

Analog products, MEMS and Sensors ("AM&S") reportable segment

Analog Integrated Circuits

We develop a broad range of innovative smart power and analog ICs, comprising both application specific and general-purpose analog products. These serve a wide spectrum of markets and applications including automotive, smart grid, cloud computing, data servers, industrial automation, power conversion and personal electronics.

We are a leading supplier of analog semiconductors devices for automotive industry worldwide, enabling the electrification and digitalization of the car, and the pervasion of electronics in both traditional internal combustion engine vehicles as well as in electric cars, full or hybrid. Based on our proprietary BCD and VIPpower technologies, we provide solutions for a range of car systems, such as battery management, traction engine, braking systems, airbag, door zone, e-fuse, and power management for ECUs.

In Industrial (as defined below) our product families include ASICs and ASSPs, covering motion control, power and energy management and factory automation. We continuously introduce new devices in our MasterGaN® and VIPerGaN families integrating a silicon driver and GaN power transistors in a single package. Our connectivity ICs range from wireline to wireless solutions. For wireline communication, we offer a complete family of transceivers compatible with different protocol standards used in the industry. Finally, we have a strong presence with our galvanic isolated gate drivers (also known as STGAP family) that are used both in industrial and automotive markets.

In Communications Equipment, Computers and Peripherals (as defined below) we serve our customers with power management solutions for data storage, as well as address the high power and high efficiency needs for servers and AI data centers.

In Personal Electronics (as defined below) we provide custom analog ICs, mainly power management ICs for battery powered devices. We deploy wireless charging solutions from low to high power across applications from smartphones to wearables, as well as display power management ICs and FingerTip touch screen controllers.

In General-Purpose Analog (as defined below) we have a wide product portfolio addressing all the market segments, spanning high-end analog front-end products, AC-DC and DC-DC converters, gate drivers for MOSFET , IGBT, SiC and GaN transistors, intelligent power switches, high & low side drivers, LED drivers, real-time clocks & timers, supervision and control ICs, as well as a comprehensive range of operational amplifiers (both low-voltage and high-voltage), comparators and current-sense amplifiers.

MEMS Sensors and Actuators

Our MEMS portfolio includes both sensors and actuators for a broad range of applications, including smartphones, personal devices, computers, automotive, industrial, healthcare and IoT.

MEMS sensors include motion MEMS (accelerometers, gyroscopes, magnetic sensors), environmental sensors (pressure, temperature and presence detection) and biosensors. We offer a unique sensor portfolio, from discrete to fully integrated solutions, high performance sensor fusion to improve the accuracy of multi-axis sensor systems in order to enable highly-demanding applications, such as navigation and location-based services, optical image stabilization and high-level quality products. Our latest range of smart sensors includes machine learning and edge AI processing capabilities built into the sensor enabling ultra-low power gesture recognition and tracking applications.

MEMS actuators include: (i) thermal and piezoelectric actuators for 2D and 3D printing in consumer, commercial and industrial market applications; and (ii) piezoelectric actuators for applications such as smartphone camera autofocus, MEMS loudspeakers and image projection.

Optical Sensing Solutions

We have a broad portfolio of optical sensing solutions based on our proprietary differentiated technologies such as FlightSense, BrightSense and SafeSense by ST. These address various markets, including 3D sensing for automotive applications such as in-cabin monitoring and occupant detection, as well as being used for industrial and consumer applications. Our optical sensing solutions are composed of both specialized components developed for dedicated customer systems and full optical sense and illumination system solutions targeting multiple customers.