



Edge-V Specifications

Model	Basic	Pro	Max
SoC	Rockchip RK3399 Big Cluster CPU: Dual-core Cortex-A72 up to 1.8GHz Little Cluster CPU: Quad-core Cortex-A53 up to 1.5GHz Mali T864 GPU: OpenGL ES1.1/2.0/3.0/3.1, OpenVG1.1, OpenCL, DX11 4K VP9 and 4K 10bits H265/H264 video decoders, up to 60fps 1080P H.264 and VP8 video encoders		
MCU [1]	8bit STM8S003 with Programmable EEPROM		
SPI Flash	16MB		
LPDDR4 [2]	2GB	4GB	4GB
EMMC 5.1 [2]	16GB	32GB	128GB
Wi-Fi	AP6356S, 802.11a/b/g/n/ac 2X2 MIMO	AP6398S, 802.11a/b/g/n/ac 2X2 MIMO with RSDB [3]	
Bluetooth	V4.1	V5.0	
Ethernet PHY	10/100/1000M RTL8211FD		
HDMI 2.0a	Type-A Female, up to 4K@60Hz, HDCP 2.2		
HDMI CEC	Yes		
USB HOST	USB3.0x1, USB2.0x1		
USB Type-C	One for Power only; One with DP1.2 support [4]		
Input Voltage Range	5V to 20V		
Battery Connector	2-Cell Battery Module		
Pogo Pads for VIN	System Power Input		
Cooling Fan Header	Controlled by PWM, with a 0.8mm Pitch Header		
Buttons	x3 (Power, Func, Reset)		
Programmable LEDs	Blue LED x1, White LED x1, Red LED x1		
Camera	Interface: 4 lanes MIPI-CSI Dual 13 MegaPixels Supported Connector: 30 Pin 0.5mm Pitch FPC Connector		
Display	4 lanes MIPI-DSI 4 lanes eDP 1.3, up to 10.8Gbps		
Touch Panel	10PIN 0.5mm Pitch FPC Connector		
M.2 Socket	4 full-duplex lane PCIe 2.1 M.2 2280 NVMe SSD Supported		
LAN	10/100/1000M, Support WOL Feature [5]		
TF Card	SD 3.0, up to 256GB		
RTC Battery Header	0.8mm Pitch Header		
IR Receiver	2 Channels		
Gesture Control	APDS-9960 Digital Proximity, Ambient Light, RGB and Gesture Sensor [6]		
Motion Tracking	ICM-20602 6-axis: 3-axis gyroscope, 3-axis accelerometer		
40 PIN 2.54mm Header	USB, I2C, SPI, I2S, SPDIF, ADC, STM8S MCU IOs [7]		
Mounting Holes	Size M2 x 4		
Board Dimensions	82.0 x 58.0 x 13.5 mm		
Board Weight	31g		
O/S	Android Oreo, Ubuntu 18.04, Debian 9.0, and more		
Linux	Mainline Linux		
BootLoader	Mainline U-Boot		
AI Features	TensorFlow, Android NN(Neural Networks API)		
Certifications	CE, FCC, RoHS		

[1] MCU: Power management, EEPROM for customization, and boot media(SPI Flash or EMMC) setup.

[2] We only use Samsung or Skhynix memory for all Khadas products, other lower cost solutions are available for ODM & OEM.

[3] RSDB: Real Simultaneous Dual Band, which lets Edge and other devices transmit and receive data over two bands at the same time.

[4] Edge can support dual independent display over USB-C, HDMI, eDP or MIPI

[5] WOL: Boot on or wake up Edge remotely over LAN through APP or webpage.

[6] Gesture: Can power on/off the Edge over gestures, this feature is disabled by default.

[7] GPIO: Most of the pinmap compatible with VIMs.