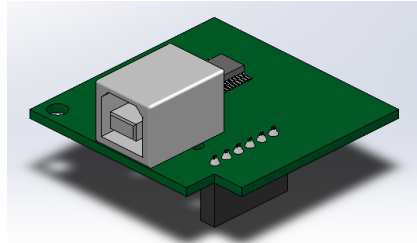


OMRON

Image Sensing Component Accessory  
HVC Conversion Board (Sample)  
Model B5T-A-001-S

INSTRUCTION SHEET

The **HVC Conversion Board** (hereafter referred to as “The Product”) is to be used when evaluating the **HVC-P Evaluation Kit**. Refrain from using it for any other purpose.  
Please confirm that you have received the correct product.  
This Instruction Sheet provides specifications, handling methods, and safety precautions. Read and understand this Instruction Sheet before you use The Product.



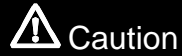
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SG-B5T-016C

Safety Precautions

● Definition of Precautionary Information



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage.

Caution

Observe all safety precautions and precautions for safe use when you use the product.



Do not disassemble the product or touch the board-mounted parts while power is being supplied. Also, do not connect or disconnect the connectors while power is being supplied. Doing so may result in electrical shock.



Do not touch the board-mounted parts with wet hands. Doing so may result in electrical shock or injury.



Do not attempt to disassemble, repair, or modify The Product. Do not disconnect the camera module connector. The inherent safety functions may be lost.



Turn OFF the power supply before performing any work on The Product. The Product will become hot while power is supplied. Always turn OFF the power supply to The Product and wait for it to cool before performing any work on it.



Observe all specifications and environmental conditions. Observe all specified values, including those for the power supply voltage and capacity. If you do not use The Product within specifications and conditions, electric shock, fire, or injury may occur. Do not short the connector pins.



Precautions for Safe Use

Check the exterior of The Product as soon as you unpack it and make sure that there is no damage.  
To ensure safe use of The Product, observe the following precautions.

1. Installation Environment
  - The internal parts may deteriorate or may be broken. Please use The Product at temperatures of 0°C to 50°C.
  - Do not use The Product in an environment where dew condensation occurs.
  - Do not use The Product in an environment subject to contact with water, oil, or chemicals.
  - Do not use The Product in an environment where corrosive, explosive, or flammable gas is present.
  - Do not use The Product in locations subject to dust, dirt, salts, or iron powder.
2. Power Supply and Wiring
  - Fire may possibly occur. Make sure that I/O terminals are wired correctly.
  - Always turn OFF the power supply before connecting or disconnecting cables.
  - Before you connect a device to a connector, check the exterior of the device and make sure that there are no bent pins or other damage.
3. Other Precautions
  - Do not attempt to dismantle, repair, or modify The Product.
  - Dispose of The Product as industrial waste.
  - Use the screw, spacer and nut (bolt) provided when connecting The Product to the **HVC-P -S(sample)**. Make sure not to bend or break the board when tightening the screw.
  - Set the tightening torque to 0.5N·m.
  - Do not subject the unit to stress, such as twisting, bending, or shock. This may cause failure or deterioration.
  - During assembly, do not subject the connectors or surface-mounted parts to stress. This may cause failure or deterioration.

Precautions for Correct Use

- Observe the following precautions to prevent failure to operate and malfunctions and to prevent adversely affecting the performance and functions of The Product.
- Store The Product at a temperature of -30 to 70°C and a humidity of 90% or less.
  - Do not touch the board-mounted parts with your bare hands. Discharge any static electricity from your body before you touch The Product.
  - Properly connect the connector ground pin to prevent malfunction due to noise.
  - Do not use The Product at ambient temperatures outside of 0°C to 50°C.
  - Do not use The Product in locations where it would be subjected to direct sunlight.
  - Do not use The Product in locations subject to excessive inductive or power supply noise, such as in strong magnetic or electric fields.
  - Do not use The Product in locations where it would be subjected to strong ultraviolet light.
  - Do not use The Product in locations where it might be subjected to radiation.
  - Sufficiently evaluate electrical characteristics of connections before you use The Product.
  - Always connect the connectors in the correct orientation.
  - Do not connect or disconnect the connectors while power is being supplied. Doing so may damage the product.
  - Never use benzine, paint thinner, or any other volatile cleaning solutions or chemical wash cloths for cleaning.

■ Product Introduction

The Product is used to convert the **HVC-P -S(sample)**'s board's UART I/F to a USB I/F in order to connect it to a PC.  
The Product is to be used when evaluating the **HVC-P-S (sample)**. Refrain from using it for any other purpose.

■ Model

Model	Product name
B5T-A-001-S	HVC Conversion board (Sample)

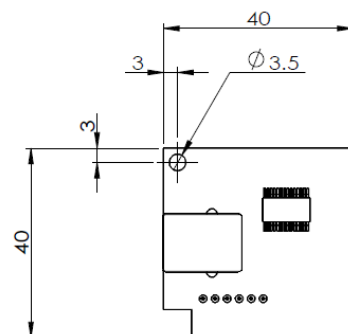
■ Contents of Package

The contents of the package are as below. Confirm that you have everything.

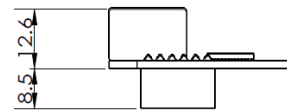
- **HVC Conversion Board** (The Product)
- Screw, spacer and nut (bolt) (1 of each)

■ Board Dimensions (unit: mm)

● Front

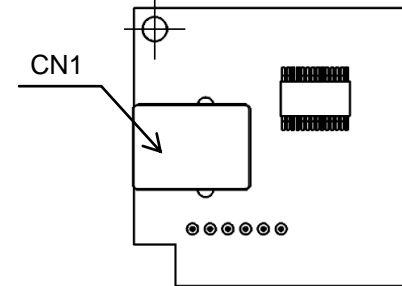


● Side



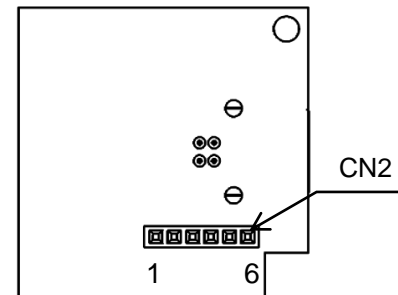
■ Parts Name

● Front



CN1: Connector for the USB transmission.  
Use it to connect the board to the PC running the **HVC-P Evaluation Software** with a USB 2.0 A/B cable.  
Connector: XM7B-0442 (made by OMRON Corporation)

● Back

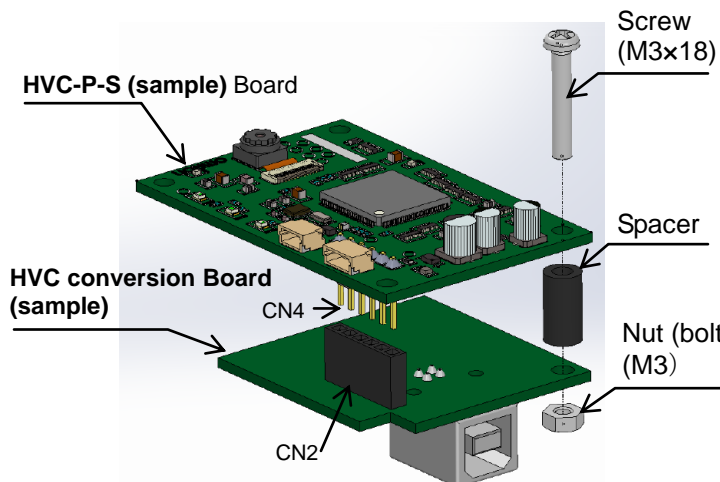


CN2: Connector to the CN4 of the **HVC-P-S (sample)**.  
Refer to Usage for details on the connection method.  
Connector: FSS-41085-06 (made by Hirose Co. Ltd.)

■ Usage

● Assembly method

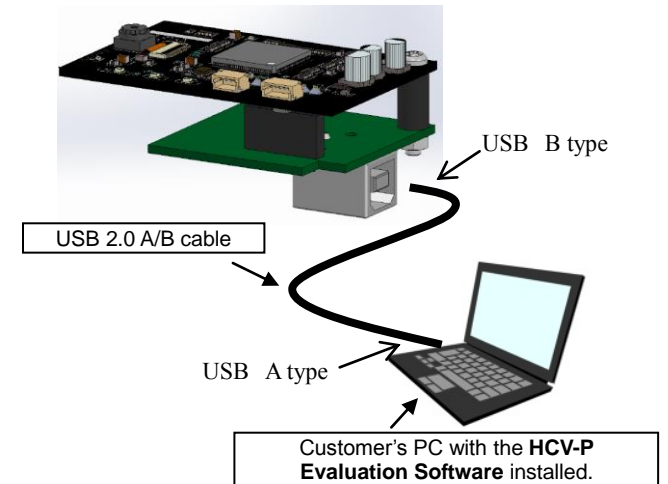
Connect The Product with the **HVC-P-S (sample)** board as described below.



Caution

Make sure to properly align The Product and the **HVC-P-S (sample)** board when connecting them.  
Make sure to properly and tightly connect the CN2 all the way in.  
Use the screw, spacer and nut (bolt) included when connecting the boards together.  
Set the tightening torque to 0.5N·m.

● Connection Method



Contact

**OMRON Corporation**  
Electronic and Mechanical Components Company  
AOB Department, HVC Customer Service

Phone: +81-77-565-5481  
Email: okao-support@omm.ncl.omron.co.jp

Hours: 9:00 to 17:00 (Japan Time Zone: UTC+09:00)  
Closed on weekends, and regular and company designated holidays.

The contents of the specification may change without notice.