : EX-SDI

Right + Right + Right + Enter : HD-SDI