NXP Contact Smart Card Reader ICs

Product Features	Analog Interface							Analog & UART	Analog & UART & CPU
	TDA8020	TDA8023	TDA8024	TDA8025	TDA8026	TDA8034	TDA8035	TDA8007B	TDA8029
Analog interfaces	2	1	1	1	5	1	1	2	1
ISO 7816 UART	-	-	-	-	-	-	-	yes	yes
ISO 7816 dedicated timers	-	-	-	-	-	-	-	yes	yes
µC-core	-	-	-	-	-	-	-	-	80C51RB+
ROM[kbyte] / RAM[byte]	-	-	-	-	-	-	-		16 / 768
Host interface	I²C	I²C	I/O lines	I/O lines	I²C	I/O lines	I/O lines	8 bit parallel	serial or I²C
ESD protection on ISO pads [kV]	6	6	6	6	7	6	10	6	6
Auxiliary protected lines for C4 and C8 contacts	0	2	2	2	2 (on slot 1)	2	2	2 x 2	0
VCC card power supply [V]	3 & 5	1.8 & 3 & 5	3 & 5	1.2 & 1.8 & 3	1.8 & 3 & 5	1.8 & 3 & 5	1.8 & 3 & 5	1.8 & 3 & 5	1.8 & 3 & 5
Card supply current @ 5 V VCC [mA]	2 x 55	55	80	-	55	65	65	55	65
Card supply current @ 3 V VCC [mA]	2 x 50	55	65	65	55	65	65	55	50
Card supply current @ 1.8 V VCC [mA]	-	35	-	65	35	65	35	35	30
Card supply voltage @1.2 V VCC [mA]	-	-	-	30	-	-	-	-	-
Card clock frequency max. [MHz]	20	20	26	26	20	26	26	26	20
Card activation time max. [µs]	135	135	225	240	135	3500	3400	135	225
Card deactivation time max. [µs]	110	110	100	100	100	250	90	100	100
Protocol Support									
Synchronous card management	-	yes	-	-	yes	yes	yes	yes	yes
Asynchronous protocol T=0 and T=1	yes	yes	yes	yes	yes	yes	yes	yes	yes
Security Features									
Voltage supervisor and over current detection	yes	yes	yes	yes	yes	yes	yes	yes	yes
Current protection on VCC, I/O, RST, CLK	yes	yes	yes	yes	yes	yes	yes	yes	yes
Additional Product Information									
Power supply interface VDDI (V)	-	1.5 - 6.5	-	1.6 - 3.3	-	1.6 - 3.6	1.6 - 3.6	-	-
Power supply (V)	2.5 - 6.5	2.7 - 6.5	2.7 - 6.5	3.6 - 5.5	2.7 - 5.5	2.7 - 5.5	2.7 - 5.5	2.7 - 6.0	2.7 - 6.0
Power down current max (µA)	150	2	-	100	25	12	1	350	20
Temperature range (ºC)	-25 / 85	-40 / 85	-40 / 85	-25 / 85	-25 / 85	-25 / 85	-25 / 85	-40 / 85	-25 / 85
Package	LQFP32	TSSOP28	SO28 & TSSOP28	HVQFN32	TFBGA64	HVQFN24 & SO16 TSSOP16	HVQFN32	LQFP48	LQFP32
EMVCo compliance	yes	yes	-	-	yes	yes	yes	yes	yes
NDS compliance	-	-	yes	yes	-	yes	yes	-	yes
Evaluation Boards	-	-	-	-	OM9800/MCT800 OM9800/DCT8026	OM9800/MCT800 OM9800/DCT8034	OM9800/MCT800 OM9800/DCT8035	-	-
Software Support	-	-	-	-	-	-	-	Cake8007MBA FW	ArmTDA8029i2c drives TDA8029 Demo

Samples and Evaluation Boards are available on request, please contact a local NXP distributor.