

GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains explanations of certain technical terms used in this document in connection with our Company and our business. Such terminology and meanings may not correspond to standard industry meanings or usage of those terms.

“μm”	micron
“4K2K”	a frame size of 3,840 x 2,160 or 4,096 x 2,160 pixels
“AI”	artificial intelligence
“ADAS”	advanced driver assistance systems
“AMOLED”	active matrix organic light emitting diodes, a type of organic light emitting diode that uses TFT to control individual pixels, enabling potentially better image quality and lower power consumption
“AR”	augmented reality, a technology that overlays virtual digital images and information onto real world environment
“ASIC”	application specific integrated circuit, an IC designed for specific purposes and manufactured for specific user requirements and electronic systems
“BSI”	backside illumination
“CAN”	Controller Area Network, a widely used field bus with a higher speed protocol primarily used in more demanding applications
“CAGR”	compound annual growth rate
“CCD”	charge-coupled device, a light sensitive IC that converts photons into electrical charges, which are then processed to form an image
“CIS”	CMOS image sensor
“CMOS”	complementary metal-oxide semiconductor, a technology used in the design and manufacturing of ICs
“DC”	direct current
“DCG”	dual conversion gain, an image sensor technology that allows each pixel to be read out with both a high and low conversion gain
“DDIC”	display driver integrated circuit, a semiconductor device that serves as an interface between microprocessors and display technologies

GLOSSARY OF TECHNICAL TERMS

“design win”	where a component or subsystem (such as a chip, sensor, or module) is selected by a customer to be integrated into their product design.
“DMS”	driver monitoring system
“Edge AI”	technology paradigm that combines the capabilities of AI with edge computing, deploying AI algorithms and models directly on edge devices, such as IoT sensors, smartphones, industrial machines and other local computing devices
“ESG”	environmental, social and corporate governance
“EVS”	event-based vision sensor, a type of imaging sensor that detects changes in light intensity at the pixel level
“fabless”	a business model of semiconductor companies that design and sell semiconductor products and solutions while relying on external foundries for semiconductor fabrication
“FAE”	field application engineer
“FHD”	full high definition
“foundry”	a semiconductor company with fabrication facilities that manufactures semiconductor chips for other companies
“fps”	frames per second
“HD”	high definition
“HDR”	high dynamic range
“HUD”	head-up display, projects driving related information onto the windshield or a small screen in front of the driver
“H/V”	horizontal/vertical
“IC”	integrated circuit
“IGBT”	insulated gate bipolar transistor, a power transistor that acts as a high-speed switch
“IoT”	Internet of Things, the network of physical objects that are embedded with sensors, software, and other technologies to connect and exchange data with other devices and systems over the internet
“ITS”	intelligent transportation system

GLOSSARY OF TECHNICAL TERMS

“LCD”	liquid crystal display, a flat panel display technology that uses liquid crystals to modulate light and create images
“LCOS”	liquid crystal on silicon, a microdisplay technology that combines liquid crystal and silicon backplane technology to create high-resolution, reflective displays
“LDO”	low dropout regulator, a type of voltage regulator that can maintain a stable output voltage
“LED”	light emitting diode
“LiDAR”	Light Detection and Ranging, a remote sensing method that uses laser light to measure distances to objects and create detailed 3D representations of the environment
“LIN”	Local Interconnect Network, a widely used field bus with a lower speed protocol that are used in less critical functions
“LOFIC”	lateral overflow integration capacitor, a component in CIS that enhances dynamic range by storing overflow charge from the photodiode in a large capacitor
“MCU”	microcontroller unit, a small, self-contained computer on a single IC
“MOSFET”	metal oxide semiconductor field effect transistor, a type of transistor used as an electronic switch or for signal amplification
“MP”	megapixels
“NIR”	near-infrared, a portion of the electromagnetic spectrum with wavelengths just beyond the visible light range
“NPU”	neural processing unit, a specialized hardware accelerator designed to handle complex computations required for AI and machine learning
“ODM”	original design manufacturer, a company that designs and manufactures products, often based on specifications provided by another company
“OEM”	original equipment manufacturer, a company that produces parts or equipment that are then used by another company to build their own finished products
“OLED”	organic LED, a flat panel display technology used in devices like TVs, monitors, and smartphones

GLOSSARY OF TECHNICAL TERMS

“PC”	personal computer
“PCB”	printed circuit board
“PMIC”	power management IC, an IC designed to manage and distribute power within an electronic device
“PSRR”	power supply rejection ratio, a measure of how well a circuit can reject noise or ripple present on its power supply
“QPD”	quad phase detection, a technique used in image sensors to improve autofocus performance and low-light capabilities
“RVC”	rear view camera
“SBC”	system basis chip, a semiconductor device that integrates various functions commonly needed in automotive electronic control units onto a single chip
“SerDes”	Serializer/Deserializer, an IC or a pair of ICs used in high-speed communication to convert parallel data into a serial stream for transmission and then back into parallel data at the receiving end
“SoC”	System-on-Chip, an IC that combines all or most components of an electronic system onto a single chip
“SLAM”	simultaneous localization and mapping, a technology that enables robots or other autonomous vehicles to build a map of an unknown environment while simultaneously determining their own location within that map
“SNR”	signal-to-noise ratio, a measure that compares the strength of a desired signal to the strength of background noise
“TCON”	timing controller, a component that controls the timing and placement of pixels on the screen, ensuring the image is displayed correctly
“TDDI”	touch and display driver integration, a technology that combines the touch sensor and display driver into a single chip
“TED”	TCON embedded driver, an IC that combines the functionality of a TCON and source drivers
“TVS”	transient voltage suppressor, a semiconductor device designed to protect electronic circuits from voltage spikes or surges
“VR”	virtual reality, computer-generated, simulated environment