

STSECURE

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

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Secure MCUs

Overview

STSECURE, ensuring your peace of mind

In the fast growing digital world, STSECURE products and solutions protect your privacy and your assets by ensuring their confidentiality, their integrity and their availability to authorized requesters where and when needed. We deliver hardware- and software-certified solutions, offer seamless integration of security features, and are experts in cryptography and device architecture. With STSECURE portfolio, ST is securing all your applications from traditional applications, such as SIM, banking and ID, to the latest ones including contactless transactions and IoT connectivity.



All STSECURE solutions are based on [secure hardware platforms](#). To know more about our products, click on applications below.

Click [here](#) to know more about our partners.



Authentication



Solutions for brand protection, IoT and embedded systems

STSAFE-A | STSAFE-J | STSAFE-TPM

SIM & eSIM



Hardware & Solutions for consumer, M2M & automotive

ST33 | ST33-M | ST33-A
ST4SIM-M/S | ST4SIM-A

Secure Automotive



Hardware & Solutions for connected cars

ST33-A | STSAFE-V | ST4SIM-A

Secure NFC



Hardware & Solutions for secure mobile transactions

ST21NFC | ST33 | ST54 | STPay-Mobile

Secure Wearables



Hardware & Solutions for contactless applications

ST31 | ST54

Banking, ID & Transport



Hardware & Solutions for smartcard applications

ST31 | STPay | CD21

Authentication

Overview

A scalable offer for brand protection and embedded systems

STSAFE is a secure element product range providing authentication, confidentiality and platform integrity services to protect OEMs against cloning, counterfeiting, malware injection and unauthorized production. Compliant with the most demanding security certifications, STSAFE secure elements are turnkey solutions developed through a trusted supply chain with pre-provisioned secrets and certificates, that include a set of software libraries and drivers for secure, seamless integration.

STSECURE STSAFE-A Optimized	STSECURE STSAFE-J Flexible	STSECURE STSAFE-TPM Standardized
		
<ul style="list-style-type: none">• For consumer and industrial• Brand protection and authentication	<ul style="list-style-type: none">• Flexible Java platform• Open and generic applets	<ul style="list-style-type: none">• TCG-certified solution• Suitable for Windows or Linux-based applications

Secure MCUs/Authentication

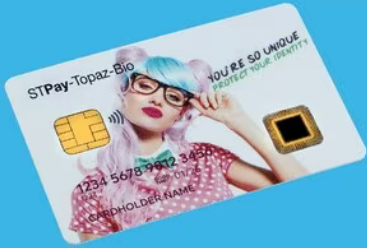
Part Number	General Description	Features set	Product Function	Software Kernel	Cryptography	Communication interfaces	Certification
ST33GTPMAI2C	Automotive TPM 2.0 device with an I2C interface	Automotive	TPM	TPM 2.0 rev138 redundant Flash loader	AES,ECC-256,ECC-384,RSA,SHA-1,SHA-2,SHA-3	I2C	CC EAL4+ (PP-TPM),FIPS140-2,TCG 2.0
ST33GTPMASPI	Automotive TPM 2.0 device with an SPI interface	Automotive	TPM	TPM 2.0 rev138 redundant Flash loader	AES,ECC-256,ECC-384,RSA,SHA-1,SHA-2,SHA-3	SPI	CC EAL4+ (PP-TPM),FIPS140-2,TCG 2.0
ST33KTPM2XI2C	TPM 2.0 devices with an SPI or I2C interface	Consumer	TPM	-	AES,ECC-256,ECC-384,RSA,SHA-1,SHA-2,SHA-3	I2C	CC EAL4+ (PP-TPM),FIPS140-3,TCG 2.0
ST33KTPM2XSPI	TPM 2.0 devices with an SPI or I2C interface	Consumer	TPM	-	AES,ECC-256,ECC-384,RSA,SHA-1,SHA-2,SHA-3	SPI	CC EAL4+ (PP-TPM),FIPS140-3,TCG 2.0
ST33TPHF20SPI	Trusted Platform Module 2.0 with TCG SPI interface	Consumer	TPM	TPM 2.0	AES,ECC,ECDAE,ECDH,RSA,SHA-1,SHA-256	SPI	CC EAL4+ (PP-TPM),FIPS140-2,TCG 2.0
ST33TPHF2EI2C	Trusted Platform Module 1.2 & 2.0 with TCG I2C interface	Consumer	TPM	TPM 1.2 & 2.0	AES,ECC,RSA,SHA-1,SHA-256	I2C	CC EAL4+ (PP-TPM),FIPS140-2,TCG 1.2,TCG 2.0
ST33TPHF2ESPI	Trusted Platform Module 1.2 & 2.0 with TCG SPI interface	Consumer	TPM	TPM 1.2 & 2.0	AES,ECC,RSA,SHA-1,SHA-256	SPI	CC EAL4+ (PP-TPM),FIPS140-2,TCG 1.2,TCG 2.0
ST33TPHF2XI2C	Long-term evolution TPM 2.0 device with an I2C interface	Consumer	TPM	TPM 2.0 rev138 redundant Flash loader	AES,ECC-256,ECC-384,RSA,SHA-1,SHA-2,SHA-3	I2C	CC EAL4+ (PP-TPM),FIPS140-2,TCG 2.0
ST33TPHF2XSPI	Long-term evolution TPM 2.0 device with an SPI interface	Consumer	TPM	TPM 2.0 rev138 redundant Flash loader	AES,ECC-256,ECC-384,RSA,SHA-1,SHA-2,SHA-3	SPI	CC EAL4+ (PP-TPM),FIPS140-2,TCG 2.0
STSAFE-A100	Authentication & Brand protection secure solution	Consumer, Industrial	Optimize	Authentication , secure channel establishment, secure storage	AES,ECC	I2C	CC EAL5+ (HW)
STSAFE-A110	Authentication, state-of-the-art security for peripherals and IoT devices	Consumer, Industrial	Optimize	Confidentiality LoRa, Sigfox protocol compliant	AES,ECC	I2C	CC EAL5+ (HW)
STSAFE-J100	Flexible programmable secure solution for Gateway	Industrial	Flexible	Javacard 3.0.4 Classic Edition/ GP 2.1.1	AES,ECC,Nescrypt,SHA-1,SHA-256	Contact ISO7816,I2C	CC EAL5+

Banking, ID & Transport

Overview

Secure solutions that comply with the highest security standards

ST's secure microcontrollers (MCUs) are designed for a wide range of applications including SDA & DDA banking, identification, transport and Pay TV solutions. From traditional smart cards to innovative wearables and biometric solutions, ST offers a complete portfolio of contact, dual-interface and contactless secure microcontrollers. On top of our secure MCUs, we propose a comprehensive System-on-Chip portfolio covering the payment market with the STPay solutions, the Identity market with the STeID MTCOS® 2.5 and the STeID MTCOS® 2.5 IDFlex, and the on-card biometric market with the STPay-Topaz-Bio.



Biometric system-on-cards

New authentication technology for smartcards. [More information here](#)

 ST31, STPay STPay-Topaz-Bio	Banking	 ST31, STeID J-Sign, J-Tacho	Identification	 ST31 GD21	Transport
					

- ST31 certified hardware platform
- Certified native and Java solutions for banking and ID, with a large choice of applets
- Optional MIFARE Classic®, MIFARE Plus® and MIFARE® DESFire® libraries

Secure MCUs/Banking, ID & Transport

Part Number	General Description	Features set	Software Kernel	Certification	Communication interfaces	Flash Size (kB)	EEPROM Size (kB) nom
CD21-Flash-CLAP	Flash-based Secure Microcontroller compliant with Calypso Light Application (CLAP) Specification	Transport	Native	CC EAL5+,Calypso,EMVCo	Contact ISO7816,Ctless ISO14443 Type B	-	-
CD21-Flash-Rev32	Flash-based Secure Microcontroller compliant with Calypso Revision 3 Version 3.2 Specification	Transport	Native	CC EAL5+,Calypso,EMVCo	Contact ISO7816,Ctless ISO14443 Type B	40	-
CD21-rev3	Dual interface / Calypso revision 3 with 4,8 or 18KB EEPROM	Transport	Calypso V3 - Card Application Rev2 - CD97 -CD97BX - CDLight	CC EAL5+,Calypso,EMVCo	Contact ISO7816,Ctless ISO14443 Type B	-	18
ST31G256	ST31 Dual Interface, Flash Secure Microcontroller	Banking,ID,Transport	-	CC EAL5+,CUP,EMVCo	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,ISO14443 Type B',VHBR	256	-
ST31G320	ST31 Dual Interface, Flash Secure Microcontroller	Banking,ID,Transport	-	CC EAL5+,CUP,EMVCo	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,ISO14443 Type B',VHBR	320	-
ST31G384	ST31 Dual Interface, Flash Secure Microcontroller	Banking,ID,Transport	-	CC EAL5+,CUP,EMVCo	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,ISO14443 Type B',VHBR	384	-
ST31G480	ST31 Dual Interface, Flash Secure Microcontroller	Banking,ID,Transport	-	CC EAL5+,CUP,EMVCo	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,ISO14443 Type B',VHBR	480	-
ST31H128	ST31 Contact, Flash Secure Microcontroller	Banking,ID,Transport	-	CC EAL5+,EMVCo	Contact ISO7816	128	-
ST31H192	ST31 Contact, Flash Secure Microcontroller	Banking,ID,Transport	-	CC EAL5+,EMVCo	Contact ISO7816	192	-
ST31H256	ST31 Contact, Flash Secure Microcontroller	Banking,ID,Transport	-	CC EAL5+,EMVCo	Contact ISO7816	256	-
ST31H320	ST31 Contact, Flash Secure Microcontroller	Banking,ID,Transport	-	CC EAL5+,EMVCo	Contact ISO7816	320	-
ST31N400	ST31 Secure dual interface microcontroller including Biometry features	-	-	CC EAL6+,EMVCo	Contact ISO7816,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO14443 Type F,GPIO,SPI,VHBR	400	-
ST31N500	ST31 Secure dual interface microcontroller including Biometry features	-	-	CC EAL6+,EMVCo	Contact ISO7816,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO14443 Type F,GPIO,SPI,VHBR	500	-
ST31N600	ST31 Secure dual interface microcontroller including Biometry features	-	-	CC EAL6+,EMVCo	Contact ISO7816,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO14443 Type F,GPIO,SPI,VHBR	600	-
ST31P320	ST31 Dual interface, Flash secure microcontroller with enhanced security	Banking,ID,Transport	-	CC EAL5+,EMVCo	Contact ISO7816,Ctless ISO14443 Type A	320	-
ST31P450	ST31 Dual interface, Flash secure microcontroller with enhanced security	Banking,ID,Transport	-	CC EAL5+,EMVCo	Contact ISO7816,Ctless ISO14443 Type A	450	-
STPay-BlackPearl	Contact SDA Java Static platform with up to 15 kbytes of user NVM	Banking,Transport	Java Static	Discover,ELO,Mastercard,Visa	Contact ISO7816	-	15
STPay-BlueAmb-21	Contact DDA JavaCard platform with up to 40 kbytes of user NVM	Banking,Transport	Java Card	Discover,Mastercard,Visa	Contact ISO7816	40	-
STPay-BlueAmb-22	Contact DDA JavaCard platform with up to 55 kbytes of user NVM	Banking,Transport	Java Card	JCB,Mastercard	Contact ISO7816	55	-
STPay-BlueAmb-23	Contact DDA JavaCard platform with up to 95 kbytes of user NVM	Banking,Transport	Java Card	Amex	Contact ISO7816	95	-

STPay-ClamPearl	Contact SDA Java Static platform with up to 8 kbytes user NVM	Banking, Transport	Static Java	ELO,Mastercard,Visa	Contact ISO7816	-	8
STPay-Sapphire-1	Contact Banking SoC supporting broad range of payment applications	Banking	Java Card	Amex,Discover,Domestic,JCB,Mastercard,Visa	Contact ISO7816	75	-
STPay-Tiger-11	Dual-interface DDA JavaCard platform with up to 90 kbytes of user NVM	Banking, Transport	Java Card	Amex,Interac Flash,Mastercard,Visa	Contact ISO7816,Ctless ISO14443 Type A	90	-
STPay-Tiger-12	Dual-interface DDA JavaCard platform with up to 35 kbytes of user NVM	Banking, Transport	Java Card	Domestic,Mastercard,Visa	Contact ISO7816,Ctless ISO14443 Type A,Ctless ISO14443 Type B	35	-
STPay-Tiger-13b	Dual-interface DDA JavaCard platform with up to 90 kbytes of user NVM	Banking, Transport	Java Card	Mastercard,Visa	Contact ISO7816,Ctless ISO14443 Type A	90	-
STPay-Tiger-14	Dual-interface DDA JavaCard platform with up to 140 kbytes of user NVM	Banking, Transport	Java Card	Mastercard,Visa	Contact ISO7816,Ctless ISO14443 Type B	140	-
STPay-Tiger-2	Dual-interface DDA JavaCard platform with up to 150 kbytes of user NVM	Banking, Transport	Java Card	Amex,Mastercard,Visa	Contact ISO7816,Ctless ISO14443 Type A	150	-
STPay-Topaz-1	Dual-interface DDA JavaCard platform with up to 60 kbytes of user NVM	Banking, Transport	Java Card	Amex,Discover,Domestic,ELO,Interac Flash,JCB,Mastercard,RuPay,Visa	Contact ISO7816,Ctless ISO14443 Type A	60	-
STPay-Topaz-18	Dual-interface DDA JavaCard platform with up to 110kbytes of user NVM	Banking, Transport	Java Card	CUP,Domestic,Mastercard,Visa	Contact ISO7816,Ctless ISO14443 Type A	80	-
STPay-Topaz-Bio	DI Banking SoC supporting on-card biometrics	-	Java Card	Mastercard,Visa	Contact ISO7816,Ctless ISO14443 Type A	60	-
STelD-MT2.5	Secure native SoC solution for electronic ID and Travel Documents	ID	-	CC EAL5+	Contact ISO7816,Ctless ISO14443 Type A,Ctless ISO14443 Type B	-	144
STelD-MTIDFlex	Native SoC for electronic ID Documents	ID	-	-	Contact ISO7816,Ctless ISO14443 Type A	-	144





Secure Automotive

Overview

Connecting and securing cars for safer driving

With cars becoming more connected and therefore more vulnerable to attacks, security is critical for automotive applications. ST is committed to provide secure solutions that address the challenges raised by this new era of digital technologies.

The well-proven ST33-A hardware secure element and STSAFE-V family are designed to guarantee passenger safety, avoid abnormal vehicle behavior, and ensure data privacy in vehicle-to-everything (V2X) communications, digital key systems, electric vehicles, wireless Qi charging designs, battery management systems (BMS), and Advanced Driver Assistance Systems (ADAS).

 ST33-A Hardware	 STSAFE-V System-on-chip
	
<ul style="list-style-type: none">• Hardware Secure ICs• Set of software libraries• AEC-Q100 & CC certified• User guide support	<ul style="list-style-type: none">• Secure network connectivity• Digital key access• Battery management• Secure autonomous driving• New services (EV & Qi charging)
Discover ST33-A	Discover STSAFE-V

Secure MCUs/Secure Automotive

Part Number	General Description	Features set	Product Function	Software Kernel	Cryptography	Communication interfaces	Certification	Flash Size (kB)	RAM Size (kB) nom
ST33G1M0A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	-	AES Rindael, EDES+, Nescrypt	Contact ISO7816, SPI, SWP	CC EAL5+	1024	30
ST33G1M2A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	-	AES Rindael, EDES+, Nescrypt	Contact ISO7816, GPIO, SPI, SWP	CC EAL5+	1280	30
ST33G384A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	-	AES Rindael, EDES+, Nescrypt	Contact ISO7816, GPIO, SPI, SWP	CC EAL5+	384	30
ST33G512A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	-	AES Rindael, EDES+, Nescrypt	Contact ISO7816, GPIO, SPI, SWP	CC EAL5+	512	30
ST33G640A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	-	AES Rindael, EDES+, Nescrypt	Contact ISO7816, GPIO, SPI, SWP	CC EAL5+	640	30
ST33G768A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	-	AES Rindael, EDES+, Nescrypt	Contact ISO7816, GPIO, SPI, SWP	CC EAL5+	768	30
ST33G896A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	-	AES Rindael, EDES+, Nescrypt	Contact ISO7816, GPIO, SPI, SWP	CC EAL5+	896	30
ST33GTPMAI2C	Automotive TPM 2.0 device with an I2C interface	Automotive	TPM	TPM 2.0 rev138 redundant Flash loader	AES, ECC-256, ECC-384, RSA, SHA-1, SHA-2, SHA-3	I2C	CC EAL4+ (PP-TPM), FIPS140-2, TCG 2.0	-	-
ST33GTPMASPI	Automotive TPM 2.0 device with an SPI interface	Automotive	TPM	TPM 2.0 rev138 redundant Flash loader	AES, ECC-256, ECC-384, RSA, SHA-1, SHA-2, SHA-3	SPI	CC EAL4+ (PP-TPM), FIPS140-2, TCG 2.0	-	-
ST33K1M5A	Automotive, high-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU with SWP, ISO, SPI and I2C interfaces, and high-density Flash memory Solution designed for Automotive	Automotive	eSIM-eSE	-	AES, ECC, EDES+, MIFARE Classic Accelerator, Nescrypt, RSA, SMx	Contact ISO7816, GPIO, I2C, SPI, SWP	CC EAL6+, EMVCo, MTPS	1536	64
STSAFE-V100-QI	In-Vehicle System-On-Chip dedicated for Qi wireless Charging (WPC)	Automotive	eSE	Dedicated software Qi charging protocol compliant	AES Rindael, ECC-256, ECC-384, RSA, SHA-1, SHA-2, SHA-3	I2C, SPI	CC EAL4+	-	-
STSAFE-V110	Automotive Authentication - Qi WPC 1.3 compliant wireless charging	Automotive	eSE	Dedicated software Qi charging protocol compliant	AES, DES, TDES, ECC-256, ECC-384, ECDSA, ECDSA, ECSchnorr, HMAC, RSA, SHA-1, SHA-2, SHA-3	I2C	CC EAL4+	-	-
STSAFE-V1100-CCC	In_vehicle Secure Element based on Javacard OS platform and Digital Key Applet CCC V3.0	Automotive	eSE	Java Card OS (Version 3.0.5) and Digital key applet CCC V3.0	AES, ECC-256, ECC-384, HMAC, RSA, SHA-1, SHA-2, SHA-3	SPI	CC EAL5+ (HW)	-	-
STSAFE-V500	In-vehicle Secure Element based on JavaCard™ Open Platform & other use cases	Automotive	eSE	JavaCard™ OS (Version 3.0.5)	AES Rindael, ECC-256, ECC-384, HMAC, RSA, SHA-1, SHA-2, SHA-3	I2C, SPI	AECQ100, CC EAL5+	-	-


Secure Hardware Platforms

Overview

ST's secure microcontrollers provide solutions for a smarter and more secure connected world

With our STSECURE portfolio, STMicroelectronics offers secure microcontrollers that answer the market needs for advanced security. We deliver hardware-certified solutions based on advanced flash technology, with our latest generation implementing an ARM® SecurCore® processor.

Secure microcontroller solutions are driven by market dynamics in smart card technologies, mobile transactions and connectivity. ST is therefore bringing solutions to secure a wide range of applications, from banking, identification and cellular connectivity in consumer markets, to more recent applications, including authentication, secure NFC transactions, and IoT, industrial, and M2M connectivity.

STSECURE ST31 Banking ID Transport	STSECURE ST32 SIM & M2M	STSECURE ST33 Mobile Industrial Automotive
		
<ul style="list-style-type: none">• ARM® SecurCore® SC000• Contactless performance• 40nm Flash NVM• Common Criteria, EMVCo certified	<ul style="list-style-type: none">• ARM® 32-bit core• Consumer & M2M coverage	<ul style="list-style-type: none">• ARM® SecurCore® SC300 / M35P• High computing power• High memory size• 40nm Flash NVM• Common Criteria, EMVCo certified

Secure MCUs / Secure Hardware Platforms/ST23

Part Number	General Description	EEPROM Size (kB) nom	RAM Size (kB) nom	Internal ROM Size (kB) nom	Communication interfaces	Certification
SB23ZE08	ST23 Contact Secure MCU with 8 Kbytes EEPROM, enhanced security	8	4	140	Contact ISO7816	EMVCo
ST23ZC08	ST23 Contactless Secure MCU with 8 KBytes EEPROM, enhanced security and DES/AES cryptoprocessor, RF Type A,B,B'	8	4	92	Ctless ISO14443 Type A,Ctless ISO14443 Type B,ISO14443 Type B'	CC EAL5+,EMVCo
ST23ZR08	ST23 Dual Interface Secure MCU with 8 KBytes EEPROM, enhanced security and DES/AES cryptoprocessor,RF Type A,B,B' (Contactless low end ID-DL/DES)	8	4	92	Contact ISO7816,Ctless ISO14443 Type A,Ctless ISO14443 Type B	CC EAL5+,EMVCo

Secure MCUs / Secure Hardware Platforms/ST31 ARM SC000

Part Number	General Description	Flash Size (kB)	RAM Size (kB) nom	Communication interfaces	Cryptography	Certification	Features set
ST31G256	ST31 Dual Interface, Flash Secure Microcontroller	256	12	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,ISO14443 Type B',VHBR	AES	CC EAL5+,CUP,EMVCo	Banking,ID,T ransport
ST31G320	ST31 Dual Interface, Flash Secure Microcontroller	320	12	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,ISO14443 Type B',VHBR	AES	CC EAL5+,CUP,EMVCo	Banking,ID,T ransport
ST31G384	ST31 Dual Interface, Flash Secure Microcontroller	384	12	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,ISO14443 Type B',VHBR	AES	CC EAL5+,CUP,EMVCo	Banking,ID,T ransport
ST31G480	ST31 Dual Interface, Flash Secure Microcontroller	480	12	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,ISO14443 Type B',VHBR	AES	CC EAL5+,CUP,EMVCo	Banking,ID,T ransport
ST31H128	ST31 Contact, Flash Secure Microcontroller	128	10	Contact ISO7816	AES	CC EAL5+,EMVCo	Banking,ID,T ransport
ST31H192	ST31 Contact, Flash Secure Microcontroller	192	10	Contact ISO7816	AES	CC EAL5+,EMVCo	Banking,ID,T ransport
ST31H256	ST31 Contact, Flash Secure Microcontroller	256	10	Contact ISO7816	AES	CC EAL5+,EMVCo	Banking,ID,T ransport
ST31H320	ST31 Contact, Flash Secure Microcontroller	320	10	Contact ISO7816	AES	CC EAL5+,EMVCo	Banking,ID,T ransport
ST31N400	ST31 Secure dual interface microcontroller including Biometry features	400	16	Contact ISO7816,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO14443 Type F,GPIO,SPI,VHBR	AES,ECC,EDES+,MI FARE Classic Accelerator,Nescrypt,RSA	CC EAL6+,EMVCo	-
ST31N500	ST31 Secure dual interface microcontroller including Biometry features	500	16	Contact ISO7816,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO14443 Type F,GPIO,SPI,VHBR	AES,ECC,EDES+,MI FARE Classic Accelerator,Nescrypt,RSA	CC EAL6+,EMVCo	-
ST31N600	ST31 Secure dual interface microcontroller including Biometry features	600	16	Contact ISO7816,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO14443 Type F,GPIO,SPI,VHBR	AES,ECC,EDES+,MI FARE Classic Accelerator,Nescrypt,RSA	CC EAL6+,EMVCo	-
ST31P320	ST31 Dual interface, Flash secure microcontroller with enhanced security	320	10	Contact ISO7816,Ctless ISO14443 Type A	AES	CC EAL5+,EMVCo	Banking,ID,T ransport
ST31P450	ST31 Dual interface, Flash secure microcontroller with enhanced security	450	10	Contact ISO7816,Ctless ISO14443 Type A	AES	CC EAL5+,EMVCo	Banking,ID,T ransport

Secure MCUs / Secure Hardware Platforms/ST32 ARM Core

Part Number	General Description	Features set	Product Function	Flash Size (kB)	RAM Size (kB) nom	Communication interfaces	Cryptography
ST32F384	ST32 Contact ARM® Cortex®-M3 based Secure Microcontroller	Consumer	SIM	384	8	Contact ISO7816	DES
ST32F512	ST32 Contact ARM® Cortex®-M3 based Secure Microcontroller	Consumer	SIM	512	12	Contact ISO7816	DES
ST32F512M	ST32 Contact ARM® Cortex®-M3 based Secure Microcontroller dedicated to M2M	M2M	SIM	512	12	Contact ISO7816	DES
ST32H480	Classic SIM / 32bit ARM® SecurCore® SC000 CPU and 480 Kbytes high-density Flash memory	Consumer	SIM	480	13	Contact ISO7816	DES

Secure MCUs / Secure Hardware Platforms/ST33 ARM core

Part Number	General Description	Features set	Product Function	Flash Size (kB)	RAM Size (kB) nom	Communication interfaces	Cryptography	Certification
ST33G1M0	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	1024	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33G1M0A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	1024	30	Contact ISO7816,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G1M0M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	1024	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G1M2	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	1280	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33G1M2A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	1280	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G1M2M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	1280	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G384A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	384	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G384M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	384	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G512	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	512	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33G512A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	512	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G512M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	512	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G640	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	640	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33G640A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	640	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G640M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	640	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G768	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	768	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+,EMVCo,MTPS

ST33G768A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	768	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G768M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	768	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G896	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	896	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33G896A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	896	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33G896M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	896	30	Contact ISO7816,GPIO,SPI,SWP	AES Rindael,EDES+,Nescrypt	CC EAL5+
ST33J1M0	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	1024	50	Contact ISO7816,GPIO,I2C,SPI,SWP	AES Rindael,EDES+,MIFARE Classic Accelerator,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33J1M1	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	1152	50	Contact ISO7816,GPIO,I2C,SPI,SWP	AES Rindael,EDES+,MIFARE Classic Accelerator,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33J1M3	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	1280	50	Contact ISO7816,GPIO,I2C,SPI,SWP	AES Rindael,EDES+,MIFARE Classic Accelerator,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33J1M5	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	1536	50	Contact ISO7816,GPIO,I2C,SPI,SWP	AES Rindael,EDES+,MIFARE Classic Accelerator,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33J1M8	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	1792	50	Contact ISO7816,GPIO,I2C,SPI,SWP	AES Rindael,EDES+,MIFARE Classic Accelerator,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33J2M0	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	2048	50	Contact ISO7816,GPIO,I2C,SPI,SWP	AES Rindael,EDES+,MIFARE Classic Accelerator,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33J896	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	896	50	Contact ISO7816,GPIO,I2C,SPI,SWP	AES Rindael,EDES+,MIFARE Classic Accelerator,Nescrypt	CC EAL5+,EMVCo,MTPS
ST33K1M0C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	1024	64	Contact ISO7816,GPIO,I2C,SPI,SWP	AES,ECC,EDES+,MIFARE Classic Accelerator,Nescrypt,RSA,SMx	CC EAL6+,EMVCo,MTPS

ST33K1M0M	High-speed secure MCU with Arm® Cortex®-M35P CPU with high-density Flash memory Solution designed for M2M Industrial	M2M	eSIM-eSE	1024	64	Contact ISO7816,GPIO,I2C,SPI ,SWP	AES,ECC,EDES+,MIFARE Classic Accelerator,Nescrypt,RSA,S Mx	CC EAL6+,EMVCo,MTPS
ST33K1M2C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	1280	64	Contact ISO7816,GPIO,I2C,SPI ,SWP	AES,ECC,EDES+,MIFARE Classic Accelerator,Nescrypt,RSA,S Mx	CC EAL6+,EMVCo,MTPS
ST33K1M2M	High-speed secure MCU with Arm® Cortex®-M35P CPU with high-density Flash memory Solution designed for M2M Industrial	M2M	eSIM-eSE	1280	64	Contact ISO7816,GPIO,I2C,SPI ,SWP	AES,ECC,EDES+,MIFARE Classic Accelerator,Nescrypt,RSA,S Mx	CC EAL6+,EMVCo,MTPS
ST33K1M5A	Automotive, high-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU with SWP, ISO, SPI and I2C interfaces, and high-density Flash memory Solution designed for Automotive	Automotive	eSIM-eSE	1536	64	Contact ISO7816,GPIO,I2C,SPI ,SWP	AES,ECC,EDES+,MIFARE Classic Accelerator,Nescrypt,RSA,S Mx	CC EAL6+,EMVCo,MTPS
ST33K1M5C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	1536	64	Contact ISO7816,GPIO,I2C,SPI ,SWP	AES,ECC,EDES+,MIFARE Classic Accelerator,Nescrypt,RSA,S Mx	CC EAL6+,EMVCo,MTPS
ST33K1M5M	High-speed secure MCU with Arm® Cortex®-M35P CPU with high-density Flash memory Solution designed for M2M Industrial	M2M	eSIM-eSE	1536	64	Contact ISO7816,GPIO,I2C,SPI ,SWP	AES,ECC,EDES+,MIFARE Classic Accelerator,Nescrypt,RSA,S Mx	CC EAL6+,EMVCo,MTPS
ST33K512M	High-speed secure MCU with Arm® Cortex®-M35P CPU with high-density Flash memory Solution designed for M2M Industrial	-	-	512	64	Contact ISO7816,GPIO,I2C,SPI ,SWP	AES,ECC,EDES+,MIFARE Classic Accelerator,Nescrypt,RSA,S Mx	CC EAL6+,EMVCo,MTPS
ST33K768C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	768	64	Contact ISO7816,GPIO,I2C,SPI ,SWP	AES Rindael,ECC,EDES+,MIFARE Classic Accelerator,Nescrypt,RSA	CC EAL6+,EMVCo,MTPS
ST33K768M	High-speed secure MCU with Arm® Cortex®-M35P CPU with high-density Flash memory Solution designed for M2M Industrial	-	-	768	64	Contact ISO7816,GPIO,I2C,SPI ,SWP	AES,ECC,EDES+,MIFARE Classic Accelerator,Nescrypt,RSA,S Mx	CC EAL6+,EMVCo,MTPS

Secure NFC

Overview

Building the most effective and secure mobile solutions

Mobile security is expanding from the largely deployed SIM technology to the growing NFC, embedded Secure Element (eSE) and embedded SIM (eSIM) technologies in smartphones, tablets, wearables, and laptops. ST provides an exhaustive offer of NFC and eSE/eSIM products to address secure mobile transaction applications such as secure connectivity, payment wireless charging and automotive: from the state-of-the-art ST21NFC to the ST54 integrating the widely deployed ST33.

 <p>ST21NFC NFC Controller</p> <ul style="list-style-type: none">• Best-in-class RF performances• Reduced bill of material & power consumption	 <p>ST33 eSE/eSIM</p> <ul style="list-style-type: none">• Multi-packages solution• GSMA SAS-UP certified flow	 <p>ST54 NFC & eSE/eSIM</p> <ul style="list-style-type: none">• All-in-one solution• GSMA SAS-UP certified flow• MIFARE® & FeliCa®	 <p>STPay-Mobile Mobile wallet platform</p> <ul style="list-style-type: none">• Platform based on ST54 SoC• Supporting digital wallets for transport, payment, car key and access control
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Secure MCUs/Secure NFC

Part Number	General Description	Features set	Product Function	Software Kernel	Flash Size (kB)	RAM Size (kB) nom	Communication interfaces	Certification
ST21NFCB	NFC Controller Card, Reader and P2P, NFC forum compliant	Consumer	NFC Controller	HCI, NCI, Reader, Card emulation & P2P	-	-	Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO15693,I2C,SPI,SWP	-
ST21NFCD	NFC Controller supporting Active Load Modulation booster	Consumer	NFC Controller	HCI, NCI 2.0, Reader, Card emulation & P2P	-	-	Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO15693,I2C,SPI,SWP	-
ST21NFCJ	NFC Controller supporting Active Load Modulation booster	Consumer	NFC Controller	HCI, NCI 2.0, Reader, Card emulation & P2P	-	-	Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO15693,I2C,SPI,SWP	-
ST33G1M0	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	-	1024	30	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G1M2	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	-	1280	30	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G512	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	-	512	30	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G640	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	-	640	30	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G768	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	-	768	30	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G896	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	-	896	30	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J1M0	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE4Mobile®	1024	50	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J1M1	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE4Mobile®	1152	50	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J1M3	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE4Mobile®	1280	50	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J1M5	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE4Mobile®	1536	50	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J1M8	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE Plus®	1792	50	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J2M0	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE4Mobile®	2048	50	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J896	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE4Mobile®	896	50	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33K1M0C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE4Mobile®	1024	64	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K1M2C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE4Mobile®	1280	64	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K1M5C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE4Mobile®	1536	64	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K768C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	MIFARE Classic®, MIFARE® DESfire®, MIFARE4Mobile®	768	64	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST54J	NFC controller and Secure Element single die	Consumer	NFC & eSIM-eSE	HCI, NCI 2.0, Reader, Card emulation & P2P supported	2048	64	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO14443 Type F,Ctless ISO15693,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo
ST54K	NFC controller and Secure Element single die and a UWB secure, fine-ranging subsystem host	Consumer	NFC & eSIM-eSE	HCI, NCI 2.0, Reader, Card emulation & P2P supported	2048	64	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO14443 Type F,GPIO,I2C,SPI,SWP,UWB	CC EAL5+,EMVCo
ST54L	Advanced NFC controller and Secure Element single die	Consumer,NFC & eSIM-eSE	NFC & eSIM-eSE	HCI, NCI 2.0, Reader, Card emulation & P2P supported	3300	100	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO14443 Type F,Ctless ISO15693,GPIO,I2C,SPI,SWP,UWB	CC EAL6+
STSAFE-S320	Mobile secure element for Android	Consumer	eSE	Secure OS JC 3.0.5, GP 2.3, SCP03, SCP11, Admt H, I2C /SPI, KeyMintv2, Weaver, Secure Storage	-	-	I2C,SPI	CC EAL5+

Secure Wearable solutions

Overview

To boost and optimized your designs

From ST31 secure microcontrollers to ST54 solutions integrating NFC controller, secure element and eSIM, ST offers a complete range of solutions for payment, transit and multiple contactless services. ST's technology is ideal for applications that require a card emulation function but are environmentally challenged or have limited space for the antenna.

 ST31 Optimized Passive	 ST54 Advanced Active
	
<ul style="list-style-type: none">• 40nm ST31 certified hardware platform• Supports mainly banking & transport applications• Supports MIFARE® for banking applications	<ul style="list-style-type: none">• Dedicated to middle & high-end wearables• Integrates eSIM function• Supports multiple secure applications

Secure MCUs/Secure Wearable solutions

Part Number	General Description	Product Function	Software Kernel	Communication interfaces	Certification
ST21NFCD	NFC Controller supporting Active Load Modulation booster	NFC Controller	HCI, NCI 2.0, Reader, Card emulation & P2P	Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO15693,I2C,SPI,SWP	-
ST31G480	ST31 Dual Interface, Flash Secure Microcontroller	-	-	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,ISO14443 Type B',VHBR	CC EAL5+,CUP,EMVCo
ST31P450	ST31 Dual interface, Flash secure microcontroller with enhanced security	-	-	Contact ISO7816,Ctless ISO14443 Type A	CC EAL5+,EMVCo
ST54J	NFC controller and Secure Element single die	NFC & eSIM-eSE	HCI, NCI 2.0, Reader, Card emulation & P2P supported	Contact ISO7816,Ctless ISO 18092,Ctless ISO14443 Type A,Ctless ISO14443 Type B,Ctless ISO14443 Type F,Ctless ISO15693,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo

SIM & eSIM

Overview

SIMs & embedded SIMs solutions to secure your cellular connectivity

SIM and embedded SIM (eSIM) solutions provide secure cellular connectivity and ensure its seamless deployment, thus improving day-to-day user experience. From consumer, M2M and industrial applications including asset tracking and smart metering to automotive solutions such as in-vehicle emergency calls (eCall), SIMs and eSIMs simplify device monitoring and contribute to the digital transformation of a wide range of markets. With more than 1.5 billion of ST33 deployed today, ST positions itself as the industry leader for eSIM solutions.

Discover our ecosystem page on **ST4SIM** portfolio. [More information here](#)

ST4SIM SIM & eSIM for cellular connectivity

 ST33	Consumer	 ST33-M ST4SIM-M/-S	Industrial/IoT	 ST33-A ST4SIM-A	Automotive
					
<ul style="list-style-type: none">• GSMA, ETSI and Global Platform compliant• CC EAL5+ and EMVCo certified	<ul style="list-style-type: none">• IoT and Industrial-grade (JEDEC)• Complete solution provided with trusted partners	<ul style="list-style-type: none">• AEC-Q100-qualified• Integrated in vehicule telematics, gateways and ECUs			

STMicroelectronics Becomes First Chip Maker Accredited by the GSMA to Personalize eSIMs for Mobiles and Connected IoT Devices

Building on existing accreditation to manufacture eSIM chips that meet the GSMA's specifications for security and reliability, ST is speeding ahead of other chip makers by gaining further accreditation for securely applying eSIM personalization data, according to the GSMA's Secure Accreditation Scheme for UICC Production (GSMA SAS-UP).

ST can now deliver personalized eSIMs, built around the proven ST33 secure microcontroller, directly to customers' production facilities, ready to use with no further programming required. Equipment OEMs, mobile network operators, and SIM operating-system (OS) vendors can thus enjoy greater convenience, economy, and business efficiency by streamlining the eSIM supply chain to save handling overheads and reduce time to market. The eSIMs, customized with connection credentials, enable smaller form factors, greater security, and increased flexibility.

- **GSMA SAS-UP Certification** for Rousset
- **GSMA SAS-UP Certification** for Toa Payoh

Secure MCUs/SIM & eSIM

Part Number	General Description	Features set	Product Function	Communication interfaces	Certification
ST32F384	ST32 Contact ARM® Cortex®-M3 based Secure Microcontroller	Consumer	SIM	Contact ISO7816	-
ST32F512	ST32 Contact ARM® Cortex®-M3 based Secure Microcontroller	Consumer	SIM	Contact ISO7816	-
ST32F512M	ST32 Contact ARM® Cortex®-M3 based Secure Microcontroller dedicated to M2M	M2M	SIM	Contact ISO7816	-
ST32H480	Classic SIM / 32bit ARM® SecurCore® SC000 CPU and 480 Kbytes high-density Flash memory	Consumer	SIM	Contact ISO7816	-
ST33G1M0	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G1M0A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	Contact ISO7816,SPI,SWP	CC EAL5+
ST33G1M0M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G1M2	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G1M2A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G1M2M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G384A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G384M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G512	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G512A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G512M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G640	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G640A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G640M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G768	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G768A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G768M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+

ST33G896	32bit ARM® SecurCore® SC300 with SWP for Secure Element or SIM-SWP	Consumer	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33G896A	32bit ARM® SecurCore® SC300 optimized for M2M for car	Automotive	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33G896M	32bit ARM® SecurCore® SC300 optimized for M2M	M2M	eSIM-eSE	Contact ISO7816,GPIO,SPI,SWP	CC EAL5+
ST33J1M0	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J1M1	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J1M3	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J1M5	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J1M8	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J2M0	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33J896	32bit ARM® SecurCore® SC300 with secure integrity architecture, AES, DES, Nescrypt public key co-processors	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL5+,EMVCo,MTPS
ST33K1M0C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K1M0M	High-speed secure MCU with Arm® Cortex®-M35P CPU with high-density Flash memory Solution designed for M2M Industrial	M2M	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K1M2C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K1M2M	High-speed secure MCU with Arm® Cortex®-M35P CPU with high-density Flash memory Solution designed for M2M Industrial	M2M	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS

ST33K1M5A	Automotive, high-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU with SWP, ISO, SPI and I2C interfaces, and high-density Flash memory Solution designed for Automotive	Automotive	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K1M5C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K1M5M	High-speed secure MCU with Arm® Cortex®-M35P CPU with high-density Flash memory Solution designed for M2M Industrial	M2M	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K512M	High-speed secure MCU with Arm® Cortex®-M35P CPU with high-density Flash memory Solution designed for M2M Industrial	-	-	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K768C	High-speed secure MCU with 32-bit Arm® Cortex®-M35P CPU	Consumer	eSIM-eSE	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST33K768M	High-speed secure MCU with Arm® Cortex®-M35P CPU with high-density Flash memory Solution designed for M2M Industrial	-	-	Contact ISO7816,GPIO,I2C,SPI,SWP	CC EAL6+,EMVCo,MTPS
ST4SIM-110M	SIM & eSIM system-on-chip solution for secure M2M industrial applications	M2M	eSIM	Contact ISO7816,SPI	CC EAL5+
ST4SIM-110S	SIM system-on-chip solution for secure IoT applications	M2M	eSIM	Contact ISO7816,SPI	CC EAL5+
ST4SIM-111M	5G SIM System-on-Chip solution for secure M2M Industrial applications	M2M	SIM	Contact ISO7816,SPI	CC EAL5+
ST4SIM-111S	5G SIM System-on-Chip solution for secure IoT application	M2M	SIM	Contact ISO7816,SPI	-
ST4SIM-200M	GSMA eSIM system-on-chip for secure M2M industrial applications	M2M	eSIM	Contact ISO7816,SPI	CC EAL5+,GSMA
ST4SIM-200S	GSMA eSIM system-on-chip solution for secure IoT applications	M2M	eSIM	Contact ISO7816	CC EAL5+,GSMA
ST4SIM-201M	GSMA 5G eSIM system-on-chip solution for secure M2M industrial applications	M2M	eSIM	Contact ISO7816	AECQ100,CC EAL5+,GSMA
ST4SIM-201S	GSMA 5G eSIM system-on-chip solution for secure IoT applications	M2M	eSIM	Contact ISO7816	CC EAL5+,GSMA

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