

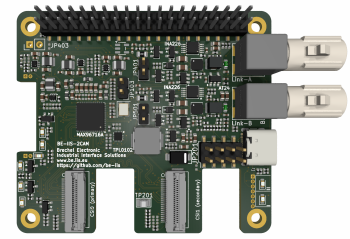
GMSL2 Camera HAT for Raspberry Pi

Brechel Electronic

Industrial Interface Solutions

Designed by Philipp Brechel (Germany)

www.be-iis.eu | www.github.com/be-iis



Document ID: BE-IIS-GMSL2-2CAM_RevA_Datasheet

Revision: Rev. A

Date: July 30, 2026

Document Status: released

Product Status: released

GMSL2 enables high-speed camera links over a single automotive cable, allowing image sensors to be placed remotely from the processing unit.

This HAT enables the connection of two GMSL2 camera to a Raspberry Pi using a dedicated GMSL2 deserializer and CSI-2 video output.

Key Features

- Dual GMSL2 camera input
- MAX96716A GMSL2 deserializer
- Raspberry Pi CSI interface compatible
- Single and Dual HAT Operation
- Multiple Camera Power Supply Voltages
- PoC Filter and Protection
- Rosenberger FAKRA connector
- RoHS compliant
- Quality component suppliers

Product Description

The HAT connects to CSI port 1 and 2 of the Raspberry Pi, or compatible CSI-2 interface of another single-board computer.

Configuration and control are handled via the I2C interface on the 40-pin header.

Applications

- GMSL2 camera evaluation
 - Automotive camera prototyping
 - Industrial vision evaluation
 - Raspberry Pi based video capture
 - Sensor and imager bring-up
 - Education and laboratory use
 - Stereo Camera Evaluation
-

Contents

1	Introduction	4
1.1	General	4
1.2	Raspberry Pi Compatibility	4
1.3	HAT Compatibility Level	5
1.4	Design Resources	5
2	Hardware Configuration	7
2.1	Main Features	7
2.2	Power Supply	9
2.2.1	Main Power Supply	9
2.2.2	5V Power Source	9
2.2.3	Supplementary Power Supplies	9
2.2.4	Camera Power Supply	9
2.2.5	Camera Power Supply Monitoring	10
2.3	GMSL2	10
2.3.1	MAX96716A Deserializer	10
2.3.2	CFG0 Configuration	10
2.3.3	CFG1 Configuration	11
2.3.4	Reset	11
2.3.5	MIPI CSI-2 Interface	11
2.3.6	I2C Interface	11
2.4	Connectors	11
2.4.1	FAKRA Connector	11
2.4.2	40-Pin Header	11
2.5	Device Identification	12
2.6	Housing and Outline	12
3	Software and System Configuration	13
3.1	System Support	14
3.2	Software Repository	14
3.3	Quick Installation	14
3.4	Installer Components	15
3.5	Camera Tools	15
3.5.1	Capture an Image	15
3.6	System Inspection	16

4	Electrical Specifications	17
4.1	Supply Voltage	17
4.2	Power Consumption	17
4.3	EMC and Environmental Compliance (Preliminary)	17
4.4	Conditions	17
4.5	Usage	17
4.6	EMC and Environmental Compliance (Preliminary)	17
5	Delivery	18
6	Mechanical	18
6.1	Board Format	18
6.2	3D Data	18
7	Assembly	18
7.1	Assemble 2x20-Pin Main Connector	18
7.2	Assemble Spacer	20
7.3	Assemble FAKRA Connectors	20
7.4	Board Overview	20
8	References	20
9	Revision History	21
	Company Information	22

1 Introduction

1.1 General

The BE-IIS-GMSL2-1CAM is a Raspberry Pi HAT compliant camera interface board for connecting two GMSL2 camera to a Raspberry Pi or to another compatible single-board computer.

GMSL2 enables high-speed camera links over a single automotive cable, allowing image sensors to be placed remotely from the processing unit. This makes the board suitable for evaluation, prototyping, industrial vision systems, and test setups where camera placement and processing hardware must be physically separated.

The board integrates a dedicated GMSL2 deserializer [1] and provides up to two CSI-2 video outputs for the host system. The CSI-2 interface can be connected to CSI port 1 and CSI port 2 of the Raspberry Pi, or to a compatible CSI-2 input of another single-board computer.

The camera-side power supply is routed through a Power-over-Coax filter and protection circuit. Multiple camera supply voltage options are supported, allowing the board to be adapted to different GMSL2 camera modules.

Configuration and control are handled via the I2C interface on the CSI-Connector. The I2C connection provides access to the deserializer and, depending on the connected camera system, to the remote serializer and image sensor configuration path. The 40-Pin header is just used for +5V Supply.

The BE-IIS-GMSL2-2CAM is intended for GMSL2 camera evaluation, rapid prototyping, software bring-up, industrial vision testing, and Raspberry Pi or SBC based camera development. ““tex

1.2 Raspberry Pi Compatibility

The board follows the Raspberry Pi HAT+ mechanical and electrical interface concept. Compatibility depends on the selected Raspberry Pi model, operating system architecture, enabled interfaces, and the installed BE-IIS software configuration.

Model	32-bit	64-bit
Raspberry Pi 2	×	×
Raspberry Pi 3	×	×
Raspberry Pi 4	×	×
Raspberry Pi 5	✓	✓
Raspberry Pi Zero	×	×
Raspberry Pi Zero 2 W	×	×

Table 1: Raspberry Pi compatibility

Note: Compatibility depends on the installed operating system, kernel version and enabled interfaces.““

1.3 HAT Compatibility Level

Table 2 describes the HAT compatibility level of the board.

Level	Description	Support	Configuration
HAT	The board can be used as a standard Raspberry Pi HAT.	✓	Standard Raspberry Pi HAT form factor
HAT+	The board supports the Raspberry Pi HAT+ auto-detection mechanism.	✗	HAT+ EEPROM populated; connected to the I2C interface of the CSI connector
HAT++	The board supports detection and stackable operation according to the BE-IIS HAT++ specification.	✗	HAT++ stack detection is not implemented; the board is designed to operate alongside HAT++ boards

Table 2: HAT compatibility level

1.4 Design Resources

All design files and software resources are publicly available.

HTML

Product Page

https://www.be-iis.eu/products/BE-IIS-GMSL2-2CAM_A/

PDF

Datasheet (PDF)

https://www.be-iis.eu/products/BE-IIS-GMSL2-2CAM_A/datasheet.pdf

PDF

Schematic (PDF)

https://www.be-iis.eu/products/BE-IIS-GMSL2-2CAM_A/schematic.pdf

HTML

Layout & BOM (Interactive)

https://www.be-iis.eu/products/BE-IIS-GMSL2-2CAM_A/ibom.html

STL

3D Model (STEP/STL)

https://www.be-iis.eu/products/BE-IIS-GMSL2-2CAM_A/model.zip

GIT

GitHub Repository

<https://github.com/be-iis/be-iis-installer/tree/main/products/BE-IIS-HPP-T1S-REVB>

GIT

Installer Script

<https://github.com/be-iis/be-iis-cam-installer/tree/main>



Available from DigiKey

Coming soon

[DigiKey Store](#)



Available from Tindie

Coming soon

[Tindie Store](#)

2 Hardware Configuration

2.1 Main Features

The BE-IIS-GMSL2-2CAM enables the connection of two GMSL2 camera to a Raspberry Pi or compatible single-board computer.

It allows remote camera placement by separating the image sensor from the processing unit while using a single automotive cable for the high-speed camera link.

The board integrates a dedicated GMSL2 deserializer and converts the incoming camera links to up to two CSI-2 video interface for the host system. The CSI-2 output can be connected to CSI port 1 and CSI port 2 of the Raspberry Pi, or to a compatible CSI-2 input of another SBC.

Power is supplied either through the 40-pin Raspberry Pi header.

Configuration and control are performed via the I2C interface provided on the CSI-2 connector.

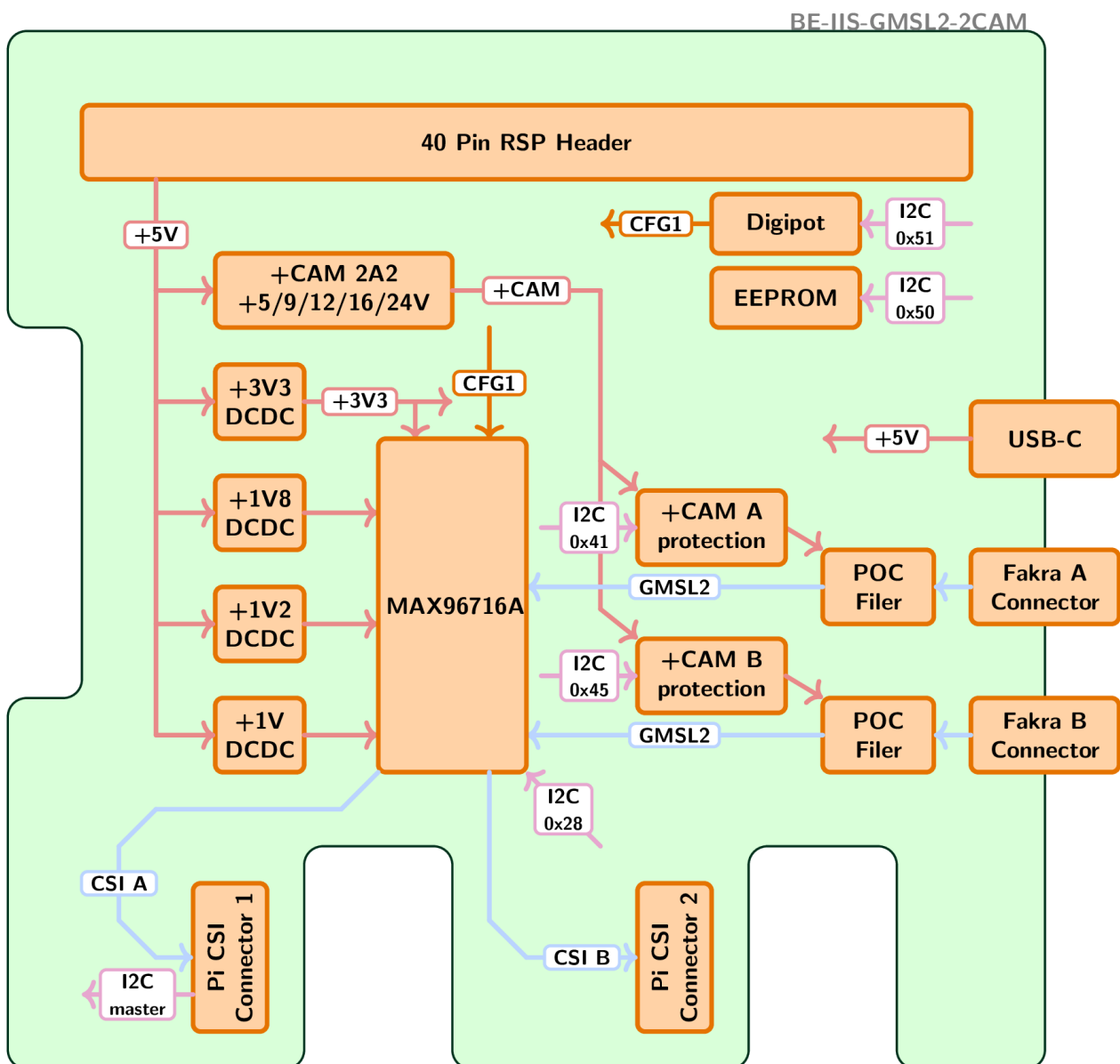


Figure 1: BE-IIS-GMSL2-2CAM block diagram

GMSL2 Deserializer

- Supplier: Analog Devices
- MAX96716A high-speed link deserializer with dual GMSL input
- CFG0: fixed to I2C target address 0x50
- 25MHz crystal

I2C Interface

- I2C interface provided by the CSI connector
- Hardware detection by EEPROM
- Monitoring by voltage and current monitor

PoC: Power over Coax

- Integrated PoC filter
- Supports currents up to 600mA
- Supports input voltages from 5V to 24V

Camera Power Supply

- Supports currents up to 600mA
- Default output voltage: 5.5V
- Selectable by jumper: 9V, 12V, 16V, or 24V

Monitoring

- Optional configuration by jumper setting
- Defined voltage and current monitoring ranges
- Power-off in case of overvoltage or overcurrent

Configuration

- Digital configuration by digital potentiometer
- Supports volatile and persistent configuration options

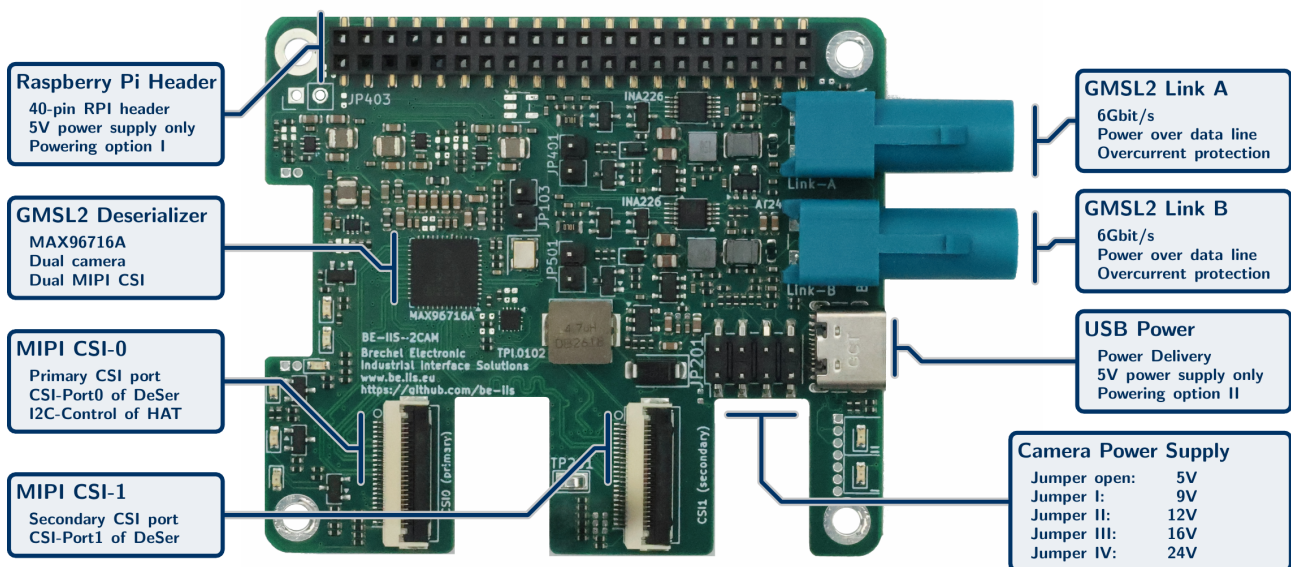


Figure 2: BE-IIS-GMSL2-2CAM annotated

2.2 Power Supply

2.2.1 Main Power Supply

The HAT is powered from a nominal 5V supply. The estimated power consumption of a dual-camera configuration is based on the following assumptions:

- Dual GMSL2 deserializer: approximately 2.2W
- Two connected cameras: approximately 2W each

For sufficient design margin, the HAT power input is specified for a minimum supply capability of 5V / 1.5A. A higher current capability is recommended to cover peripheral loads, conversion losses, and future product variants.

2.2.2 5V Power Source

The HAT can be powered from one of two 5V sources:

- **Option I – Raspberry Pi 40-pin header:** The HAT is powered through the Raspberry Pi header. Apply jumper JP403.
- **Option II – USB-C connector:** The HAT is powered through the USB-C connector. If jumper JP403 is applied, the Raspberry Pi is powered in parallel through the 40-pin header.

2.2.3 Supplementary Power Supplies

The board provides dedicated DC/DC converters for the supplementary power supplies. These converters are enabled when the 3.3V supply on the CSI flex cable is active.

The following supply rails are provided:

- 1.0V / 1A: core supply for the GMSL2 deserializer
- 1.2V / 1A: supply rail for the GMSL2 deserializer
- 1.8V / 1A: supply rail for the GMSL2 deserializer
- 3.3V / 1A: I/O voltage supply

2.2.4 Camera Power Supply

The BE-IIS-GMSL2-2CAM provides a dedicated DC/DC boost converter for the camera power supply. The default camera supply voltage is 5.5V. Additional output voltages can be selected by jumper configuration.

- 5.5V: default configuration
- 9.5V: Jumper 1
- 12.5V: Jumper 2
- 16.5V: Jumper 3
- 24V: Jumper 4

Never install more than one voltage-selection jumper.

The maximum output current is 600mA. The voltage-selection jumper reference designator is JP201.

The boost converter is enabled through pin 17 of the CSI connector. By default, the camera power supply is disabled.

PoC Link Enable Jumpers The Power over Coax (PoC) supply for each GMSL2 link is enabled separately:

- JP401 enables the PoC supply for Link A.
- JP501 enables the PoC supply for Link B.

If the respective jumper is open, no PoC voltage is supplied to that link. This allows an unused link to remain unpowered or supports camera modules with an external power supply.

2.2.5 Camera Power Supply Monitoring

An INA226 [2] monitors the camera supply voltage and current.

The voltage and current limits can be configured by software, for example by using a Device Tree overlay entry. If one of the configured limits is exceeded, the alert pin is asserted. The alert pin can be monitored by Linux.

If jumper JP401 is fitted, the alert signal also controls a high-side switch and disconnects the camera power supply in case of an overvoltage or overcurrent condition.

Depending on the selected operating mode, the camera power supply either remains disabled after a fault condition or is automatically enabled again after the hardware filter has discharged. The typical recovery time is approximately 1,s.

2.3 GMSL2

2.3.1 MAX96716A Deserializer

The GMSL2 deserializer is implemented with a MAX96716A device.

- Reference designator: U103
- Type: MAX96716A

2.3.2 CFG0 Configuration

CFG0 is pulled to GND by a 10 kΩ resistor to force I2C mode and set the I2C target address to 0x50.

As an assembly option, a digital potentiometer can be used to adjust the CFG0 level flexibly and volatile.

- Reference designator: U106
- Type: TPL0102
- Channel 0: CFG0

2.3.3 CFG1 Configuration

The CFG1 voltage level is set by an I²C transaction. Depending on the product variant, the configuration can be implemented either with an optional digital potentiometer or with fixed resistor values.

- Reference designator: U106
- Type: TPL0102 digital potentiometer (optional, not populated)
- Channel 1: CFG1
- Alternative configuration: Fixed resistor values

2.3.4 Reset

The reset signal is controlled by the hardware filter and pin 18 of the CSI connector.

If pin 18 is left open, the reset signal is generated by the onboard RC filter.

Applying jumper JP103 forces the reset signal active. Use JP103 when a reset must be enforced manually.

2.3.5 MIPI CSI-2 Interface

The MIPI CSI-2 output of the deserializer is connected to the CSI port of the Raspberry Pi or compatible SBC.

The pinout follows the Raspberry Pi 5 CSI connector specification.

2.3.6 I2C Interface

The I2C interface is connected to MFP3 as SDA and MFP4 as SCL.

As an assembly option, the pass-through I2C connection can be populated to provide access to the remote serializer and camera-side devices.

The I2C bus is pulled up with 3.3 k Ω resistors.

2.4 Connectors

2.4.1 FAKRA Connector

The GMSL2 camera link uses a FAKRA connector.

- Supplier: Rosenberger
- MPN: 59S22B-40MT5-Z
- Coding: uncoded / blue

2.4.2 40-Pin Header

The 40-pin header follows the Raspberry Pi header specification.

Only the power pins are used by the BE-IIS-GMSL2-2CAM.

- Used: 5V

- Used: GND
- Remaining pins: not connected

2.5 Device Identification

The EEPROM is connected to the I2C bus of the CSI connector.

The board does not support the standard Raspberry Pi HAT+ auto-detection mechanism, because the EEPROM is not connected to the HAT ID EEPROM interface of the 40-pin header.

Instead, device identification can be performed by probing the EEPROM on the CSI I2C bus. If the EEPROM is detected, the corresponding overlay can be applied by software. After a reboot, the overlay becomes active.

- EEPROM I2C address: 0x50
- 8-bit EEPROM address notation: 0xA0

2.6 Housing and Outline

The BE-IIS-GMSL2-1CAM is mechanically compliant with the Raspberry Pi HAT specification [7].

The board can be used as a standard HAT by plugging it onto the 40-pin header of a Raspberry Pi 5 or compatible SBC.

If the HAT and the Raspberry Pi or SBC are powered independently, the 40-pin header connection is not required. This allows flexible mechanical arrangements, such as placing the boards next to each other or mounting the Raspberry Pi above the HAT.

For operation, the BE-IIS-GMSL2-2CAM only requires a connection to a compatible CSI-2 port of the host system.

““latex

3 Software and System Configuration

The currently available software supports the validated BE-IIS GMSL2 camera reference system. This system consists of the following hardware components:

- BE-IIS-GMSL2-2CAM HAT
- BE-IIS-GMSL-SER FAKRA camera adapter board
- Sony IMX708 camera module with DW9817 autofocus lens
- Raspberry Pi 5 running Raspberry Pi OS

The software configures the complete GMSL2 camera path, including the GMSL2 link, remote camera power control, the MAX96716A deserializer, the MAX96717 serializer, and the Sony IMX708 image sensor.

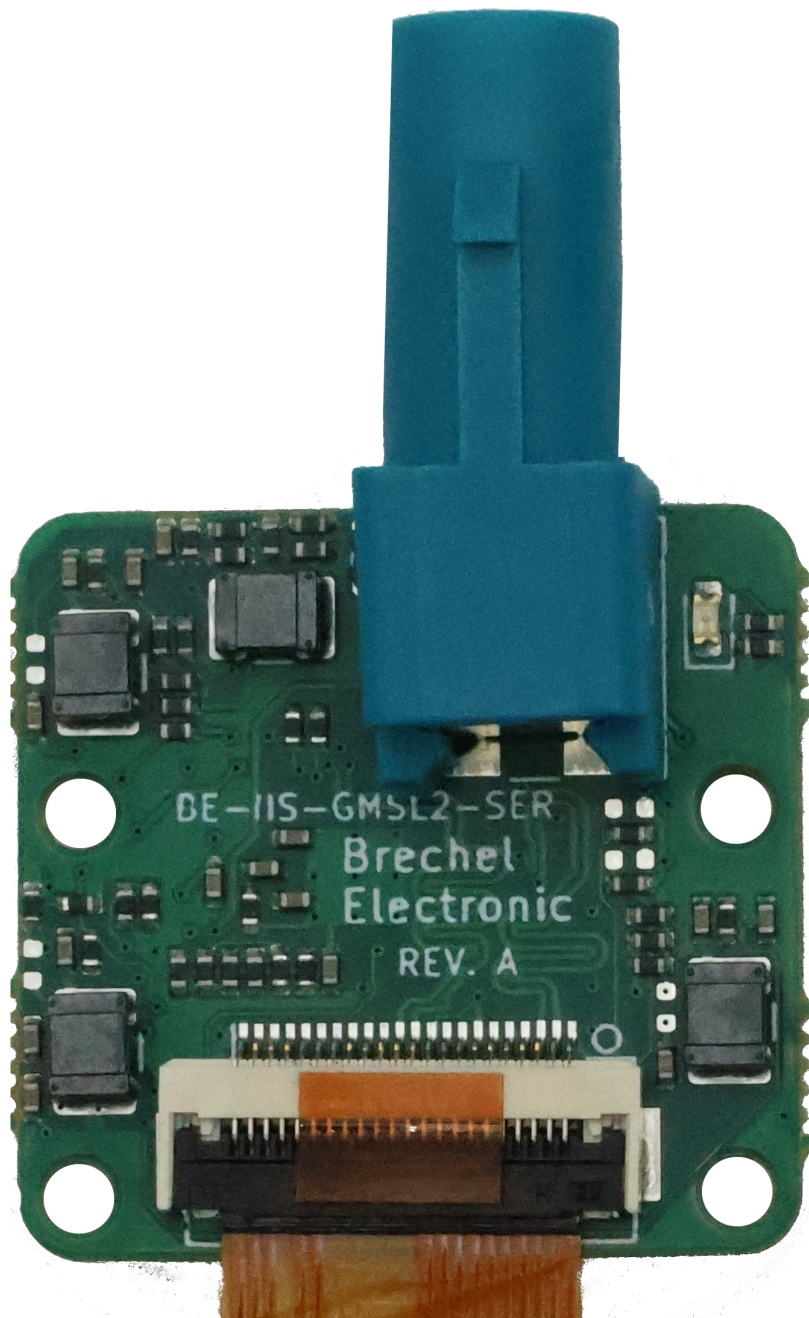


Figure 3: BE-IIS-GMSL-SER FAKRA camera adapter board

3.1 System Support

The current software release is intended for the following validated reference configuration:

- Raspberry Pi 5
- Raspberry Pi OS 64-bit
- Raspberry Pi kernel 6.12 or newer
- BE-IIS-GMSL2-2CAM HAT
- BE-IIS-GMSL-SER FAKRA adapter board
- Sony IMX708 camera module

Support for additional camera sensors, serializers, deserializers, operating systems, and Raspberry Pi platforms may be added in future software releases.

3.2 Software Repository

All software required for the validated reference configuration is provided in the `be-iis-cam-installer` GitHub repository:

```
https://github.com/be-iis/be-iis-cam-installer
```

The repository is organized into the following main components:

- **Initialization script**
Configures the GMSL2 camera pipeline and activates the selected camera link.
- **Device Tree overlays**
Describes the hardware topology for the MAX96716A deserializer, MAX96717 serializer, IMX708 image sensor, DW9817 autofocus lens, camera power control, and Raspberry Pi CSI interface.
- **Overlay profiles**
Defines the validated hardware combinations and generates the corresponding Device Tree overlay.
- **Kernel driver sources**
Provides the optional IMX708 horizontal-blanking driver required by the validated camera configuration.
- **ADI kernel tools**
Provides helper scripts to obtain and build the required Linux kernel components where necessary.
- **Camera tools**
Provides user-facing utilities for image capture and camera control.

3.3 Quick Installation

A standard Raspberry Pi OS installation is used as the base system. The installer configures the required Device Tree overlay, kernel modules, camera services, and helper tools.

```
# install git
$ sudo apt install -y git

# clone camera installer
$ git clone https://github.com/be-iis/be-iis-cam-installer.git

# enter directory
$ cd be-iis-cam-installer

# initialize the validated GMSL2 camera configuration
$ ./init-imx708-gmsl-port-a-tunnel.sh
```

Drop-in CMD

```
sudo apt install -y git && cd /Downloads && git clone https://github.com/be-iis/be-iis-cam-installer.git && cd be-iis-cam-installer && ./init-imx708-gmsl-port-a-tunnel.sh
```

The initialization script prepares the validated configuration for GMSL2 Link A. Reboot the Raspberry Pi when requested by the installer or after a Device Tree or kernel configuration change.

3.4 Installer Components

The installer configures the camera pipeline in several steps:

- Detects and validates the required I²C devices
- Builds and installs the Device Tree overlay for the selected hardware profile
- Configures the MAX96716A deserializer and MAX96717 serializer
- Enables remote camera power and releases the camera reset signal
- Registers the Sony IMX708 image sensor and DW9817 autofocus lens
- Connects the camera output to the Raspberry Pi MIPI CSI interface
- Installs the optional IMX708 horizontal-blanking driver
- Installs the `be-iis-camera-init` systemd service for automatic configuration during system startup

After a successful installation, the camera is exposed through the standard Linux media-controller and libcamera interfaces. No application-specific camera driver is required.

3.5 Camera Tools

The repository installs camera tools for image capture and operation of the validated camera system.

- **be-iis-capture-image**
Captures a still image using the configured camera pipeline.
- **Autofocus control**
Autofocus is enabled by default. It can be disabled or configured through the capture tool when a fixed focus position is required.
- **HDR control**
HDR processing can be selected through the capture tool where supported by the active Raspberry Pi libcamera image-processing pipeline.
- **Standard Linux camera tools**
The media graph and camera status can be inspected with standard Linux tools such as `media-ctl`, `v4l2-ctl`, and `rplicam-hello`.

3.5.1 Capture an Image

The following command captures an image with the default camera settings:

```
$ be-iis-capture-image --output image.jpg
```

Example with autofocus and automatic HDR selection:

```
$ be-iis-capture-image --autofocus auto --hdr auto --output image.jpg
```

3.6 System Inspection

The automatic camera configuration service provides runtime information through the system journal.

```
# show camera initialization status
$ systemctl status be-iis-camera-init.service

# show camera initialization log
$ journalctl -u be-iis-camera-init.service -b
```

Drop-in CMD

```
journalctl -u be-iis-camera-init.service -b
```

The Linux media graph can be inspected as follows:

```
$ media-ctl -p
```

A successful configuration shows the GMSL2 deserializer, serializer, IMX708 sensor, and Raspberry Pi CSI receiver as connected entities in the media graph. “

4 Electrical Specifications

4.1 Supply Voltage

Parameter	Min	Typ	Max
HAT input voltage [V]	4.5V	5V	5.5V
Camera supply voltage [V]	5V	–	24V

Table 3: Voltage supply

4.2 Power Consumption

Parameter	Typ	Max
HAT power consumption	2.2W	–
Camera power consumption (each)	2W	–
Total power consumption (two cameras)	6.2W	–
Required 5V input current	1.24A	1.5A

Table 4: Power consumption, including two cameras

4.3 EMC and Environmental Compliance (Preliminary)

4.4 Conditions

Condition	Min	Max
Operating Temperature [°C]	-40	+85
Storage Temperature [°C]	-40	+105
Relative humidity [%]	5	95

Table 5: Operating conditions

4.5 Usage

Condition	Parameter
Usage	indoor
Pollution degree	2
Operating altitude	up to 2000m

Table 6: Operating usage

4.6 EMC and Environmental Compliance (Preliminary)

The standard version of the board is provided without formal EMC or safety certification.

The hardware design is developed with consideration of commonly applied IEC standards, including:

- **ESD immunity:** IEC 61000-4-2
- **Electrical fast transient (EFT/Burst):** IEC 61000-4-4
- **Surge immunity:** IEC 61000-4-5
- **Conducted RF immunity:** IEC 61000-4-6
- **Radiated RF immunity:** IEC 61000-4-3
- **EMC immunity (industrial):** IEC 61000-6-2
- **EMC emission (industrial):** IEC 61000-6-4
- **Safety / isolation reference:** IEC 62368-1

These standards are not verified for the standard product variant.

Compliance with specific standards, test levels, or safety requirements is not guaranteed unless explicitly specified.

If defined EMC or isolation requirements are provided, application-specific validation, testing, and certification can be supported. Upon request, product variants with validated performance, including labeling, certification, and test reports (e.g. Hi-Pot testing), can be delivered.

5 Delivery

The product is delivered as a partially assembled kit for final user assembly. All components required for standard dual-camera evaluation and stacked operation are included.

Order Code	BE-IIS-GMSL2-2CAM
Condition	Assembly kit
Status	Partially assembled
Included Items	1x BE-IIS-GMSL2-2CAM-PCBA-FT 2x 100mm flex cables 2x FAKRA connectors 1x 2x20 pin stackable header 4x M2.5x16mm mechanical spacers 4x configuration jumpers
REACH & RoHS	RoHS and REACH compliant

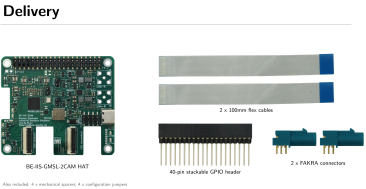


Figure 4: Delivery condition



Available from DigiKey
Coming soon
DigiKey Store



Available from Tindie
Coming soon
Tindie Store

6 Mechanical

6.1 Board Format

- Form factor: Raspberry Pi HAT
- Mechanical dimensions: Raspberry Pi HAT compatible [7]
- Mounting-hole pattern: Raspberry Pi HAT compatible [7]
- Stack height: 16mm

6.2 3D Data

- Available on the BE-IIS product page [5]

7 Assembly

This product is delivered as a kit and requires basic soldering and mechanical assembly.

7.1 Assemble 2x20-Pin Main Connector

The 2x20-pin connector provides the interface to the Raspberry Pi. For proper HAT functionality, the connector must be assembled carefully.

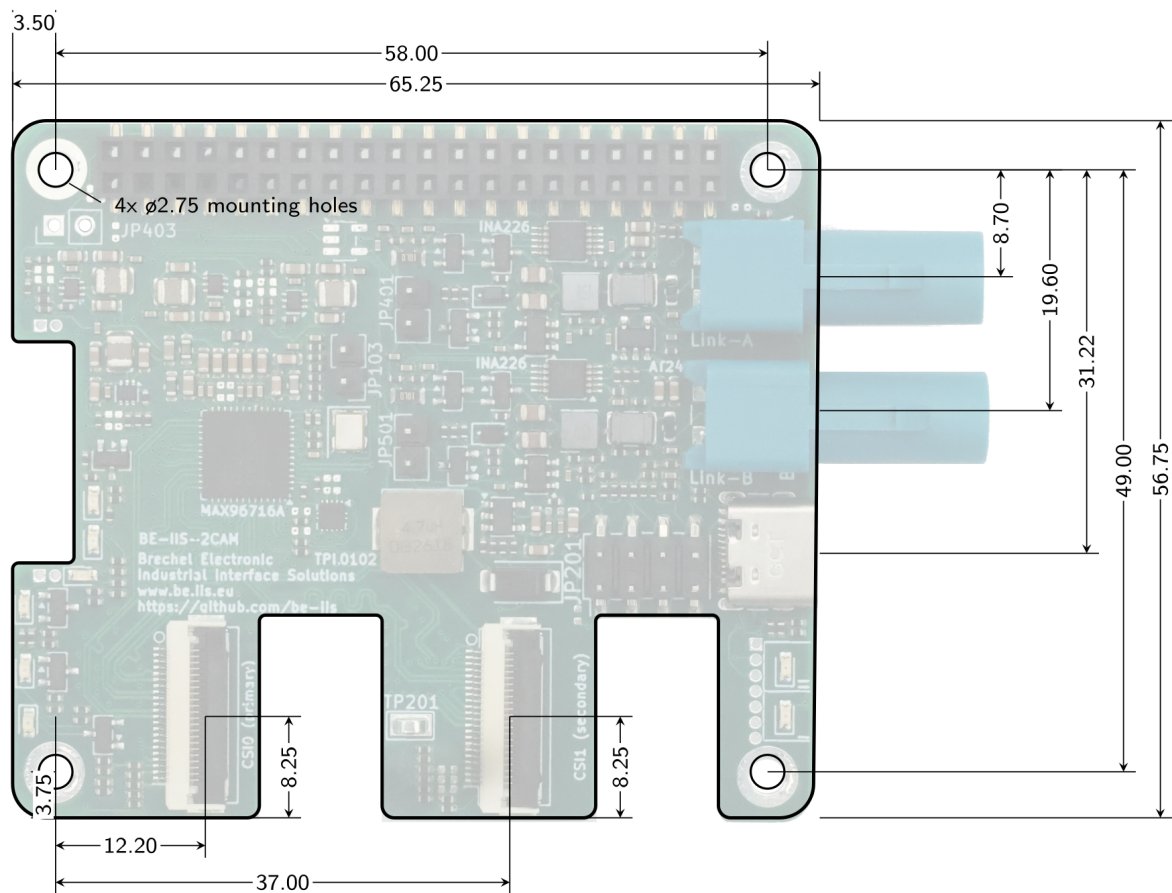


Figure 5: BE-IIS-GMSL2-2CAM – mechanical dimensions and connector reference positions

A stackable 2x20-pin header is included in the delivery and is recommended for most applications, especially when using the BE-IIS HAT++ stacking system.

The header must be inserted between the Raspberry Pi and the HAT: the header is first mounted onto the Raspberry Pi, and the HAT is then plugged onto the header.

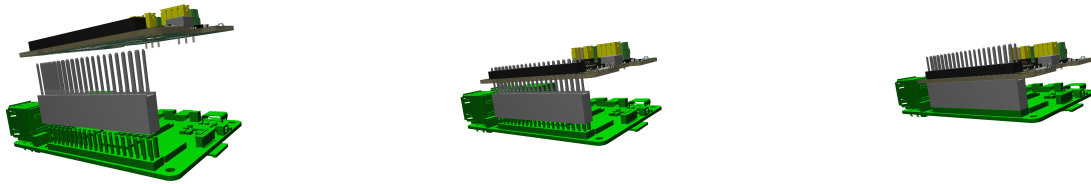


Figure 6: Assembly of the 2x20-pin stackable header between Raspberry Pi and HAT

7.2 Assemble Spacer

To ensure mechanical stability and correct stacking height, spacers must be installed.

- Recommended spacer height: see Section 6.1
- Fix the PCB using appropriate screws and spacers
- Ensure stable mechanical mounting to avoid stress on the connector

The spacers define the stacking distance and provide mechanical fixation of the HAT.

7.3 Assemble FAKRA Connectors

Two FAKRA connectors are included in the delivery for the GMSL2 camera links. They are mechanically coded and must be fitted in the specified connector positions.

Assembly instructions:

- Insert each FAKRA connector from the top side of the PCB.
- Ensure that the connector housing is aligned with the PCB outline and that the coaxial cable interface faces outwards.
- Push the connector fully into the PCB before soldering to ensure correct mechanical alignment.
- Solder all connector pins and the mounting tabs carefully with sufficient solder wetting.

Important notes:

- Do not apply excessive heat to the plastic connector housing.
- Ensure that the shield and mounting tabs are soldered properly; they provide both mechanical retention and the high-frequency ground connection.
- Inspect all solder joints for bridges, incomplete wetting or mechanical misalignment.

Correct assembly is essential for reliable GMSL2 signal transmission and mechanical stability of the coaxial interface.

7.4 Board Overview

8 References

1. Analog Devices MAX96716 Datasheet

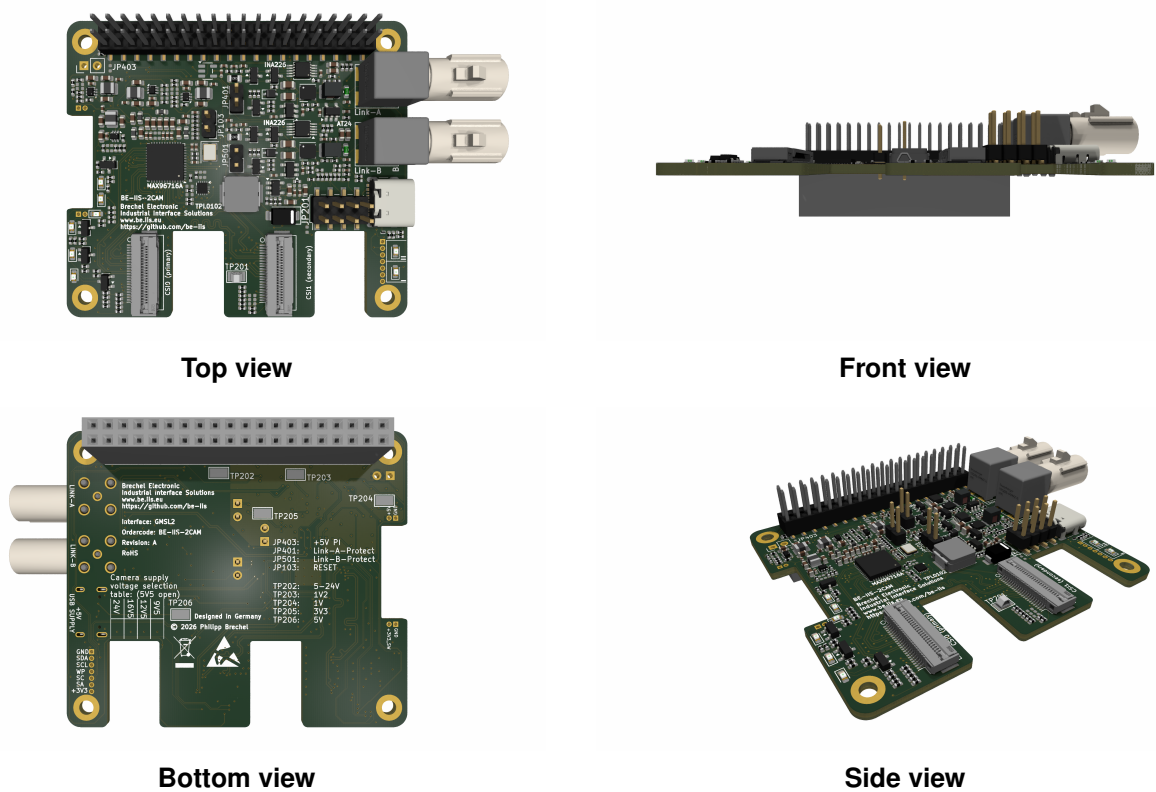


Figure 7: BE-IIS-GMSL2-2CAM – mechanical overview

2. TI INA226 Datasheet
3. BE-IIS Installer (Software and Setup Tools)
4. Raspberry Pi HAT+ Specification
5. Schematic, PCB-Viewer, BOM, 3D-Model
6. Power over Dateline extension board
7. Raspberry Pi HAT+ Specification

9 Revision History

Revision	Date	Description
A.00	2026-06-28	Initial draft
A.01	2026-07-27	Add content after Rev-A bring up
A.02	2026-07-29	Add content dimensions

Company Information

Manufacturer

BE-IIS welcomes technical feedback, suggestions and improvement ideas. Business inquiries, cooperation requests and distribution opportunities are welcome.

Name	Philipp Brechel
Company	Brechel Electronic
Business	Industrial Interface Systems
Address	Hindenburgstraße 100/1 73207 Plochingen, Germany

Contact

Email	contact@be-iis.eu
Web	www.be-iis.eu
GitHub	github.com/be-iis
LinkedIn	linkedin.com/in/brechel
Digikey	https://www.digikey.de/de/supplier-centers/industrial-interface-solutions
Languages	German and English
