

FWS100-NN AI Bridge is a product equipped with Jetson Nano module. It supports CSI/MIPI interface and can be used as a board for camera development., In particular, it has two built-in Gigabit Ethernet ports, so it can be used in applications for separation of networks. In addition, USB3.0 and USB2.0 ports are built-in, and through this, USB storage devices and SD storage devices can be used. By using the Carrier board, it is possible to use as Mini PC, NVRs, cameras, etc. and as a representative application, it can be used where an expensive operating system is used on the Intel CPU board. We provide the optimal solution for edge equipment development using the provided AI function.

### Features

- Core Module : Nvidia Jetson Nano
- Micro B Type (5Pin) USB 2.0 port, A Type USB 3.0 port
- RJ45 Gigabit Network x 2 ports
- Stacked Connector : Mini HDMI display
- Camera Connections  
2x15 Position Board to Board connector
- PCIe x 1 Lane, I2S, UART, I2C control, FAN control (PWM)
- Serial Port for debugging

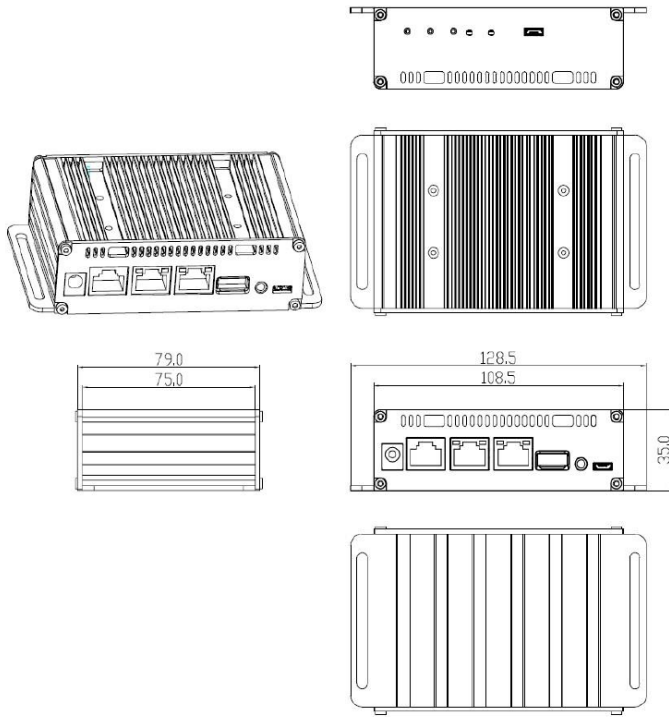


### Tech Notes

Apart from the Deepstream SDK provided by NVIDIA, we provide our own SDK so that the AI model being used by the customer can be inferencing and utilized. The SDK is sold separately from the hardware sales, and supports the OpenCV video class interface so that the customer can focus on the optimization of the AI model without worrying about interlocking IP cameras, decoding, storing, and retransmitting the stream.

# FWS100-NN

## Technical Specifications



Serial port	Supports Serial port for debugging (on automation header)
Switch	Power, Reset, Factory Default
Power Supply	SMPS, 12VDC 3A
Dimension	128(W) x 79(D) x 35(H) mm
Weight	About 280 Gr (without Power Supply)
Accessories	

**For more detailed specifications,  
Please refer to the product approval sheet.**

<b>System</b>	
Core Module	Nvidia Jetson Nano
<b>USB</b>	
USB 2.0	1 x USB Micro B (5Pin) Type
USB 3.0	1 x USB A Type
<b>Network</b>	
Wired Network	2 x RJ45 Gigabit Ethernet ports (RJ45 Connector with PoE and LEDs)
<b>Display</b>	
Video Output	Mini HDMI x 1 port
<b>Camera Connections</b>	
Connector	2x15 Board to Board Connector
Supports specifications	Each connector supports 3 CSI Lanes Camera CLK, I2C and control
<b>Interface</b>	
Interface	<ul style="list-style-type: none"><li>- Reset switch</li><li>- Factory Default switch</li><li>- DC input port</li><li>- Mini HDMI output port</li><li>- 2 x RJ45 Ethernet Female ports</li><li>- Audio port (PJ-328C / 4 Position)</li></ul>
<b>Hardware</b>	
Expansion Header	40 Pin (2x20) Header I2C (x2), SPI (x2), UART I2S, Audio Clock, GPIOs, PWM
M.2 Key E Connector	PCIe x 1 lane, USB 2.0, I2S, UART, I2C Control