

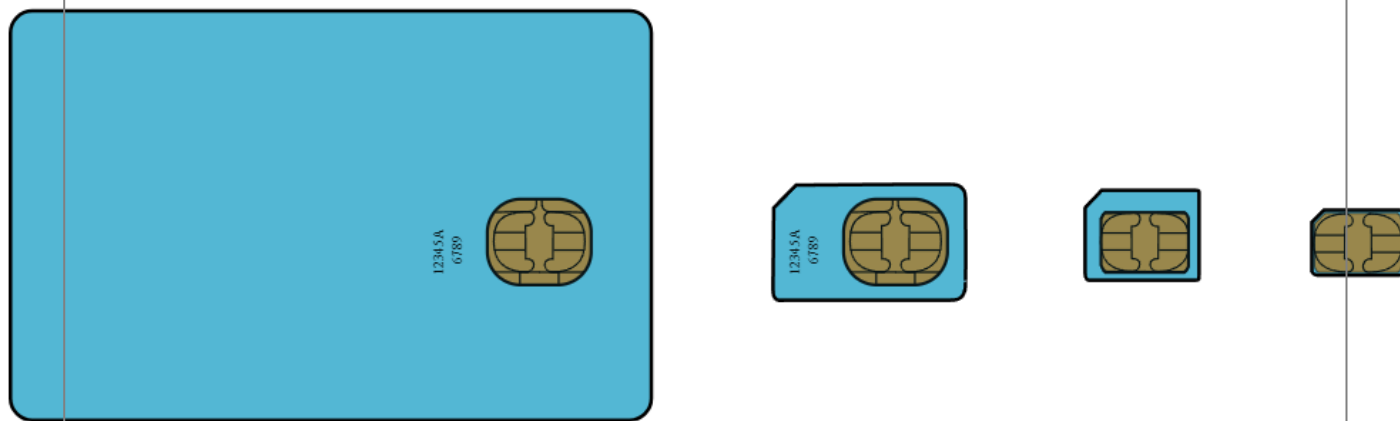
Содержание

SIM card	3
Form factors	3
Connectors	4
Pinout	4

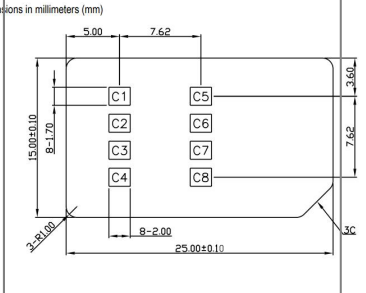
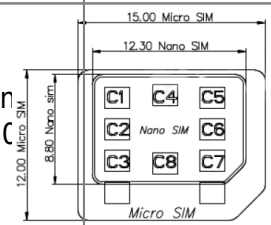
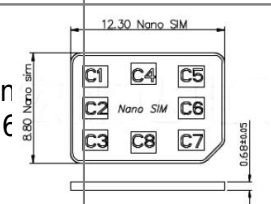
SIM card

https://en.wikipedia.org/wiki/SIM_card

Form factors

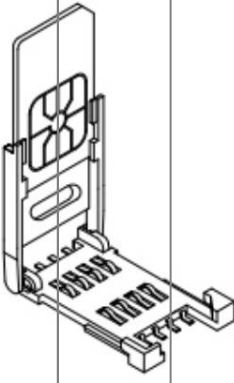


From left, full-size SIM (1FF), mini-SIM (2FF), micro-SIM (3FF), and nano-SIM (4FF)

SIM card format	Introduced	Standard reference	Length	Width	Thickness	
Full-size (1FF)	1991	ISO/IEC 7810:2003, ID-1	85.6 mm (3.37 in)	53.98 mm (2.125 in)	0.76 mm (0.030 in)	
Mini-SIM (2FF)	1996	ISO/IEC 7810:2003, ID-000	25 mm (0.98 in)	15 mm (0.59 in)	0.76 mm (0.030 in)	3.2 SIM Card Dimension (According to Standard GSM 11.11) Dimensions in millimeters (mm)  Thickness: 0.76 ± 0.08 mm
Micro-SIM (3FF)	2003	ETSI TS 102 221 V9.0.0, Mini-UICC	15 mm (0.59 in)	12 mm (0.47 in)	0.76 mm (0.030 in)	
Nano-SIM (4FF)	early 2012	ETSI TS 102 221 V11.0.0	12.3 mm (0.48 in)	8.8 mm (0.35 in)	0.67 mm (0.026 in)	

SIM card format	Introduced	Standard reference	Length	Width	Thickness	
Embedded-SIM (eSIM)	2016	ETSI TS 102.671 V9.0.0 JEDEC Design Guide 4.8, SON-8 GSMA SGP.22 V1.0	—	—	—	

Connectors

PUSH-PUSH	with ejection mechanism	
PUSH-PULL	no ejection mechanism	
HINGE	no ejection mechanism	
GUIDE AND HOLDER		

KLS	https://www.klsele.com/products/connectors/Card-connectors/SIM-card-connectors.html
KLS	https://www.klsele.com/products/connectors/Card-connectors/Micro-SIM-card-connectors.html
KLS	https://www.klsele.com/products/connectors/Card-connectors/Nano-SIM-card-connectors.html
HSM	
Connfly	
Attend	

Pinout

At first we need to understand SIM Pinouts:

- 6-pin includes VCC, GND, I/O, VPP, RST, CLK
- 8-pin includes VCC, GND, I/O, VPP, RST, CLK, SIM_PRESENCE, GND

Contact No	Assignment	Description
C1	VCC	Power Voltage.
C2	RST	Reset Signal.
C3	CLK	Clocking Signal.
C4	RFU	Reserved for Feature Use.
C5	GND	Power and Signal Ground.

Contact No	Assignment	Description
C6	VPP	Programming Voltage.
C7	I/O	Serial Data input/output.
C8	RFU	Reserved for Feature Use