

Technical Datasheet

for Professional BasicCards

*ZC5.4 Rev J,
ZC5.4 Rev K,
ZC5.5 Rev J,
ZC5.5 Rev K,
ZC5.5 Rev L,
ZC5.6 Rev A,
ZC5.6 Rev B,
ZC5.6 Rev C*

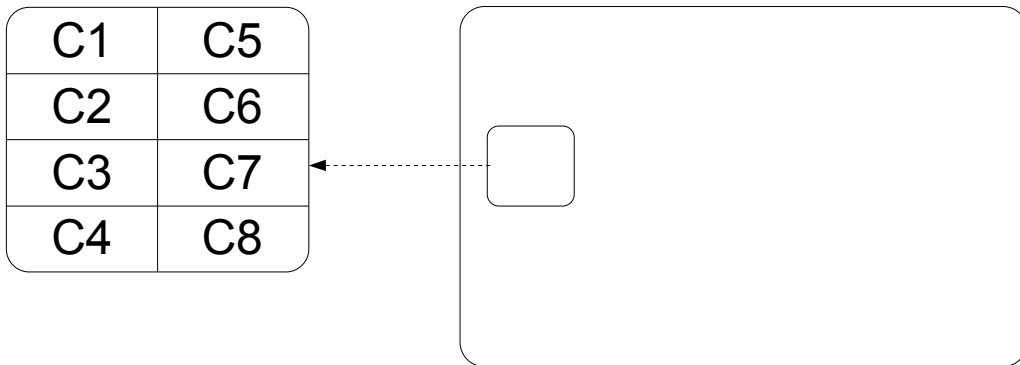
Compliance to International Standards

The listed products are compliant to several international standards, including:

- ISO/IEC 7816-1:1998 “Identification cards – Integrated circuit(s) cards – Part 1: Cards with contacts – Physical characteristics”
- ISO/IEC 7816-2:2007 “Identification cards – Integrated circuit cards – Part 2: Cards with contacts – Dimensions and location of the contacts”
- ISO/IEC 7816-3:2006 “Identification cards – Integrated circuit cards – Part 3: Cards with contacts – Electrical interface and transmission protocols”

Pinning Information

The following drawing describes the location of contacts and the assignment of symbolic names for each contact. It does not give an exact picture of form and position of contacts for the product.



PIN	Function	PIN	Function
C1	Vcc	C5	GND
C2	RST	C6	not connected
C3	CLK	C7	I/O
C4	not connected	C8	not connected

Electrical Specifications

Supported Ratings According to ISO/IEC 7816-3

Class According ISO7816-3	Vcc		Icc	
	Min	Max	Min	Max
Class A	4.5 V	5.5 V		60 mA
Class B	2.7 V	3.3 V		50 mA
Class C	Not supported			

Other ISO compliant supported ratings

	Min	Max
External clock f_{CLK}	1 MHz	5 MHz
Operating Temperature of the Card	0 °C	50 °C

The above table states values according to ISO standard, which are supported by this product. See section “Compliance to International Standards“ and corresponding international standard documents for more details. See also “Standard Operating Conditions“ below for more exact ratings.

Notes:

- Class C is not supported.
- ISO/IEC refers to an operating temperature in between 0°C and 50°C.
- Within this temperature range, both the chip **and the card** will not be damaged

Standard Operating Conditions

The product operates without malfunctions in operating conditions specified below.

	Min	Typ	Max
Vcc	2.7V	3V / 5V	5.5V
Icc (Vcc=5V)		4.6 mA	10 mA
Icc (Vcc=3V)		4.6 mA	6 mA
f_{CLK}	1 MHz		5 MHz
Operating Temperature	-25°C		+85°C

Note: The operating temperature applies to the microchip. The plastic card may be damaged even if operating temperature is in range specified above!

Absolute Ratings

Stresses above these listed maximum ratings may cause permanent damage to the device. Exposure beyond specified electrical characteristics may affect device reliability or cause malfunction. Note that plastic card may be damaged even if the storage temperature is in specified range!

	Condition	Min	Max
Power Supply (Vcc to GND)		-0.3 V	+5.7 V
Voltage at RST, CLK, I/O		GND -0.3 V	Vcc + 0.3 V
Storage Temperature	Relative Humidity < 20%	-40°C	+125°C

Note: The storage temperature applies to the microchip. The plastic card may be damaged even if storage temperature is in range specified above!