

GLOSSARY OF TECHNICAL TERMS

In this document, unless the context otherwise requires, explanations and definitions of certain terms used in this document in connection with our Company and our business shall have the meanings set out below. These meanings may not always correspond to standard industry usage.

“ADAS”	advanced driver-assistance systems, electronic systems in vehicles that assist drivers in driving and parking
“ADP Link”	Aggregated Dualstream Port Link, the Company’s proprietary high-speed serial interface protocol for automotive, AR, and endoscope applications
“AEC-Q100”	a failure mechanism-based stress test qualification for ICs used in automotive applications
“AR/VR”	augmented reality and virtual reality, immersive technologies that overlay digital content onto the real world or create fully simulated environments respectively
“automotive-grade”	a chip designed, manufactured and qualified to meet automotive standards, such as AEC-Q100
“BER”	bit error rate, the ratio of erroneous bits to total transmitted bits over a period of time or data volume, used to quantify the reliability of a communication link
“bridging”	a component that connects two different interfaces or protocols, enabling data transfer between them
“CDR”	clock and data recovery, a circuit in high-speed serial receivers to reconstruct timing and data from received signals
“ClearEdge technology platform”	a proprietary underlying technology platform that integrates high-bandwidth SerDes, protocol processing and encryption, and high-definition video processing to support scalable chip development and feature reuse
“C-PHY”	MIPI C-PHY, a physical interface using 3-phase symbol encoding for high data rates with reduced pins for high-resolution sensors and displays
“CPU”	central processing unit, the primary processor of a computer or electronic system that executes instructions and performs general-purpose computation
“CXL”	compute express link, an open standard high-speed interconnect enabling low-latency communication between CPUs and accelerators, memory expanders or other devices
“DDR” and “LPDDR”	double data rate and low power double data rate, a type of high-speed memory
“domain controller”	a central electronic control unit in a smart vehicle that manages a specific functional domain, such as cockpit

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“DP” and “eDP”	DisplayPort and embedded DisplayPort, digital display interface standards used for transmitting high-definition audio and video signals
“DSC”	display stream compression, a visually lossless compression standard that greatly reduces bandwidth for transmitting high-resolution video
“eARC”	enhanced audio return channel, an HDMI2.1 audio return specification that supports higher-bandwidth, multi-channel audio transmission than ARC
“EDA”	electronic design automation, software tools used to design and verify electronic systems such as integrated circuits and printed circuit boards
“fabless”	a chip design business model whereby the company focuses on chip design and outsources wafer fabrication and assembly and testing to third-party service providers
“foundry”	a manufacturer specializing in the production and manufacturing of chips in the field of integrated circuits
“FPGA”	Field-Programmable Gate Array, an integrated circuit designed to be configured after manufacturing to perform different logic functions
“GPU”	graphics processing unit, a specialized processor originally designed for graphics rendering and increasingly used for parallel computation workloads including AI training and inference
“HDCP”	high-bandwidth digital content protection, digital copy protection for audio and video content transmitted across connections
“HDMI”	high-definition multimedia interface, a proprietary digital interface for transmitting high-quality video and audio signals between devices
“HDR”	high dynamic range, a display technology producing greater contrast, wider color and brightness range and color depth
“HPC”	high-performance computing, the use of advanced computing clusters for massive parallel processing of complex workloads including AI and machine learning
“HUD”	head-up display, a display technology that projects information onto a transparent surface within the user’s sight
“IC”	integrated circuit, a set of electronic circuits fabricated on a small semiconductor substrate
“intelligent vision terminal”	an end device that captures, processes and displays video or images, potentially integrating AI

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“I/O chip”	Input/Output chip, an integrated circuit to manage and mediate the data communication between a computer’s CPU and its peripheral devices or external networks
“LiDAR”	light detection and ranging, a remote sensing technology that uses laser beams to measure precise distances to an object or surface
“LVDS”	low-voltage differential signaling, a technical standard that specifies electrical characteristics of a differential and serial signaling standard
“MAL”	Multi-Audio Link, the Company’s proprietary bi-directional high-speed serial interface protocol designed to transmit multiple audio channels simultaneously between devices
“MIPI”	mobile industry processor interface, a family of communication standards for mobile devices and peripherals developed by the MIPI Alliance
“D-PHY”	MIPI D-PHY, a physical interface connecting cameras and displays to processors, with high noise immunity and high jitter tolerance. It also offers low-latency transitions between high-speed and low-power modes
“DSI/CSI-2”	two serial interface protocols defined by the MIPI Alliance, where DSI is used for display panels and CSI-2 is used for image sensors used in cameras
“MST”	Multi-Stream Transport, a DisplayPort feature that carries multiple independent video streams over a physical link
“OLED”	organic light-emitting diode, a display technology using an organic film that emits light in response to electric current
“on-device AI”	AI inference or partial training performed locally on a device, rather than on remote cloud servers
“PCIe retimer”	a PCIe signal-conditioning chip that compensates for channel attenuation and mitigates jitter to enhance signal integrity and extend signal reach
“PCIe switch”	a PCIe interconnect device that enables efficient communication among multiple devices, often used in data centers and AI acceleration systems
“PLL”	Phase-Locked Loop, a control system that generates an output signal whose phase is related to its input
“redriver”	a high-speed signal conditioning chip that amplifies and equalizes attenuated differential signals to improve signal amplitude and quality without full retiming
“reference design”	a technical design of a system that contains its essential elements and serves as a model for others to copy, adapt or modify

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“SATA”	serial advanced technology attachment, a computer bus interface connecting host bus adapters to storage devices
“Scaler”	a processing block that resizes input images or video to match the resolution of different display panels
“SerDes”	serializer/deserializer, functional blocks used in high-speed communications to convert data between serial and parallel formats
“SoC”	system-on-chip, a chip which integrates the core components of a computer or other electronic system
“spatial computing”	a computing paradigm that senses and models real-world space and fuses it with digital content in real time
“tape-out”	the final stage in the IC design process where the verified physical design data (mask sets) is released to the semiconductor foundry for wafer fabrication
“UHD”	ultra-high-definition, 4K or higher video resolution
“USB/USB-C”	universal serial bus (USB), an industry standard for digital data transmission and power delivery; USB-C, a reversible connector standard
“UVM”	universal verification methodology, a standardized methodology for IC functional verification
“VGA”	video graphics array, a standard display interface
“VRR”	variable refresh rate, a display technology that allows the screen refresh rate to dynamically follow the frame rate of the video source, reducing tearing and stuttering
“wafer”	a circular silicon substrate used in the manufacturing of ICs, where various circuit structures can be fabricated to produce IC products with specific electrical functions
“4K”, “8K” or “10K”	generic terms for UHD display resolutions of approximately 3840×2160 pixels, 7680×4320 pixels, and 10240×4320 pixels, respectively