

RZ/V2L SoM Comparison Chart

CPU Name	Renesas RZ/V2L	Renesas RZ/G2L	Renesas RZ/G2UL	Renesas RZ/G2LC
CPU Type	2 x Cortex A55 1 x Cortex M33 DRP-AI Accelerator	2 x Cortex A55 1 x Cortex M33	1 x Cortex A55 1 x Cortex M33	2 x Cortex A55 1 x Cortex M33
RAM	2 GB DDR4 default, optional: 1 GB DDR4	1 GB DDR4 default, optional: 2 GB DDR4	1 GB DDR4 default, optional: 512 MB up to 2 GB DDR4	1 GB DDR4 default, optional: 512 MB up to 2 GB DDR4
Internal Storage	16 GB eMMC default, optional: Up to 64 GB eMMC	8 GB eMMC default, optional: Up to 64 GB eMMC	8 GB eMMC default, optional: Up to 64 GB eMMC	8 GB eMMC default, optional: Up to 64 GB eMMC
Ethernet	Up to 2 x 10/100/1000 Mbps phy on board	Up to 2 x 10/100/1000 Mbps phy on board	100BASE-T	100BASE-T
Wireless	802.11 b/g/n/ac + BT 5.0	802.11 b/g/n/ac + BT 5.0	802.11 a/b/g/n + BT 5.2	802.11 a/b/g/n + BT 5.2
GPU	Arm Mali-G31 - 500 MHz	Arm Mali-G31 - 500 MHz	None	Arm Mali-G31
3D GPU Support	OpenGL ES 1.1/ 2.0/ 3.0/ 3.1/ and 3.2 Supported OpenCL 2.0 Full Profile Supported	OpenGL ES 1.1/ 2.0/ 3.0/ 3.1 and 3.2 Supported OpenCL 2.0 Full Profile Supported	None	OpenGL/CL 2.0
AI Accelerator	DRP-AI	-	-	-
Video Decoder	H.264 1920x1080 @ 30 fps	H.264 1920x1080 @ 30 fps	None	None
Video Encoder	H.264 1920x1080 @ 30 fps	H.264 1920x1080 @ 30 fps	None	None
Display Interfaces	1 x MIPI-DSI, RGB	1 x MIPI-DSI, RGB	None	1 x MIPI-DSI
Camera Interface	1 x MIPI-CSI-2 supported 5MP, 30 fps	1 x MIPI-CSI-2 supported 5MP, 30 fps	1 x MIPI-CSI2	1 x MIPI-CSI-2
USB 2.0	2	2	2	2
USB 3.0	-	-	-	-
PCIe	-	-	-	-
I2C	3	3	3	3
SPI	2	2	2	2
UART	3	3	3	3
GPIO	✓	✓	✓	✓
PWM	✓	✓	✓	✓
CAN-FD	2 x CAN-FD	2 x CAN-FD	2 x CAN-FD	2 x CAN-FD
Size	47 x 30 mm	47 x 30 mm	47 x 30 mm	47 x 30 mm