

SBC-3.5-RK3399

3.5" SBC with Rockchip RK3399 SoC

The Right Balance of Graphic/Computing Performance and Cost



HIGHLIGHTS



CPURockchip RK3399 Processor



CONNECTIVITY

up to 2x GbE; opt WiFi; up to 2x RS-232 or RS-485 or CAN; opt Modern with SIM slot or eSIM $\,$



GRAPHICS 4-Core Mali-T860MP4 GPU



MEMORY

Soldered-down LPDDR4 memory, up to 4GB total







(i) Available in Industrial Temperature Range



MAIN FIELDS OF APPLICATION









Safety & Surveillance

Digital Signage

Transportation

Energy & Utilities

FEATURES

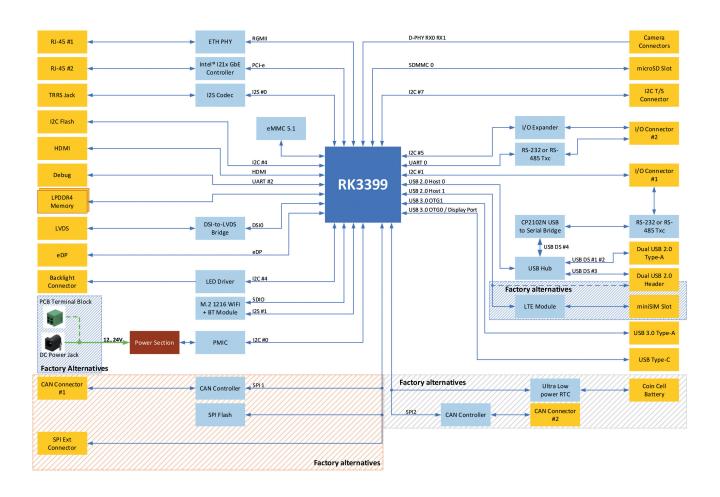
Processor	Rockchip RK3399 processor, 2x Cortex°-A72 MP cores + 4x Cortex°-A53 MPCores, up to 1.8GHz, 64-bit architecture
Max Cores	2+4
Memory	Soldered-down LPDDR4 memory, up to 4GB total, 64-bit interface
Graphics	4-Core Mali-T860MP4 GPU OpenGL ES 1.1/2.0/3.0/3.1, OpenVG 1.1, OpenCL, DX11 support Embedded VPU, able to offer: H.265 10-bit, H.264 10-bit, VP9 8-bit 4Kx2K@60fps HW Decoding MPEG-4/MPEG-2/VP8 1080p@60fps HW Decoding H.264, VP8 1080p@30fps HW encoding Supports 2 independent video outputs
Video Interfaces	LVDS Single / Dual Channel interface eDP 1.3 interface HDMI® 4K interface (HDMI® 4K interface) DP 1.2 interface on USB Type-C connector (alternate mode)
Video Resolution	HDMI®, DP: Up to 4K x 2K @60Hz (HDMI® DP: Up to 4K x 2K @60Hz) eDP: Up to 4096 x 2160 (4K) LVDS: Up to 1920 x 1080 @60Hz
Mass Storage	SPI Flash (alternative to CAN Controller #1) eMMC 5.1 Drive soldered on-board microSD slot
문 Networking	Up to 2 x Gigabit Ethernet ports Optional soldered on-board M.2 1216 WLAN 802.11 a/b/g/n/ ac + BT 5.0 module Optional on-board LTE Modem
•← USB	1 x USB 3.0 Type-C port (Alternate mode with DP) 1x USB 3.0 Host port on Type-A socket 2 x USB 2.0 Host ports on Dual Type-A socket Up to 2 x USB 2.0 Host ports on internal pin header
Audio	Optional I2S Audio Codec w/ TRSS Jack (MicIn / Lineout)

Ø. •	Serial Ports	Ix Debug UARTs Up to 2x RS-232 (factory options) Up to 2x RS-485 (factory options) Up to 2x CAN ports (factory options).
	Other Interfaces	Optional 2x MIPI-CSI Camera connectors, 4-lanes CSI input each one miniSIM slot or eSIM for on-board optional modem II/O Connector #1 with I2C interface + 1x Open-Drain + (RS-232 or RS-485 - factory alternatives) I/O Connector #2 with 3xGPIOs + 1x PWM + (RS-232 or RS-485 or TTL UART - factory alternatives) Dedicated connector for I2C Touch Screen Controller Support Optional Ultra-low Power RTC (Alternative to CAN Controller #2) Optional SPI external interface (alternative to CAN Controller #1) Optional LED Driver Optional Trust Secure Element on-board
	Power Supply	+ $12V_{\rm pc}$ ÷ +24 $V_{\rm DC}$ RTC battery
os	Operating System	Linux Yocto Android (under development)
1	Operating Temperature*	0°C ÷ +60°C (Commercial Temperature range) -20°C ÷ +85°C (Extended Temperature range)
	Dimensions	146 x 102 mm (3.5" form factor)

*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.



BLOCK DIAGRAM





Streamline and expedite your edge computing implementations

EDGEHOG OS

A flexible operating system that adapts to your needs, thanks to the customization tool and Docker support. Reliability and security are built-in through a dual-partition system and native integration with Exein's robust Al-based protection.

DATA ORCHESTRATION

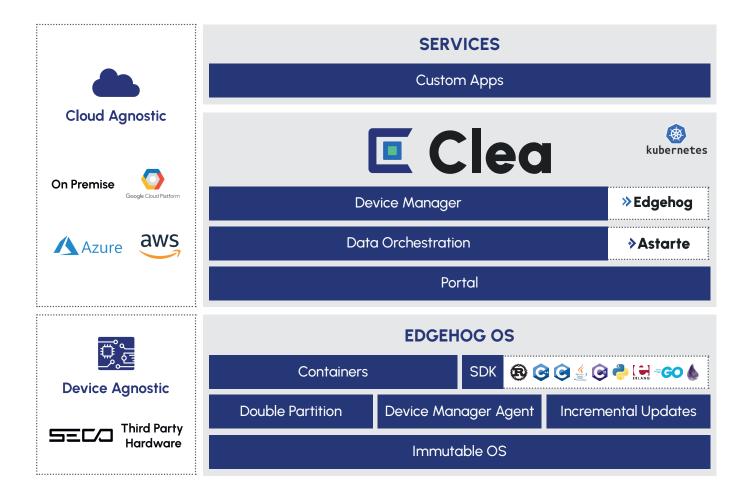
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

DEVICE MANAGER

Update, configure, and manage remote devices. Optimize time and costs to maximize operational efficiency and security without the need for costly field interventions.

PORTAL

Analyze data from remote devices, customize the user experience with applications tailored to user needs, and manage user rights, company access, and tenant privileges.



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EDGEHOG OS



CLEA DOCS



