

13.56MHz Encapsulated Transponder

The 13.56MHz Encapsulated Transponder from Texas Instruments is compliant with the ISO/IEC 15693 standard, a global open standard that allows interoperability of products from multiple manufacturers. With a user memory of 2k bits, organized in 64 blocks, the rugged 13.56MHz Encapsulated Transponder allows for advanced solutions in demanding supply chain management applications such as laundry tracking. It is especially designed and tested for applications that require a ruggedized transponder that can withstand harsh environments.



Specifications:

Part Number	RF-HDT-DVBB-N0
Supported Standard	ISO 15693-2,-3
Operating frequency (at +25°C)	13.56 MHz ± 250kHz
Typ. required activation field strength to read (at +25°C)	112 dBμA/m
Typ. required activation field strength to write (at +25°C)	115 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)
Dimensions	∅ 22 ± 0.2 mm x 3 ± 0.2 mm
Weight	1.6 ± 0.3 grams
Case Material	PPS, black
Protection Class	IP 68 (condition: water pressure 45bar, 10h)
Operating temperature	-25°C to +90°C
Storage temperature	-25°C to +120°C +160°C for total 50 hours +220°C for total 30 seconds
Mechanical Stability	Axial compression strength: 1000N Radial compression strength: 500N
Chemical Resistance	Typical chemicals used in laundry and dry-cleaning processes
Delivery	1000 units in bulk

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>

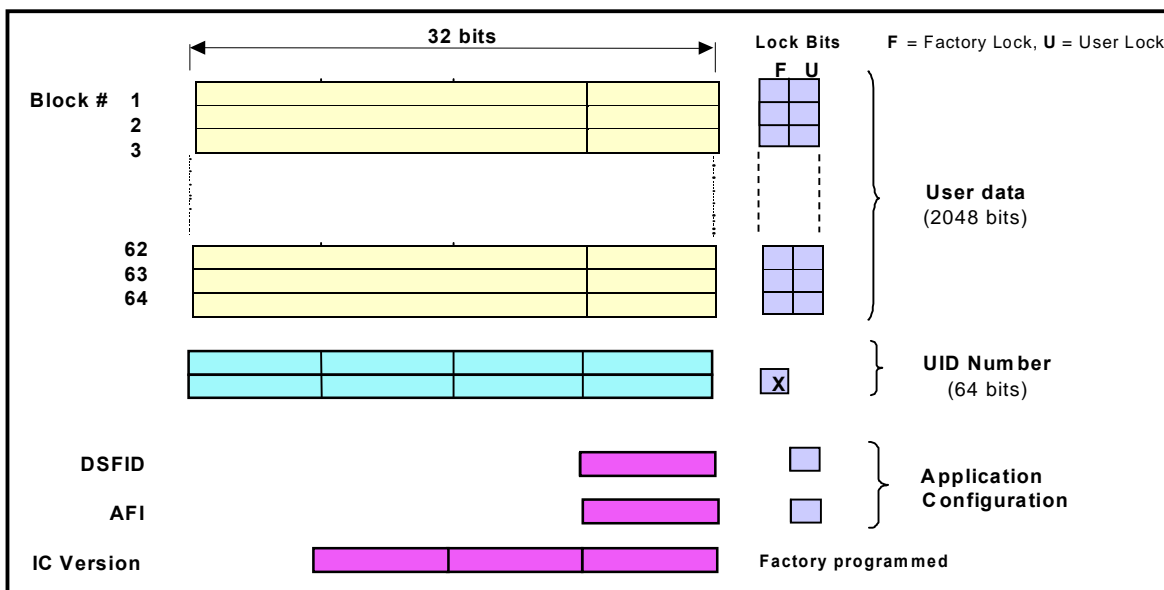
Supported Command Set

Request	Request Code	Request Mode				
		Inventory	Addressed	Non-Addressed	Select	AFI
ISO 15693 Mandatory and Optional Commands						
Inventory	0x01		-	-	-	
Stay Quiet	0x02	-		-	-	-
Read_Single_Block	0x20					
Write_Single_Block	0x21	-				-
Lock_Block	0x22	-				-
Read_Multi_Blocks	0x23					
Write_Multi_Blocks	0x24	-	-	-	-	-
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_Blks_Sec_St	0x2C					
TI Custom Commands						
Write_2_Blocks	0xA2	-				-
Lock_2_Blocks	0xA3	-				-

: Implemented

- : Not applicable

Memory Organization



Texas Instruments reserves the right to change its products and services at any time without notice. TI provides customer assistance in various technical areas, but does not have full access to data concerning the uses and applications of customers products. Therefore, TI assumes no responsibility for customer product design or for infringement of patents and/or the rights of third parties, which may result from assistance provided by TI.

© Copyright 2003 Texas Instruments Incorporated.
11-09-22-154 09/03



For more information, visit: www.rfidcanada.com Email: info@rfidcanada.com
Canada and USA: 1 (877) 476-6760 Outside of North America: +1 905-513-8919