

## **HV-USB3** Specification

**USB3.0 Super speed HD Video Streamer** 

**Horizontal Type c Connector** 

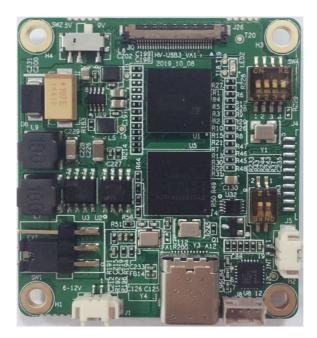
Adapt to Sony/Hitachi/Hikvison.....zoom module camera series











The board converts the native LVDS signal of the camera and transfers the video image to a computer. You will take advantage of new visualisation, processing and image transfer solutions by using the network streaming possibilities.

## **Feature**

• Support Sony FCB-EH/EV series and SE600,Hitachi,Hikvison.....and so on mainstream companies zoom module,support inter-sync and external-sync signal



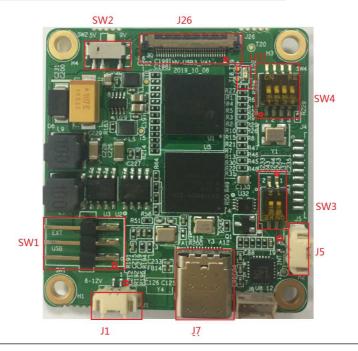
- LVDS video input from camera
- USB Video Class(UVC)
- USB Communication Device Class(CDC)
- Automatics Sony camera module recognition
- Up to 1080p60fps video output, excellent output image quality, low delay
- Board and camera module managment by micro switch
- Tiny module size 48mm x 45mm x10mm,mounting hole 42mm x 39mm

## **Specification**

| ТРУЕ         | Туре                                   | HV-USB3                                     |                 |  |
|--------------|--|---|-----------------|--|
| IFYE         | Description                            | LVDS to USB3.0 Board                        |                 |  |
|              | video standard                         | LVDS  |                 |  |
|              |  | 1920X1080/60fps                             | 1920X1080/50fps |  |
| Video Input  |  | 1920X1080/30fps                             | 1920X1080/25fps |  |
| video input  | frame rate                             | 1280X720/60fps                              | 1280X720/50fps  |  |
|              |  | 1280X720/30fps                              | 1280X720/25fps  |  |
|              | USB                                    | USB3.0                                      |                 |  |
|              | video formate                          | YUV 422                                     |                 |  |
| Video Output |  | 1920X1080/60fps                             | 1920X1080/50fps |  |
| Viaco Output | frame rate                             | 1920X1080/30fps                             | 1920X1080/25fps |  |
|              | Trame rate                             | 1280X720/60fps                              | 1280X720/50fps  |  |
|              |  | 1280X720/30fps                              | 1280X720/25fps  |  |
|              | USB standard                           | USB3.0 / USB2.0                             |                 |  |
|              | USB UVC Class                          | Support, Drive free insta                   | llation         |  |
| USB          | USB CDC protocol                       | Support                                     |                 |  |
| parameter    | Camera setting and control             | USB3.0-CDC /Exteranl control interface      |                 |  |
|              | Type C positive and negative insertion | Support                                     |                 |  |
| System       | Online upgrade software by USB         | Support                                     |                 |  |
|              | Operating temperature /humidity        | -20°era C ~ 55°C/0%-90%                     |                 |  |
|              |  | Self-powered by USB3.0 or external 5-12V DC |                 |  |
|              |  | Remark:when the power consumption of camera |                 |  |
| Other        | Power supply                           | more than 3W,the external power supply mode |                 |  |
|              |  | must be selected(recommended DC5V 1.5A,     |                 |  |
| Other        |  | DC12V,1A)                                   |                 |  |
|              | Power consumption (max)                | <1W   |                 |  |
|              | Dimensions(mm)                         | nsions(mm) L(48mm)*W(45mm)*H(10mm)          |                 |  |
|              | Weight/PCS(g)                          | 40g   |                 |  |
|              | Operating temperature /humidity        | -20°C ~ 55°C/0%-90%                         |                 |  |



## Interface description(note: the red circle mark the first pin of socket)



Green LED:(off: system is in progress, on:system start-up complete and work properly)

| J26:LVDS USL20-30SS-005-C(30Pin) |          |         |          |
|----------------------------------|----------|---------|----------|
| Pin No.                          | Pin Name | Pin No. | Pin Name |
| 1                                | NC       | 16      | 12V      |
| 2                                | NC       | 17      | 12V      |
| 3                                | NC       | 18      | RXD1     |
| 4                                | NC       | 19      | TXD1     |
| 5                                | NC       | 20      | GND      |
| 6                                | NC       | 21      | TXIN0-   |
| 7                                | GND      | 22      | TXIN0+   |
| 8                                | GND      | 23      | TXIN1-   |
| 9                                | GND      | 24      | TXIN1+   |
| 10                               | GND      | 25      | TXIN2-   |
| 11                               | GND      | 26      | TXIN2+   |
| 12                               | GND      | 27      | TXCLK-   |
| 13                               | 12V      | 28      | TXCLK+   |
| 14                               | 12V      | 29      | TXIN3-   |
| 15                               | 12V      | 30      | TXIN3+   |

| J1: Optional external power |  | J7: Type C 24Pin |  |
|-----------------------------|--|------------------|--|
| Pin No.                     |  | Pin No.          |  |



| 1 | 5-12V DC |  |
|---|----------|--|
| 2 | GND      |  |

| J5:Zoom n | nodule camera control Uart |  |
|-----------|----------------------------|--|
| Pin No.   | Pin Name                   |  |
| 1         | TX(camera to host)         |  |
| 2         | RX(host to camera)         |  |

| SW1:Power supply mode |         |          |
|-----------------------|---------|----------|
| 1 03 02               | Pin No. |          |
| SW1 USB EXT           | 1-2     | USB      |
|                       | 3-2     | External |

| SW2:Camera power supply output (just suitable for USB power supply mode) |         |             |
|--|---------|-------------|
| SW2  | Pin No. |             |
| SW2 5V TO 9V   | 1       | 5V(SE600)   |
|  | 2       | 9V(default) |

| SW3:Camera control UART mode   |         |                  |
|--|---------|------------------|
| A TANK THE REPORT OF THE PERSON OF THE PERSO | Pin No. |                  |
| * 2 1 2 = 1  | 1,2 On  | USB CDC(default) |
| SW3  | 1,2 Off | External         |

| SW4:Camera type selection |                                     |   |
|---------------------------|-------------------------------------|---|
| 5 SW4                     | Pin No.<br>4/3/2/1:<br>on(1) off(0) |   |
| dia li perè               | 0000(default)                       | Sony FCB-EV and most of general company's |
|                           |                                     | camera(Hitachi,Hikvison,powerview         |
|                           | 0001                                | Sony FCB-EH                               |
|                           | 0010                                | Reserve                                   |
|                           |                                     | Reserve                                   |



Mounting holes drill=3.0mm Land=5mm

