



For further details please refer to:
www.MIFARE.net

MIFARE and NFC reader/writer IC solutions selection

Product	NFC frontend solutions				NFC controller solutions		HITAG
	SLRC610	MFRC630	CLRC663	PN5180	PN7150	PN7462	HTRC110
Integrated microcontroller	High-performance ISO/IEC 15693 ICODE	High-performance ISO/IEC 14443A MIFARE and NTAG	High-performance multi-protocol NFC frontend	High-performance multi-protocol NFC frontend	Full NFC Forum- compliant controller with integrated FW and NCI interface	Full NFC open microcontroller Cortex M0 - with contact smartcard interface and 160K Flash for user's application	Highly integrated optimized HITAG short range reader/writer
Carrier frequency [MHz]	-	-	-	-	Integrated FW	Open microcontroller Cortex M0	-
Standards & protocols							
Reader/ writer	ISO/IEC 15693 ISO/IEC 18000-3M3	ISO/IEC 14443 A	ISO/IEC 18092 ISO/IEC 14443 ISO/IEC 15693 ISO/IEC 18000-3M3 Felica	ISO/IEC 18092 ISO/IEC 14443 ISO/IEC 15693 ISO/IEC 18000-3M3 Felica	ISO/IEC 18092 ISO/IEC 14443 ISO/IEC 15693 Felica	ISO/IEC 18092 ISO/IEC 14443 ISO/IEC 15693 ISO/IEC 18000-3M3 Felica	HITAG
NFC tag type reader	5	1, 2, 4	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	-
ISO/IEC 14443 Bit-rate [KBit/s]	-	-	-	106/212/424/848	-	-	-
Felica Bit-rate [KBit/s]	-	-	212/424	212/424	212/424	212/424	-
MIFARE Classic support (license included)	-	✓	✓	✓	✓	✓	-
ISO/IEC 15693 Bit-rate [KBit/s]	26.5/53	-	26.5/53	26.5/53	26.5	26.5/53	-
EPC class-1 HF/ ISO/IEC 18000-3M3	✓	-	✓	✓	-	✓	-
EMVCo compliance	-	-	✓	✓	-	✓	-
Card emulation	-	-	-	✓	✓	✓	-
NFC tag type emulation	-	-	-	4A	3, 4A, 4B	4A	-
NFC tag type Bit-rate [KBit/s]	-	-	-	106/212/424/848	106/212/424	106/212/424/848	-
Peer-to-peer (ISO/IEC 18092)	-	-	✓	✓	✓	✓	-
Passive communication	-	-	Initiator	Initiator/Target	Initiator/Target	Initiator/Target	-
Active communication	-	-	-	Initiator/Target	Initiator/Target	Initiator/Target	-
Operating distance up to [mm]							
RF transmitter supply voltage [V]	3.0 - 5.5	3.0 - 5.5	3.0 - 5.5	2.7 - 5.5	2.7 - 4.75	3.0 - 5.5	up to 200 w.o. booster
Transmitter supply current, typ [mA]	250	250	250	250	180	250	200
Host interface	SPI, I ² C, UART	SPI, I ² C, UART	SPI, I ² C, UART	SPI	I ² C	USB, HSUART, SPI, I ² C	Serial 2/3 wire
Supply voltage host interface [V]	3.3 - 5.0	3.3 - 5.0	3.3 - 5.0	1.8 - 3.3	1.8 - 3.3	1.8 or 3.3	5
Standby mode current, typ [µA]	3	3	3	15	20	18	200
Power-down mode current, type [µA]	0.008	0.008	0.008	10	10	12	7
Dynamic power contr./ Adaptive modulation contr.	-	-	-	✓	-	✓	-
Lower-power card detection mode	✓	✓	✓	✓	✓	✓	-
Temperature range [°C]	-25 to +85	-25 to +85	-25 to +85	-30 to +85	-30 to +85	-40 to +85	-40 to +85
Security features							
MIFARE SAM support	-	In X-mode	In X-mode	-	-	via UART ISO 7816	-
MIFARE Classic security (CRYPTO1 HW)	-	✓	✓	✓	✓	✓	-
Product support & ordering information							
Package	HVQFN32	HVQFN32	HVQFN32	HVQFN40 TFBGA64	HVQFN40	HVQFN64	S014
Product type	SLRC61002HN	MFRC63002HN	CLRC66302HN	PN5180A0HN	PN7150BOHN	PN7462AUHN	HTRC11001T/02EE
Software							
NFC Reader library	✓	✓	✓	✓	N/A	✓	-

For further details please refer to:
www.nxp.com/products/identification-and-security/reader-ics:READERS-ICS

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