

Our business model

Resources

Human

- 50,000+ employees
- 118 nationalities
- 35% women, 65% men
- Average age: 40

Financial

- US\$19.98 billion total assets
- US\$3.52 billion capital expenditures
- US\$1.8 billion net financial position

Intellectual

- 9,000+ employees in R&D
- US\$1.9 billion R&D investments
- 186 R&D partnerships

Manufactured

- 14 main manufacturing sites in 9 different countries
- 66% of employees in manufacturing
- ~6,600 suppliers

Natural

- 2,878GWh of energy consumed
- 62% of renewable electricity
- ~22 million m³ of water withdrawn
- ~4,300 chemicals used

Social and relationship

- ST values and Code of Conduct
- US\$2.2 million cash donated by ST to local communities
- 148,000+ hours donated to local communities

Main steps in our value chain



Suppliers

We purchase raw materials, equipment, energy, gas, chemicals and services from many suppliers and subcontractors.

R&D concept and design

New products are created in a multi-step process including architecture conception, electrical layout, electrical and logic simulation, chip layout and generation of the masks that will be used to etch the design in silicon.

Front-end manufacturing

Manufacturing chips requires around 400 separate stages, starting with a plain wafer, and resulting in the etching of several hundreds to thousands of dies.

Management of our impacts

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.

Products

Through our Sustainable Technology program we design products systematically taking into consideration the environmental impact of the device during its whole lifecycle, including raw materials, transportation, manufacturing, usage and end of life.

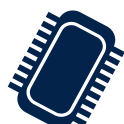
People

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.



Electrical wafer sorting

Dies on the wafer are electrically tested. This step is known as wafer sort or probe.



Back-end manufacturing

The dies are cut from the wafer before being assembled in a package. The chips are then tested prior to delivery to the customer.



Product use and end of life

We offer a large portfolio of products suitable for the wide range of applications addressed by our customers.

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.

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Unless otherwise stated, all data refer to 2022.

Value created

Human

Engaged and skilled people in an inclusive and safe workplace

- average of 47 hours training per employee
- 86% of employees recommend ST as a great place to work
- 0.12 total recordable case rate (injuries and illnesses) for employees and contractors

Financial

Sustainable financial performance

- US\$16.13 billion net revenues
- US\$3.68 billion salaries and benefits
- US\$416 million income tax paid
- US\$212 million cash dividends

Intellectual

Innovative products and solutions

- ~19,500 active patents
- 77% of new products classified responsible products
- 13% of revenues generated by new product lines

Manufactured

Responsible and effective business operations

- 200,000+ customers served
- ISO 9001, 14001, 14064, 22301, 50001, 45001 and IATF certifications
- 100% of largest manufacturing sites covered by RBA audits
- 91% of suppliers' agreement to comply with ST business ethics and corporate responsibility standard

Natural

Mitigation of the impact of our activities

- 40% decrease in GHG emissions scopes 1 and 2 since 2018 (in absolute value)
- 95% of waste reused, recovered or recycled
- 42% of water recycled or reused

Social and relationship

Knowledge and values shared with all

- 228,000+ beneficiaries in local communities
- 660+ volunteering initiatives worldwide
- 972,000+ people trained on computer basics by ST Foundation since 2003