



Inlay Features

- EPC Class1 Gen2 compliant
- Short read range, good near field performance
- Fits well into very small sized labels
- Based on Paperclip™ design by Impinj

Applications

- Item-level logistics
- Pharmaceutical applications
- Jewelry

Inlay Layout and Dimensions

	UH180
Antenna width	20 mm ± 0.5 mm (0.79 ± 0.02 in)
Antenna length	8 mm ± 0.5 mm (0.55 ± 0.02 in)
Lengthwise pitch	tbd
Web width	tbd

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 5	Impinj Monza 4D	Impinj Monza 4E	Impinj Monza 4QT
Product code	UH180-MZ5	UH180-MZ4D	UH180-MZ4E	UH180-MZ4QT
Operating frequency	860 ÷ 960 MHz			
Standard compliance	EPC Class 1 Gen2 – ISO 18000-6C			
Thickness	100µm ± 15µm	100µm ± 15µm	100µm ± 15µm	100µm ± 15µm
Operating temperature	-40 °C to +65 °C	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
EPC code	128 bits	128 bits	496 bits	128 bits
User memory	n/a	32 bits	128 bits	512 bits
TID (locked)	96 bits serialized	96 bits serialized	96 bits serialized	96 bits serialized + 96 rw bits for public EPC
Reserved memory	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)
Write endurance	50 years	50 years	50 years	50 years
Data retention	100 000 cycles	100 000 cycles	100 000 cycles	100 000 cycles

General supply conditions

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