

# EmoSim™

## Subscriber Identification Modules

Secure user  
identification chip for  
GSM mobile phones



### Key features

- Finished SIM Card delivery
- Custom solutions
- Personalisation
- Comp128-1/2, 3xDes, standard and proprietary authentication

Silcom has been developing OS, making and selling SIMs (subscriber identification modules) for GSM mobile phones since 1998.

#### Delivery of finished SIM Cards

Silcom offers a complete in-house SIM development capability, including: developing Operating Systems and smartcard applications, manufacturing the SIM cards, and personalising the SIM.

#### Customized applications and smart OS.

With the experience of our smartcard design team, Silcom is able to customise the standard GSM SIM to meet specific customer requirements. Our past developments are from simple OS, added-value menu applications OS, prepaid and postpaid applications OS, Roaming selection OS, up to the next generation of Intelligent Routing enabled OS.

Silcom's solutions also include advanced SIM SmartOTA functions, SMS based upload facility with total security due to the use of secure cryptographic functions.

Silcom SIM OSs are currently in use by various operators and are delivered with the latest state of the art Flash technology silicium.

#### Personalisation / Manufacturing

Silcom's experience in secure smartcard OS helped to develop secure transaction solutions for a wide distribution, makes us the ideal partner to personalise SIM with sensitive information. Our SIMs are personalised to the customer's requirements in a controlled personalisation environment within high security facilities, using procedures to highly protect your data.

SIM personalisation security is directly related to the quantity of SIMs, printing details, IMSI, Tree, Ki, ICCID, authentication keys and algorithms. All this data is supplied directly to the operator to load on the switch in an electronic format, highly encrypted.

Identification data can be printed as per the operator wish, this could mean on the front and/or rear of the smartcard in high resolution. The personalisation system can print digits, barcodes and images, like update sensitive data during the last step production.

We helping you to find the best solution, Silcom can supply system solutions which enable personalised cards to be customised by the customer or approved third party. We can supply GSM/CDMA OS pre-loaded modules, ready to be personalised by a third party.

## Manufacturing the cards

Silcom SIMs are manufactured in secure facilities by Silcom's partners worldwide.

Our partners in Italy, England, Germany and China are offering the best service on manufacturing smartcards and magnetic stripe cards for a large customer range. Our partners are approved by major credit card companies and major European mobile operators. Smartcards are manufactured in accordance with ISO regulations and are tested by independent test houses.

Our smartcards can be made from a number of materials including PVC, PC, ABS and PET.

Our in-house art department will create for you the latest image collection for your projects and new products.



Silcom GSM and CDMA smartcards, the user experience.

## EmoSim™ SIMs Technical specifications

### EmoSim™ v06

- GSM Phase 2 extended voltage
- Flash technology, Plat./T48k chip.
- 3 V and 5 V supply

### EmoSim™ v06+

- GSM Phase 2+ ext. voltage
- Flash technology, Plat./T48k chip.
- Personalisation thru standard ISO commands, authentication thru 3Des, Single Des, Pincodes.
- Enhanced speed
- 3 V and 5 V supply

### EmoSim™ v07PF

- GSM Phase 2+
- SIM application toolkit
- SMS Data download
- Routing and Roaming secure application.
- Flash technology, T48k chip.  
- Personalisation thru ISO cmd.
- 3 V and 5 V supply

### EmoSim™ v08 SMSMenu™

- GSM Phase 2+
- SIM application toolkit, SMSMenu.
- Flash technology, Plat./T48k chip.
- 3 V and 5 V supply

### EmoSim™ v09 CDMA/GSM Dual™

- GSM Phase 2+ / CDMA Dual™
- CDMA and GSM compliant
- Flash technology, Plat./T48k chip.
- SMS Data download, Toolkit.

- Authentication 3Des, Des, Pin.
- 3 V and 5 V supply

### Physical configurations

- Full size SIM card (ISO 7816-1)
- Plug-in SIM (GSM 11.11)

### Standards compliance

- ETSI-GSM 11.11
- ETSI-GSM 11.12
- ETSI-GSM 11.14
- ISO 7186 parts 1, 2, 3 and 4
- ISO 7813
- ISO 10373
- GSM MoU comp128-1/2/3 authentication algorithms.

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