

Guardian Family

GD25 – ST25TN



Overview

Application Area

Paragon ID GUARDIAN Family of NFC inlays are optimally designed for Brand Protection applications like identification of luxury goods, fragrances, wines and spirits. The design is such that it can also be used for general purpose NFC applications

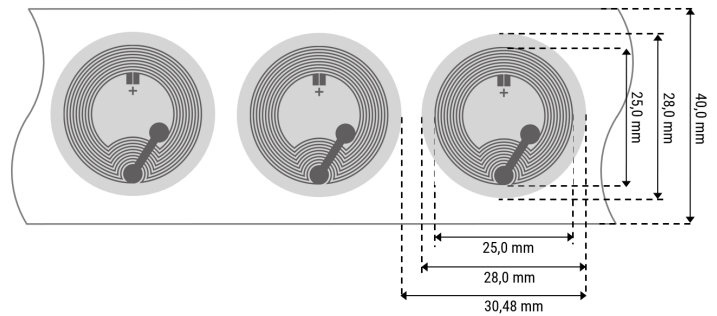
IC

The GD25–ST25TN is based on the ST Microelectronics ST25TN series of IC's. These NFC type 2 compatible ICs are available with 512 and 1664 bits of memory, support high levels of security and can be permanently deactivated to meet privacy requirements.

Paragon ID

Paragon ID is the largest EU based RFID inlay and label manufacturer with production facilities in Argent, France and Bucharest, Romania. Inlays are manufactured according to the highest quality standards

Dimensions



Product overview

Antenna dimensions	Round 25 mm diameter
Antenna material	Aluminium
Operating frequency	13.56 Mhz
IC	ST Microelectronics ST25TN512, ST25TN01K
International standards	NFC type 2, ISO14443A
Memory	ST25TN512: 512 bits ST25TN01K: 1664 bits
Security	Digital Signature (TruST25)
Other features	Contextual automatic NDEF message Kill mode for permanent deactivation Block level memory permanent write lock

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Inlay specifications

Antenna size	Round 25 mm/ 0.63 in
Die-cut	Round 28 mm / 0.75 in
Substrate	PET 50 µm
Antenna	Aluminium 15µm
Adhesive	Acrylic, permanent
Backing	Silicon paper
Minimum Yield	98% or higher, 2 splices or less per roll
Quality assurance	100 % tested
Marking	Failed units marked
Delivery Details	10 000 functional inlays/roll, 76 mm (3 in) core

IC specifications

Model and Memory	ST25TN512, 512 bits ST25TN01K, 1664 bits
Standards	NFC type 2 ISO/IEC 14443 type A
Identifier	7 bytes, unique
Operating Temperature	-40°C up to +85°C -40°F up to +185°F
Data Retention	40 years at < +55°C
Write Cycles	Minimum 100,000

Delivery information

	Delivery Format		
	DRY Inlay	WET Inlay	Label
Chip	ST25TN512 ST25TN01K	ST25TN512 ST25TN01K	ST25TN512 ST25TN01K
Antenna size	Round 25 mm / 0.98 in	Round 25 mm / 0.98 in	Round 25 mm / 0.98 in
Die-cut size	N/A	Round 28 mm / 1.10 in	Round 28 mm / 1.10 in
Standard Pitch	30.48 mm / 1.20 in	30.48 mm / 1.20 in	30.48 mm / 1.20 in
Web width	40 mm / 1.57 in	40 mm / 1.57 in	40 mm / 1.57 in
Core inner diameter	76 mm / 3.0 in	76 mm / 3.0 in	76 mm / 3.0 in
Quantity per roll	10,000	10.000	10.000



To ensure this product meets application requirements, this product should be tested under conditions appropriate to the application. Paragon ID does not warrant that this product is fit for any particular use or purpose. The information provided in this datasheet is believed to be reliable to our current experience and knowledge, no rights however can be derived from the information provided in this datasheet. Paragon ID reserves the right to change or discontinue product offerings at any time without notice.