

# INVENGO COMBI CARD PVC CARD



Impinj Monza 5 & NXP Mifare Classic EV1



## About Invengo's Smart Card with Monza 5 and MIFARE Classic EV1

The Invengo XCTF-8210D-C13 combines Impinj Monza 5 passive RAIN RFID (UHF) technology with NXP's Mifare Classic EV1 HF functionality. This combi smart card is designed for superior read/write performance combining Invengo's advanced antenna design and both RAIN RFID and HF industry leaders IC's.



Invengo – the global RFID technology provider – is a leading developer and manufacturer of high quality, intelligent RAIN RFID (UHF) and NFC (HF) inlays, tags and connectivity solutions utilized in the Internet of Things (IoT). With a focus on RFID innovation, Invengo has created a leading product line in retail, library, (industrial) laundry, pharmaceutical, healthcare, (public) transportation and many other industries.

Invengo Technology Pte. Ltd. (SG) is the International Headquarters of Invengo Information Technology Co. Ltd, listed on Shenzhen Stock Exchange (SZSE: 002161.SZ). Employing over 600 people globally, Invengo is one of the largest publicly traded, RFID oriented companies in the world.

### Key Benefits

- High performance transponders for a wide range of (combined) applications
- Operating Frequency 840 to 960 MHz / 13.56 MHz
- State-of-the-Art Monza 5 and MIFARE Classic EV chip
- Superior read/write sensitivity
- 100% performance tested

## Application Areas

- Personal Identification
- Public Transportation & Electronic Toll Collection
- Automatic Vehicle Identification
- Access Control
- Event Management
- Club and Resort Membership
- Asset Tracking

## Card Design



## Product Specifications

### RAIN RFID (UHF)

<b>Protocols Supported</b>	EPCglobal Class 1 Gen 2, ISO 18000-63
<b>Integrated Circuit (IC)</b>	Impinj Monza 5
<b>Operating Frequency</b>	840 to 960 MHz
<b>EPC Size</b>	128 bits
<b>TID</b>	32 bits model number and 48 bits serialized number
<b>Access password</b>	32 bits
<b>Kill password</b>	32 bits

### HF

<b>Protocols Supported</b>	ISO/IEC 14443 - A
<b>Integrated Circuit (IC)</b>	NXP MIFARE Classic EV1
<b>Operating Frequency</b>	13,56 MHz
<b>Memory</b>	1K (EEPROM Size - byte)
<b>Security</b>	4-byte NUID

### environmental

<b>Operating Temperature</b>	-40°C to 85°C (-40°F to 185°F)
<b>Shelf Life</b>	Minimum 2 years from date of manufacturing in 20°C (68°F) @ 50% RH
<b>Bending Diameter</b>	> 50 mm, tension max 10 N
<b>Static Pressure</b>	< 10MPa (10N/mm <sup>2</sup> )
<b>ESD</b>	± 2000V peak

### Dimensions

<b>Size</b>	86 x 54 x 0,9 mm (3.39 x 2.13 x 0.04 in)
<b>Weight</b>	6 gram

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