



# TRASNA

## SECURE SIM CHIPS FOR MOBILE COMMUNICATION

The Telecom market closed 2022 with around 4.3 billion units shipped (source: ABI Research) proving to be more resilient to the effects of the pandemic and ongoing chip shortage than initially anticipated. Key factors pushing market revenue are the growth of SIM cards due to increasing adoption of smartphones and feature phones in developing countries, the rising demand for eSIM driven by the penetration of high-end products as well as IoT devices and the take-off of 5G networks.

### TRASNA Secure SIM Chip Family

With years of experience in the telecom market, TRASNA has established a successful history of designing and selling innovative, secure SIM chips. With our unique expertise in advanced hardware architecture and security, ultra-low power embedded systems, we offer to the market an independent and competitive SIM chip solution open to all SIM card players.

We help mobile network operators and IoT companies to innovate, drive revenue and stay ahead competition thanks to a long-term technological roadmap and supply strategy.

- High performance Architecture
- Optimized die size embedding 256 KBytes (KB) and 480 KBytes Flash
- Advanced embedded 65nm technology
- Secure silicon sourcing through Samsung Fab in Korea

With Flash densities of 256 KB and 480 KB, the TRASNA Secure SIM Chip family offers products covering the Native, USIM Java Card and LTE markets.

TRASNA Secure SIM Chip family is the ultimate choice for MNOs, OEMs, IoT operators looking to overtake competitors and to have secure supply chain.

### TRASNA Secure SIM Chip Features

#### CPU

High-performance 32-bit core  
Advanced low power modes

#### FLASH MEMORY

Fully flash-based  
Robust data retention (10 years)  
Erase/program cycle capability 100 Kcycles

#### TEMPERATURE

Operating Temperature  
• -40°C to +85°C

#### SECURITY

Secured Memories  
Data Encryption  
Algorithm protection of SPA and DPA attacks  
Unique serial number per chip

#### DEVELOPMENT TOOLS

Emulator  
Complete Development Suite

## PRODUCTS CHARACTERISTICS

Part Number	Clock frequency	Flash (KB)	RAM (KB)	Endurance	Application
TSS256A1	28MHz	256	5.5	100 000	*Consumer
TSS480A1	28MHz	480	13	100 000	*Consumer

\* ETSI normalized (TS 102 221)

For further information on TRASNA Secure SIM Chips, please visit : [trasna.io](https://trasna.io)

Request our SIM product briefs at : [sales@trasna.io](mailto:sales@trasna.io)



**Unleash the full potential of your application development with TRASNA Development tools !**

TRASNA provides a complete suite of development tools allowing customers to develop and fine-tune their SIM card applications while minimizing both the time and cost associated with creating secure applications. TRASNA development suite includes:

- an emulator (Secure hardware FPGA) for developers to test their applications in a controlled environment.
- CSKY development kit based on GNU's compiler technology.
- an embedded-flash bootloader that allows firmwares updates to be performed in the field, thus helping developers to keep their products up-to-date and running smoothly throughout the product lifecycle.

## QUALITY ✓

We provide top quality at competitive prices. Thanks to economies of scale, we can maximise operational resource efficiency.

Quality is in our DNA!

We do continuous testing on our products (BAP cards, new materials, field & environmental testing).

Our Quality Assurance Unit, who are experts in modern behavior, can manage your test plan or help you to define one.



## SUSTAINABILITY ✓

We consider the environment in every aspect of our business: when we design our products, when we select our suppliers, and when we participate in any project! We want to be an active contributor to the Sustainable Development Goals (SDGs) set by the United Nations, which defines global sustainable development priorities and aspirations for 2030

## ABOUT TRASNA

TRASNA is focused on Technology leadership providing semiconductors and its related software and services solutions for IOT mass deployment. TRASNA combines innovation in semiconductor design, secure Software, edge computing, AI and blockchain integration to deliver the most innovative and optimized System-On-Chip (SOC) to take advantage of huge IOT opportunities facilitated by the emergence of 5G in which networks can meet the communication needs of billions of connected objects and where the NB-IOT is part of 5G specifications.

TRASNA SOC embed RISC-V cores, i-SIM and GNSS, developed to offer the lowest BOM to the market to scale up the deployment of massive IOT. With its Telecom BU, TRASNA provide a unique offer with all products and services related to IOT connectivity such as eSIMs / eUICCs and expertise so its customers can build, innovate, and grow successful businesses in a constantly progressing environment.

We support and guide our customers through every step of their IoT device journey.

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