

## **HW16ECB**

### Introduction

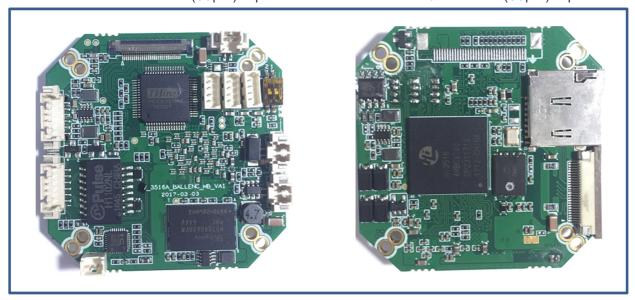
HIVIEW provides a video network encoding board designed with Huawei Hisilicon chip HI3516A or HI3516D.

There are two input interface for you to choose, as shown in the figure below.

You can use this board to develop HD network cameras. We will provide software services and hardware services.

#### LVDS Interface (30pin) Input

#### BT1120 Interface (36pin) Input

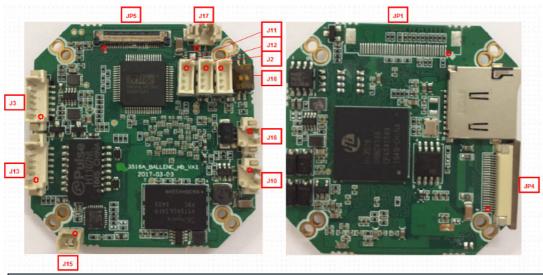


## **General specifications**

| Power supply                  | DC12V±10%      |
|-------------------------------|----------------|
| Current(Normal operation@12v) | 180mA          |
| Power Consumption             | 2.2W           |
| Dimensions                    | 48*48(±0.5)mm  |
| Weight                        | Approx. 60g    |
| Operating Temperature         | -10°C to 60°C  |
| Operating Humidity            | Lower than 90% |



# **Interface description**



| J15                               |                           |         |                           |  |  |
|-----------------------------------|---------------------------|---------|---------------------------|--|--|
| JP5: (KEL USL00-30L) for HVB2620N |                           |         |                           |  |  |
| Pin No.                           | Pin Definition            | Pin No. | Pin Definition            |  |  |
| 1                                 | TXOUT3+ (LVDS)            | 16      | DCIN(9~15V) recommend 12V |  |  |
| 2                                 | TXOUT3- (LVDS)            | 17      | DCIN(9~15V) recommend12V  |  |  |
| 3                                 | TXCLKOUT+ (LVDS)          | 18      | DCIN(9~15V) recommend12V  |  |  |
| 4                                 | TXCLKOUT- (LVDS)          | 19      | GND                       |  |  |
| 5                                 | TXOUT2+ (LVDS)            | 20      | GND                       |  |  |
| 6                                 | TXOUT2- (LVDS)            | 21      | GND                       |  |  |
| 7                                 | TXOUT1+ (LVDS)            | 22      | GND                       |  |  |
| 8                                 | TXOUT1- (LVDS)            | 23      | GND                       |  |  |
| 9                                 | TXOUT0+ (LVDS)            | 24      | GND                       |  |  |
| 10                                | TXOUTO- (LVDS)            | 25      | NC                        |  |  |
| 11                                | GND                       | 26      | NC                        |  |  |
| 12                                | RXD                       | 27      | NC                        |  |  |
| 13                                | TXD                       | 28      | NC                        |  |  |
| 14                                | DCIN(9~15V) recommend 12V | 29      | NC                        |  |  |
| 15                                | DCIN(9~15V) recommend 12V | 30      | NC                        |  |  |
| J3                                |                           |         |                           |  |  |
| Pin No.                           | Pin Definition            | Pin No. | Pin Definition            |  |  |
| 1                                 | CVBS                      | 4       | GND                       |  |  |
| 2                                 | GND                       | 5       | AC_LIN_IN (Audio in)      |  |  |
| 3                                 | RESET (System reset)      | 6       | AC_LIN_OUT (Audio out)    |  |  |
| J10                               |                           |         |                           |  |  |
| Pin No.                           | Pin Definition            | Pin No. | Pin Definition            |  |  |
| 1                                 | DCIN(9~15V)recommend 12V  | 2       | GND                       |  |  |
| J15                               |                           |         |                           |  |  |
| Pin No.                           | Pin Definition            | Pin No. | Pin Definition            |  |  |
| 1                                 | RS485-                    | 2       | RS485+                    |  |  |



| JP1: (FFC-FPC ) for HVB2610N |                       |         |                           |  |  |
|------------------------------|-----------------------|---------|---------------------------|--|--|
| Pin No.                      | Pin Definition        | Pin No. | Pin Definition            |  |  |
| 1                            | GND                   | 19      | C-OUT [6]                 |  |  |
| 2                            | Y-OUT [0]             | 20      | C-OUT [7]                 |  |  |
| 3                            | Y-OUT [1]             | 21      | GND                       |  |  |
| 4                            | Y-OUT [2]             | 22      | VSYNC                     |  |  |
| 5                            | Y-OUT [3]             | 23      | HSYNC                     |  |  |
| 6                            | GND                   | 24      | GND                       |  |  |
| 7                            | Y-OUT [4]             | 25      | DIGITAL CLOCK             |  |  |
| 8                            | Y-OUT [5]             | 26      | GND                       |  |  |
| 9                            | Y-OUT [6]             | 27      | GND                       |  |  |
| 10                           | Y-OUT [7]             | 28      | GND                       |  |  |
| 11                           | GND                   | 29      | GND                       |  |  |
| 12                           | C-OUT [0]             | 30      | GND                       |  |  |
| 13                           | C-OUT [1]             | 31      | DCIN(9~15V) recommend 12V |  |  |
| 14                           | C-OUT [2]             | 32      | DCIN(9~15V) recommend 12V |  |  |
| 15                           | C-OUT [3]             | 33      | DCIN(9~15V) recommend 12V |  |  |
| 16                           | GND                   | 34      | GND                       |  |  |
| 17                           | C-OUT [4]             | 35      | TXD                       |  |  |
| 18                           | C-OUT [5]             | 36      | RXD                       |  |  |
| J13                          |                       |         |                           |  |  |
| Pin No.                      | Pin Definition        | Pin No. | Pin Definition            |  |  |
| 1                            | ETH_TX+ (RJ45)        | 4       | ETH_RX+ (RJ45)            |  |  |
| 2                            | ETH_TX- (RJ45)        | 5       | ETH_RX- (RJ45)            |  |  |
| 3                            | ETH_LEDO (RJ45 LED)   | 6       | ETH_LED1 (RJ45 LED)       |  |  |
| J16                          |                       |         |                           |  |  |
| Pin No.                      | Pin Definition        | Pin No. | Pin Definition            |  |  |
| 1                            | GND                   | 2       | CDS                       |  |  |
| J17                          |                       |         |                           |  |  |
| Pin No.                      | Pin Definition        | Pin No. | Pin Definition            |  |  |
| 1                            | CAM_RXD (FORM CAMERA) | 2       | CAM_TXD (FORM CAMERA)     |  |  |
| J2                           |                       |         |                           |  |  |
| Pin No.                      | Pin Definition        | Pin No. | Pin Definition            |  |  |
| 1                            | GND                   | 3       | USB_DM                    |  |  |
| 2                            | USB_DP                |         | 3V3_WIFI                  |  |  |
| J11                          |                       |         |                           |  |  |
| Pin No.                      | Pin Definition        | Pin No. | Pin Definition            |  |  |
| 1                            | GIP00_8               | 3       | ALARM_OUT                 |  |  |
| 2                            | 1 2 2                 |         | ALARM_IN                  |  |  |
| J12(debugger)                |                       |         |                           |  |  |
| Pin No.                      | Pin Definition        | Pin No. | Pin Definition            |  |  |
| 1                            | UATRO_TXD             | 3       | 3V3                       |  |  |
| 2                            | UARTO_RXD             | 4       | GND                       |  |  |