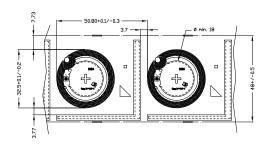


Tag-it[™] HF-I Transponder Inlay

The Tag-it HF-I Transponder Inlay is compliant with the ISO/IEC 15693 and ISO/IEC 18000-3 standard. With a user memory of 2k bits, organized in 64 blocks, the Tag-it HF-I Transponder Inlays allows advanced solutions for CD/DVD identification in library management. The thin and flexible Tag-it HF-I Transponder Inlays can be easily converted into paper labels or plastic labels.



Specifications:

Part Number	RI-I17-112A			
Supported Standard	ISO/IEC 15693-2,-3, ISO/IEC 18000-3			
Recommended Operating frequency	13.56 MHz			
Passive Resonance Frequency (at +25°C)	13.80 MHz \pm 400kHz (includes frequency offset to compensate further integration into paper or PVC lamination)			
Typ. required activation field strength to read (at +25°C)	110 dBμA/m [#]			
Typ. required activation field strength to write (at +25°C)	113 dBμA/m [#]			
Factory programmed Read Only Number	64 bits			
Memory (user programmable)	2k bits organized in 64 x 32-bit blocks			
Typical programming cycles (at +25°C)	100,000			
Data retention time (at +55°C)	> 10 years			
Simultaneous Identification of Tags	Up to 50 tags per second (reader/antenna dependent)			
Antenna size	Outer diameter: Ø 32.5mm +0.1mm/-0.2mm (~1.28 in) Inner diameter: min. Ø 18mm (~0.7 in)			
Foil width	48 mm ± 0.5 mm (1.89 in ± 0.02 in)			
Foil pitch	50.8 mm +0.1mm/-0.3mm (2 in)			
Thickness	Chip area: 0.355mm (~0.014 in) Antenna area: 0.085mm (~0.0033 in)			
Base material	Substrate: PET (Polyethylenetherephtalate) Antenna: Aluminum			
Smallest bending radius allowed	18 mm (~0.71 in)			
Operating temperature	-25°C to +70°C			
Storage temperature (single inlay)	-40°C to +85°C (warpage may occur at upper temperature range)			
Storage temperature (on reel)	-40°C to +40°C			
Delivery	Single row tape wound on cardboard reel with 500 mm diameter Reel outer width: approx. 60 mm (~2.36 in) Reel inner width: approx. 50 mm (~1.97 in) Hub diameter: 76.2 mm (3 in)			
Typical quantity of good units per reel	5,000			

Note: For highest possible read-out coverage we recommend to operate readers at a modulation depth of 20% or higher
After integration into paper

For more information, contact the sales office or distributor nearest you. This contact information can be found on our web site at: http://www.ti-rfid.com

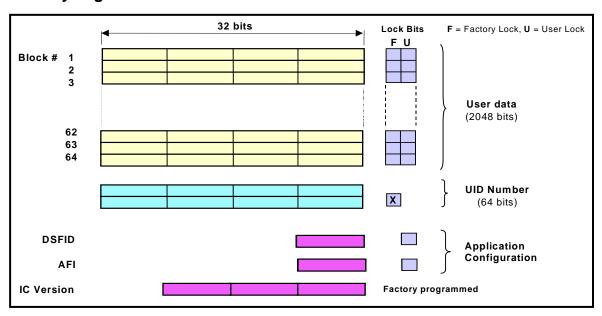
Supported Command Set

		Request Mode					
Request	Request Code	Inventory	Addressed	Non- Addressed	Select	AFI	
ISO 15693 Mandatory and Optional Commands							
Inventory	0x01	√	-	-	-	✓	
Stay Quiet	0x02	-	\checkmark	-	-	-	
Read_Single_Block	0x20	√	✓	√	√	\	
Write_Single_Block	0x21	1	✓	✓	✓		
Lock_Block	0x22	1	✓	✓	✓		
Read_Multi_Blocks	0x23	√	✓	√	\	\	
Write_Multi_Blocks	0x24	1	ı	1	ı	1	
Select Tag	0x25	-	✓	-	-	-	
Reset to Ready	0x26	-	✓	✓	✓	-	
Write_AFI	0x27	-	✓	✓	✓	-	
Lock_AFI	0x28	-	✓	✓	✓	-	
Write DSFID	0x29	-	√	√	√	-	
Lock DSFID	0x2A	-	√	√	√	-	
Get_System_info	0x2B	√	√	√	√	✓	
Get_M_Blk_Sec_St	0x2C	√	√	√	√	✓	
TI Custom Commands							
Write_2_Blocks	0xA2	-	✓	✓	✓	-	
Lock_2_Blocks	0xA3	-	√	√	√	-	

✓: Implemented

-: Not applicable

Memory Organization



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