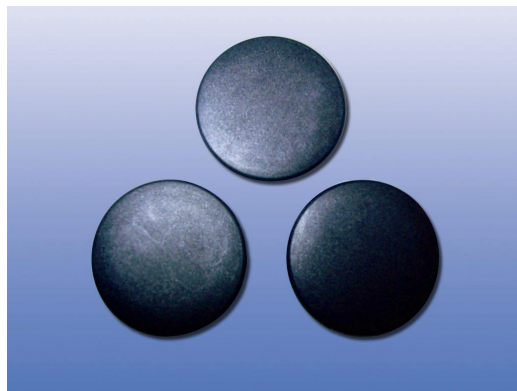


## 13.56MHz Encapsulated Transponder

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
Resonance Frequency (at +25°C)	13.56 MHz $\pm$ 300 kHz
Typ. required activation field strength to read (at +25°C)	112 dB $\mu$ A/m
Typ. required activation field strength to write (at +25°C)	115 dB $\mu$ A/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 +25°C)	> 10 years
Simultaneous Identification of Tags	Up to 50 tags per second (reader/antenna dependent)
Dimensions	$\varnothing$ 22 $\pm$ 0.2 mm x 3 $\pm$ 0.2 mm
Weight	1.6 $\pm$ 0.3 grams
Case Material	PPS, black
Protection Class	IP 68
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
Vibration	ISO/IEC 68.2.6 (10g, 10..2000Hz, 3 axis, 2.5h)
Mechanical Shock	ISO/IEC 68.2.27 (100g, 6ms, 6 axis, 20 times per axis)
Mechanical Stability	Axial compression strength: 1000N (10s, static) Radial compression strength: 500N (10s, static) Isostatic water pressure: 45 bar (10h)
Chemical Resistance	Typical chemicals used in laundry and dry-cleaning processes
Delivery	1000 units in bulk

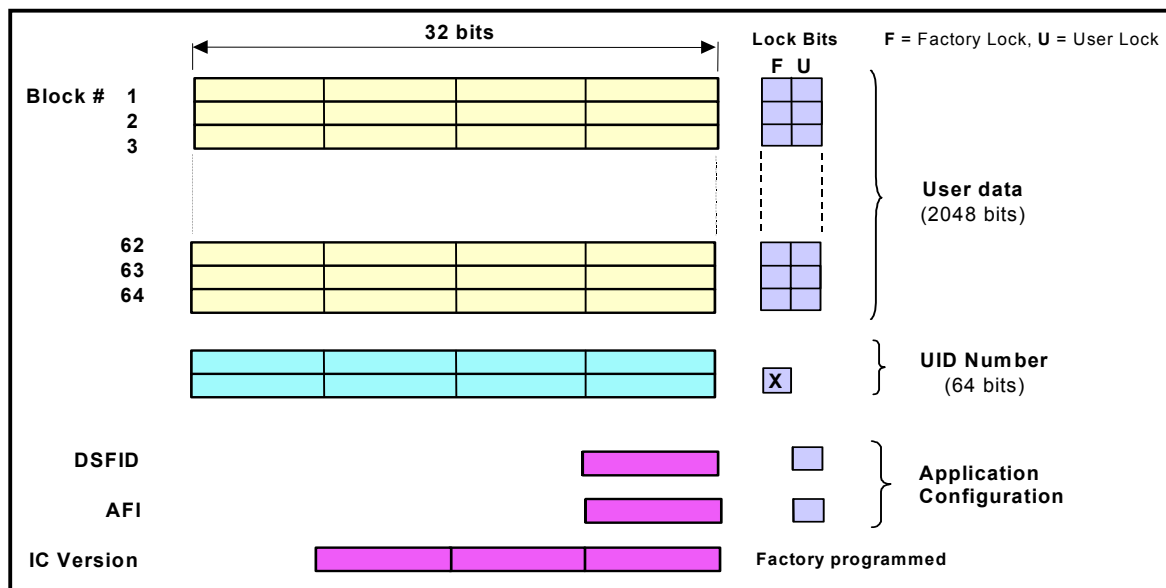
For more information, contact the sales office or distributor nearest you. This contact information can be found on our web site at: <http://www.ti-rfid.com>

## Supported Command Set

		Request Mode				
Request	Request Code	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_Blkc_Sec_St	0x2C	✓	✓	✓	✓	✓
TI Custom Commands						
Write_2_Blocks	0xA2	-	✓	✓	✓	-
Lock_2_Blocks	0xA3	-	✓	✓	✓	-

✓: Implemented  
 -: Not applicable

## Memory Organization



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