Analog, Smart Power, Low Power RF, Touch Screen Controllers

We develop a broad range of innovative power, smart power and analog ICs, to serve markets such as those relating to smart grid, cloud computing, automation, personal electronics and power conversion. These product families include: Industrial ASICs and ASSPs, covering motion control, power and energy management and automation; General Purpose Analog Products, which includes high end analog front-end products as well as RF ICs; and Custom Analog ICs, mainly power management ICs (“PMIC”) for data storage, servers and portable power management devices. In 2021, we further deployed wireless charging solutions and enlarged our offering to cover low to high power products and across personal electronics applications from smartphones to wearables. We also expanded our presence in the automotive and industrial markets with our Galvanic Isolated Gate Drivers (also known as STGAP Family).

We also develop a comprehensive range of operational amplifiers (both low-voltage and high-voltage), comparators and current-sense amplifiers. In addition to our portfolio of mainstream operational amplifiers and comparators, we offer specific products for healthcare, industrial, and automotive applications, as well as a range of high-performance products specifically designed to meet the strict requirements of the wearable market.

In 2021, we introduced further devices in our MasterGaN® family, integrating a silicon driver and GaN power transistors in a single package. Our connectivity ICs range from wireline to wireless solutions. We optimize our products for reliability of the communication channel and low power consumption. For wireline communication, we offer a complete family of transceivers compatible with different protocol standards used in the industry (PRIME, Meters and More, IEC 61334-5-1, CAN and others). Our ultra-low power wireless solutions include Sub-1GHz RF chips (aka SPIRIT Family), latest generation Bluetooth Low Energy (aka BlueNRG Family). We sell to OEMs and Mass Market both Standard and Dedicated RF solutions, either chips or certified modules.

Our FingerTip family of Touch Screen Controllers provides true multi-touch capability, supporting unlimited simultaneous touches, and it is optimized for the extreme low power consumption. FingerTip also enhances multi-touch actions such as pinch-to-zoom, supports stylus operations and is compatible with both flat and curved display panel.

MEMS Sensors and Actuators

Our MEMS portfolio includes both Sensors and Actuators. We sell our MEMS products in a broad range of application fields, including mobile, gaming, computer, automotive, industrial, healthcare and IoT.
MEMS Sensors include Motion MEMS (accelerometers, gyroscopes, magnetic sensors), Environmental Sensors (pressure, humidity and temperature) and Microphones. 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 indoor navigation and location-based services, optical image stabilization and high-level quality products.

MEMS Actuators include: (i) Thermal and Piezoelectric Actuators for 2D and 3D Printing in Consumer, Commercial and Industrial market applications; (ii) Piezoelectric Actuators for applications such as smartphone camera Auto Focus and MEMS loudspeakers; and (iii) Piezoelectric, Electrostatic and Electromagnetic Actuators for emerging VR/AR applications, ultra-low power depth cameras and LIDAR Systems for assisted Smart Driving.

**Optical Sensing Solutions**
We also have a broad portfolio of optical sensing solutions based on ST proprietary differentiated technologies such as FlightSense, addressing various markets, and in particular the fast-growing 3D sensing consumer and automotive applications. Our optical sensing solutions are composed of both specialized components developed for dedicated customers’ systems; and full optical sense and illumination system solutions targeting multiple customers.