



Inlay Features

- Rain RFID compliant
- Common unique ID
- Shared Memory
- Dual frequency 1-step inlay manufacturing

Applications NFC

- Product information
- Wifi, Bluetooth pairing
- Smart poster, advertising
- Coupons, loyalty programs

Application UHF

- Supply Chain Management
- Tracking and Tracing
- Container Identification
- Asset Control

Inlay Layout and Dimensions

	DF105
Antenna width	84 mm ± 0.5mm (3.31 ± 0.02 in)
Antenna length	27.7 mm ± 0.5mm (1.10 ± 0.02 in)
Lengthwise pitch	39.08 mm ± 0.5mm (1.54 ± 0.02 in)
Web width	96 mm ± 0.5mm (3.78 ± 0.02 in)

Available ICs

	EM-Marin 4423			
Product code	EM-Marin 4423			
Thickness	78µm ± 15µm			
Operating temperature	-40 °C to +85 °C			
Write endurance	10 years			
Data retention	100 000 cycles			
Operating frequency UHF	860 ÷ 960 MHz			
Standard compliance UHF	EPC Class 1 Gen2 – ISO 18000-63			
Unique serial number	6 bytes in TID bank			
EPC code	96 bits			
User memory UHF	160 bits			
TID (locked)	96 bits			
Reserved memory	64 bits (for Kill and Access passwords)			
Operating frequency HF	13.56MHz			
Standard compliance HF	ISO 14443-A			
UID	7 bytes			
Memory Size HF	1920 bits			
Memory Organization HF	480 blocks of 4 bytes			

Inlay Composition

Composition	Material	Thickness* [µm]
Top	Aluminium	30 ± 5%
Support	Polyester PET	38 ± 5%
Bottom	Aluminium	10 ± 5%

* Overall thickness depends on the IC. For IC thickness please refer to the "Available ICs" table

General supply conditions

Reel dimensions	Internal diameter	TBD
	External diameter	TBD
Reel quantity	Inlay per reel	TBD