



## Inlay Features

- EPC Class1 Gen2 compliant
- Hybrid loop-dipole configuration
- Long read range
- Good orientation insensitivity
- Supports Impinj dies
- Based on Thin Propeller™ design by Impinj

## Applications

- Logistics
- Apparel applications

## Inlay Layout and Dimensions

	UH100
Antenna width	7.8 mm ± 0.5 mm (0.31 ± 0.02 in)
Antenna length	94 mm ± 0.5 mm (3.70 ± 0.02 in)
Lengthwise pitch	18.8 mm ± 0.5 mm (0.74 ± 0.02 in)
Web width	106 mm ± 0.5 mm (4.17 ± 0.02 in)

## Inlay Composition

Composition	Material	Thickness* [µm]
Top	Aluminum	9 ± 5%
Support	Polyester PET	38 ± 5%

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

## Available ICs

	Impinj Monza 2 / 3	Impinj Monza ID	Impinj Monaco64
Product code	UH100-MZ2 / UH100-MZ3	UH100-MZID	UH100-MO64
Operating frequency	860 ÷ 960 MHz		
Standard compliance	EPC Class 1 Gen2 – ISO 18000-6C		
Thickness	150µm ± 15µm	150µm ± 15µm	150µm ± 15µm
Operating temperature	-40 °C to +65 °C	-40 °C to +65 °C	-40 °C to +65 °C
Storage temperature	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
Unique serial number	n/a	8 bytes <small>in User Memory bank</small>	n/a
EPC code	96 bits	96 bits	96 bits
User memory	n/a	8 bytes locked UID	64 bits (8 bytes)
TID	32 bits (locked)	32 bits (locked)	32 bits (locked)
Reserved memory	64 bits (for Kill and Access passwords)	112 bits (locked for factory use)	64 bits (locked to zero)
Write endurance	50 years	50 years	50 years
Data retention	100 000 cycles	100 000 cycles	100 000 cycles



## INLAY UHF - UH100B

	Impinj Monza 4D	Impinj Monza 4E	Impinj Monza 4U	Impinj Monza 4QT
<b>Product code</b>	<b>UH100-MZ4D</b>	<b>UH100-MZ4E</b>	<b>UH100-MZ4U</b>	<b>UH100-MZ4QT</b>
<b>Operating frequency</b>	860 ÷ 960 MHz			
<b>Standard compliance</b>	EPC Class 1 Gen2 – ISO 18000-6C			
<b>Thickness</b>	150µm ± 15µm	150µm ± 15µm	150µm ± 15µm	150µm ± 15µm
<b>Operating temperature</b>	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
<b>Storage temperature</b>	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
<b>Unique serial number</b>	in TID memory bank	in TID memory bank	in TID memory bank	in TID memory bank
<b>EPC code</b>	128 bits (16 bytes)	496 bits (62 bytes)	128 bits (16 bytes)	128 bits (16 bytes)
<b>User memory</b>	32 bits (4 bytes)	128 bits (16 bytes)	512 bits (64 bytes)	512 bits (64 bytes)
<b>TID</b>	96 bits	96 bits	96 bits	96 bits
<b>Reserved memory</b>	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)
<b>Write endurance</b>	50 years	50 years	50 years	50 years
<b>Data retention</b>	100 000 cycles	100 000 cycles	100 000 cycles	100 000 cycles

### General supply conditions

<b>Reel dimensions</b>	Internal diameter	76 mm
	External diameter	< 200 mm (custom sizes available upon request)
<b>Reel quantity</b>	Inlay per reel	2500 ± 10% (custom sizes available upon request)

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For more information, contact the sales office. Contacts can be found on our web site at <http://www.lab-id.com>