Allied Vision

# EXO Camera Link

exo304CCL

## 常规

| | |
|---|---|
| 型号 | exo304CCL |
| 产品代码 | F001766 |
| 产品系列 | EXO Camera Link |
| 状态 | Available |

## 传感器

| | |
|---|---|
| 传感器类型 | Area scan |
| 色度 | Color |
| 光谱 | Visible |
| 光谱范围 | 400 nm to 1000 nm |
| 分辨率 | 4,096 × 3,000 (12.30 MP) |
| 传感器型号 | Sony IMX304 |
| 传感器架构（材料） | cmos |
| 快门类型 | Global shutter (GS) |
| 传感器尺寸 | 14.13 × 10.35 mm (17.52 mm, Type 1.1) |
| 像素尺寸 | 3.45 µm × 3.45 µm |

## 像素格式

| | |
|---|---|
| 传感器位深度 | 8-bit, 12-bit |
| RGB像素格式 | bayer8, bayer12 |

## 成像性能

| | |
|---|---|
| 动态范围 | 72 dB |
| 信噪比 | 39.5 dB |

## 时序与增益

| | |
|---|---|
| 最大帧率 | 20 fps |
| 曝光时间 | 29 µs to 60 s |
| 增益 | 0.0 dB to 48.0 dB |

## I/O与电源

| | |
|---|---|
| 非电气隔离IO | 0 x LVDS input, 0 x LVDS output, 0 x TTL input, 0 x TTL output, 2 x 24V input, 4 x Open drain output, |
| 特定非电气隔离IO | 1 x RS232 input, 1 x RS232 output, 0 x RS422 input, 0 x RS422 output, |
| 光电隔离线路 | 1 x Optical isolated input, 0 x Optical isolated input, |
| I/O接口 | 12-pin Hirose HR10A-10P-12S |
| 电源供应 | 10 to 25VDC |
| 功耗 | External: 4 W (typical) |

## 工作条件

| | |
|---|---|
| 工作温度（外壳 | -10 °C to 60 °C |

## 机械特性

| | |
|---|---|
| 机身尺寸（L x W x H mm） | 43 × 50 × 50 |
| 滤光片/保护玻璃 | IR-Cut - 680nm |
| IP防护等级 | IP40 |
| 镜头接口 | C-Mount |
| 重量 | 140 g |

## 板载内存与FPGA

| | |
|---|---|
| 图像缓存（RAM） | 192 MByte |
| 非易失性存储器（闪存） | 32 MByte |

## 接口

| | |
|---|---|
| 数字接口 | Camera Link Base |
| 接口连接器 | (MDR) |

## 固件功能 - 图像控制

| | |
|---|---|
| 曝光模式 | manual, auto, external |

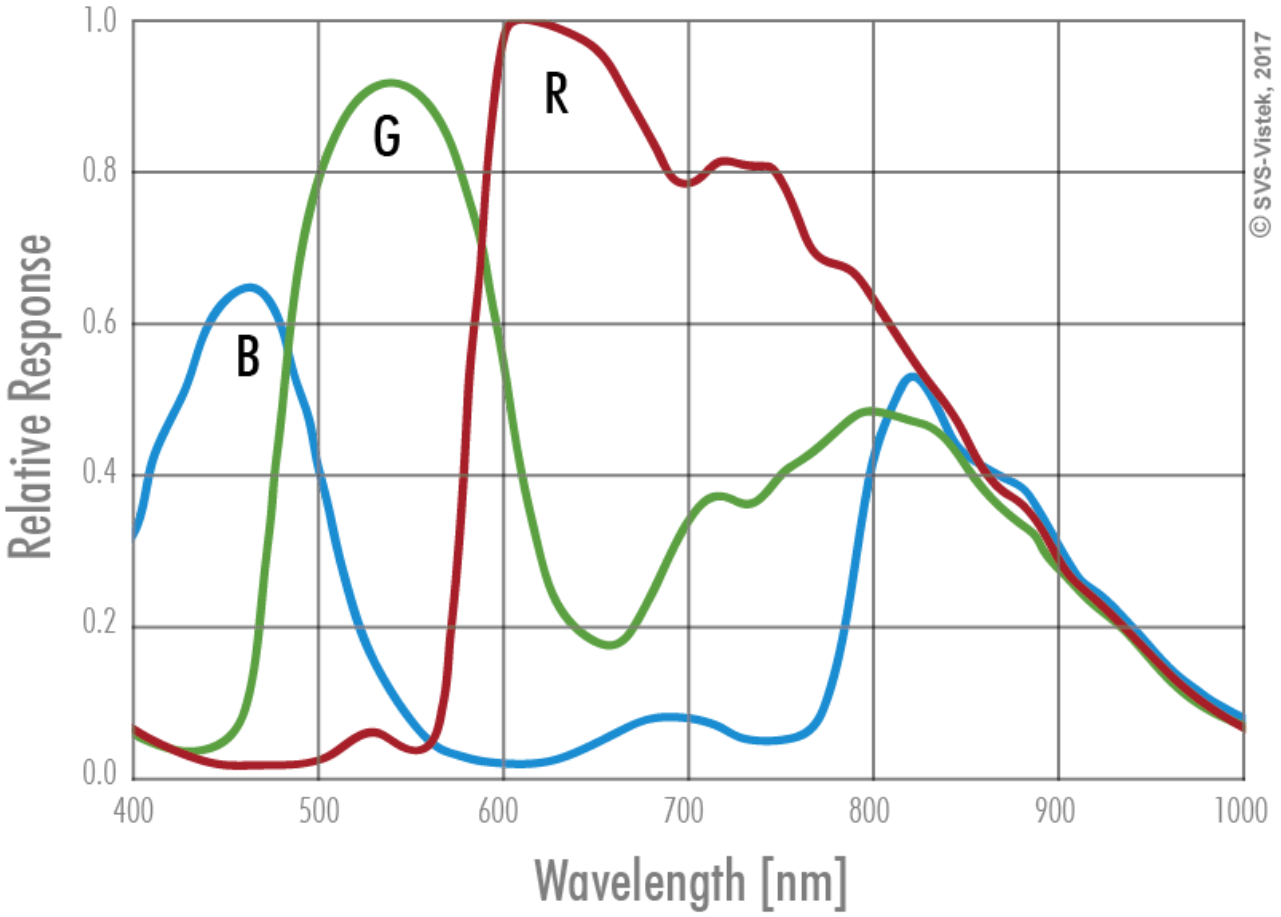
## 固件功能 - 图像控制

| | |
|---|---|
| 增益模式 | auto, manual |
| 白平衡模式 | auto, manual |
| 图像控制功能 | roi, lut, mirror-image |

## 固件功能 - 相机控制

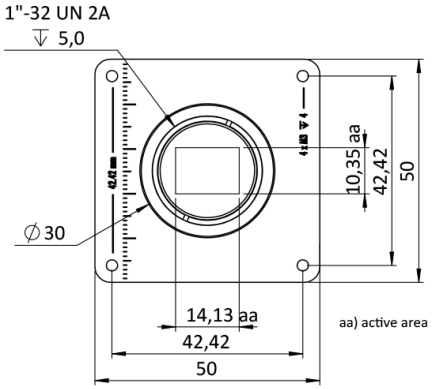
| | |
|---|---|
| 触发模式/同步 | internal, software, external |
| 相机控制功能 | User Sets, PWM(4), Sequencer, |

## Quantum Efficiency

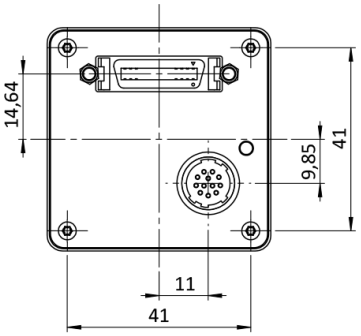


## Technical Drawing

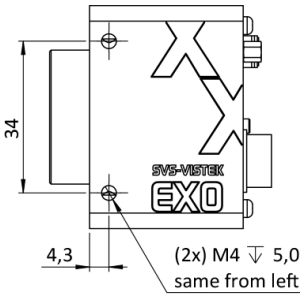
### front



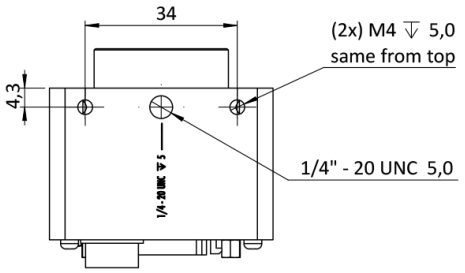

### back



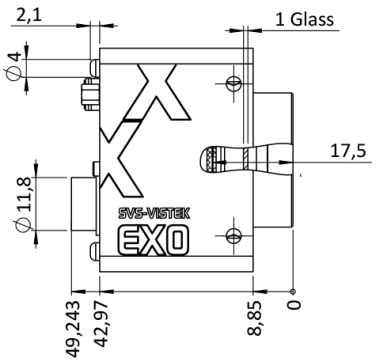

### right side




### bottom

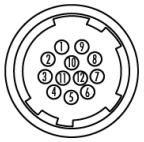


left side




## I/O pin assignment

Hirose 12 Pin



| | | | | | |
|---|---|---|---|---|---|
| 1 | VIN – | (GND) | 7 | OUT 1 | (open drain) |
| 2 | VIN + | (10 V to 25 V DC) | 8 | OUT 2 | (open drain) |
| 3 | IN 4 | (RXD RS232) | 9 | IN 3 + | (opto In +) |
| 4 | OUT 4 | (TXD RS232) | 10 | IN 3 – | (opto In –) |
| 5 | IN 1 | (0 - 24V) | 11 | OUT 3 | (open drain) |
| 6 | IN 2 | (0 - 24V) | 12 | OUT 0 | (open drain) |