



## Comparisons between Edge-V, VIM3, Odroid-N2 and Rpi 4

Model	Edge-V Pro	VIM3 Pro	Odroid-N2 (4GB)	Raspberry Pi 4 (4GB)
<b>SoC Process</b>	28nm	12nm	12nm	28nm
<b>CPU</b>	Rockchip RK3399 x2 A72 at 1.8GHz + x4 A53 at 1.4GHz	Amlogic A311D x4 A73 at 2.2GHz + x2 A53 at 1.8GHz	Amlogic S922X x4 A73 at 1.7GHz + x2 A53 at 1.8GHz	Broadcom BCM2711 x4 A72 at 1.5GHz
<b>GPU</b>	Mali T860 MP4	Mali G52 MP4 at 800MHz	Mali G52 MP4 at 800MHz	VideoCore VI at 500MHz
<b>NPU</b>	-	5 TOPS	-	-
<b>RAM</b>	4GB LPDDR4 800MHz, 64bit	4GB LPDDR4/X 1608MHz, 32bit	4GB DDR4 1320MHz, 32bit	4GB LPDDR4 TBC, 32bit
<b>eMMC</b>	Onboard, 32GB	Onboard, 32GB	Socket	-
<b>SPI Flash</b>	16MB	16MB	8MB	512KB (EEPROM)
<b>Wi-Fi</b>	2T2R 802.11 ac with RSDB	2T2R 802.11 ac with RSDB	-	1T1R 802.11 ac
<b>Bluetooth</b>	V5.0	V5.0	-	V5.0
<b>M.2 Socket</b>	4-lane PCIe	1-lane PCIe [1]	-	-
<b>Wake-on-Lan [2]</b>	✓	✓	-	-
<b>Timer on [3]</b>	✓	✓	-	-
<b>USB-C DP Display</b>	✓	-	-	-
<b>HDMI Display</b>	x1 Type-A	x1 Type-A	x1 Type-A	x2 Type-D
<b>eDP Display</b>	✓	-	-	-
<b>MIPI-DSI Display</b>	2 [4]	1	-	2-lane
<b>MIPI-CSI Camera</b>	4-lane x2 with dual 14MP ISP	4-lane x1 with 8MP ISP	-	2-lane
<b>Gesture Control</b>	✓	-	-	-
<b>Motion Tracking</b>	Tri-axis Gyroscope Tri-axis Accelerometer	Tri-axis Accelerometer	-	-
<b>Battery</b>	✓ [5]	-	-	-
<b>User Buttons</b>	Reset, Power, Function	Reset, Power, Function	-	-
<b>Power Supply</b>	USB-C x2	USB-C, VIN	DC Jack	USB-C
<b>IR Receiver</b>	Dual Channels	Dual Channels	One Channel	-
<b>AV Out</b>	-	-	✓	✓
<b>USB Host</b>	x1 USB 3.0 + x1 USB 2.0	x1 USB 3.0 + x1 USB 2.0	x4 USB 3.0	x2 USB 3.0 + x2 USB 2.0
<b>USB OTG Port</b>	USB-C	USB-C	Micro USB	USB-C
<b>Board Dimensions</b>	82.0 x 58.0 x 13.0 mm	82.0 x 58.0 x 13.0 mm	90 x 90 x 17 mm	88.0 x 58.5 x 19 mm [6]
<b>Decoding</b>	H.265 4K 60fps	Multi-video decoder up to 4Kx2K@60fps + 1x1080P@60fps		H.265 up to 4Kp60
<b>Encoding</b>	H.264 at 1080P@30fps	H.265 & H.264 at 1080P@60fps		H.264 at 1080P@30fps

[1] Switch between 1-lane PCIe or USB 3.0.

[2] WOL still works when the Edge-V or VIM3 SBC is powered down and Odroid-N2 only works on sleep mode.

[3] The RTC timer can power on the SBC at a preset time which can be used applied to occasions like digital signage.

[4] Need to setup one of the MIPI-TX/RX interface(MIPI-CSI as default configuration) as MIPI-DSI interface.

[5] The Battery module requires a built-in charging circuit.

[6] All board dimensions given are inclusive of I/O ports.