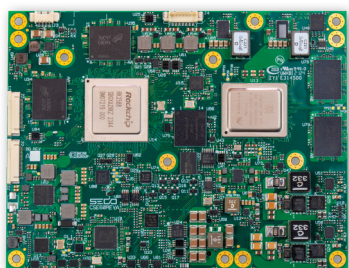




SOM-COMe-BT6-RK3588

COM Express® type 6 module based on Rockchip RK3588 SoC coupled to Axelera AI's Metis AIPU

AI unleashed at the edge: unmatched power, precision, and versatility with Rockchip RK3588 and Axelera AI's Metis AIPU



HIGHLIGHTS

CPU Rockchip RK3588 with additional Axelera AI Metis AIPU soldered on board	CONNECTIVITY 1x NBase-T IGbE; 2x USB Type-C with DP-Alt mode; 4x USB 5Gbps; 1x Hi-Speed USB; 4x PCI-e lanes
GRAPHICS Arm Mali-G610 MC4 GPU, embedded VPU	MEMORY Up to 32GB LPDDR5-3200 memory for CPU + 2GB LPDDR4x-2133 for AIPU



MAIN FIELDS OF APPLICATION



Industrial Automation



Safety & Surveillance

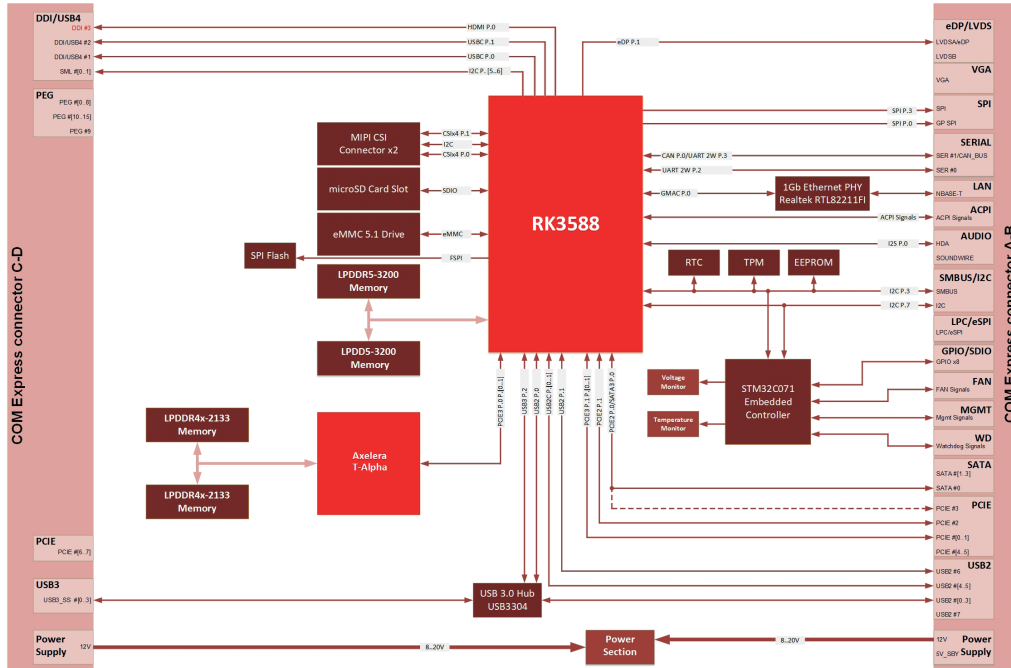
FEATURES

Processor Rockchip RK3588 processor 4x Cortex-A76 cores + 4x Cortex A55 cores, 3x Cortex-M0 cores, with embedded GPU, NPU and video codec Axelera AI Metis AIPU soldered on board, up to 120 TOPS	Other Interfaces General purpose SPI 4x GPI + 4x GPO 2x I2C interfaces Ultra-low power RTC Optional TPM 2.0 on-board
System Memory 2x LPDDR5-3200 ICs for RK3588 processor, up to 32GB total 2x LPDDR4x-2133 ICs for Metis AIPU, up to 2GB total	Power Supply +8V ... +20V 3V RTC battery
Graphics Embedded Arm Mali-G610 MP4 GPU + VPU Support up to 4 independent displays	Operating System Clea OS
Video Interfaces HDMI® 2.1 interface 2x DP 1.4a interfaces on USB-C ports (alternate mode) eDP 1.3 interface	CAN Bus 1x CAN port, optional (alternative to 2-wire UART SER1)
Video Resolution HDMI®: up to 7840x4320 @60Hz eDP: up to 4k @ 60Hz DP: up to 7680x4320 @ 30Hz	Operating Temperature* 0°C to +60°C (Commercial version) -40°C to +85°C (Industrial version)
Mass Storage Optional eMMC 5.1 drive, up to 32GB microSD Slot on-board Optional SATA Gen3 interface I2C EEPROM + QSPI flash soldered on-board	Embedded Controller Functionalities Voltage monitor, temperature monitor, power state management, FAN control, watchdog, GPIOs
Networking 1x NBase-T ethernet port, supporting 1GbE connection (Realtek RTL8211FI transceiver)	Security Optional TPM 2.0 onboard
USB 2x USB type- C interfaces supporting DP-alternate mode 4x USB 5Gbps ports 1x USB 2.0 Host port	Dimensions 120 x 95 mm (4.92" x 3.74")
Audio I2S audio interface mapped on HD audio pins	*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.
PCI-e 2x PCI-e lanes Gen3 (manageable as 2x PCI-e x1 or 1x PCI-e x2 port) 1x PCI-e lanes Gen2 port 1x PCI-e lanes Gen2 port (factory alternative to SATA Gen3 interface)	
Serial Ports Up to 2x 2-wire UARTs managed by the RK3588 processor	

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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

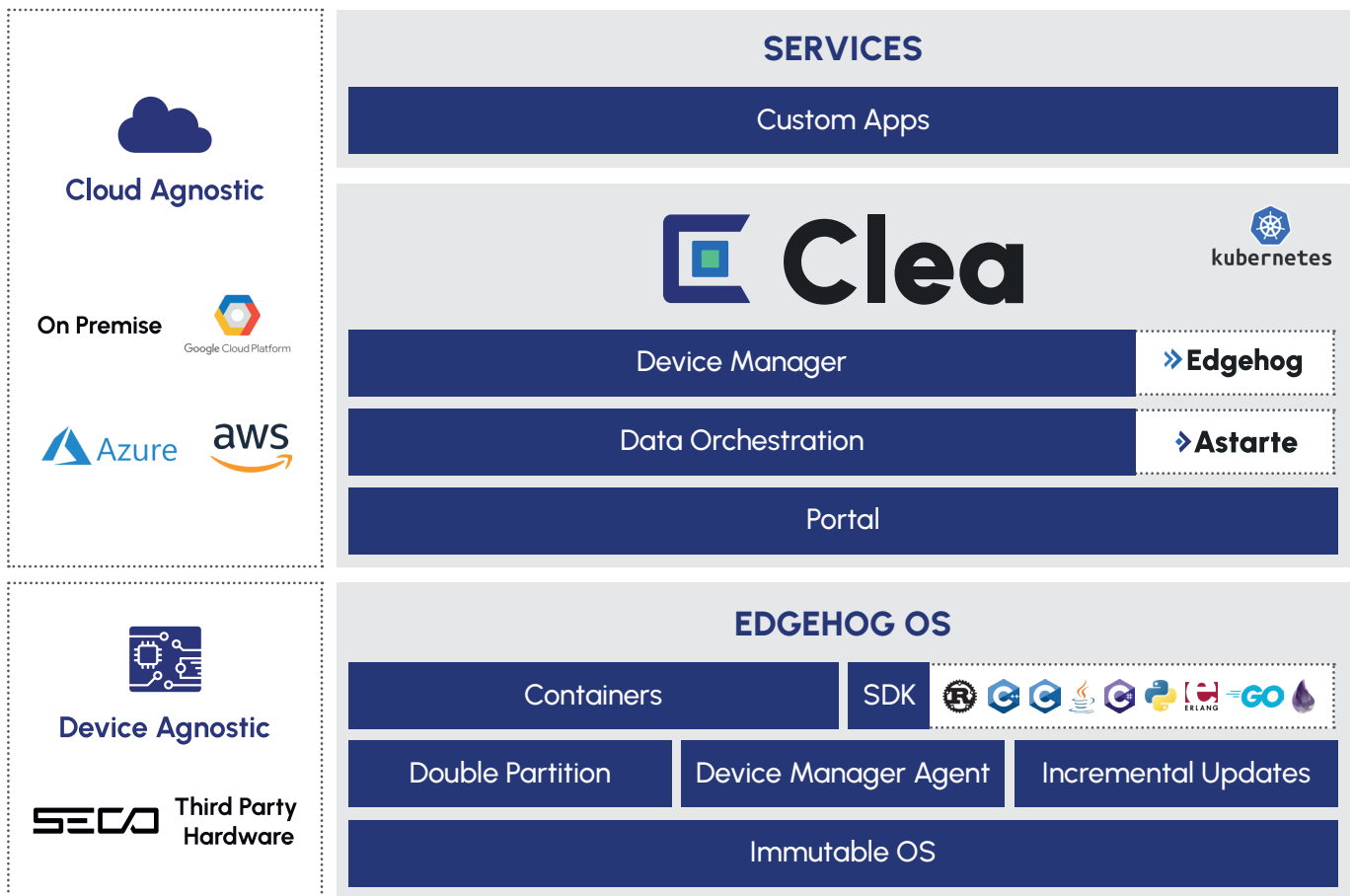
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

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.



Scan to know more about our solution

EDGEHOG OS



CLEA DOCS

