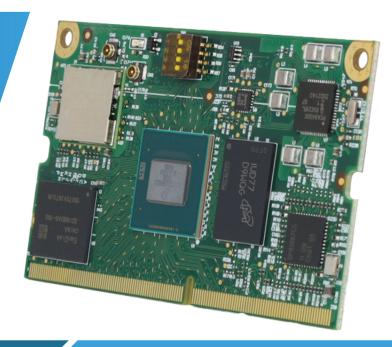


## SYSTEM ON MODULE

E2I Plus SOM VSP09QEC31-1C0





**VEST E2I Plus SOM** features a NXP i.MX 8M Plus; Powerful Quad or Dual Arm® Cortex®-A53 processor with a Neural Processing Unit (NPU) operating at up to 2.3 TOPS.

VEST E2I Plus SOM provide feature rich and high performance solutions for Advance Edge Intelligence and Multi Media applications.



## **Feature Rich**



**Easy Integration** 



Compact

pecifications	
CPU	i.MX 8M Plus   4x Cortex-A53 @ 1.8GHz, Cortex-M7 @ 800MHz
GPU	16 GLOPS (high-precision) OpenGL® ES 3.1/3.0, Vulkan®, Open CL™ 1.2 FP, Open VG™ 1.1
NPU	Neural Processing Unit (NPU) operating at up to 2.3 TOPS
Hi-Fi Audio	Cadence® Tensilica® Hifi 4 DSP @ 800MHz
Memory	2GB (up to 8GB) 32-bit LPDDR4 2133-10MHz - 17GB/s.
Storage	8GB (up to 128GB) eMMC5.1
Video Encoder	1080p60, h.265/4
Video Decoder	1080p60, h.265/4, VP9, VP8
Connectivity	On Board Dual Band Wi-Fi / Bluetooth Module (optional)
Camera	2x MIPI CSI with Dual Image signal processors
Display	MIPI-DSI, up to UWHD and WUXGA   HDMI 2.0a Tx, up to 4kp30
	LVDS (4/8-lane) Tx, up to 1920x1080p60
Display	LCD display controller (up to WXGA 1366x768)
SO DIMM	260-pin edge connector
UPHY	1x PCIe Gen3 – 1 lane, 2 x USB 3.0/2.0
In/Out	Up to 3 x UART, 3 x SPI, 5 x I2C, 2 x I2S, 1 x SDIO, 2 x CAN FD
Networking	2x Gigabit Ethernet with AVB, IEEE 1588, EEE and 1x w/ TSN
Dimensions	69.6mm x 40mm
BSP	Linux Yocto, Ubuntu and Android



Advanced Products Corporation Pte Ltd 5006 Ang Mo Kio Avenue 5, #05-01/12 TECHPlace II Singapore 569873



## **VEST E2I Plus Carrier Board**

(VCP0910100-000) is optimized for performance with the VEST E2I Plus SOM

## **Technical Specifications**

- 12 24VDC, 2.0mm DC Jack or 2 Pin 4.2 mm pitch Mini Fit JR Header
- USB 3.0 OTG, Type C
- 3 USB 3.0 Host, Type A
- 2x 10/100/1000 BaseT RJ45 Ethernet
- Full Size Mini PCle with Nano SIM Card Socket
- Micro SD 3.0 Socket push-push type
- On board LVDS and I2C Touch Connector for 7" & 10" LCD Panel
- 4 Pos Dip Switch for Backlight Selection
- M.2 Display Daughter Board Socket
- Including the Following Interfaces:
  - Dual Channel 4-lane LVDS
  - 4-lane MIPI-DSI
  - I2C Touch
  - PWM
  - Up to 1A Backlight Output
  - GPOs
- HDMI 2.0a Type A
- 3.5mm Headphone Jack with Microphone Input
- 2mm pitch, 4 pin header for Speaker L&R, Up to 10W/ch into 8ohm load
- RS485 (default) or RS232
- CAN- 2x 2mm pitch 3 pin header
- Debug- 2x UART Header, 2.54mm pitch 5pin header
- JTAG-1.27 mm pitch 2 x 5 pin header
- 1x On/Off Button
- 1x Reset Button
- On/Off, Reset, Power LED Control Signal Connector- 1x 2mm pitch 5 pin header
- Power LED Indicator- x 2, 3.3V & 5V
- M.2 Expansion Daughter Board Socket
- Including the Following Interfaces:
  - 4-lane MIPI CSI x 2
  - SAI x 1
  - SPI x 1
  - I2C x 1
  - Up to 4 x PWM
  - Up to 2 x UART
  - GPIOs
- Form Factor 180 mm x 112 mm

