

## Overview

The TF3 features the Impinj Monza 4 chip, the Monza 4 family provides a variety of models to suit diverse applications, ushering in new standards in RFID privacy, tag orientation insensitivity, best and most consistent read/write performance, and memory capability.

## Communication Protocol and Memory Specifications

Wireless Communication Protocol EPC Gen 2, ISO 18000-6C, ISO/IEC 15963 (UID standard). Protocol Class 1. Component Used Impinj Monza 4

IC NAME	Monza 4D	Monza 4E	Monza 4QT
EPC MEMORY	128 bits	496 bits	128 bits
USER MEMORY	32 bits	128 bits	512 bits
SERIALIZED TID	32 bits	32 bits	32 bits
RESERVED MEMORY (password, kill)	64 bits	64 bits	64 bits
READ SENSIBILITY LIMIT	-18 dBm	-18 dBm	-18 dBm
WRITE SENSIBILITY LIMIT	-14,6 dBm	-14,6 dBm	-14,6 dBm

## Features

- Optimized for item tracking in near-field and long range in far-field operation
- Enhanced anti-counterfeiting/anti-cloning capability.
- Applications include logistics, garments, and other assets.
- Aluminium inlay provides excellent performance at lower • costs than silver ink or copper; RoHS compliant

## Functional Specifications

EPC Class 1 Gen 2  
ISO/IEC 18000-6C  
Operating Frequency Band:860 - 960 MHz  
Read Range Typical  $\geq$  2m with fixed reader and inlay mounted on cardboard  
Mode of Operation Passive, Backscattering Modulation

## Environmental Specifications

Operating Temperature Range -40° C to +65° C at 40-80% RH  
Storage Temperature -40° C to +85° C at 40-80% RH  
Electrostatic Discharge (ESD) tolerance: 2.000V HBM (Human Body Model)



# “TF34 SATELLITE” Inlay

Produced by Trace-Tech Id Solutions S.L.  
Tag for Short and Medium Range Item level Tagging

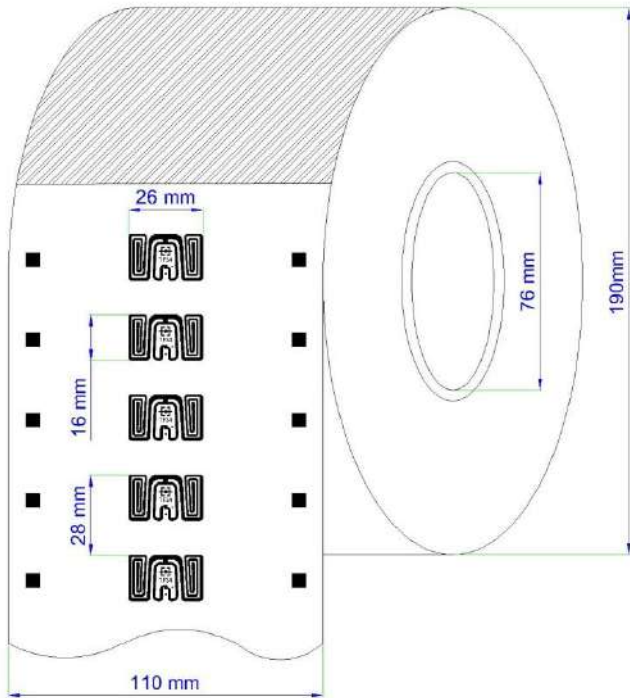
## Dry Inlay Specifications

Substrate	50 micron PET
Metal Layer	Aluminum 99.8% pure
Pitch	28.0147 mm
Overall Inlay Thickness with IC	Max 210 µm
Bending Diameter	≥ 15mm, tension less than 6 N

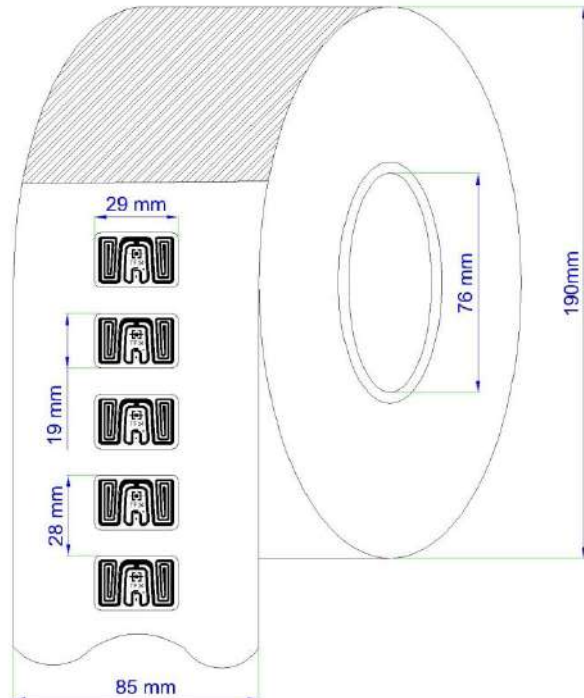
## Wet Inlay Specifications

Die-cut size	29x19mm
Inlay Adhesive	Acrylic
Release liner	40#SCK
Pitch	28.0147 mm

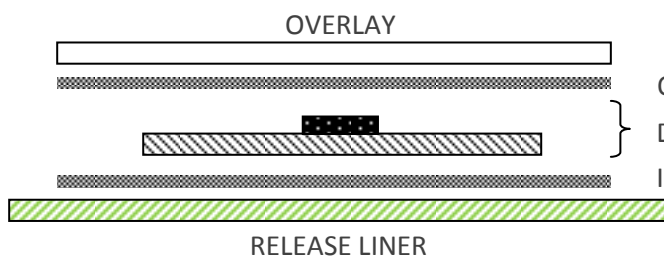
## Dry Reel Layout



## Wet Reel Layout



## Wet Inlay or Labeltag Construction



Overlay Adhesive

DRY INLAY = 50 µm PET + Monza4 die

Inlay Adhesive

## Customized solutions

Whatever size, material, shape and adhesive for:

- RFID Labeltags
- RFID Tickets
- RFID Hangtags
- RFID PVC cards

- Printing & codifying service
- High volumes and low volumes



**trace** [ ]  
tech id solutions

Trace-Tech ID Solutions S.L.

+34 935 451 176

[www.tracetechnid.com](http://www.tracetechnid.com)

info@tracetechnid.com

World Trade Center, South Building 2<sup>nd</sup> floor – Barcelona’s Harbour -08223 Barcelona (SPAIN)

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