CC1 Series USB 3.0 Industrial Area Scan Camera

Product Features

- USB 3.0 interface, theoretical transfer bandwidth of 5Gbps, USB-powered.
- Supports various triggering functions such as software trigger, hardware trigger, and free-run acquisition.
- 128MB onboard cache for data transfer or image retransmission in burst mode.
- Supports multiple image data output formats, gain adjustment, and mirroring, etc.
- Supports ISP (Image Signal Processing) functions such as gamma correction, contrast adjustment, brightness adjustment, and lookup table.
- Compatible with USB3 Vision protocol and GenICam standard.

Product model and parameters

Mono/Color	C	M
Image format	Mono8/ 10/ 10Packed/12/ 12Packed	Mono8/10/12,BayerRG 8/10/10Packed/12/12Packed, YUV422Packed,YUV422_YUYV_Packed,RGB 8,BGR 8
Bit Depth	8/10/12	
ROI (Region of Interest)	Supports	
Gamma	0~3.999	
Image Acquisition Modes	Software trigger/hardware trigger/free run	
Image Buffer	128MB image cache	
Storage Channel	Supports saving 3 sets of user-defined configurations	
Digital I/O	6-pin Hirose interface, 1 optically isolated input, 1 optically isolated output, 1 configurable input/output without optical isolation	
Dimensions	29mm×29mm×29mm (excluding lens mount and rear shell interface)	
Weight	<75g	
Power Supply	DC auxiliary power supply via Hirose interface, voltage range 9V~24V, supports USB interface power supply	
Data Interface	USB3.0	
Lens Mount	C	
Standards	Compliant with USB3 Vision, GenICam	
Temperature	Storage temperature: -30°C~+80°C; operating temperature: 0°C~+50°C	

Product model and parameters

Model	Resolution	Pixel Size (μm²)	Chip Type	Exposure Mode	Frame Rate (fps)	Chip Size	Sensor Model	Exposure Time	Power Consumption	Mono/Color
OPT-CC1-M004-UG1-10	720×540	6.9	CMOS	Global	526.56	1/2.9"	IMX287	14us~10s	2.3W@5 VDC	M
OPT-CC1-M013-UG6-10	1280×1024	4	CMOS	Global	240	1/2.7"	SC130GS	4us~10s	2.4W@5 VDC	M
OPT-CC1-M016-UG3-10	1440×1080	4	CMOS	Global	227	1/1.7"	GMAX4002	1us~10s	2.2W@5 VDC	M
OPT-CC1-M020-UG3-10	1600×1200	4	CMOS	Global	202	1/1.7"	GMAX4002	1us~10s	2.4W@5 VDC	M
OPT-CC1-M050-UR0-10	2592×1944	2.2	CMOS	Rolling	60	1/2.5"	AR0521	7us~4.8s	2.1W@5 VDC	M
OPT-CC1-M050-UG1-10	2448×2048	3.45	CMOS	Global	35.6	2/3"	IMX264	28us~4s	2.1W@5 VDC	M
OPT-CC1-M050-UG3-11	2448×2048	3.4	CMOS	Global	77.39	2/3"	GMAX3405	1us~10s	2.9W@5 VDC	M
OPT-CC1-M060-UR1-10	3072×2048	2.4	CMOS	Rolling	59.75	1/1.8"	IMX178	17us~1s	2.0W@5 VDC	M
OPT-CC1-M120-UR1-10	4024×3036	1.85	CMOS	Rolling	31.76	1/1.7"	IMX226	10us~10s	2.4W@5 VDC	M
OPT-CC1-M200-UR1-10	5472×3648	2.4	CMOS	Rolling	19.44	1"	IMX183	13us~10s	2.4W@5 VDC	M
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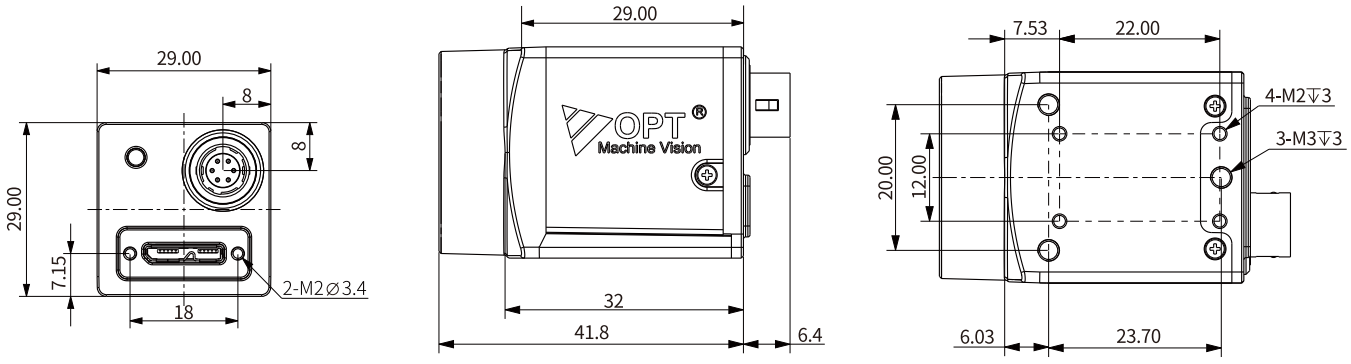
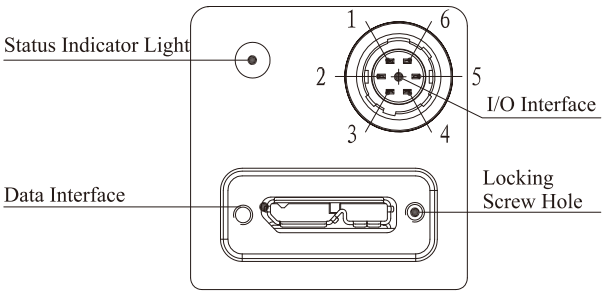
Dimensions (mm)



IO Interface Description

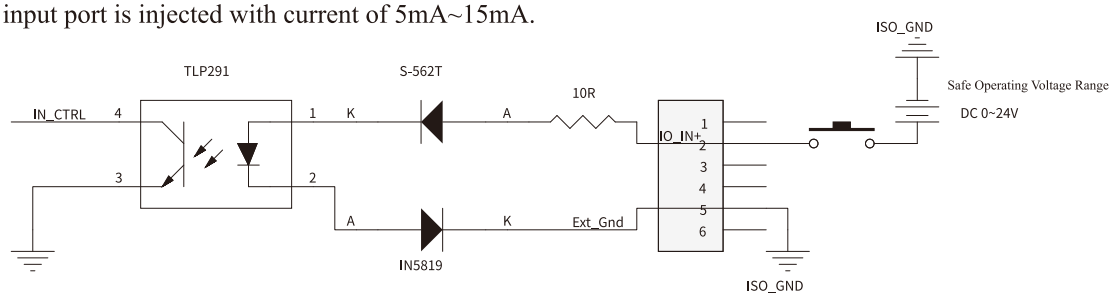


Pinouts	Signal	Explanation
1	Power	DC 12V~24V Camera Power Supply
2	Line1	Opto-isolated input
3	Line3	GPIO (non-isolated software configurable input/output)
4	Line2	Opto-isolated output
5	ISO_GND	Opto-isolated signal ground
6	GND	Power ground and GPIO signal ground

IO Circuit Diagram

1. Opto-isolated Input

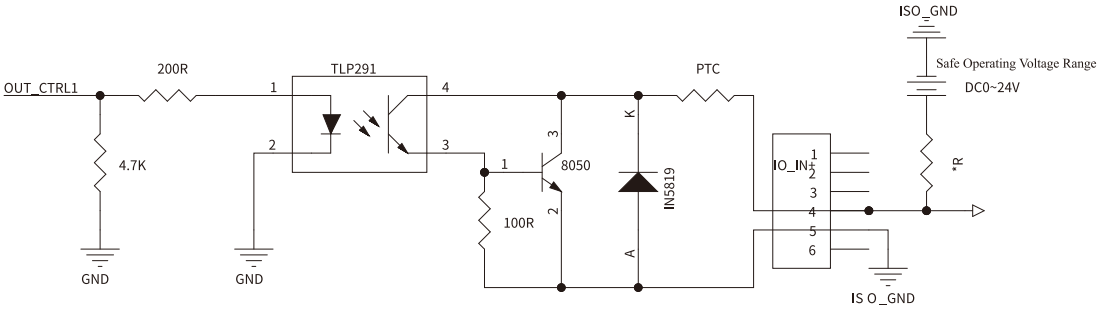
Isolated I/O input port is injected with current of 5mA~15mA.



Opto-isolated Input Circuit Diagram

2. Opto-isolated Output

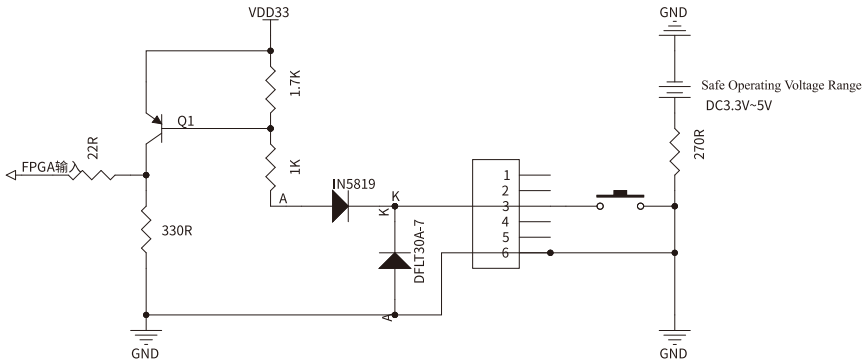
Isolated I/O output port maximum continuous current: 50mA.



Opto-isolated output circuit diagram

3. GPIO Input

When the user external input logic is 0, the maximum sink current is 2mA, and when the input logic is 0, the maximum sink current at the interface is 100uA.

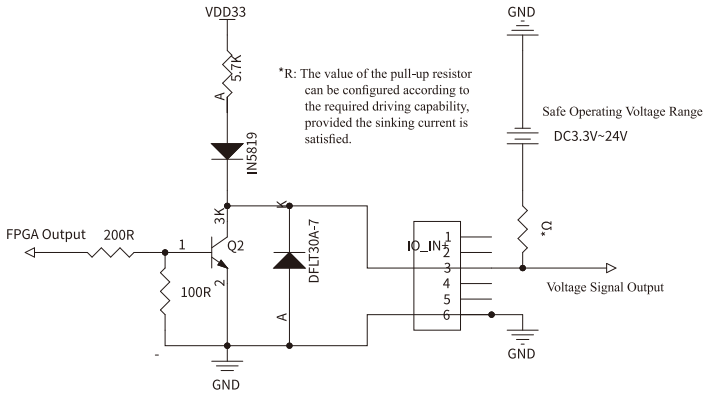


GPIO Input Circuit Diagram

IO Circuit Diagram

4. GPIO Output

When used as an output, the IO port can sink a maximum current of 50mA.



GPIO Output Circuit Diagram

Accessories

USB Camera Universal Capture Card	
Model	OPT-GU-J4-P-01
Chipset	ASM3042
Bus Interface	4×PCIe2.0
Physical Interface	4×Type - A
Transfer Speed	5 Gbps
OS Support	Windows 7/Windows 10/Windows 11, Linux
Appearance Illustration	

USB Camera Universal Cable					
Cable Type			6-pin IO Cable with Power Adapter	6-pin IO Cable	Data cable
Cable Material/ Length	Static	3M	CB-HR10-6F008-S3M	CB-HR10-6F003-S3M	CB-U3-MBSAM-S3M
		5M	CB-HR10-6F008-S5M	CB-HR10-6F003-S5M	CB-U3-MBSPAMP-T5M
		10M	CB-HR10-6F008-S10M	CB-HR10-6F003-S10M	CB-U3-MBSPAMP-T10M
	High Flexibility	3M	CB-HR10-6F008-R3M	CB-HR10-6F003-R3M	CB-U3-MBSPAMP-T3M
		5M	CB-HR10-6F008-R5M	CB-HR10-6F003-R5M	CB-U3-MBSPAMP-T5M
		10M	CB-HR10-6F008-R10M	CB-HR10-6F003-R10M	CB-U3-MBSPAMP-10M
Appearance Illustration