

Allied Vision I/O cable





Allied Vision I/O cables are manufactured in accordance with the CE standard and its underlying directions.



Allied Vision I/O cables comply with the requirements of the EU directive 2011/65/EU Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).



We declare, under our sole responsibility, that the described parts or components conform to the directives of UL20276.

Specifications

Feature	8-pin cable	12-pin cable	13-pin cable Manta / Stingray board level
Jacket	HR-PVC (Pb free), 0.81 mm thick, 5.0 mm Ø	PVC Class 43, 6.4 mm Ø +/-0.20	PVC 105°C, 6.4 mm Ø
Outer braid shield	Tinned annealed copper, min. 85 % coverage	Tinned annealed copper, min. 85 % coverage	Tinned annealed copper
Cable assembly	5 pairs (4 used)	12 x single	13 x single
Insulation	HRLF PVC 0.1 mm thick, 0.58 mm Ø	SR-PVC	PVC 80°C
Conductor	Tinned annealed copper, 7 x 0.127 (AWG 28); 0.38 mm Ø	Tinned annealed copper, 7 x 0.16 mm (AWG26)	Tinned annealed copper, 7 x 0.16 (AWG26); 0.48mm Ø
Max. conductor DC resistance	246 Ω/km at 20°C	max. 140 Ω/km at +20°C	max. 155 Ω/km at +20°C
Min. insulation DC resistance	10 MΩ x km at 20°C	min. 100 MΩ x km at +20°C	min. 153 MΩ x km at +20°C
Compliance	UL 20276 (80°C / 30 V), RoHS (2011/65/EU)	UL/cUL, style 2464/1061, RoHS	UL 2464/1061, VDE881, UL1061

Table 1: 12-pin and 13-pin cable specifications

I/O and trigger cable configurations

Color-coding is only valid for part number.
Color-coding can be different for legacy cable variants.

Part number	Legacy part number	Length	Description	Prosilica GT	Prosilica GX	Prosilica GC	Prosilica GE	Prosilica GB/GS	Mako G	Manta BL	Manta/PoE	Guppy PRO	Stingray	Stingray BL	Pike	Guppy	Marlin	Oscar
2814	K1200191	2.0 m	12-pin Hirose female to open end	X	X	X					X	X	X		X		X	X
2815	K1200292 02-6033A 02-6031A	3.0 m		X	X	X					X	X	X		X		X	X
2817	K1200193	5.0 m		X	X	X					X	X	X		X		X	X
2818	K1200194	10.0 m		X	X	X					X	X	X		X		X	X
2789	02-6032A	3.0 m	12-pin Hirose male to open end				X											
2790	-	5.0 m					X											
2791	-	10.0 m					X											
K1200301	-	3.0 m	13-pin PicoBlade to open end							X				X				
K1200302	-	5.0 m								X				X				
K1200196	-	2.0 m	8-pin Hirose female to open end						X							X		
K1200197	-	5.0 m							X							X		
2792	02-6041A	3.0 m	14-pin Mini-D shell to open end					X										
2793	-	5.0 m						X										
2794	-	10.0 m						X										
Trigger cable (only connected to Trigger IN 1)																		
K1200267	-	2.0 m	12-pin Hirose female to BNC	X	X						X	X	X		X		X	X
K1200252	-	5.0 m		X	X							X	X	X		X		X
K1200240	-	2.0 m	12-pin Hirose female to open end	X	X						X	X	X		X		X	X
K1200244	-	10.0 m		X	X							X	X	X		X		X
K1200229	-	10.0 m	8-pin Hirose to 4-pin open end													X		

Table 2: I/O and trigger cable configurations

I/O connector pin assignment

Guppy camera

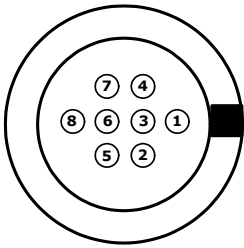
Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Yellow dot Red	Camera Out 1	Out	TTL	Camera Output 1
	2	Yellow dot Black	Camera Out 2	Out	TTL	Camera Output 2
	3	Grey dot Red	Camera Out 3	Out	TTL	Camera Output 3
	4	Grey dot Black	CameraIn	In	TTL	Camera Input
	5	Pink dot Black	RxD	In	RS232	Terminal Receive Data
	6	Pink dot Red	TxD	Out	RS232	Terminal Transmit Data
	7	Orange dot Black	ExtPower	---	+8 to 36 VDC	Camera Power Supply
	8	Orange dot Red	GND	---	GND	External Ground

Table 3: Guppy I/O definition

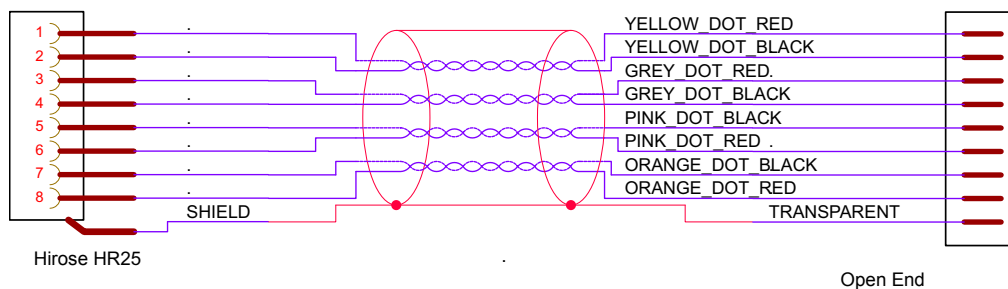


Figure 1: Guppy cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is Hirose HR25-7TP-8S and can be purchased from Allied Vision (Order code: K7600503).

Guppy PRO camera

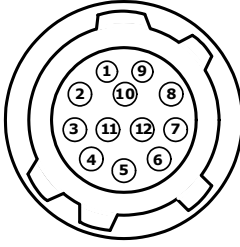
Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Blue	External GND	--	GND for RS232 and ext. power	External Ground for RS232 and external power
	2	Red	External Power	---	+8 to 36 VDC	Camera Power Supply
	3	Pink	---	---	---	---
	4	Grey	Camera In1	In	$U_{in}(high) = 3 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 1.5 \text{ V}$	Camera Input 1 (GPIIn1) opto-isolated
	5	Yellow	Camera Out3	Out	Open emitter	Camera Output 3 (GPOut3) opto-isolated
	6	Green	Camera Out1	Out	Open emitter	Camera Output 1 (GPOut1) opto-isolated
	7	Brown	Camera In GND	In	Common GND for inputs	Camera Common Input Ground (In GND)
	8	White	---	---	---	---
	9	Black	---	---	---	---
	10	Orange	Camera Out Power	In	Common VCC for outputs max. 36 VDC	Camera Output Power for digital outputs (OutVCC)
	11	White/Black	---	---	---	---
	12	White/Brown	Camera Out2	Out	Open emitter	Camera Output 2 (GPOut2) opto-isolated

Table 4: Guppy PRO I/O definition

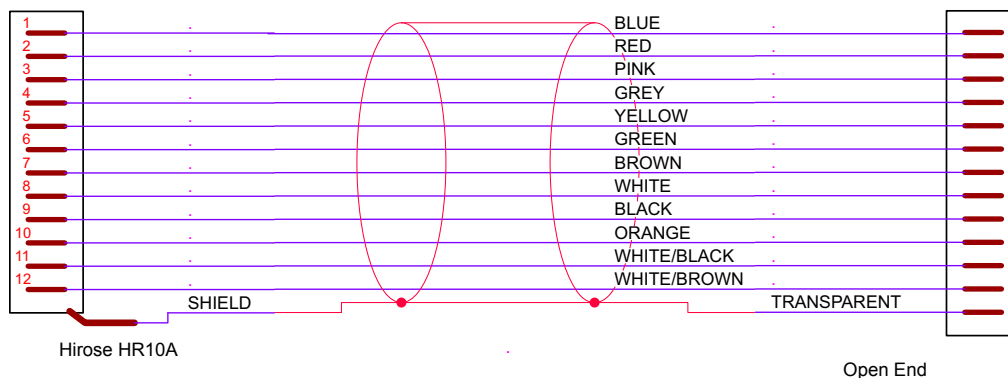


Figure 2: Guppy PRO cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is Hirose HR10A-10P-12S and can be purchased from Allied Vision (Order code: K7600040).

Mako G camera

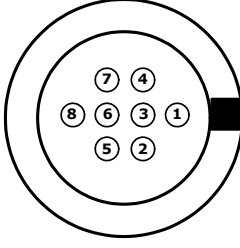
Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Yellow dot Red	CameraOut1	Out	Open emitter max. 20 mA	Camera Output 1 (SyncOut1) opto-isolated
	2	Yellow dot Black	CameraOut2	Out	Open emitter max. 20 mA	Camera Output 2 (SyncOut2) opto-isolated
	3	Grey dot Red	CameraOut3	Out	Open emitter max. 20 mA	Camera Output 3 (SyncOut3) opto-isolated
	4	Grey dot Black	CameraIn	In	Uin(high) = 3 to 24 V Uin(low) = 0 to 1.0 V	Camera Input (SyncIn) opto-isolated
	5	Pink dot Black	CameraIn GND	In	Common GND for inputs	Camera Common Input Ground (In GND)
	6	Pink dot Red	CameraOut Power	In	Common VCC for outputs max. 30 VDC	Camera Output Power for digital outputs (OutVCC)
	7	Orange dot Black	ExtPower	---	12 to 24 VDC +/- 10 %	Camera Power Supply
	8	Orange dot Red	GND	---	GND for ext. Power	External Ground for external power

Table 5: Mako G I/O definition

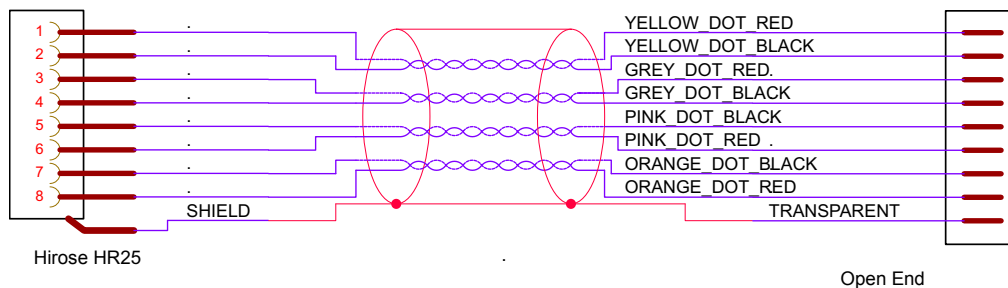


Figure 3: Mako G cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is Hirose HR25-7TP-8S and can be purchased from Allied Vision (Order code: K7600503).

Manta and Manta PoE camera

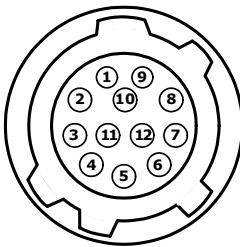
Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Blue	External GND	---	GND for RS232 and ext. power	External Ground for RS232 and external power
	2	Red	External Power	---	+8 to +30 VDC	Camera Power Supply
	3	Pink	Video Iris	---	---	Video Iris (\geq F W 01.44.00)
	4	Grey	Camera In1	In	$U_{in}(high) = 3 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 1.0 \text{ V}$	Camera Input 1 (SyncIn1) opto-isolated
	5	Yellow	Reserved	---	---	---
	6	Green	Camera Out1	Out	Open emitter max. 10 mA	Camera Output 1 (SyncOut1) opto-isolated
	7	Brown	Camera In GND	In	Common GND for inputs	Camera Common Input Ground (In GND)
	8	White	RxD	In	RS232	Terminal Receive Data
	9	Black	TxD	Out	RS232	Terminal Transmit Data
	10	Orange	Camera Out Power	In	Common VCC for outputs max. 30 VDC	Camera Output Power for digital outputs (OutVCC)
	11	White/Black	Camera In2	In	$U_{in}(high) = 3 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 1.0 \text{ V}$	Camera Input 2 (SyncIn2) opto-isolated
	12	White/Brown	Camera Out2	Out	Open emitter max. 10 mA	Camera Output 2 (SyncOut2) opto-isolated

Table 6: Manta and Manta PoE I/O definition

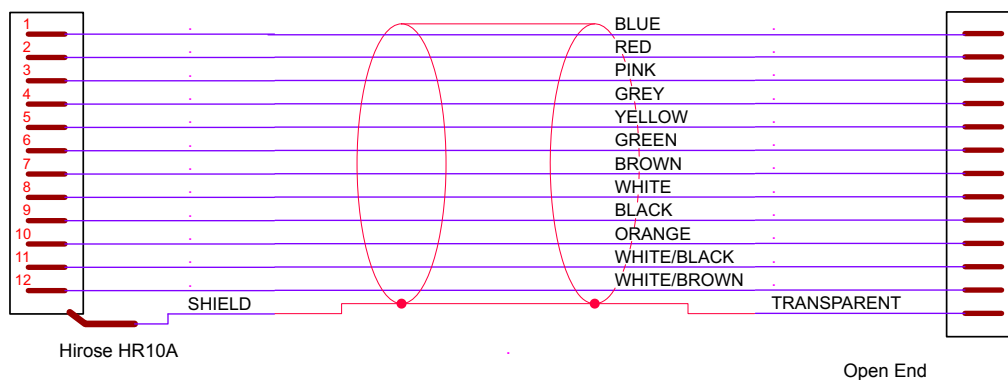


Figure 4: Manta and Manta PoE cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is Hirose HR10A-10P-12S and can be purchased from Allied Vision (Order code: K7600040).

Camera IN1 and Camera IN2 for non-PoE variants manufactured prior 12/2011 are specified as follows:

$U_{in}(high) = 2.5 \text{ to } 6.0 \text{ V}$

$U_{in}(low) = 0 \text{ to } 0.8 \text{ V}$

Manta board level camera

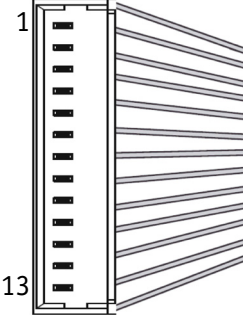
Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Blue	External GND	---	GND for RS232 and ext. power	External Ground for RS232 and external power
	2	Red	External Power	---	+8 to +30 VDC	Camera Power Supply
	3	White/Black	Video Iris	---	---	Video Iris (\geq FW 01.44.00)
	4	Grey	Camera In1	In	$U_{in}(high) = 3$ to 24 V $U_{in}(low) = 0$ to 1.0 V	Camera Input 1 opto-isolated (SyncIn1)
	5	Yellow	Reserved	---	---	---
	6	Green	Camera Out1	Out	Open emitter max. 10 mA	Camera Output 1 opto-isolated (SyncOut1)
	7	Brown	Camera In GND	In	Common GND for inputs	Camera Common Input Ground (In GND)
	8	White	RxD (RS232)	In	RS232	Terminal Receive Data
	9	Black	TxD (RS232)	Out	RS232	Terminal Transmit Data
	10	Orange	Camera Out Power	In	Common VCC for outputs max. 30 VDC	Camera Output Power for digital outputs (OutVCC)
	11	White/Brown	Camera In2	In	$U_{in}(high) = 3$ to 24 V $U_{in}(low) = 0$ to 1.0 V	Camera Input 2 opto-isolated (SyncIn2)
	12	Violet	Camera Out2	Out	Open emitter max. 10 mA	Camera Output 2 opto-isolated (SyncOut2)
	13	Shield/Transparent	Chassis GND	---	Chassis GND	Chassis Ground

Table 7: Manta board level I/O definition

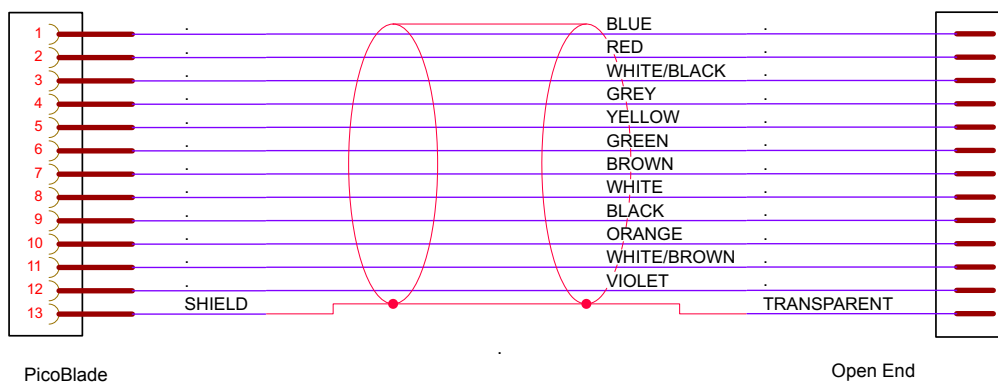


Figure 5: Manta board level cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



Camera IN1 and Camera IN2 for Non-PoE variants up to serial number 503323258 are specified as follows:

$U_{in}(high) = 2.5$ to 6.0 V

$U_{in}(low) = 0$ to 0.8 V

Prosilica GT camera

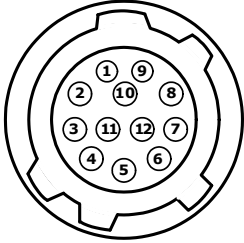
Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Blue	External GND	---	GND for RS232 and ext. power	External Ground for RS232 and external power
	2	Red	External Power	---	+7 to +25 VDC	Camera Power Supply
	3	Pink	Camera Out 4	Out	Open emitter max. 8 mA	Camera Output 4 (SyncOut4) opto-isolated
	4	Grey	Camera In 1	In	LVTTTL max. 3.3 V	Camera Input 1 (SyncIn1) non-isolated
	5	Yellow	Camera Out 3	Out	Open emitter max. 8 mA	Camera Output 3 (SyncOut3) opto-isolated
	6	Green	Camera Out 1	Out	LVTTTL max. 3.3 V	Camera Output 1 (SyncOut1) non-isolated
	7	Brown	Camera In GND	In	Common GND for inputs	Camera Common Input Ground (In GND)
	8	White	RxD (RS232)	In	RS232	Terminal Receive Data
	9	Black	TxD (RS232)	Out	RS232	Terminal Transmit Data
	10	Orange	Camera Out Power	In	Common VCC for outputs +5 to +24 VDC	Camera Output Power for digital outputs (Out VCC)
	11	White/Black	Camera In 2	In	$U_{in}(high) = 5 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 0.8 \text{ V}$	Camera Input 2 (SyncIn2) opto-isolated
	12	White/Brown	Camera Out 2	Out	LVTTTL max. 3.3 V	Camera Output 2 (SyncOut2) non-isolated

Table 8: Prosilica GT cable color code

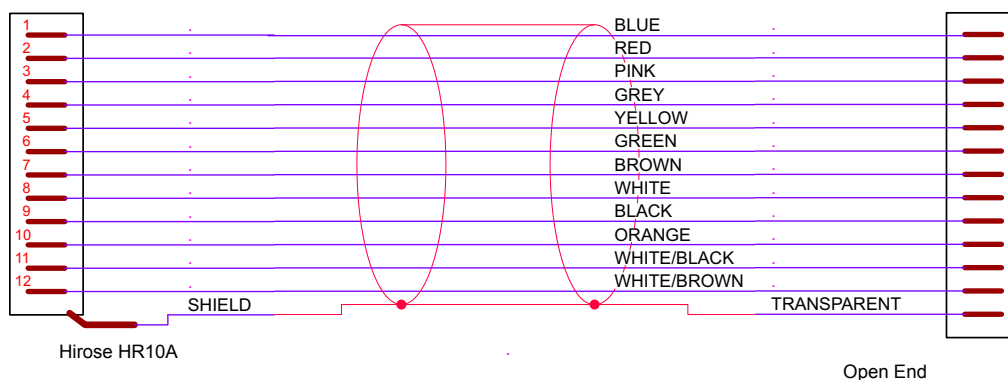


Figure 6: Prosilica GT cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is Hirose HR10A-10P-12S and can be purchased from Allied Vision (Order code: K7600040).

Pike and Stingray cameras

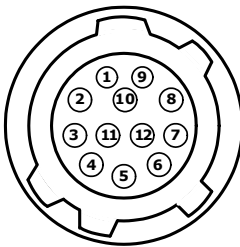
Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Blue	External GND	---	GND for RS232 and ext. power	External Ground for RS232 and external power
	2	Red	External Power	---	+8 to +36 VDC	Camera Power Supply
	3	Pink	Camera Out4	Out	Open emitter	Camera Output 4 (GPOut4) default: -
	4	Grey	Camera In 1	In	$U_{in}(high) = 3 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 1.5 \text{ V}$	Camera Input 1 (GPIn1) opto-isolated default: Trigger
	5	Yellow	Camera Out 3	Out	Open emitter	Camera Output 3 (GPOut3) default: Busy
	6	Green	Camera Out 1	Out	Open emitter	Camera Output 1 (GPOut1) default: IntEna
	7	Brown	Camera In GND	In	Common GND for inputs	Camera Common Input Ground (In GND)
	8	White	RxD	In	RS232	Terminal Receive Data
	9	Black	TxD	Out	RS232	Terminal Transmit Data
	10	Orange	Camera Out Power	In	Common VCC for outputs max. 36 VDC	Camera Output Power for digital outputs (OutVCC)
	11	White/Black	Camera In 2	In	$U_{in}(high) = 3 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 1.5 \text{ V}$	Camera Input 2 (GPIn2) default: -
	12	White/Brown	Camera Out 2	Out	Open emitter	Camera Output 2 (GPOut2) default: -

Table 9: Pike and Stingray I/O definition

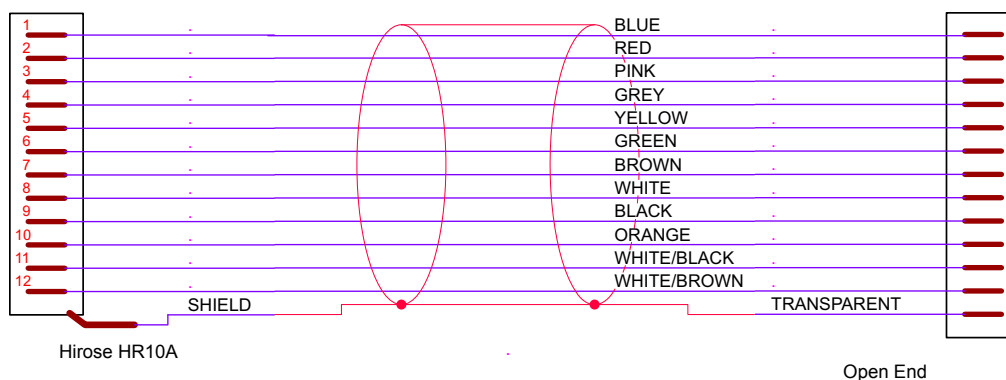


Figure 7: Pike and Stingray cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is Hirose HR10A-10P-12S and can be purchased from Allied Vision (Order code: K7600040).

Stingray board level cameras

Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Blue	External GND	---	GND for RS232 and ext. power	External Ground for RS232 and external power
	2	Red	External Power	---	+8 to +36 VDC	Camera Power Supply
	3	White/Black	Camera Out4	Out	Open emitter	Camera Output 4 (GPOut4) default: -
	4	Grey	Camera In 1	In	$U_{in}(high) = 3 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 1.5 \text{ V}$	Camera Input 1 (GPIn1) opto-isolated default: Trigger
	5	Yellow	Camera Out 3	Out	Open emitter	Camera Output 3 (GPOut3) default: Busy
	6	Green	Camera Out 1	Out	Open emitter	Camera Output 1 (GPOut1) default: IntEna
	7	Brown	Camera In GND	In	Common GND for inputs	Camera Common Input Ground (In GND)
	8	White	RxD	In	RS232	Terminal Receive Data
	9	Black	TxD	Out	RS232	Terminal Transmit Data
	10	Orange	Camera Out Power	In	Common VCC for outputs max. 35 VDC	Camera Output Power for digital outputs (OutVCC)
	11	White/Brown	Camera In 2	In	$U_{in}(high) = 3 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 1.5 \text{ V}$	Camera Input 2 (GPIn2) default: -
	12	Violet	Camera Out 2	Out	Open emitter	Camera Output 2 (GPOut2) default: -
	13	Shield/Transparent	Chassis GND	---	Chassis GND	Chassis Ground

Table 10: Stingray board level I/O definition

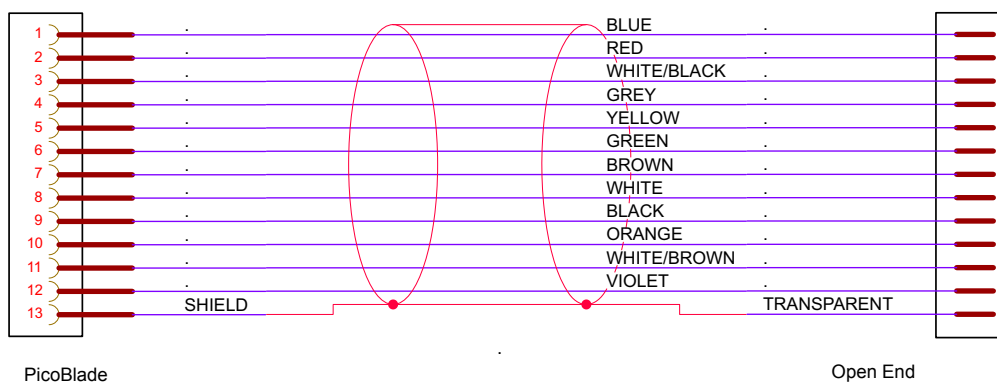


Figure 8: Stingray board level cable color-coding

Note Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



Prosilica GC camera

Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Blue	External GND	---	GND for RS232 and ext. power	External Ground for external power
	2	Red	External Power	---	Refer to the Prosilica GC Technical Manual	Camera Power Supply
	3	Pink	Camera In 1	In	$U_{in}(high) = 5\text{ V to }24\text{ V}$ $U_{in}(low) = 0\text{ V to }0.8\text{ V}$	Camera Input 1 opto-isolated (SyncIn1)
	4	Grey	Camera Out1	Out	Open emitter max. 20 mA	Camera Output 1 opto-isolated (SyncOut1)
	5	Yellow	Isolated GND	---	Common GND for In/Out	Ground for isolated outputs
	6	Green	Video Iris	Out	---	PWM Signal for Iris Control
	7	Brown	Reserved	---	---	---
	8	White	TxD	Out	RS232	Terminal Transmit Data
	9	Black	RxD	In	RS232	Terminal Receive Data
	10	Orange	Signal GND	---	---	Ground for RS232 and non-isolated outputs
	11	White/Black	Camera In 2	In	LVTTTL max. 3.3 V	Camera Input 2 non-isolated (SyncIn2)
	12	White/Brown	Camera Out 2	Out	LVTTTL max. 3.3 V	Camera Output 2 non-isolated (SyncOut2)

Table 11: Prosilica GC I/O definition

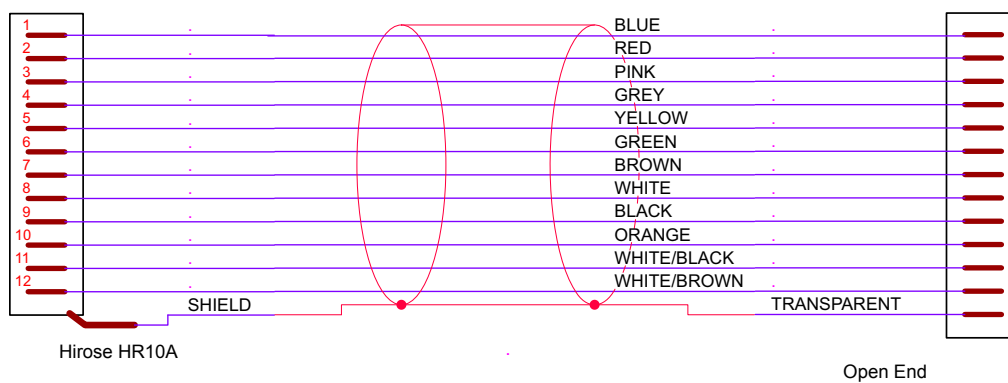


Figure 9: Prosilica GC cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is Hirose HR10A-10P-12S and can be purchased from Allied Vision (Order code: K7600040).

Prosilica GX camera

Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Blue	External GND	---	GND for RS232 and ext. power	External Ground for RS232 and external power
	2	Red	External Power	---	+5 to +24 VDC	Camera Power Supply
	3	Pink	Camera Out4	Out	Open emitter max. 20 mA	Camera Output 4 (SyncOut4) opto-isolated
	4	Grey	Camera In 1	In	$U_{in}(high) = 5 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 0.8 \text{ V}$	Camera Input 1 (SyncIn1) opto-isolated
	5	Yellow	Camera Out 3	Out	Open emitter max. 20 mA	Camera Output 3 (SyncOut3) opto-isolated
	6	Green	Camera Out 1	Out	Open emitter max. 20 mA	Camera Output 1 (SyncOut1) opto-isolated
	7	Brown	Camera In GND	In	Common GND for inputs	Camera Common Input Ground (In GND)
	8	White	RxD	In	RS232	Terminal Receive Data
	9	Black	TxD	Out	RS232	Terminal Transmit Data
	10	Orange	Camera Out Power	In	Common VCC for outputs +5 to +24 VDC	Camera Output Power for digital outputs (Out VCC)
	11	White/Black	Camera In 2	In	$U_{in}(high) = 5 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 0.8 \text{ V}$	Camera Input 2 (SyncIn2) opto-isolated
	12	White/Brown	Camera Out 2	Out	Open emitter max. 20 mA	Camera Output 2 (SyncOut2) opto-isolated

Table 12: Prosilica GX I/O definition

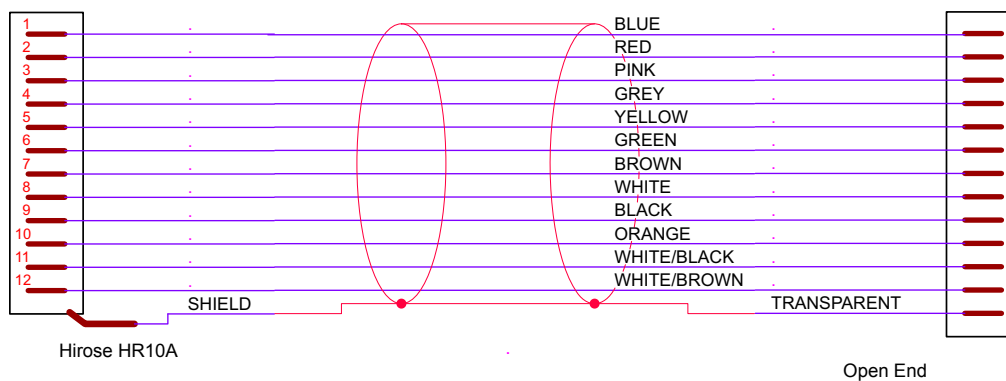


Figure 10: Prosilica GX cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is Hirose HR10A-10P-12S and can be purchased from Allied Vision (Order code: K7600040).

Marlin and Oscar cameras

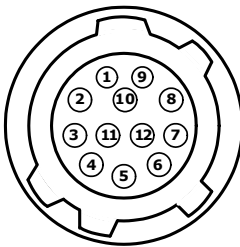
Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Blue	External GND	---	GND for RS232 and ext. power	External Ground for RS232 and external power
	2	Red	Power IN	---	+8 to +36 VDC	Camera Power supply. Not required for CMOS models
	3	Pink	Reserved	---	---	---
	4	Grey	GPInput 1	In	$U_{in}(high) = 2 \text{ to } U_{inVCC}$ $U_{in}(low) = 0 \text{ to } 0.8 \text{ V}$	TTL, Edge, programmable Camera Input1 (GPIn1) default: Trigger
	5	Yellow	Reserved	---	---	---
	6	Green	GP Output 1	Out	Marlin:Open collector Oscar:Open emitter	Camera Output 1 (GPOut1) default: IntEna
	7	Brown	GPInput GND	---	Common GND for inputs	Camera Common Input Ground (InGND)
	8	White	RxD	In	RS232	Terminal Receive Data
	9	Black	TxD	Out	RS232	Terminal Transmit Data
	10	Orange	OutVCC	Out	Common VCC for outputs max. 36 VDC	Camera Output Power for digital outputs (OutVCC)
	11	White/Black	GPInput 2	In	$U_{in}(high) = 2 \text{ to } U_{inVCC}$ $U_{in}(low) = 0 \text{ to } 0.8 \text{ V}$	TTL Camera Input 2 (GPIn2) default: -
	12	White/Brown	GPOutput 2	Out	Marlin:Open collector Oscar:Open emitter	Camera Output 2 (GPOut2) default: -

Table 13: Marlin and Oscar I/O definition

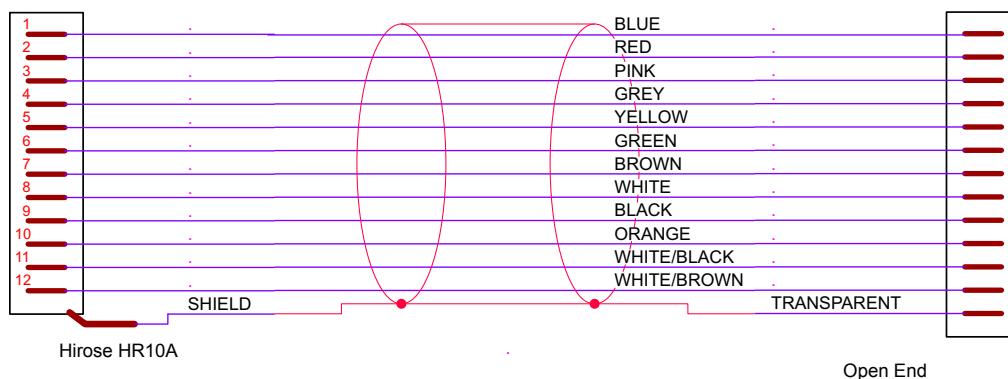


Figure 11: Marlin and Oscar cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is Hirose HR10A-10P-12S and can be purchased from Allied Vision (Order code: K7600040).

Prosilica GE camera

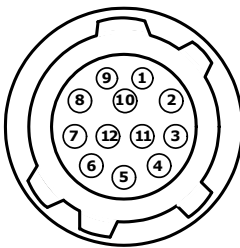
Drawing	Pin	Cable color	Signal	Direction	Level	Description
	1	Blue	Camera In 1	In	TTL max. 5 V	Camera Input 1 (SyncIn1) Galvanic isolation
	2	Red	Camera Out 2	Out	TTL max. 5 V	Camera Output 2 (SyncOut2) Galvanic isolation
	3	Pink	Camera Out 3	Out	TTL max. 5 V	Camera Output 3 (SyncOut3) Galvanic isolation
	4	Grey	RxD	In	RS232	Terminal Receive Data
	5	Yellow	TxD	Out	RS232	Terminal Transmit Data
	6	Green	Reserved	---	---	---
	7	Brown	Reserved	---	---	---
	8	White	Reserved	---	---	---
	9	Black	Reserved	---	---	---
	10	Orange	Isolated GND	In/Out	Common GND	Isolated input/output signal GND
	11	White/Black	Isolated GND	In/Out	Common GND	Isolated input/output signal GND
	12	White/Brown	Isolated GND	In/Out	Common GND	Isolated input/output signal GND

Table 14: Prosilica GE I/O definition

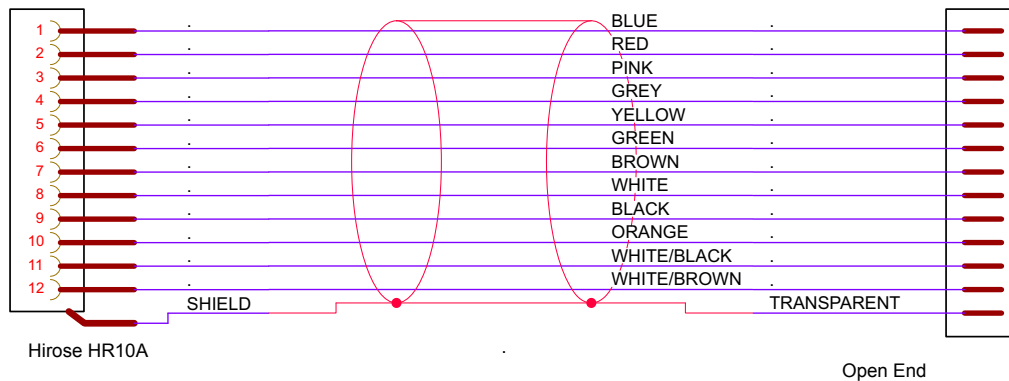


Figure 12: Prosilica GE cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is Hirose HR10A-10P-12P and can be purchased from Allied Vision (Order code: K7600040).

Prosilica GB/Prosilica GS camera

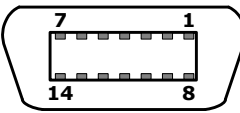
Drawing	Pin	Cable color	Signal	Direction	Level	Description
14-pin Mini-D 	1	Red	External Power	---	+5 to 16 VDC (or 25 VDC)	Camera Power Supply
	2	Black	External GND	---	GND for power	Ground for external power
	3	White	Camera In 1	In	$U_{in}(high) = 5 \text{ to } 24 \text{ V}$ $U_{in}(low) = 0 \text{ to } 0.8 \text{ V}$	Camera Input 1 (SyncIn1) opto-isolated
	4	Brown	Isolated GND	---	Common GND for In/Out	Ground for isolated outputs (isolated GND)
	5	Green	Camera Out 1	Out	Open emitter max. 20 mA	Camera Output 1 (SyncOut1) opto-isolated
	6	Blue	Video Iris	Out	---	PWM Signal for Iris Control
	7	Orange	Reserved	---	---	---
	8	---	---	---	---	---
	9	---	---	---	---	---
	10	Yellow	TxD	Out	RS232	Terminal Transmit Data
	11	White/Brown	RxD	In	RS232	Terminal Receive Data
	12	Pink	Camera In 2	In	LVTTTL max. 3.3 V	Camera Input 2 (SyncIn2) non-isolated
	13	White/Black	Camera Out 2	Out	LVTTTL max. 3.3 V	Camera Output 2 (SyncOut2) non-isolated
	14	Grey	Non-isolated GND	---	---	Ground for non-isolated outputs and RS232

Table 15: Prosilica GB/GS I/O definition +5 to 16 VDC (or 25 VDC)

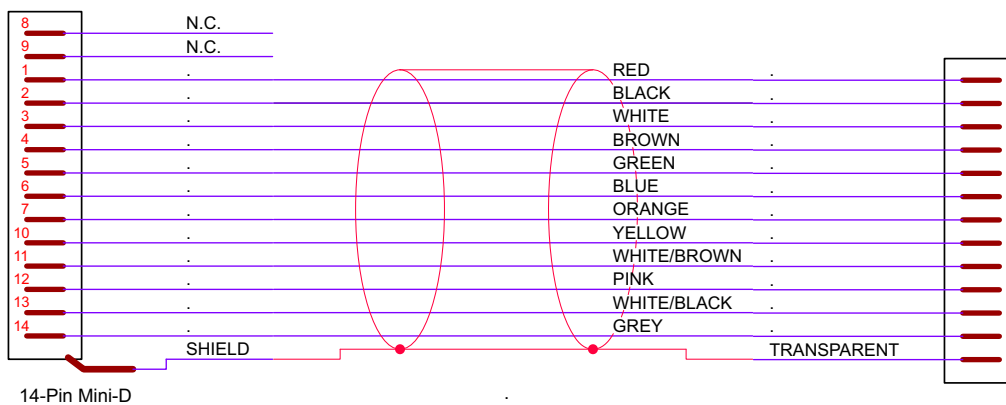


Figure 13: Prosilica GB/GS cable color-coding

Note

Color-coding is only valid for part numbers as specified in the table above, the pinout can be different for legacy cable variants.



The mating cable connector is 3M 10114-3000PE and can be purchased from Allied Vision (Order code: 02-7003A).

Additional references

To download Allied Vision technical documentation:

<https://www.alliedvision.com/en/support/technical-documentation.html>

Allied Vision camera webpages:

<https://www.alliedvision.com/en/products/cameras.html>

Allied Vision case studies:

<https://www.alliedvision.com/en/news/application-case-studies.html>

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