

0,18µm

NXP SmartMX Contact and Dual Interface Security Controllers

Product Features	P5SD009	P5SC018	P5SC036	P5SC072
CPU	Secure_MX51	Secure_MX51	Secure_MX51	Secure_MX51
ISO Contact Interface	ISO 7816	ISO 7816	ISO 7816	ISO 7816
ISO Contactless Interface	ISO 14443	-	-	-
ROM [byte]	96 K	96 K	96 K	128 K
RAM total [byte]	2.25 K	2.25 K	2.25 K	2.25 K
EEPROM [byte]	12 K	18 K	36 K	72 K
Security Features				
DES-Engine	DES3 < 40 µs	DES3 < 40 µs	DES3 < 40 µs	DES3 < 40 µs
Exception Sensors	V, f, T, Light	V, f, T, Light	V, f, T, Light	V, f, T, Light
Additional Product Information				
UART for implemented interfaces	yes	yes	yes	yes
CRC-Engine	yes	yes	yes	yes
Supply voltage [V]	1.62 ... 5.5	1.62 ... 5.5	1.62 ... 5.5	1.62 ... 5.5
External Clock [MHz]	1 ... 10 (13.56)	1 ... 10	1 ... 10	1 ... 10
Internal Clock [MHz]	1 ... 30	1 ... 30	1 ... 30	1 ... 30
Temperature range [°C]	-25 ... +85	-25 ... +85	-25 ... +85	-25 ... +85
EEPROM page mode granularity [byte]	1 ... 64	1 ... 64	1 ... 64	1 ... 64
16-bit Timer/Counter	2	2	2	2
True Random Number Generator	yes, acc. to FIPS 140-2 / AIS 31 (Class P2)	yes, acc. to FIPS 140-2 / AIS 31 (Class P2)	yes, acc. to FIPS 140-2 / AIS 31 (Class P2)	yes, acc. to FIPS 140-2 / AIS 31 (Class P2)
Philips Handshake Technology	yes	yes	yes	yes
Mifare® functionality (optional)	yes, 1K or 4K	-	-	-
Delivery Type Wafer	sawn/unsawn	sawn/unsawn	sawn/unsawn	sawn/unsawn
Delivery Type Module	Contact, Dual, Interface, Contactless	Contact	Contact	Contact
Evaluation and Certification				
3rd Party Hardware Evaluation	yes	yes	yes	yes
Security Certificates*	CAST	CAST	CAST	-

* Common Criteria (CC), Mastercard, VISA, ZKA evaluations planned depending on application requirements