

ISO 14443

ISO 15693

Philips' Contactless Reader Systems

Product Features	Reader ICs					Evaluation Systems			
	MF RC500	MF RC530	MF RC531	SL RC400	CL RC632	MF EV700	MF EV800	SL EV400	SL EV900
Operating distance typ. [mm]	100	100	100	100	100	75	75	75	up to 600
Antenna	-	-	-	-	-	yes	yes	yes	yes
FIFO depth [byte]	64	64	64	64	64	n.a.	n.a.	n.a.	n.a.
Host interface	8-bit parallel	8-bit parallel, SPI	8-bit parallel, SPI	8-bit parallel	8-bit parallel, SPI	USB	USB/R232	USB	RS232
RF Interface									
Analog interface	fully integrated	fully integrated	fully integrated	fully integrated	fully integrated	MF RC500	MF RC500	SL RC400	discrete
Carrier frequency [MHz]	13.56	13.56	13.56	13.56	13.56	13.56	13.56	13.56	13.56
Modulation	100% ASK	100% ASK	10% & 100% ASK	10% ASK	10% & 100% ASK	100% ASK	100% ASK	10% & 100% ASK	10% & 100% ASK
Baudrate ISO 14443 [kbit/s]	106	106/212/424/848	106/212/424/848	-	106/212/424/848	106	106	-	-
Baudrate ISO 15693 [kbit/s]	-	-	-	1.66 / 26.5	1.66 / 26.5	-	-	1.66 / 26.5	1.66 / 26.5
Standards & Protocols									
ISO 14443 A	yes	yes	yes	-	yes	yes	yes	-	-
ISO 14443 B	-	-	yes	-	yes	-	-	-	-
ISO 15693	-	-	-	yes	yes	-	-	yes	yes
mifare® Classic protocol	yes	yes	yes	-	yes	yes	yes	-	-
ICODE 1 protocol	-	-	-	yes	yes	-	-	yes	yes
EPC protocol	-	-	-	yes	yes	-	-	yes	yes
Security Features									
mifare® Classic	yes	yes	yes	-	yes	yes	yes	-	-
Exception Sensors	V, f	V, f	V, f	V, f	V, f	-	-	-	-
Additional Product Information									
Supply voltage digital [V]	5	3.3 or 5	3.3 or 5	5	3.3 or 5	5	5	5	24
Supply voltage analog [V]	5	5	5	5	5	-	-	-	-
Power down mode current, typ. [µA]	2	2	2	2	2	n.a.	n.a.	n.a.	n.a.
Wake up time [µs]	1000	1000	1000	1000	1000	n.a.	n.a.	n.a.	n.a.
Temperature range [°C]	-25 ... +85	-25 ... +85	-25 ... +85	-25 ... +85	-25 ... +85	0 ... +70	0 ... +70	0 ... +70	0 ... +70
Package	SO32	SO32	SO32	SO32	SO32	-	-	-	-
Approvals									
EMC	n.a.	n.a.	n.a.	n.a.	n.a.	CE, FCC	CE, FCC	CE, FCC	CE, FCC, EN300330
Software Support	yes	yes	yes	yes	yes	yes	yes	yes	yes