Comparisons between Edge, VIM4 and Edge2

Model	Edge Pro	VIM4	Edge2 Pro
SoC Process	28nm	12nm	8nm
CPU	Rockchip RK3399 x2 A72 at 1.8GHz + x4 A53 at 1.4GHz	Amlogic A311D2 x4 A73 at 2.2GHz + x4 A53 at 2.0GHz	Rockchip RK3588S x4 A76 at 2.25GHz + x4 A55 at 1.8GHz
GPU	Mali T860 MP4 at 600 MHz	Mali G52 MP8(8EE) at 800MHz	Mali G610 MP4 at 1GHz
NPU	-	TBC	6TOPS
Coprocessor	8-bit, STM8S1003	32-bit, STM32G1031K6	32-bit, STM32G1031K6
RAM	4GB LPDDR4 800MHz, 64-bit	8GB LPDDR4X 2016MHz, 64-bit	16GB LPDDR4X 2112MHz, 64-bit
eMMC	32GB	32GB	64GB
SPI Flash	16MB	32MB	32MB
Wi-Fi	2T2R Wi-Fi 5 with RSDB	2T2R Wi-Fi 6, SDIO	2T2R Wi-Fi 6, PCIe
Bluetooth	5.0	5.1	5.0
Ethernet	Gigabit PHY Onboard, I/O over MXM3	Gigabit, RJ45 LAN	-
Wake-on-Lan	-	✔	-
TF Card Slot	I/O over MXM3	Onboard, UHS-I Speed	I/O over FPC
M.2 Socket	-	1-lane PCIe	-
Timer on [1]	✔	✔	✔
RTC Battery	Connector	Connector	Rechargeable Button Battery
USB-C Display	✔	-	✔
HDMI Display	x1 Type-A HDMI 2.0，up to 4K@60fps	x1 Type-A HDMI 2.1, up to 4K@60fps	x1 Type-A HDMI 2.1, up to 8K@60fps
eDP Display	✔	✔	-
V-by-One Display	-	✔	-
MIPI-DSI Display	-	1	2
MIPI-CSI Camera	-	4-lane with 16MP ISP x2	4-lane with 48MP ISP x3
HDMI Input	-	4K@30fps, Micro HDMI [2]	-
DMIC	-	Stereo Digital Microphones	Stereo Digital Microphones
Motion Tracking	Tri-axis Gyroscope Tri-axis Accelerometer	Tri-axis Accelerometer	Tri-axis Accelerometer
Battery	✓ [3]	-	-
User Buttons	Reset, Power, Function	Reset, Power, Function	Reset, Power, Function
LED	R/G/B	R/W	x2 RGB
Power Supply	x2 USB-C	USB-C, VIN(90° Rotated)	x2 USB-C
USB Host	x1 USB 3.0 + x1 USB 2.0	x1 USB 3.0 + x1 USB 2.0	x1 USB 3.1 + x1 USB 2.0
Expansion	MXM3 Connector	40-pin 2.54mm GPIO Header	30-pin 0.5mm FPC IO Connector x2 Pogo Pads
USB OTG Port	USB-C	USB-C	USB-C
Board Dimensions	82.0 x 57.5 x 5.7 mm	82.0 x 58.0 x 13.0 mm	82.0 x 57.5 x 5.7 mm
Decoding	H.265 at 4K@60fps	Up to 8K@24fps Multi-video Decoder up to 4Kx2K@60fps + 1x 1080p@60fps	Up to 8K@60fps Multi-video Decoder up to 32x 1080p@60fps
Encoding	H.264 at 1080p@30fps	H.265 & H.264 at 1080p@60fps	H.265 & H.264 at 8K@30fps
4K UI	-	✔	✔
Compliances	RoHS, CE, FCC	RoHS, CE, FCC, TELEC	RoHS, CE, FCC, TELEC, KC

[1] The RTC timer can power on the SBC at a preset time which can be used applied to occasions like digital signage.
[2] When a HDCP license is present, the official ROM will support 4K@60fps, otherwise it will revert to 4K@30fps.
[3] The battery module requires a built-in charging circuit.