We are creators and makers of technology

One of the world's largest semiconductor companies

- Over 50,000 employees of which 9,000+ in R&D
- $16.1 billion revenues in 2022
- Over 80 sales & marketing offices serving over 200,000 customers across the globe
- 14 main manufacturing sites
- Signatory of the United Nations Global Compact (UNGC)
- Member of the Responsible Business Alliance (RBA)

As of December 31, 2022
ST stands for life.augmented

Everywhere microelectronics makes a positive contribution to people’s lives, ST is there.
Our value proposition for all stakeholders

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

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

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

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 & Connectivity**
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.

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

Affordable, desirable electric vehicles

Electric vehicles sales* from ~10 million in 2021 to ~30 million in 2025

Cleaner, greener Internal Combustion Engines (ICE)

ICEs in over 80% of new vehicles produced 2021-2025

Sources: 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

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

- More than 20 Billion IoT connected devices per year by 2025
- IoT security services market over $12 billion by 2025
- Four billion cellular IoT connections by 2025

Source: ABI, Ericsson, GSMA
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
- Lead in Power & Energy Management
- Lead in Sensors
- Accelerate in Analog

**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
- Leverage broad portfolio to address high-volume applications
Products and technologies
Differentiated technologies are our foundation

- MEMS
  for sensors & micro-actuators

- Smart Power: BCD
  (Bipolar - CMOS - Power DMOS)

- FD-SOI CMOS
  FinFET through Foundry

- Discrete, Power MOSFET, IGBT
  Silicon Carbide, Gallium Nitride

- Analog & RF CMOS

- Vertical Intelligent Power

- eNVM CMOS

- Optical sensing solutions

- 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
Dedicated automotive ICs

**Automotive MCUs**
- Scalable single- and multicore MCU solutions
- Targeting cost-sensitive to highly advanced applications
- Comprehensive development ecosystem

**ADAS solutions**
- CMOS image sensors
- Image signal processors
- Radar transceivers
- V2X communication solutions

**Infotainment & telematics**
- Makes the driving experience more fun and comfortable
- Outstanding audio fidelity and positioning accuracy in every condition
- Secure smartphone mirroring
- Safe vehicle connectivity with wide set of peripherals

**Automotive analog & power**
- Compliance with rigorous automotive requirements
- Design-ins at automotive suppliers and car makers
- Wide portfolio of analog, power and digital products
- VIPower* HSDs, LSDs & H-bridges and LED drivers
- Complete system kit solutions

* registered and/or unregistered trademarks of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere
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

Transistor 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

### General-purpose 32-bit MCUs & MPUs
- STM32* 32-bit general-purpose microcontrollers (MCUs) and microprocessors (MPUs)
- 1000+ compatible devices
- Arm® Cortex® cores
- Maximum integration
- Extensive ecosystem

### General-purpose 8-bit MCUs
- 8-bit general-purpose microcontrollers (MCUs)
- Dedicated series for mainstream, ultra-low-power and automotive
- Rich ecosystem

### Secure solutions
- Secure MCUs
- eSIM, eSE, NFC for mobile
- eSIM, eSE and TPM for industrial, IoT and automotive
- Secure payment solutions
- Authentication and Brand protection solutions

### NFC & Memory
- NFC / RFID Tags
- Dynamic NFC tags
- NFC / RFID Readers
- UHF Readers
- High-performance & high-endurance EEPROM

* registered and/or unregistered trademarks of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere
### 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</td>
<td>Unique expertise in GHz wireless RF and analog design using advanced technologies, such as RFSOI, BiCMOS, and millimeter wave</td>
</tr>
<tr>
<td>technologies with eNVM option, as well as FinFET</td>
<td>(through foundry)</td>
</tr>
<tr>
<td>(through foundry)</td>
<td></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</td>
<td>A broad portfolio of differentiated technologies including BCD, VIPower*, SiC, GaN, and power MOSFET</td>
</tr>
<tr>
<td>Custom imaging solutions and premium foundry services</td>
<td></td>
</tr>
</tbody>
</table>

* registered and/or unregistered trademarks of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere
Manufacturing and R&D
We offer quality, flexibility, and supply security

Front-End (Wafer fabrication)

Back-End (Assembly & Test)

Sweden
Norrköping

France
Crolles
Rousset
Tours
Rennes

Italy
Agrate
Catania
Marcianise

Morocco
Bouskoura

Malta
Kirkop

China
Shenzhen

Philippines
Calamba

Malaysia
Muar

Singapore
We are drivers of your innovation

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

- ~12% of revenues invested in R&D in 2022
- ~1,950 active and pending patents
- ~600 new filings in 2022
- ~200 active R&D partnerships
- ~280 active R&D and product design
- Open innovation with startups in 15 Proof of Concept centers
- 70 startups engaged in our programs in 2022
Recognized as a top global innovator

STMicroelectronics recognized as Top 100 Global Innovator 2022

STMicroelectronics recognized as one of the Top 100 Global Innovators 2023 by Clarivate
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* 2022
- Apple
- Bosch
- Continental
- Samsung
- SpaceX
- Tesla
- Huawei
- Vitesco

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
FY 2022 Revenues

% by product group

- Microcontrollers & Digital ICs Group (MDG): 32%
- Automotive & Discrete Group (ADG): 37%
- Analog, MEMS & Sensors Group (AMS): 31%
- Others: 0.1%

% by shipment location

- Americas: 63%
- EMEA: 23%
- Asia Pacific: 14%

% by region of origin

- Americas: 41%
- EMEA: 29%
- Asia Pacific: 30%

% by customer type

- Distribution: 33%
- Top 10 OEMs: 43%
- Other OEMs: 24%
Our commitment to quality
Our quality culture is driven by a commitment to continuously improve, a prevention mindset & our STRIVE for Excellence values

STRIVE FOR EXCELLENCE

Find out more at www.st.com/quality
Quality is a key business enabler for ST

<table>
<thead>
<tr>
<th>Our quality vision</th>
<th>Our quality mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevate ST quality to the highest levels, positioning it as a valuable asset for our customers.</td>
<td>Ensure ST products meet the highest quality and reliability requirements of customers in the markets we address.</td>
</tr>
</tbody>
</table>

Our quality strategy

- Deploy a mindset and culture of quality
- Focus on quality performance at our customers
- Innovate for advanced quality and reliability
- Drive structured result-driven improvement programs
An annual status of the ST Quality organization, infrastructure and initiatives that demonstrate our commitment to continually strive for excellence.

Read ST’s 2021-22 Quality review
Our people
Our technology starts with our people

As of December 31, 2022

- Manufacturing ~65.5%
- Research & Development ~17.5%
- Marketing & Sales, Divisional Functions, Administration & General services ~17%

Geographical Distribution:
- Asia ~20,000
- France ~12,000
- Italy ~12,000
- Mediterranean ~5,600
- Americas ~800
- Others ~1,100
Sustainability
Sustainability has been engraved in our business model and culture for 30 years

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>Creation of ST. Business conduct &amp; ethics policy</td>
</tr>
<tr>
<td>1993</td>
<td>First environmental policy</td>
</tr>
<tr>
<td>1995</td>
<td>First environmental decalogue</td>
</tr>
<tr>
<td>1997</td>
<td>First environmental report, ISO 14001, EMAS</td>
</tr>
<tr>
<td>2000</td>
<td>Signatory of the UNGC 10 principles</td>
</tr>
<tr>
<td>2001</td>
<td>Creation of ST Foundation</td>
</tr>
<tr>
<td>2002</td>
<td>Establishment of a reforestation program</td>
</tr>
<tr>
<td>2007</td>
<td>Conflict Minerals program</td>
</tr>
<tr>
<td>2011</td>
<td>Sustainable Technology program</td>
</tr>
<tr>
<td>2012</td>
<td>ISO 50001 energy management</td>
</tr>
<tr>
<td>2014</td>
<td>5th Environment, Health &amp; Safety Decalogue</td>
</tr>
<tr>
<td>2016</td>
<td>ISO 22301 Business Continuity 1st certification</td>
</tr>
<tr>
<td>2019</td>
<td>2025 CO₂ goal achieved</td>
</tr>
<tr>
<td>2020</td>
<td>Commitment to be Carbon Neutral by 2027*</td>
</tr>
<tr>
<td>2021</td>
<td>New Sustainability Charter published</td>
</tr>
<tr>
<td>2023</td>
<td>26th annual Sustainability report</td>
</tr>
</tbody>
</table>

*on scope 1 & 2 and partially scope 3
Our approach to sustainability

**Sustainable technology**
- Designing responsible products and technologies
- Managing the lifecycle of our products in sustainable way
- Responsible minerals sourcing
- Eco-design devices - power-efficient & low-carbon

**Sustainable way**
- Ensuring people health, safety, & well-being
- Role model in labor & human rights
- Fostering diversity & inclusion
- Offering great employee experience

**Sustainable company**
- Committing to carbon neutrality*
- Leading environmental management system
- Reducing water usage & addressing local scarcity risks
- Reducing waste & promoting a circular economy
- Embedding risk management
- Monitoring and developing the extended supply chain
- Promoting STEM in all our eco-systems
- Monitoring & transparently reporting our progress

*on scope 1 & 2 and partially scope 3
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

Sustainable technology

Product compliance
- (Conflict-mineral free, RoHS)
- Material Declaration & ECOPACK*

Eco-design devices
- (power-efficient & low-carbon)

Responsible applications
- (planet-friendly & human-welfare)

Social & Environmental programs
- (RBA code of conduct, Water, Waste, Energy & Climate Change, Chemicals)

Manufacturing

End of life

Raw materials

Product development

Usage

* registered and/or unregistered trademarks of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere
We will be carbon neutral by our 40th anniversary

**Milestones**

- Compliance with the 1.5°C scenario by 2025 – recognized by SBTi
- Carbon neutral on scope 1 & 2 and partially scope 3 by 2027
- Sourcing 100% renewable energy by 2027
- Collaborative programs and partnerships for carbon neutrality throughout our ecosystems

**In 2022**

- 62% renewable energy
- 45 projects saving an additional 24GWh of energy
Sustainability reporting
26th 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)
  EU taxonomy
• Content and data verified by a 3rd party

Read ST’s 2023 sustainability report: sustainabilityreports.st.com
Our technology starts with You

Find out more at www.st.com