

HDMI to Mipi CSI-2 Bridge

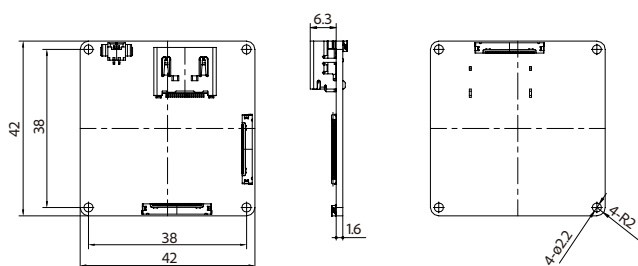
ACE-HMST642-HM

- HDMI to Mipi CSI-2 Bridge(4 Lane@up to 2GHz)
- 2160p@30fps, 1080p@30/60fps, 720p@30/60fps
- 2x Mipi CSI-2 (4 Lanes)
- Jetson Nano, Xavier NX Development Platform
- Physical Board Size : 42 x 42 mm

ACE-HMST642-HM



• Dimensions



Pin assignment

• J301

| J301(External Power) / Molex : 53261-0271 | |
|--|------------------|
| 1 | Power IN: +12VDC |
| 2 | GND |

• J201

| J201(HDMI) / 51U019S-30SIN-AR (Input) | |
|--|---------|
| 1 | TMDS2+ |
| 2 | GND |
| 3 | TMDS2- |
| 4 | TMDS1+ |
| 5 | GND |
| 6 | TMDS1- |
| 7 | TMDS0+ |
| 8 | GND |
| 9 | TMDS0- |
| 10 | TMDS+ |
| 11 | GND |
| 12 | TMDS- |
| 13 | CEC |
| 14 | NC |
| 15 | DDC_SCL |
| 16 | DDC_SDA |
| 17 | GND |
| 18 | +5VDC |
| 19 | HPD |

• J202

| J202(Micro Co-Axial) / KEL Co.USL00-30L-A (Input) | |
|--|--------------------|
| 1 | POWER IN: +12VDC |
| 2 | POWER IN: +12VDC |
| 3 | GND |
| 4 | GND |
| 5 | I2C_SCL(3.3V)/NC |
| 6 | I2C_SDA(3.3V)/NC |
| 7 | GND |
| 8 | Uart_TXD(5V) |
| 9 | Uart_RXD(5V) |
| 10 | GND |
| 11 | GND |
| 12 | 1_HDMI(TMDS_D2+) |
| 13 | 2_HDMI(GND) |
| 14 | 3_HDMI(TMDS_D2-) |
| 15 | 4_HDMI(TMDS_D1+) |
| 16 | 5_HDMI(GND) |
| 17 | 6_HDMI(TMDS_D1-) |
| 18 | 7_HDMI(TMDS_D0+) |
| 19 | 8_HDMI(GND) |
| 20 | 9_HDMI(TMDS_D0-) |
| 21 | 10_HDMI(TMDS_CLK+) |
| 22 | 11_HDMI(GND) |
| 23 | 12_HDMI(TMDS_CLK-) |
| 24 | 13_HDMI(CEC) |
| 25 | 14_HDMI(NC) |
| 26 | 15_HDMI(DDC_SCL) |
| 27 | 16_HDMI(DDC_SDA) |
| 28 | 17_HDMI(DDC_GND) |
| 29 | 18_HDMI(VCC_5V) |
| 30 | 19_HDMI(HPD) |

• J204

| J204(Micro Co-Axial) / KEL Co.USL00-30L-A (Output 1)-Default | |
|---|--------------------|
| 1 | POWER IN: +12VDC |
| 2 | POWER IN: +12VDC |
| 3 | GND |
| 4 | GND |
| 5 | INTIO(GPIO) |
| 6 | GND |
| 7 | MIPI_D0_P(Port-1) |
| 8 | MIPI_D0_N(Port-1) |
| 9 | GND |
| 10 | MIPI_D1_P(Port-1) |
| 11 | MIPI_D1_N(Port-1) |
| 12 | GND |
| 13 | MIPI_CLK_P(Port-1) |
| 14 | MIPI_CLK_N(Port-1) |
| 15 | GND |
| 16 | MIPI_D2_P(Port-1) |
| 17 | MIPI_D2_N(Port-1) |
| 18 | GND |
| 19 | MIPI_D3_P(Port-1) |
| 20 | MIPI_D3_N(Port-1) |
| 21 | GND |
| 22 | I2C_SCL(3.3V) |
| 23 | I2C_SDA(3.3V) |
| 24 | GND |
| 25 | Uart_TX(3.3V) |
| 26 | Uart_RX(3.3V) |
| 27 | Reset(GPIO) |
| 28 | GND |
| 29 | DET_HDMI(GPIO) |
| 30 | CEC_HDMI(GPIO) |

• J206

| J206(Micro Co-Axial) / KEL Co.USL00-30L-A (Output 2) | | | | | |
|--|-------------------|----|--------------------|----|----------------|
| 1 | POWER IN: +12VDC | 11 | MIPI_D1_N(Port-2) | 21 | GND |
| 2 | POWER IN: +12VDC | 12 | GND | 22 | I2C_SCL(3.3V) |
| 3 | GND | 13 | MIPI_CLK_P(Port-2) | 23 | I2C_SDA(3.3V) |
| 4 | GND | 14 | MIPI_CLK_N(Port-2) | 24 | GND |
| 5 | NC(GPIO) | 15 | GND | 25 | Uart_TX(3.3V) |
| 6 | GND | 16 | MIPI_D2_P(Port-2) | 26 | Uart_RX(3.3V) |
| 7 | MIPI_D0_P(Port-2) | 17 | MIPI_D2_N(Port-2) | 27 | Reset(GPIO) |
| 8 | MIPI_D0_N(Port-2) | 18 | GND | 28 | GND |
| 9 | GND | 19 | MIPI_D3_P(Port-2) | 29 | DET_HDMI(GPIO) |
| 10 | MIPI_D1_P(Port-2) | 20 | MIPI_D3_N(Port-2) | 30 | CEC_HDMI(GPIO) |