AD Midas+ NFC ST25TN

Overview

Frequency Band
NFC 13.56 MHz

Chip
ST25TN512

Antenna Dimensions
11.5 x 19 mm / 0.45 x 0.75 in

International Standard
ISO 14443A

Industry Segments
Electronics
Beauty
Apparel
Healthcare

Applications
NFC
Customer Experience
Packaging

RoHS
EU Directive 2011/65/EU and 2015/863 Compliant

REACH
Regulation (EC) No. 1907/2006

Excellent performance and small size

Our AD Midas+ NFC ST25TN inlay is designed for products with space restrictions for inlay placement. Due to its small footprint, Midas+ NFC is well suited for electronics, beauty and packaging, where inlays are embedded within limited spaces

Our AD Midas+ NFC ST25TN is based on an aluminum antenna, offers high reliability, Great performance and is equipped with ST Microelectronics ST25TN512. AD Midas+ NFC with the ST25TN512 chip is a cost-efficient solution where 64 bytes of user memory is required.

AD Midas+ NFC ST25TN supports augmented NDEF to answer dynamic NDEF message without modifying the user memory and TruST25 Digital Signature feature to fight against counterfeiting.

This product is ISO 14 443A and NFC Forum Type 2 compliant. Our inlays and tags are compliant with ISO 9001:2015 Quality Management and ISO 14001:2015 Environmental Management. This ensures a reliable and state-of-the-art product that meets a variety of application needs.

Technical features

Chip	ST25TN512
Chip Attachment Technology	Direct Chip Attach
User Memory	64 bytes
Product Code	3008847 / IL-604635
Delivery Format	Wet+ inlay
Die-Cut Dimension	13.5 mm x 21 mm / 0.53 x 0.82 in
Inlay Substrate	PET
Face Sheet	Clear PET
Total Thickness	136µm
Standard Pitch	26 mm / 1.024 in
Web Width	24 mm / 1 in
Core Size	76 mm / 3 in
Quantity / Reel	5000 pcs/reel 20000 pcs/box
Operating Temperature	-40 °C to 85 °C / -40 °F to 185 °F

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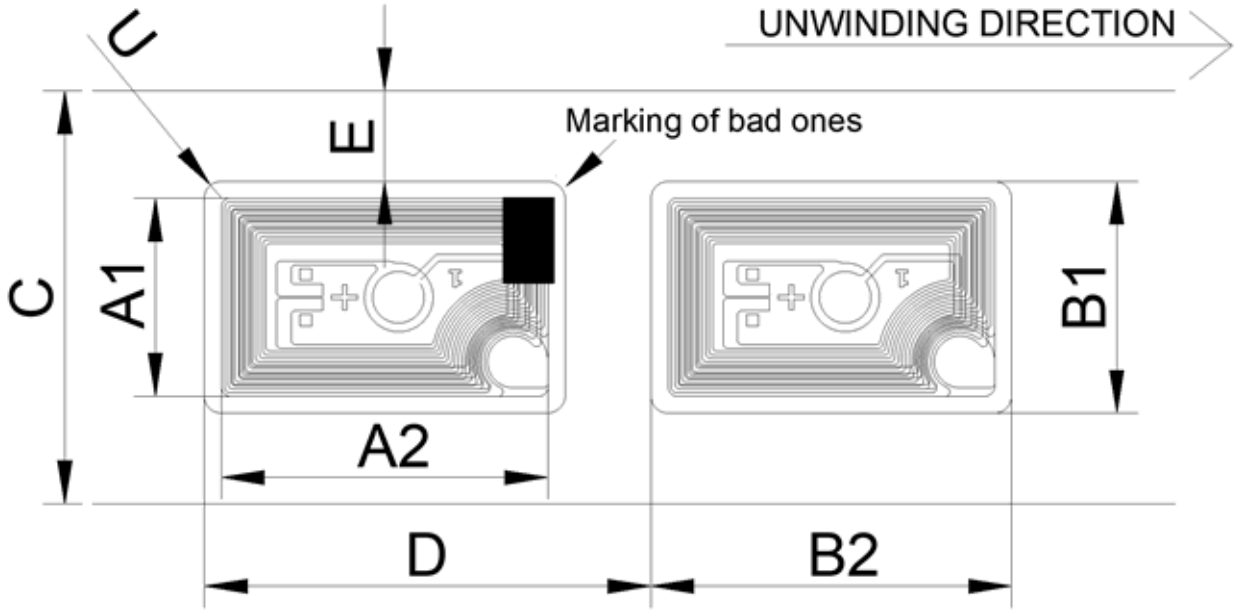
Product Specification

Midas+ NFC Wet Inlay +
ISO 14 443 A
STM ST25TN512
Sales Code 3008847 **Item Code : IL-604635**

Mechanical dimensions

A1 x A2	Antenna size	11.5 x 19 mm	± 0,5 mm	0.453 x 0.748 in
B1 x B2	Die-cut size	13,5 x 21 mm	± 0,2 mm	0.512 x 0.827 in
C	Web width	24 mm	± 0,5 mm	0.945 in
D	Pitch, length per piece MD	26 mm	± 1,5 mm	1.024 in
E	Die-cut to web edge	5.25 mm	± 1,5 mm	0.207 in
U	Die-cut corner radius	1 mm		0, 039 in
	Overall thickness of transponder package (excluding IC and siliconized paper)	136 µm	± 10 %	
	Thickness of the IC	120 µm		



Electrical characteristics

Integrated Circuit (IC)	STM ST25TN512
Air interface protocol	ISO 14 443 A
Operation frequency	13,56 MHz
Unloaded resonance frequency	TBD
Memory	64 bytes

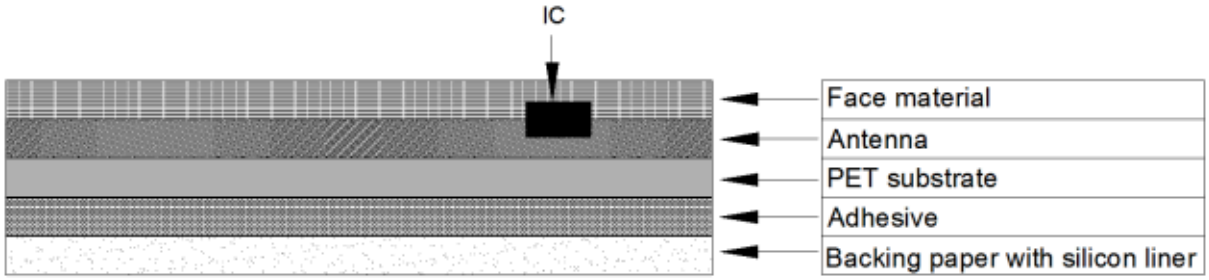
General characteristics of transponder

Operating temperature (electronics parts)	-40 °C / +85 °C	-40 °F / 185 °F
ESD voltage immunity	± 2 kV peak HBM	
Shelf life: From the date of manufacture 2 years in	+20 °C, 50 % RH	68 °F, 50 % RH
Bending diameter (D)	> 50 mm, tension less than 10 N	

Delivery form

Transponder format	Die-cut	
Transponder face material	Clear PET 12	
Transponder backing material	Siliconized Paper 56	
Transponder antenna, antenna carrier	Aluminum, clear PET	
Transponder adhesive	RA-5	
- labelling temperature	min. +0 °C	min. 32 °F
- usage temperature	-20 °C - 80 °C	-4 °F - 176 °F
- peel	min. 10 N / 25 mm (FTM 1)	
Final inspection	100 %, known faulty ones marked	
Minimum delivery yield	97 %	
Reel Label	Reel number, Material number, Material description, Yield, Qty of functional inlays, Qty of non-functional inlays, Date	
Printability	Needs to be tested by customer	

Structure



Delivery details

Appearance	Single row reel form
Reel core	Paper core inner diameter 76 mm (3 in)
Transponder alignment	Chip at rear of transponder
Winding of the reel	Face out
Reel size	5 000 pcs/reel
Package size	20 000 pcs/box Deliveries only in full packages.

This technical specification replaces all earlier ones.

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SMARTRAC
HALOGEN-FREE
MEETS
IEC 61249-2-21
environment-friendly
UK
CA