

MPH v1

MPH V1

for
ADAS/AD Cameras,
as HILS Solution.

What is

- The MPH V1 is an ADAS HIL simulation solution for electrical emulation of 4-Channel sensors and actuators. The MPH V1 consists of a SerDes interfacing to main ECU, a signal generator programmed in FPGA and a USB bridge controller interfacing to main SoC.
- The SoC of MPH is Nvidia Jetson Xavier with AWS IoT Greengrass, which builds and trains the machine learning models quickly and easily. Also, it deploys them into a production-ready hosted environment directly.

Highlights

- Super speedy Interface : Quick preview available by USB 3.0
- High-performance system : Carmel CPU complex connected
- High-Speed data serialization for megapixel camera : CAN, CAN FD supported
- Excellent synchronizing output data : Programmed in FPGA

Applications

- Autonomous vehicles
- Portable HIL simulators for testing of engine ECUs

Technical Details

SOM	Nvidia Jetson™ Xavier	
CPU	ARMv8.2 (64-Bit) heterogeneous multi-processing (HMP) 4x Dual-Core CPU clusters (8 NVIDIA Carmel processor cores) connected L3 Cache: 4 MB (shared across all clusters)	
Memory	Memory Type : LPDDR4x	
Input Power	19V (USB power)	
Interface	CAN	CAN-FD X 2EA(up to 5 Mbit/s)
	USB	USB 3.0 Super Speed
	Ethernet	1 Gbit/s Ethernet X 1EA 10 Gbit/s Ethernet X 1EA
	DATA-OUT	GMSL X4 Coax Type Output (Up to 1.74 Gbps Serial-Bit Rate GMSL mode)
Dimension	252 X 135 X 67 (mm)	
Camera HILs	Clock	98MHz (Maximum)
	Resolution	Maximum 1280 X 960, 30 FPS, 12-Bit
	Pixel Format	YUV422 8-Bit (UYVY) or Bayer 12-Bit

Requirements Specification

Supported O/S : Ubuntu 18.04 / 8-core ARMv8.2 64-Bit / 8GB RAM
USB 3.0 Interface, USB 2.0 Interface / SSD Hard Disk Drive (512GB and over)



Cellplus Korea

Cellplus Korea is a rising corporate within the Edge Computing industry. Backed by cutting-edge engineers and professionals, we provide multifarious hardware, software, and engineering services in order to provide AI & Automotive businesses with high-end solutions to reach their highest potential.

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