



SBC-3.5-RK3399

3.5" SBC with Rockchip RK3399 SoC

The Right Balance of Graphic/Computing Performance and Cost



HIGHLIGHTS

	CPU Rockchip RK3399 Processor
	GRAPHICS 4-Core Mali-T860MP4 GPU

	CONNECTIVITY up to 2x GbE; opt WiFi; up to 2x RS-232 or RS-485 or CAN; opt Modem with SIM slot or eSIM
	MEMORY Soldered-down LPDDR4 memory, up to 4GB total

Available in Industrial Temperature Range

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HIGH-DEFINITION MULTIMEDIA INTERFACE

MAIN FIELDS OF APPLICATION



Safety &
Surveillance



Digital Signage



Transportation



Energy &
Utilities

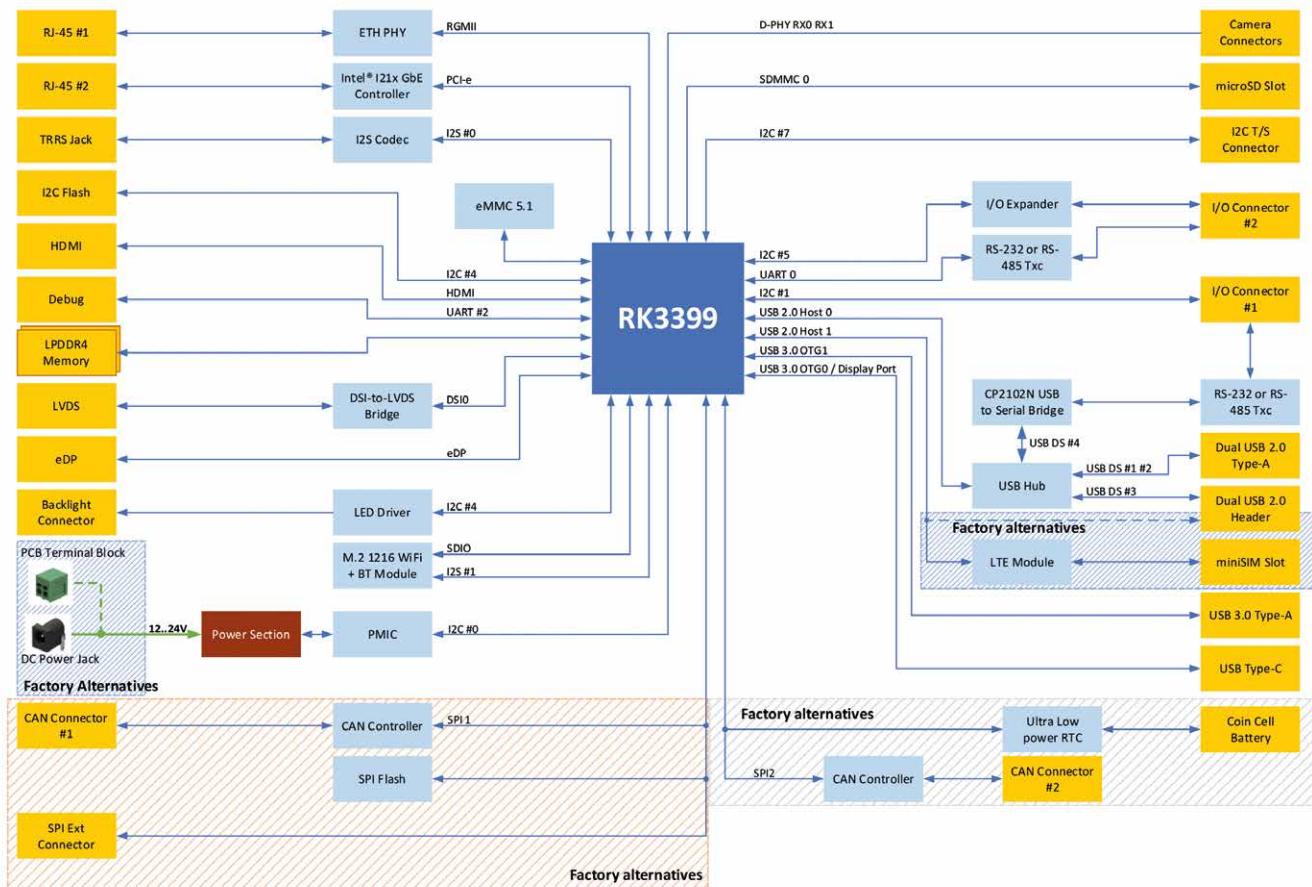
FEATURES

	Rockchip RK3399 processor, 2x Cortex®-A72 MP cores + 4x Cortex®-A53 MPCores, up to 1.8GHz, 64-bit architecture		1x Debug UARTs Up to 2x RS-232 (factory options) Up to 2x RS-485 (factory options) Up to 2x CAN ports (factory options).
	2+4		Optional 2x MIPI-CSI Camera connectors, 4-lanes CSI input each one miniSIM slot or eSIM for on-board optional modem I/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
	Soldered-down LPDDR4 memory, up to 4GB total, 64-bit interface		+12V _{DC} ÷ +24V _{DC} RTC battery
	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		Linux Yocto Android (under development)
	LVDS Single / Dual Channel interface eDP I.3 interface HDMI® 4K interface (HDMI® 4K interface) DP 1.2 interface on USB Type-C connector (alternate mode)		0°C ÷ +60°C (Commercial Temperature range) -20°C ÷ +85°C (Extended Temperature range)
	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		146 x 102 mm (3.5" form factor)
	SPI Flash (alternative to CAN Controller #1) eMMC 5.1 Drive soldered on-board microSD slot	*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.	
	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		
	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		
	Optional I2S Audio Codec w/ TRSS Jack (MicIn / Lineout)		

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BLOCK DIAGRAM



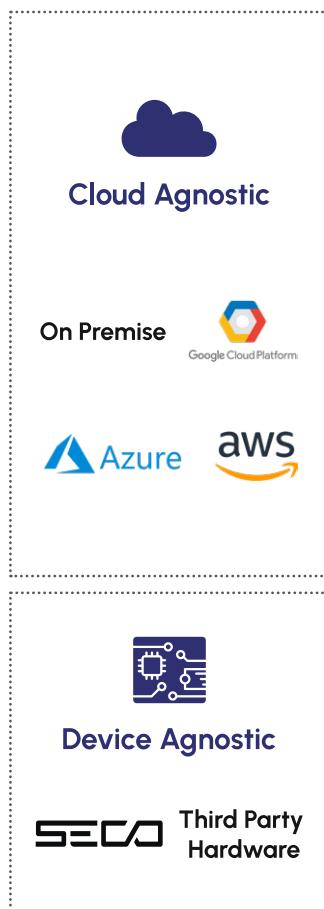
Streamline and expedite your edge computing implementations

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 AI-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.

SERVICES

Custom Apps



Device Manager

»Edgehog

Data Orchestration

»Astarte

Portal

EDGEHOG OS

Containers

SDK



Double Partition

Device Manager Agent

Incremental Updates

Immutable OS

Scan to know more about our solution

EDGEHOG OS



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