We are creators and makers of technology

One of the world’s largest semiconductor companies

48,000 employees of which 8,400 in R&D

$12.8 B revenues in 2021

Over 80 sales & marketing offices serving over 200,000 customers across the globe

13 manufacturing sites

Signatory of the United Nations Global Compact (UNGC)
Member of the Responsible Business Alliance (RBA)

As of December 31, 2021
Our vision

ST stands for life.augmented

Everywhere microelectronics make a positive contribution to people’s lives, ST is there.
Our value proposition

For our **shareholders**
- Return value in line with our objective
- Sustainable and profitable growth

For our **customers**
- Provide differentiating enablers
- Independent, reliable & secure supply chain

For all **stakeholders**
- Committed to sustainability
- Our values: Integrity – People – Excellence
Our technology starts with you

At ST we create technology that starts with You

Our employees

Our customers

Our partners
Where you find us

Making **driving** safer, greener and more connected

Enabling the evolution of **industry** towards smarter, safer and more efficient factories & workplaces

Making **homes & cities** smarter, for better living, higher security, and to get more from available resources

Making everyday **things** smarter, connected and more aware of their surroundings
Trends and markets
Our strategy stems from key long-term enablers

**Smart Mobility**
Helping car manufacturers make driving safer, greener and more connected for everyone

**Power & Energy**
Enabling industries to increase energy efficiency everywhere and the use of renewable energy

**Internet of Things & 5G**
Supporting the proliferation of smart, connected IoT devices with products, solutions & ecosystems
ST provides innovative solutions to help our customers make driving safer, greener and more connected for everyone.

- **Increase safety for road users & driver comfort and convenience**
- **Affordable, desirable electric vehicles**
- **Cleaner, greener Internal Combustion Engines (ICE)**

Road crashes carry a high human toll and cost $500B+ every year.

- Electric vehicles from 9% in 2019 to over 20% in 2025
- ICEs in over 90% of new vehicles produced 2020-2025

Sources: [www.asirt.org](http://www.asirt.org), Strategy Analytics
* Excluding Mild Hybrid EV
ST technology and solutions enable customers to increase energy efficiency everywhere & support the use of renewable energy sources.

- Rising demand for and usage of electrical energy
- Decrease carbon emissions to reduce global warming impact
- Increase use of renewable energy

Over 30% global electricity demand increase from 2020 to 2030

45% CO2 emission reduction from 2010 to 2030 to limit warming to 1.5°C

Electrical energy from renewal sources from ~10% in 2020 to ~20% in 2030

Sources: IEA, IPCC, BP
Internet of things & 5G

ST provides sensors, embedded processing, connectivity, security and power management, as well tools and ecosystems.

- **Cloud connected and data-enabled services**
- **Digital security for all data**
- **5G accelerating the connection of objects to the IoT**

**Two billion** industrial IoT & utility connected devices by 2022

IoT security services market over **$10 billion** in 2021

Over **90 million** new 5G IoT connections in 2026

Sources: ABI
Our strategy
We address four end markets

Automotive

Industrial

Personal electronics

Communications equipment, computers & peripherals
Our strategic objectives

**Automotive**
- Lead in car electrification
- Lead in car digitalization

**Industrial**
- Lead in embedded processing
- Accelerate growth in analog & sensors
- Expand in power & energy management
- Accelerate growth with industrial OEMs

**Personal electronics**
- Lead in selected high-volume smartphone applications with differentiated products or custom solutions
- Leverage broad portfolio to address high-volume applications

**Communications Equipment, Computers & Peripherals**
- Address selected high-volume applications with differentiated products or custom solutions
- Address selected applications in cellular and satellite communication infrastructure
- Leverage broad portfolio to address high-volume applications
Products and technologies
Differentiated technologies are our foundation

<table>
<thead>
<tr>
<th>MEMS</th>
<th>Smart Power: BCD</th>
</tr>
</thead>
<tbody>
<tr>
<td>for sensors &amp; micro-actuators</td>
<td>(Bipolar - CMOS - Power DMOS)</td>
</tr>
<tr>
<td>FD-SOI CMOS</td>
<td>Discrete, Power MOSFET, IGBT</td>
</tr>
<tr>
<td>FinFET through Foundry</td>
<td>Silicon Carbide, Gallium Nitride</td>
</tr>
<tr>
<td>Analog &amp; RF CMOS</td>
<td>Vertical Intelligent Power</td>
</tr>
<tr>
<td>eNVM CMOS</td>
<td>Optical sensing solutions</td>
</tr>
</tbody>
</table>

**Packaging technologies**
- Leadframe – Laminate – Sensor module – Wafer level
Our products and solutions enable customer innovation

Dedicated Automotive ICs

Analog, Industrial & Power Conversion ICs

GP MCU & MPU, Secure MCUs, EEPROM

Discrete & Power Transistors

MEMS & Optical sensing solutions

ASICs based on ST proprietary technologies
<table>
<thead>
<tr>
<th>Dedicated Automotive ICs</th>
<th>Discrete &amp; Power Transistors</th>
<th>Analog, Industrial &amp; Power Conversion ICs</th>
<th>GP, Connected MCU, MPU Secure MCU, EEPROM</th>
<th>MEMS &amp; Optical sensing solutions</th>
<th>ASICs based on ST proprietary technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPC5</td>
<td>STPOWER</td>
<td>STSPIN</td>
<td>STM32</td>
<td>iNEMO</td>
<td>RF-SOI</td>
</tr>
<tr>
<td>Stellar</td>
<td>SIC</td>
<td>VIperPlus</td>
<td>STSECURE</td>
<td>Flight Sense</td>
<td>FD-SOI</td>
</tr>
<tr>
<td>ADAS</td>
<td>IGBT</td>
<td></td>
<td>ST25</td>
<td></td>
<td>BICMOS</td>
</tr>
</tbody>
</table>

**ST product portfolio enabling strategic trends**

**Smart Mobility**

**Power & Energy**

**Internet of Things & 5G**
Dedicated automotive ICs

<table>
<thead>
<tr>
<th>Automotive MCUs</th>
<th>ADAS solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Scalable single- and multi-core MCU solutions</td>
<td>• CMOS image sensors</td>
</tr>
<tr>
<td>• Targeting cost-sensitive to highly-advanced applications</td>
<td>• Image signal processors</td>
</tr>
<tr>
<td>• Comprehensive development ecosystem</td>
<td>• Radar transceivers</td>
</tr>
<tr>
<td></td>
<td>• V2X communication solutions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infotainment &amp; telematics</th>
<th>Automotive analog &amp; power</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Makes the driving experience more fun and comfortable</td>
<td>• Compliance with rigorous automotive requirements</td>
</tr>
<tr>
<td>• Outstanding audio fidelity and positioning accuracy in every condition</td>
<td>• Design-ins at automotive suppliers and car makers</td>
</tr>
<tr>
<td>• Secure smartphone mirroring</td>
<td>• Wide portfolio of analog, power and digital products</td>
</tr>
<tr>
<td>• Safe vehicle connectivity with wide set of peripherals</td>
<td>• VIPower* HSDs, LSDs &amp; H-bridges and LED drivers</td>
</tr>
<tr>
<td></td>
<td>• Complete system kit solutions</td>
</tr>
</tbody>
</table>

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Discrete & power transistors

**Diodes, rectifiers, thyristors (SCR), AC switches**
- Silicon carbide (SiC) & high- and low-voltage silicon diodes
- Ultra-fast & bridge rectifiers
- Power Schottky diodes & field-effect rectifiers
- Thyristors (SCR) & Triacs
- ACS* AC switches

**Transient Voltage Suppressors (TVS) Integrated EMI filtering and protection ICs**
- ESD protection
- EOS & lightning surge protection
- Current limiters
- IPAD* Integrated EMI and ESD protection devices
- Integrated passive devices

**Key power technologies & packages for: Car electrification, power management, motor control**
- Gallium Nitride (GaN) on silicon power and RF transistors
- LDMOS & DMOS RF power transistors
- Silicon-Carbide MOSFETs
- High- and low-voltage silicon power MOSFETs (STripFET, Planar & MDmesh*)
- IGBTs. Power bipolar transistors
- ACEPACK* power modules. SLLIMM* intelligent power modules

* registered and/or unregistered trademarks of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere
# Analog, industrial & power conversion ICs

## Power management
- AC/DC & DC/DC converters
- Analog & digital controllers
- Linear voltage regulators
- LED drivers & lighting ICs
- Intelligent Power Switches
- Battery management ICs
- Voltage reference
- eFuses
- Wireless power ICs
- PoE ICs
- Photovoltaic ICs
- Rad-Hard products

## Analog products & Specific ICs
- Operational amplifiers
- Comparators
- Current sensing amplifiers
- Filtering & signal conditioning
- Interfaces & transceivers
- Reset and Supervisors
- Audio ICs
- Switches
- Rad-Hard products
- Medical ICs
- Smart Metering ICs

## Motor control
- Brushed DC motor drivers
- Brushless DC motor drivers
- Stepper motor drivers
- MOSFET & IGBT gate drivers
- Galvanic isolation ICs
- GaN drives

## Connectivity solutions
- Bluetooth® Low Energy ICs
- Sub-1 GHz transceivers, Sigfox-compatible devices
- LoRaWAN® technology
- Short-range RF transceivers
- Powerline communication ICs
- IO-Link
MEMS & optical sensing solutions

### Motion sensors
- Accelerometers
- e-compasses
- Gyroscopes
- iNEMO* inertial modules
- T-Plus: Motion MEMS with embedded temperature sensor

### Environmental sensors
- Pressure sensors
- Temperature sensors
- Humidity sensors
- MEMS microphones

### Micro actuators
- Actuators for printheads
- Micro mirrors & drivers
- Piezoelectric actuators
- Electrostatic actuators
- Electromagnetic actuators
- Thermal actuators

### Optical sensing solutions
- FlightSense* ToF proximity & ranging modules
- 3D FlightSense* ToF sensors
- Global shutter CMOS image sensors
- Ambient light sensors
- Custom optical solutions

* registered and/or unregistered trademarks of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere
General purpose MCU & MPU, secure solutions & NFC

<table>
<thead>
<tr>
<th>General purpose 32-bit MCUs &amp; MPUs</th>
<th>General purpose 8-bit MCUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• STM32* 32-bit general-purpose microcontrollers (MCUs) and microprocessors (MPUs)</td>
<td>• 8-bit general purpose microcontrollers (MCUs)</td>
</tr>
<tr>
<td>• 1000+ compatible devices</td>
<td>• Dedicated series for mainstream, ultra-low-power and automotive</td>
</tr>
<tr>
<td>• Arm® Cortex® Cores</td>
<td>• Rich ecosystem</td>
</tr>
<tr>
<td>• Maximum integration</td>
<td></td>
</tr>
<tr>
<td>• Extensive ecosystem</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secure solutions</th>
<th>NFC &amp; Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Secure MCUs</td>
<td>• NFC / RFID Tags</td>
</tr>
<tr>
<td>• eSIM, eSE, NFC for mobile</td>
<td>• Dynamic NFC Tags</td>
</tr>
<tr>
<td>• eSIM, eSE and TPM for industrial, IoT and automotive</td>
<td>• NFC / RFID Readers</td>
</tr>
<tr>
<td>• Secure payment solutions</td>
<td>• UHF Readers</td>
</tr>
<tr>
<td>• Authentication and Brand protection solutions</td>
<td>• High-performance &amp; high-endurance EEPROM</td>
</tr>
</tbody>
</table>

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### ASICs based on ST proprietary technologies

ST offers strategic independence and product differentiation to ASIC customers through three key enablers:

- Advanced manufacturing technology platforms
- Worldwide design resources and advanced IP
- ST’s Independent Device Manufacturer supply chain

<table>
<thead>
<tr>
<th>Digital ASICs</th>
<th>Analog &amp; RF ASICs</th>
</tr>
</thead>
<tbody>
<tr>
<td>System-on-Chip designs in CMOS and FD-SOI technologies with eNVM option, as well as FinFET (through foundry)</td>
<td>Unique expertise in RF and analog design using advanced technologies, such as RFSOI, BiCMOS and millimeter wave</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEMS and imaging ASICs</th>
<th>Power ASICs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary micromachining process, deep expertise in MEMS integration Custom imaging solutions and premium foundry services</td>
<td>A broad portfolio of differentiated technologies including BCD, VIPower*, SiC, GaN and power MOSFET</td>
</tr>
</tbody>
</table>

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Manufacturing and R&D
We offer quality, flexibility and supply security
We are drivers of your innovation

Advanced R&D centers around the world for close collaboration with operations, customers, and partners

~8,400 people working in R&D and product design

13.5% of revenues invested in R&D in 2021

143 active R&D partnerships

~18,500 patents
~550 new filings in 2021

Open innovation with startups in 15 Proof of Concept centers
Our commitment to quality

**Our quality vision**

Elevate ST to the highest level of quality as an asset for our customers

**Our quality mission**

Ensure ST products meet the highest quality and reliability requirements of customers in the markets we address

**How do we achieve this?**

- Sustainable culture of quality excellence
- Customer focus
- Result-driven improvement programs
Customers & sales
We are partners with our customers worldwide

Over 80 sales offices in 35 countries
We serve more than 200,000 customers

Top 10 Customers* 2021
- Apple
- Bosch
- Continental
- Delta
- HP
- Huawei
- Intel-Mobileye
- Samsung
- Seagate
- Tesla

Unified worldwide account management tailored to each account to provide global coverage and service

Standard process, reporting & follow-up in Sales & Marketing worldwide
Differentiated approach by type of customer

*In alphabetical order
Q4 2021 Revenues

% by product group

- Microcontrollers & Digital ICs Group (MDG) - 30%
- Automotive & Discrete Group (ADG) - 34%
- Analog, MEMS & Sensors Group (AMS) - 36%
- Others - 0.3%

% by shipment location

- Americas - 68%
- EMEA - 20%
- Asia Pacific - 12%

% by region of origin

- Americas - 42%
- Asia Pacific - 33%
- EMEA - 25%

% by customer type

- Top 10 OEMs - 45%
- Distribution - 33%
- Other OEMs - 22%
Our people
Our technology starts with our people

As of December 31, 2021

<table>
<thead>
<tr>
<th>Region</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>~11,300</td>
</tr>
<tr>
<td>France</td>
<td>~11,300</td>
</tr>
<tr>
<td>Mediterranean</td>
<td>~4,900</td>
</tr>
<tr>
<td>Americas</td>
<td>~750</td>
</tr>
<tr>
<td>Asia</td>
<td>~19,000</td>
</tr>
<tr>
<td>Others</td>
<td>~1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>~66%</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>~17%</td>
</tr>
<tr>
<td>Marketing &amp; Sales, Divisional Functions, Administration &amp; General services</td>
<td>~17%</td>
</tr>
</tbody>
</table>
Sustainability
A long-standing public commitment to sustainability

- Environmental policy
- ST’s creation
- Business conduct & ethics policy
- 1st Environmental Decalogue

1991

- 1st Environmental report ISO 14001, EMAS
- ST Code of Conduct Principles of Sustainable Excellence
- Health Plan
- OHSAS 18001 certification

2001

- ST Code of Conduct Principles of Sustainable Excellence
- Supply Chain Responsibility
- Ethics committee
- Conflict Minerals program

2002

- ST Code of Conduct Principles of Sustainable Excellence
- Reforestation program
- OHSAS 18001 certification

2003

- ST Code of Conduct Principles of Sustainable Excellence
- ISO 50001 energy management
- ISO 22301 Business Continuity 1st certification
- 5th Environment, Health & Safety Decalogue

2005

- ST Code of Conduct Principles of Sustainable Excellence
- ISO 50001 energy management
- ISO 22301 Business Continuity 1st certification
- 5th Environment, Health & Safety Decalogue

2006

- ST Code of Conduct Principles of Sustainable Excellence
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- ISO 22301 Business Continuity 1st certification
- 5th Environment, Health & Safety Decalogue

2007

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- 5th Environment, Health & Safety Decalogue

2011

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- ISO 50001 energy management
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- 5th Environment, Health & Safety Decalogue

2012

- ST Code of Conduct Principles of Sustainable Excellence
- ISO 50001 energy management
- ISO 22301 Business Continuity 1st certification
- 5th Environment, Health & Safety Decalogue

2014

- ST Code of Conduct Principles of Sustainable Excellence
- ISO 50001 energy management
- ISO 22301 Business Continuity 1st certification
- 5th Environment, Health & Safety Decalogue

2016

- ST Code of Conduct Principles of Sustainable Excellence
- ISO 50001 energy management
- ISO 22301 Business Continuity 1st certification
- 5th Environment, Health & Safety Decalogue

2017

- ST Code of Conduct Principles of Sustainable Excellence
- ISO 50001 energy management
- ISO 22301 Business Continuity 1st certification
- 5th Environment, Health & Safety Decalogue

2019

- ST Code of Conduct Principles of Sustainable Excellence
- ISO 50001 energy management
- ISO 22301 Business Continuity 1st certification
- 5th Environment, Health & Safety Decalogue

2020

- ST Code of Conduct Principles of Sustainable Excellence
- ISO 50001 energy management
- ISO 22301 Business Continuity 1st certification
- 5th Environment, Health & Safety Decalogue

2021

- ST Code of Conduct Principles of Sustainable Excellence
- ISO 50001 energy management
- ISO 22301 Business Continuity 1st certification
- 5th Environment, Health & Safety Decalogue

Sustainability Charter

Commitment to be Carbon Neutral by 2027

2025 CO₂ goal achieved
Our sustainability strategy

Living our values

Putting people first
Augmenting everybody’s life
Protecting the environment
Acting together
Our sustainability strategy

Based on 2020 materiality exercise
## Our approach to sustainability

<table>
<thead>
<tr>
<th>Sustainable Technology</th>
<th>Sustainable Way</th>
<th>Sustainable Company</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>We create technology for a sustainable world</strong></td>
<td><strong>We prioritize people</strong></td>
<td><strong>We generate long-term value for all stakeholders</strong></td>
</tr>
<tr>
<td>- Designing responsible products and technologies</td>
<td>- Ensuring people health, safety, &amp; well-being</td>
<td>- Embedding risk management</td>
</tr>
<tr>
<td>- Managing the lifecycle of our products in sustainable way</td>
<td>- Role model in labor &amp; human rights</td>
<td>- Monitoring and developing the extended supply chain</td>
</tr>
<tr>
<td>- Responsible minerals sourcing</td>
<td>- Fostering diversity &amp; inclusion</td>
<td>- Promoting STEM in all our eco-systems</td>
</tr>
<tr>
<td>- Eco-design devices - power-efficient &amp; low-carbon</td>
<td>- Offering great employee experience</td>
<td>- Monitoring &amp; transparently reporting our progress</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>We protect the planet</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Committing to carbon neutrality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Leading environmental management system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Reducing water usage &amp; addressing local scarcity risks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Reducing waste &amp; promoting a circular economy</td>
<td></td>
</tr>
</tbody>
</table>
Our business model
Management of our impact

Suppliers
We require our suppliers to implement the Responsible Business Alliance (RBA) standards and encourage ISO and OHSAS certifications to address ethics, social, environmental, health and safety risks.
We participate in the Responsible Minerals Initiative.

Environment
We deploy programs to reduce our direct and indirect greenhouse gas emissions from all our operations, including Perfluorinated Compounds (PFCs), which have a very long atmospheric lifetime and high global warming potential.
We minimize the environmental, health and safety risks related to the chemicals and materials used in the manufacturing process, by basing the selection, handling, and substitution on the precautionary principles.
We are continually reducing our water footprint through reuse and recycling and all our wastewater is treated before being discharged into the environment.
We reduce, reuse, recycle or recover as much of our waste as possible, rather than sending it to incineration or landfill.

People
We ensure the health and safety of our employees through advanced management systems and certification.
We implement our Code of Conduct and the RBA standards in all our sites to mitigate our ethics and labor and human rights risks and carry out regular assessments and audits in all our production sites.

Products
Through our Sustainable Technology program we design products systematically taking into consideration the environmental impact of the device during its whole life cycle, including raw materials, transportation, manufacturing, usage and end of life.
Our Sustainable Technology program aims to develop responsible products which:

- improve our social and environmental footprint at every stage of the product life
- have the greatest positive impact on the planet and people in the end-application
We will be carbon neutral by our 40th anniversary

**Milestones**

- Compliance with the 1.5°C scenario by 2025 – recognized by SBTi
- Carbon neutral by 2027
- Sourcing 100% renewable energy by 2027
- Collaborative programs and partnerships for carbon neutrality throughout our ecosystems
Sustainability reporting
24th edition

Transparency – Reliability – Comparability

- Economic, environmental and social performance
- Our long-term sustainability ambitions and goals
- Program progress
- Focus on site initiatives
- Stakeholder inclusiveness
- Aligned with international reporting standards and disclosures: Global Reporting Initiative (GRI) Sustainability Accounting Standards Board (SASB) Task Force on Climate-related Financial Disclosures (TCFD)
- Content and data verified by a 3rd party

Read ST’s 2021 sustainability report: sustainabilityreports.st.com/sr21/
Our technology starts with You