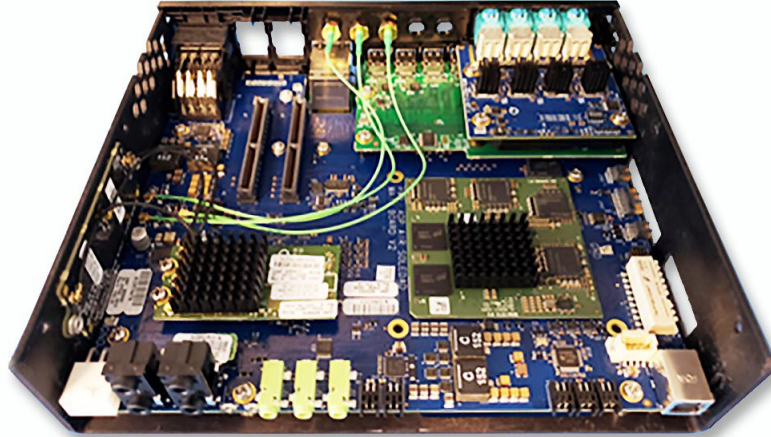


# SA8295P Automotive Development Platform

Based on the Qualcomm® Snapdragon™ SA8295P SoC



The SA8295P Snapdragon™ Automotive Development Platform (ADP) based on the Qualcomm® Snapdragon™ Automotive chipset from Qualcomm® Technologies, Inc. (QTI) provides OEMs and ecosystem partners with access to QTI's high-performance automotive infotainment platform.

This version of the ADP features the top tier QAM8295P. QAM8295P is the next generation Qualcomm® Snapdragon™ automotive infotainment module designed for superior performance and power efficiency. It has been developed as an SEooC (safety element out of context) targeting assumed ASIL B use cases. The key components of the QAM8295P module include SA8295P SoC, four instances of PMM8295AU power management IC, one third party power management IC, and two 556-ball LPDDR4X SDRAM.

SA8295P includes the following key components: Qualcomm® Kryo™ 695 CPU built on Arm v8 Cortex technology, Qualcomm® Adreno™ 695 GPU, Dual Qualcomm® Hexagon™ Tensor Processors, Qualcomm Spectra™ ISP 395, Adreno 665 VPU, Adreno DPU 1199, and dedicated Safety manager subsystem.

## Key Features

- Features top tier SA8295P SoC
- Superior performance and power efficiency
- Dedicated Safety manager subsystem
- Display: Three DisplayPorts, one of them shared with USB 3.1, four 4-lane embedded DisplayPort v1.4b, two 4-lane MIPI DSI D-PHY v1.2
- Camera: Four 4-lane MIPI CSI configurable in 4 + 4 + 4 + 4 or split 2s configuration
- Audio: Six Class D Amplifier Analog OUT, four Analog/MIC Inputs, two A2B

## Applications/Markets

- High performance, low power platform for developing, testing, optimizing and showcasing next generation in-vehicle infotainment solutions.

## Engineering Services:

We provide a full solution – our unparalleled engineering expertise and product development skills deliver innovative products that are cost-effective and can jumpstart your Go-to-Market timeline.

Our business model offers turnkey product development services, or we can augment your team in specific areas of development. The choice is yours.

## Key development expertise in:

- Camera development and tuning
- Voice control
- Machine learning
- Mechanical & RF design
- Thermal & power optimization.

IoT product development made easy.

# Lantronix SA8295P Automotive Development Platform

## Hardware Specifications:

SA8295P Automotive Development Platform	
• <b>Processor</b>	Snapdragon™ SA8295P SIP Qualcomm® Kryo™ 695 CPU built on Arm v8 Cortex technology Qualcomm® Adreno™ 695 GPU for the highest in graphics performance and power efficiency Dual Qualcomm® Hexagon™ Tensor Processors integrated with Qualcomm Hexagon DSP, quad Qualcomm Hexagon Vector eXtensions (HVX) processor, and dual Qualcomm Hexagon Matrix eXtensions (HMX) coprocessors for high performance machine learning use cases Qualcomm® Spectra™ ISP 395 image processing engine Adreno 665 VPU for high-quality, ultra HD video encode and decode Adreno DPU 1199 for ultra HD multi-display support Dedicated Safety Manager Subsystem equipped with dual ARC HS46 CPU in lock-step mode
• <b>Safety MCU</b>	1x Aurix TC397XX
• <b>Memory</b>	Eight-channel high-speed memory – 2133 MHz LPDDR4X SDRAM with optional low-power features (8 x 16-bit); 16 GB
• <b>Storage</b>	Two UFS 3.1 gear 4 – 2 lanes for on-board memory (UFS0 as boot up device); NVMe via PCIe (not-bootable)
• <b>Audio</b>	Six Class D Amplifier Analog OUT; Four Analog/MIC Inputs; Two A2B
• <b>Power Supply</b>	6V to 20V DC, typical 12V DC
• <b>Camera</b>	Four 4-lane MIPI CSI configurable in 4 + 4 + 4 + 4 or split 2s configuration
• <b>Display</b>	Three DisplayPorts, one of them shared with USB 3.1 Four 4-lane embedded DisplayPort v1.4b Two 4-lane MIPI DSI D-PHY v1.2
• <b>Connectivity</b>	Wi-Fi 6 (802.11ax) + Bluetooth 5.2 Dual MAC MIMO + MIMO (QCA6696) Dual-band dual-MAC radios for concurrent 2x2 MIMO 2.4GHz + 2x2 MIMO 5GHz operation Combined simultaneous maximum PHY rate of 1774Mbps 1x 1000 BaseT1 2x 100 BaseT1
• <b>I/O</b>	4x CAN-FD; 2x LIN
• <b>Sensors</b>	Gyro, Accelerometer - ASM330LHH; Magnetometer - AK09917D
• <b>Test and Debug</b>	JTAG: SoC, VIP; USB debug UARTs; Test automation
• <b>OS Support</b>	QNX Hypervisor with Linux virtual machine

## Software:



SA8295P Automotive Development Platform with Thermal Enclosure Configuration

## Purchasing Information:

• <b>SA8295P Automotive Development Platform</b>	PN: ADP-8295-IVI
• <b>SA8295P Automotive Development Platform with Thermal Enclosure Configuration</b>	PN: ADP-8295-IVI-T
• <b>SA8295P ADP GMSL2 AR0231 Camera Accessory with Quad HFM Cable</b>	PN: ADP-8295-C

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