

OS	 AGL	 AAOS	 Arene OS	 BYD OS	 CHERY-OS	 Cloudpeak	 Great Wall Motor OS	 Halo OS	 HarmonyOS	 HyperOS	 MB.OS	 Pleos	 QNX	 RTDriveOS	 SkyOS	 VW.OS	 XsmartOS	Z-ONE	ZEEKR OS
Vendor																			
Scope																			
Body Control	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes (VOS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Partial	Yes	Yes
Chassis Control	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes (VOS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Partial	Yes	Yes
Drive Control	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes (VOS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Partial	Yes	Yes
Automated Driving	Partial (emerging ADAS)	Partial (Level 2 support)	Yes (Level 2+, L3 planned)	Partial	Partial	No	Partial	Yes	Yes (AOS)	Yes	Yes (Level 2+, L3 planned)	Yes (Level 2+ by 2027)	Yes (ASIL-D, ADAS focus)	Yes	Yes	Yes (Level 2+, scaling to L3)	Yes	Yes	Yes
In-Vehicle Infotainment	Yes (primary focus)	Yes (primary focus)	Yes	Partial	Yes	Yes (primary focus)	Yes	Yes	Yes (HOS)	Yes	Yes (primary focus)	Yes (Pleos Connect)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
High Performance Computing	Yes (emerging)	Yes (cockpit-focused)	Yes	No	Partial	Yes (cockpit-focused)	Partial	Yes	Yes (AOS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supported Chip Cores																			
ARM	Yes (Cortex-A, R)	Yes (Cortex-A, Qualcomm/NVIDIA)	Yes (Cortex-A, R, NVIDIA)	Yes (Cortex-M)	Yes (Cortex-A, R, M)	Yes (Cortex-A, R)	Yes (Cortex-A, R)	Yes (Cortex-A, R, M)	Yes (Cortex-A for some models)	Yes (Cortex-A, R)	Yes (Cortex-A, R, Qualcomm)	Yes (Cortex-A, R, NVIDIA Orin)	Yes (Cortex-A, R, M)	Yes (Cortex-A, R)	Yes (Cortex-A, R, M)	Yes (Cortex-A, R, NVIDIA)	Yes (Cortex-A, R)	Yes (Cortex-A, R, M)	Yes (Cortex-A, R)
Huawei Ascend	No	No	No	No	No	No	No	No	Yes (Ascend 610/910D)	No	No	No	No	No	No	No	No	No	No
x86	Partial (Intel-based ECUs)	No	No	No	No	No	No	No	No	No	Partial (Intel-based cockpits)	No	Partial (Intel Atom in some ECUs)	No	No	No	No	No	No
TriCore	No	No	No	No	No	No	No	Yes (Infineon partnerships)	No	Yes (Infineon partnerships)	No	No	Yes (Infineon AURIX)	No	No	Yes (Infineon partnerships)	No	Yes (Infineon partnerships)	No
DSPs	Yes (integrated in SoCs)	Yes (Qualcomm/NVIDIA SoCs)	Yes (NVIDIA SoCs)	Partial	Partial	Yes (integrated in SoCs)	Partial	Yes (e.g., TI C66x)	Yes (integrated in SoCs)	Yes (Qualcomm SoCs)	Yes (NVIDIA SoCs)	Yes (NVIDIA SoCs)	Yes (TI C66x, others)	Yes (integrated in SoCs)	Yes (integrated in SoCs)	Yes (NVIDIA SoCs)	Yes (integrated in SoCs)	Yes (integrated in SoCs)	Yes (integrated in SoCs)
RISC-V	Partial (exploring)	No	No	Yes (exploring for MCUs)	Yes (exploring)	Yes (exploring)	Yes (exploring)	Yes (Axera, Horizon)	No	Partial (exploring)	No	No	No	Yes (exploring)	Partial (exploring)	No	Partial (exploring)	Yes (Axera)	Yes (exploring)
Proprietary Architectures	No	No	Yes (NVIDIA NPUs)	No	No	No	No	Yes (Schumacher chip)	Yes (Ascend 610/910D)	No	Yes (Qualcomm NPUs)	Yes (NVIDIA NPUs)	No	No	Yes (Shenji NX9031 NPU)	Yes (NVIDIA NPUs)	Yes (Turing chip)	No	Yes (Longying No. 1)
Features																			
Hypervisor Support	Yes (ACRN, others)	Yes (via Linux kernel)	Yes	Partial	Partial	Yes	Partial	Yes	Yes	Yes	Yes	Yes	Yes (QNX Hypervisor)	Yes	Yes	Yes	Yes	Yes	Yes
Functional Safety Level Supported	ASIL-B	ASIL-B	ASIL-D	ASIL-D	ASIL-B	ASIL-B	ASIL-B	ASIL-D	ASIL-D	ASIL-D	ASIL-D	ASIL-D	ASIL-D	ASIL-D	ASIL-D	ASIL-D	ASIL-D	ASIL-D	ASIL-D
Integrated UI	Yes (AGL UCB)	Yes (Android-based UI)	Yes	Partial	Yes	Yes	Yes	Yes	Yes (HOS)	Yes	Yes (MBUX-based)	Yes (Pleos Connect, AAOS-based)	Yes (cockpit applications)	Yes	Yes	Yes	Yes	Yes	Yes
Integrated Middleware																			
SOME/IP	Yes (exploring for AUTOSAR)	No	Yes (likely, AUTOSAR)	Yes (AUTOSAR Classic)	Yes (likely, AUTOSAR)	No	Yes (likely, AUTOSAR)	Yes (via Infineon)	Yes (some models, AUTOSAR)	No	Yes (AUTOSAR, MBUX)	No	Yes (AUTOSAR compatibility)	Yes (likely, AUTOSAR)	No	Yes (AUTOSAR, VW.AC)	Yes (via VW partnership)	Yes (AUTOSAR, Infineon)	Yes (AUTOSAR)
MQTT	Yes (for connectivity)	Yes (primary for V2X, infotainment)	Yes (for V2X, unconfirmed)	Yes (for connectivity)	Yes (for connectivity)	Yes (primary for connectivity)	Yes (for V2X, unconfirmed)	Yes (for connectivity)	Yes (for V2X, IoV)	Yes (for CarIoT, infotainment)	Yes (for V2X, unconfirmed)	No	Yes (for V2X/IoT)	Yes (for connectivity)	Yes (for V2X, unconfirmed)	Yes (for V2X, unconfirmed)	Yes (for V2X)	Yes (for V2X)	Yes (for connectivity)
DDS	Yes (exploring for ADAS)	No	Yes (for ADAS, likely)	No	Yes (for ADAS, unconfirmed)	No	Yes (for ADAS, unconfirmed)	Yes (for ADAS)	Yes (for ADAS)	Yes (for ADAS)	Yes (for ADAS, likely)	Yes (for ADAS, control)	Yes (RTI Connext, FastDDS)	Yes (for ADAS)	Yes (for ADAS)	Yes (for ADAS, likely)	Yes (for ADAS)	Yes (for ADAS)	Yes (for ADAS)
Proprietary Standards	Yes (AGL SOA services)	Yes (Android SOA)	Yes (SOA-based)	Yes (AUTOSAR-based)	Yes (SOA-based)	Yes (SOA-based)	Yes (SOA-based)	Yes (SOA, non-AUTOSAR)	Yes (SOA-based)	Yes (Linux/Vela SOA)	Yes (MBUX SOA)	Yes (Pleos Playground, SOA)	Yes (QNX SDP, SOA)	Yes (SOA-based)	Yes (SkyOS-L, SOA)	Yes (VW.AC, SOA)	Yes (SOA-based)	Yes (SOA, non-AUTOSAR)	Yes (SOA-based)