

HTS 2048

125 kHz RFID IC

Read/Write 2048 bits

Anticollision, Crypt

Features

- 2048 bits EEPROM memory organized in 64 pages of 32 bits (1984 bits of user memory in plain mode or 1920 bits of user memory in encryption mode)
- 32 bits Read Only memory
- Lock bit per 2 pages, block, 2 blocks or 4 blocks
- Typical operating frequency : 125kHz
- Contactless power supply, very low power
- Manchester or Bi-Phase encoding (selected by customer)
- Data rate options : 2, 4 or 8KbD (selected by customer)
- Compliance to : ISO 1784/785, 14223-1, German and Dutch pigeon race standard and German waste management standard BDE
- Operating Mode (selected by customer) :
 - TTF (Transponder Talk First) : Pages 4, 5, 6, 7 transmitted at power up
 - RTF (Anticollision) : Reader Talk First approach
Based on Unique ID number
Detection speed 20 tags/sec
 - Encryption : Mutual authentication based on 48 bits secret key
(performed within 48ms)

Memory Organisation

		Plain Mode		Authentication Mode	
Block	Page	Content	Access	Content	Access
Block 0	0	32 bit UID	Read Only	32 bit UID	Read Only
	1	24 bits configuration, 8 bits reserved	R/W, RO or OTP	24 bits configuration, 8 bits PWD high	R/W, RO or OTP
	2	User Memory	R/W or Lock (for page 2 and 3)	16 bits key high, 16 bits PWD low	R/W or No access
	3	User Memory		32 bit key low	
Block 1	4	User Memory	R/W or Lock (for page 4 and 5)	User Memory	R/W or Lock (for page 4 and 5)
	5	User Memory		User Memory	
	6	User Memory	R/W or Lock (for page 6 and 7)	User Memory	R/W or Lock (for page 6 and 7)
	7	User Memory		User Memory	
Block 2	8	User Memory	R/W or Lock (for page 8, 9, 10 and 11)	User Memory	R/W or Lock (for page 8, 9, 10 and 11)
	9	User Memory		User Memory	
	10	User Memory		User Memory	
	11	User Memory		User Memory	
Block 4...5	16	User Memory	R/W or Lock (for block 4 and 5)	User Memory	R/W or Lock (for block 4 and 5)
	17	User Memory		User Memory	
	22	User Memory		User Memory	
	23	User Memory		User Memory	
Block 8...11	32	User Memory	R/W or Lock (for block 8 to 11)	User Memory	R/W or Lock (for block 8 to 11)
	33	User Memory		User Memory	
	46	User Memory		User Memory	
	47	User Memory		User Memory	
Block 12...15	48	User Memory	R/W or Lock (for block 12 to 15)	User Memory	R/W or Lock (for block 12 to 15)
	49	User Memory		User Memory	
	62	User Memory		User Memory	
	63	User Memory		User Memory	

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