Rad-Hard product range
Fast expanding European offering

ST offers a large portfolio of rad-hard products, packaged, tested and qualified for space

In space for over 35 years, the high quality of ST’s aerospace products is recognized by agency audits & customer vendor surveys.

ST continues to be the industry reference for the longevity of its space products as demonstrated by the transfer to its 6” fab of its rad-hard Logic portfolio. Based on this strong space legacy, ST is rapidly expanding its portfolio of rad-hard products in power, analog and high density, in full synergy with its product expertise and technologies portfolio.

KEY FEATURES
• Wide product range
• Long term commitment to space
• ST is ESCC / JAN / QML certified
• Agency qualified products
• RHA\(^{(1)}\) qualified products
• Hermetic packages & dice
• Upgrade to no electrically floating metal\(^{(2)}\)
• Complete ecosystem

ST SPACE ECOSYSTEM
All ST Rad-Hard products have a complete radiation report with Total Ionisation Dose (TID) and Single Event Latch-up (SEL) test results, as well as all pertinent tests including, Single Event Upset (SEU) and Single Event Transient (SET) measured in typical configurations for users can perform worst case analysis.

\(^{(1)}\) Radiation Hardness Assurance
\(^{(2)}\) In progress
SPACE APPLICATIONS

**Schottky diodes & rectifiers : ESCC Qualified**
- Currently under development: New Single Effect Event (SEE) tested Schottky Diodes up to 200 V (1)

**Bipolar transistors: ESCC & JANS**
- Hirel & 100 krad(Si) version with low dose rate wafer by wafer tests

**MOSFET : ESCC Qualified**
- N Channel : 50 krad(Si) – P Channel : 100 krad(Si)

**Logic ICs : ESCC or QML-V Qualified**
- AC Logic : 300 krad(Si) – HC Logic : 50 krad(Si) – CMOS4000B: 100 krad (Si)
- Complete portfolio transferred to 6” for long-time support

**LVDS: QML-V qualified**
- Driver – Receiver – Transceiver – Crosspoint Switch – High Speed Serializer & Deserializer
- Cost-effective & high-performance series

**Analog ICs: 100 / 300 krad(Si) QML-V qualified**
- Latest additions:
  - RHF200 420 MHz differential amplifier
  - RHRDAC1612 16-bit ENOB D/A converter
  - RHFA128 8-channel 12-bit A/D converter now sampling
- Several products under development...

**Power ICs: 100 / 300 krad(Si) QML-V qualified**
- RHFL4913 / RHFL6000A: 300 krad(Si)
- Voltage regulators with best-in-class SET
- RHRPM442x series of dual low-side gate drivers with superior performance
- Several products under development:
  - Integrated Current Limiter IC, Point-of-Load...

**Technology Platforms**
- 65 nm Rad-Hard ASIC platform
- Currently developing 28 nm FDSOI Rad-Hard Platform
- Advanced imaging technologies for space components

**RAD-HARD PORTFOLIO OVERVIEW**