



KEY FEATURES

- Support Nvidia Holoscan Sensor Bridge (HSB) Platform
- Output Pixel: Max 3840*2160
- Support different focal length lens
- Output format: RAW/YUV422
- Allow customization
- Dimensions : L:185mmxW:77mmxH:41mm
- Compatible with AGX Thor and AGX Orin

Application

- Industrial
- Robotics
- Medical
- Inspection

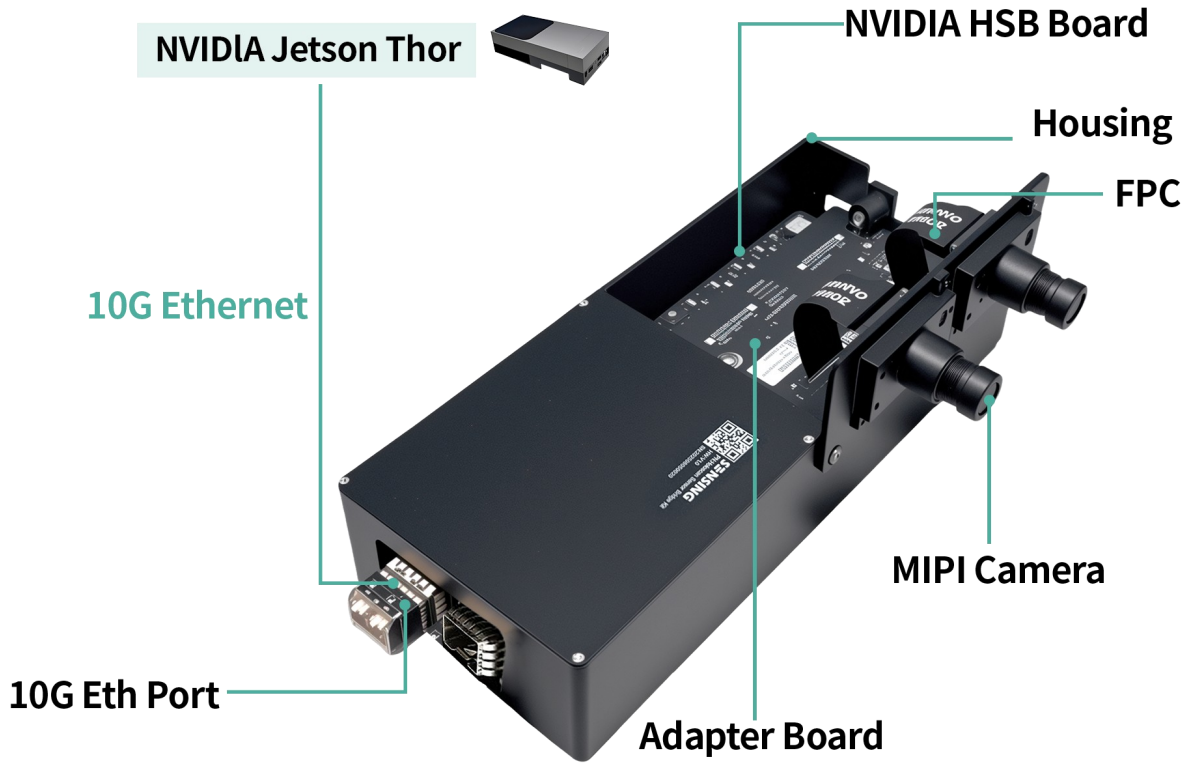


Recommended Package

HSB KIT PURCHASE LIST		
Product model	Parts	Camera Key features
SENSING-HSBKIT2M	Holoscan Sensor Bridge Kit *1pcs SG8-IMX678C-MIPI-H80K*2pcs	8MP_MIPI RAW Camera (Rolling shutter)
SENSING-HSBKIT4M	Holoscan Sensor Bridge Kit *1pcs SG8-IMX678C-MIPI-H80K*2pcs SG2-AR0234C-MIPI-H60F*2pcs	8MP_MIPI RAW Camera (Rolling shutter) 2MP_MIPI RAW Camera (Global shutter)
SENSING-HSBKIT6M	Holoscan Sensor Bridge Kit *1pcs SG8-IMX678C-MIPI-H80K*2pcs SG2-AR0234C-MIPI-H60F*2pcs SG3-ISX031C-MIPI-H100F1*2pcs	8MP_MIPI RAW Camera (Rolling shutter) 2MP_MIPI RAW Camera (Global shutter) 3MP_MIPI YUV Camera (Rolling shutter)



SENSING-HSBKIT2M



Parts list			
Serial number	Product model	quantity	remark
1	Holoscan Sensor Bridge Kit	1	up to 2 cameras at most
2	SG2A-HOLOSCAN-MIPI-A1	1	Standard configuration
3	SG8-IMX678C-MIPI-H80K	2	Standard configuration
4	FPC_0.5mm_L-50mm	2	Standard configuration
5	M2.5*5	2	Standard configuration
6	MPO to LC 10-Gigabit 1-to-4 Fiber Optic	1	Standard configuration
7	QSFP-100G Multimode Optical Transceiver Module	1	Standard configuration
8	10-Gigabit Multimode Dual-Fiber Optical Transceiver Module	1	Standard configuration
9	Power adapter	1	Standard configuration
10	Type-c data cable	1	Standard configuration
11	JETSON AGX THOR DK	1	optional configuration



SG8-IMX678C-MIPI-H80K



KEY PARAMETERS

Sensor	SONY 8.29MP IMX678 RGGB
ISP	/
Image Size	1/1.8 inch CMOS
Output Pixels	3840H*2160V
Frame Rate	Up to 60 fps
Pixel Size	2um*2um
HDR Support	Yes
Output data	MIPI/RAW@10bit/12bit
Power Supply	3.3V
Current	<300mA@3.3VDC
Camera interface	FPC
Connector	FH67-30S-0.5SV
Operating temp.	-30~+85°C
Dimensions	W: 20mm, L:35mm, H:25mm
EFL	4.0mm
F/NO	2.6
Optical Distortion	-88%
Field of View (FOV)	HFOV76°/VFOV42°
Lens Mount	M12xP0.5 (Supports the assembly of different lens)
Weight	<50g





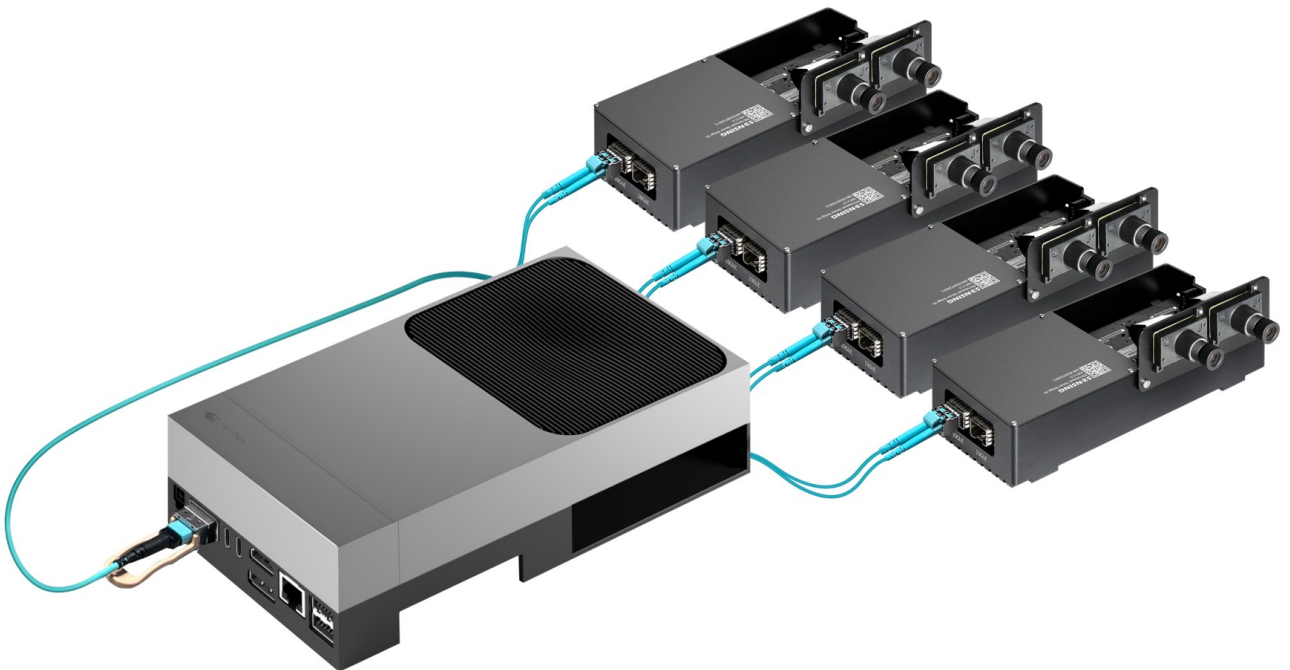
PLATFORMS SUPPORT

The camera can be connected to AGX Thor via NVIDIA Holoscan sensor bridge. Please obtain the SDK driver through the Github link

Github link

<https://github.com/SENSING-Technology/Holoscan-Sensor-Bridge>

AGX Thor+Holoscan Sensor Bridge





PLATFORMS SUPPORT

The camera can be connected to AGX Orin via NVIDIA Holoscan sensor bridge. Please obtain the SDK driver through the Github link

Github link

<https://github.com/SENSING-Technology/Holoscan-Sensor-Bridge>

AGX Orin+Holoscan Sensor Bridge





ACCESSORIES

IF you need to use Holoscan Sensor Bridge to connect to AGX ORIN, you will need to purchase the following additional .

Parts list			
Serial number	Product model	quantity	remark
1	10G optical to electrical module	1	Standard configuration
2	10G network cable - black -1m	1	Standard configuration
3	JETSON AGX ORIN DK	1	optional configuration





PRODUCT CONNECTION INSTRUCTIONS

Product connection video

https://autosensee.feishu.cn/drive/folder/NtS2fCdWBIF0mwdDCUscqfEqnkf?from=from_copylink

HSB Accessories for AGX Thor



HSB Accessories for AGX Orin



To verify the integration of a global camera with the Holoscan Sensor bridge, the following kit can be selected.

SENSING-HSBKIT4M



Parts list			
Serial number	Product model	quantity	remark
1	Holoscan Sensor Bridge Kit	1	up to 2 cameras at most
2	SG2A-HOLOSCAN-MIPI-A1	1	Standard configuration
3	SG8-IMX678C-MIPI-H80K	2	Standard configuration
4	SG2-AR0234C-MIPI-H60F	2	Standard configuration
5	FPC_0.5mm_L-50mm	2	Standard configuration
6	M2.5*5	2	Standard configuration
7	MPO to LC 10-Gigabit 1-to-4 Fiber Optic	1	Standard configuration
8	QSFP-100G Multimode Optical Transceiver Module	1	Standard configuration
9	10-Gigabit Multimode Dual-Fiber Optical Transceiver Module	1	Standard configuration
10	Power adapter	1	Standard configuration
11	Type-c data cable	1	Standard configuration
12	JETSON AGX THOR DK	1	optional configuration



SG2-AR0234C-MIPI-H60F



KEY PARAMETERS

Sensor	ONSEMI 2.3MP AR0234CS
ISP	/
Image Size	1/2.6 inch CMOS
Output Pixels	1920H*1080V
Frame Rate	60 fps
Shutter	Global shutter
Pixel Size	3um*3um
HDR Support	Yes
Output data	MIPI/RAW@10bit
Power Supply	3.3V
Current	<300mA@3.3VDC
Camera interface	FPC
Connector	FH67-30S-0.5SV
Operating temp.	-30~+85°C
Dimensions	W: 20mm, L:35mm, H:25mm
EFL	5.8mm
F/NO	1.6
Optical Distortion	-11.5%
Field of View (FOV)	HFOV60°/VFOV32°
Lens Mount	M12xP0.5 (Supports the assembly of different lens)
Weight	<50g



To verify the integration of a YUV camera with the Holoscan Sensor bridge, the following kit can be selected.

Remark: The YUV camera currently only supports image capture and cannot perform image preview

SENSING-HSBKIT6M



Parts list			
Serial number	Product model	quantity	remark
1	Holoscan Sensor Bridge Kit	1	up to 2 cameras at most
2	SG2A-HOLOSCAN-MIPI-A1	1	Standard configuration
3	SG8-IMX678C-MIPI-H80K	2	Standard configuration
4	SG2-AR0234C-MIPI-H60F	2	Standard configuration
5	SG3-ISX031C-MIPI-H100F1	2	Standard configuration
6	FPC_0.5mm_L-50mm	2	Standard configuration
7	M2.5*5	2	Standard configuration
8	MPO to LC 10-Gigabit 1-to-4 Fiber Optic	1	Standard configuration
9	QSFP-100G Multimode Optical Transceiver Module	1	Standard configuration
10	10-Gigabit Multimode Dual-Fiber Optical Transceiver Module	1	Standard configuration
11	Power adapter	1	Standard configuration
12	Type-c data cable	1	Standard configuration
13	JETSON AGX THOR DK	1	optional configuration



SG3-ISX031C-MIPI-H100F1

 KEY PARAMETERS

Sensor	SONY 2.95MP ISX031 RGGB
ISP	Built-in
Image Size	1/2.42 inch CMOS
Output Pixels	1920H*1536V
Frame Rate	Max 60 fps
Shutter	Rolling shutter
Pixel Size	3um*3um
HDR Support	Yes
Output data	MIPI/YUV422-10bit
Power Supply	3.3V
Current	<500mA@3.3VDC
Camera interface	FPC
Connector	FH67-30S-0.5SV
Operating temp.	-30~+85°C
Dimensions	W: 20mm, L:35mm, H:25mm
EFL	3.55mm
F/NO	1.6
Optical Distortion	-49%
Field of View (FOV)	HFOV100°/VFOV78°
Lens Mount	M12xP0.5 (Supports the assembly of different lens)
Weight	<50g





Revision History

Version	Description	Release date
Rev1	First Release	Aug.2025
Rev2	Revise product model	Oct.2025

