



# bibliotheca UHF tag™ Spine

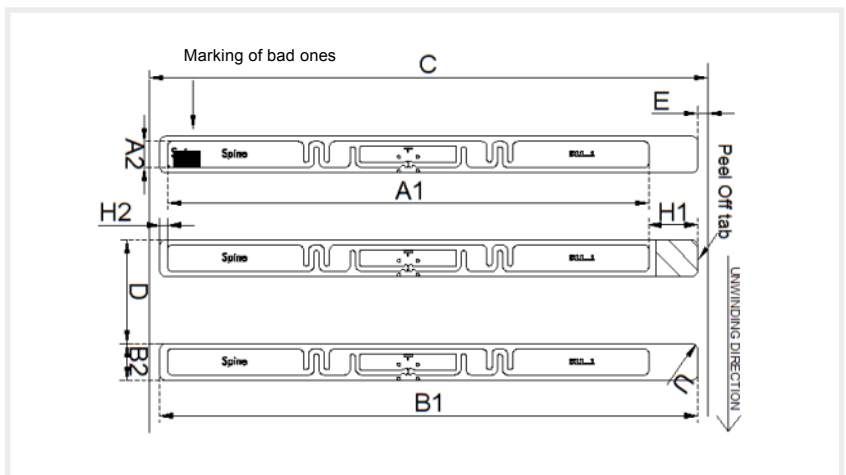
EPC Class 1 Gen 2, ISO 18 000-6C, NXP UCode 7XM  
Item Code: TAG000116

## Mechanical dimensions

A1 x A2	Antenna size	93 x 5 mm	± 0,5 mm	3,661 x 0,197 in
B1 x B2	Die-cut size	104 x 7 mm	± 0,2 mm	4,094 x 0,276 in
C	Web width	108 mm	± 0,5 mm	4,252 in
D	Pitch, length per piece MD	20 mm	± 1,5 mm	0,787 in
E	Die-cut to web edge	2 mm	± 1,5 mm	0,079 in
H1	Antenna to die-cut (CD)	9,5 mm	± 1,5 mm	0,374 in
H2	Antenna to die-cut (CD)	1,5 mm	± 1,5 mm	0,059 in
U	Die-cut corner radius	1mm		0,039 in

### Product Highlights

- | Chip: UCODE 7xm
- | Memory: 448 bit EPC + 2048 bit User
- | Tag Format: Wet Inlay, adhesive on both sides
- | Larger memory for libraries who want to replicate HF Data Formats
- | Form-factor designed to be installed covertly in books
- | Optimized for library applications



## Electrical characteristics

Integrated Circuit (IC)	NXP UCode 7XM
Air interface protocol	EPC Class 1 Gen 2, ISO 18 000-6C
Operation frequency	860 - 960 MHz
Memory	448bit EPC + 2048 bit



Preferred UHF tag offering

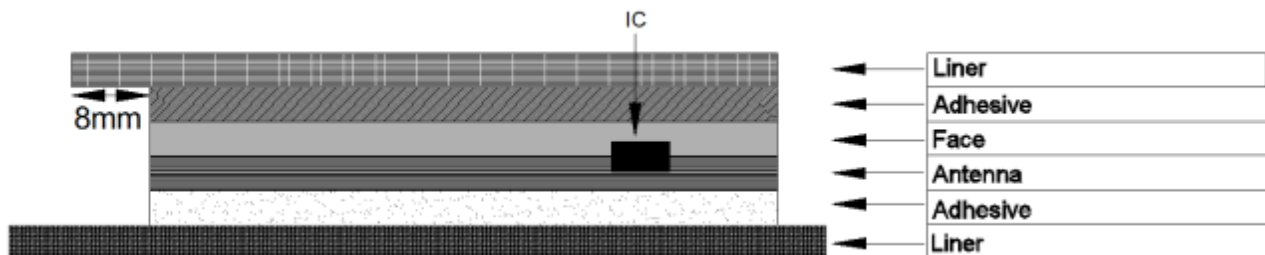
### General characteristics of transponder

Operating temperature (electronics parts)	-40 °C / +85 °C	-40 °F / 185 °F
ESD voltage immunity	± 2 kV peak HBM	
Shelf life: From the date of manufacture 2 years in	+20 °C, 50 % RH	68 °F, 50 % RH
Bending diameter (D)	> 50 mm, tension less than 10 N	

### Delivery form

Transponder format	Die-cut	
Transponder face material	Clear PET 12	
Transponder antenna material	Aluminum	
Transponder adhesive	RA-2	
- labelling temperature	min. +5 °C	min. 41 °F
- usage temperature	-40°C - 150 °C	-40 °F - 302 °F
- peel	min. 15 N / 25 mm (FTM 1)	
Final inspection	100 %, known faulty ones marked	
Minimum delivery yield	97 %	
Reel Label	Reel number, Material number, Material description, Yield, Qty of functional inlays, Qty of non-functional inlays, Date	

### Structure



### Delivery details

Appearance	Single row reel form
Reel core	Paper core inner diameter 76 mm (3 in)
Winding of the reel	Face out
Reel size	5000 pcs/reel

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# bibliotheca UHF tag™ Dogbone standard

EPC Class 1 Gen 2, ISO 18 000-6C, NXP UCode 7XM

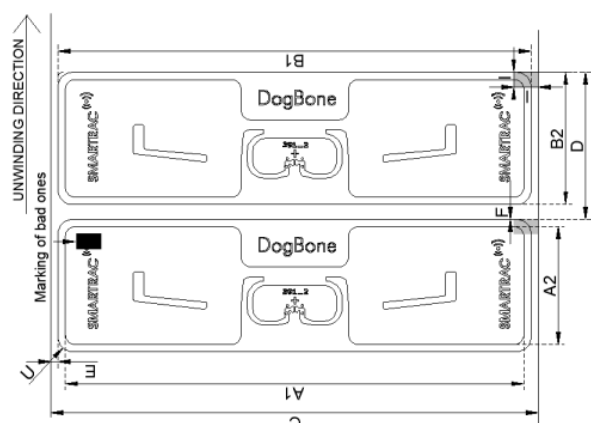
Item Code: TAG000117

## Mechanical dimensions

A1 x A2	Antenna size	94 x 24 mm	± 0,5 mm	3,701 x 0,945 in
B1 x B2	Die-cut size	97 x 27 mm	± 0,2 mm	3,819 x 1,063 in
C	Web width	100 mm	± 0,5 mm	3,937 in
D	Pitch, length per piece MD	30 mm	± 1,5 mm	1,181 in
E	Die-cut to web edge	1,5 mm	± 1,5 mm	0,059 in
F	Die-cut to register mark	0 mm	± 1,0 mm	0,000 in
I	Minimum size of register mark (width x length)	5 x 3 mm		0,197 x 0,118 in
U	Radius	3 mm		0,118 in

### Product Highlights

- | Chip: UCODE 7xm
- | Memory: 448 bit EPC + 2048 bit User
- | Tag Format: Paper tag, adhesive on one side
- | Larger memory for libraries who want to replicate HF Data Formats
- | Larger tag with longer read range



### Electrical characteristics

Integrated Circuit (IC)	NXP UCode 7XM	
Air interface protocol	EPC Class 1 Gen 2, ISO 18 000-6C	
Operation frequency	860 - 960 MHz	
Memory	448bit EPC + 1024 bit	

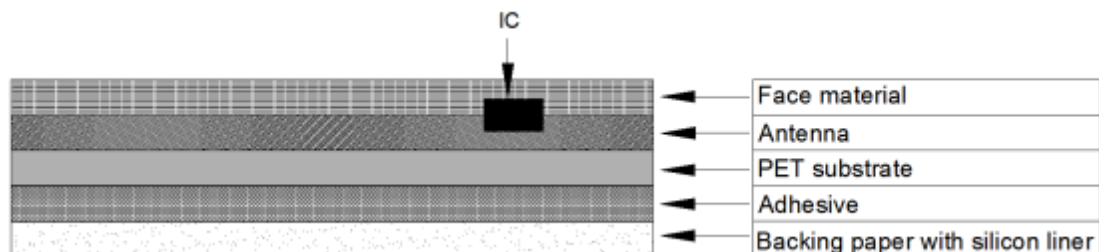
### General characteristics of transponder

Operating temperature (electronics parts)	-40 °C / +85 °C	-40 °F / 185 °F
ESD voltage immunity	± 2 kV peak HBM	
Shelf life: From the date of manufacture 2 years in	+20 °C, 50 % RH	68 °F, 50 % RH
Bending diameter (D)	> 50 mm, tension less than 10 N	

### Delivery form

Transponder format	Die-cut	
Transponder face material	Mid-gloss paper	
Transponder antenna material	Aluminum	
Transponder adhesive	RA-2	
- labelling temperature	min. +5 °C	min. 41 °F
- usage temperature	-40°C - 150 °C	-40 °F - 302 °F
- peel	min. 15 N / 25 mm (FTM 1)	
Final inspection	100 %, known faulty ones marked	
Minimum delivery yield	97 %	
Reel Label	Reel number, Material number, Material description, Yield, Qty of functional inlays, Qty of non-functional inlays, Date	

### Structure



### Delivery details

Appearance	Single row reel form
Reel core	Paper core inner diameter 76 mm (3 in)
Winding of the reel	Face out
Reel size	3000 pcs/reel Diameter: <205 mm
Package size	3000 pcs/box Deliveries only in full packages.

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# bibliotheca UHF tag™ Belt standard

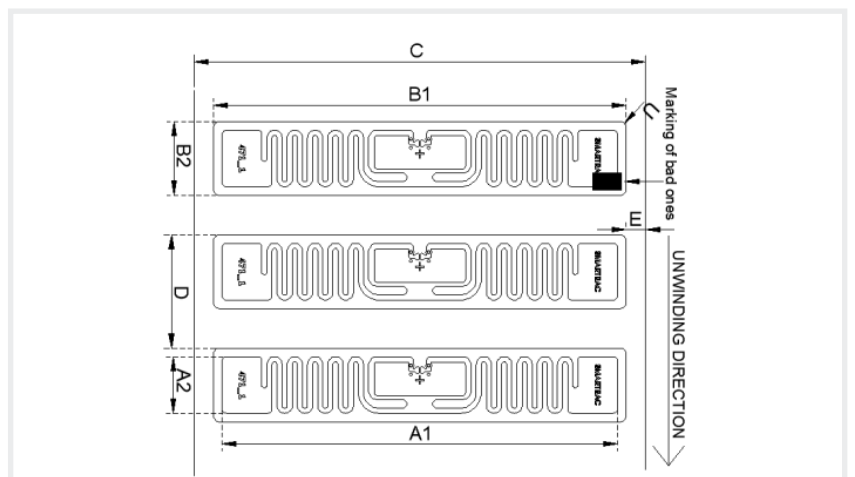
EPC Class 1 Gen 2, ISO 18 000-6C, NXP UCode 7XM  
Item Code: TAG000118

## Mechanical dimensions

A1 x A2	Antenna size	70 x 10 mm	± 0,5 mm	2,756 x 0,394 in
B1 x B2	Die-cut size	73 x 13 mm	± 0,2 mm	2,874 x 0,512 in
C	Web width	80 mm	± 0,5 mm	3,150 in
D	Pitch, length per piece MD	20 mm	± 1,5 mm	0,787 in
E	Die-cut to web edge	3,5 mm	± 1,5 mm	0,138 in
U	Die-cut corner radius	1 mm		

### Product Highlights

- | Chip: UCODE 7xm
- | Memory: 448 bit EPC + 2048 bit User
- | Tag Format: Paper tag, adhesive on one side
- | Larger memory for libraries who want to replicate HF Data Formats
- | Standard UHF form-factor for reduced cost



## Electrical characteristics

Integrated Circuit (IC)	NXP UCode 7XM
Air interface protocol	EPC Class 1 Gen 2, ISO 18 000-6C
Operation frequency	860 - 960 MHz
Memory	448bit EPC + 2048 bit

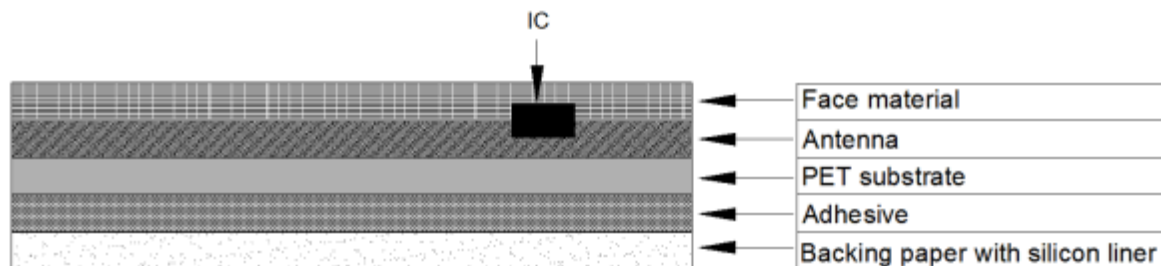
### General characteristics of transponder

Operating temperature (electronics parts)	-40 °C / +85 °C	-40 °F / 185 °F
ESD voltage immunity	± 2 kV peak HBM	
Shelf life: From the date of manufacture 2 years in	+20 °C, 50 % RH	68 °F, 50 % RH
Bending diameter (D)	> 50 mm, tension less than 10 N	

### Delivery form

Transponder format	Die-cut	
Transponder face material	Opaque Matt Paper 79	
Transponder antenna material	Aluminum	
Transponder adhesive	RA-2	
- labelling temperature	min. +5 °C	min. 41 °F
- usage temperature	-40°C - 150 °C	-40 °F - 302 °F
- peel	min. 15 N / 25 mm (FTM 1)	
Final inspection	100 %, known faulty ones marked	
Minimum delivery yield	97 %	
Reel Label	Reel number, Material number, Material description, Yield, Qty of functional inlays, Qty of non-functional inlays, Date	

### Structure



### Delivery details

Appearance	Single row reel form
Reel core	Paper core inner diameter 76 mm (3 in)
Winding of the reel	Face out
Reel size	5000 pcs/reel
Package size	20000 pcs/box Deliveries only in full packages.

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# bibliotheca UHF tag™ Dogbone

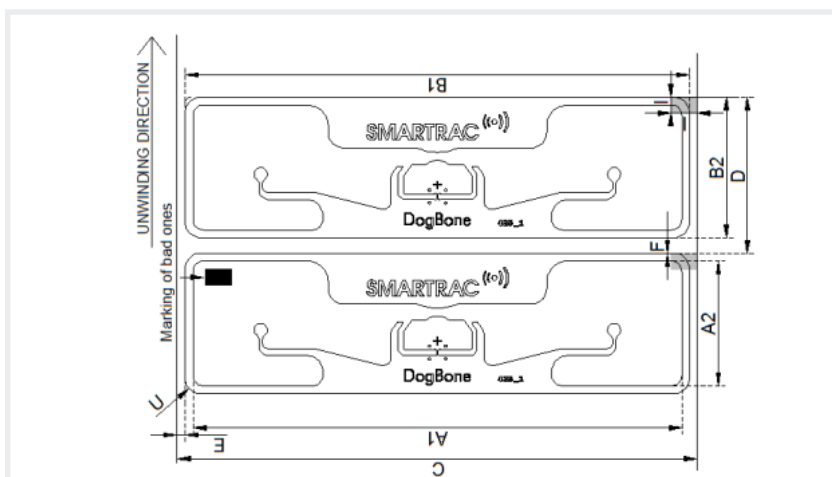
EPC Class 1 Gen 2, ISO 18 000-6C, Impinj Monza R6-P  
Item Code: TAG000119

## Mechanical dimensions

A1 x A2	Antenna size	94 x 24 mm	± 0,5 mm	3,701 x 0,945 in
B1 x B2	Die-cut size	97 x 27 mm	± 0,2 mm	3,819 x 1,063 in
C	Web width	100 mm	± 0,5 mm	3,937 in
D	Pitch, length per piece MD	30 mm	± 1,5 mm	1,181 in
E	Die-cut to web edge	1,5 mm	± 1,5 mm	0,059 in
F	Die-cut to register mark	0 mm	± 1,0 mm	0,000 in
I	Minimum size of register mark (width x length)	5 x 3 mm		0,197 x 0,118 in
U	Corner radius	3 mm		0,118 in

### Product Highlights

- | Chip: Monza RP-6
- | Memory: 128 bit EPC + 32 bit User
- | Tag Format: Paper tag, adhesive on one side
- | Smaller memory ideal for libraries who only want the Item ID (barcode) on the tag or using a database lookup model
- | Larger tag with longer read range



### Electrical characteristics

Integrated Circuit (IC)	Impinj Monza R6-P	
Air interface protocol	EPC Class 1 Gen 2, ISO 18000-63	
Operation frequency	860 - 960 MHz	
Memory	128 bit EPC + 32 bit	

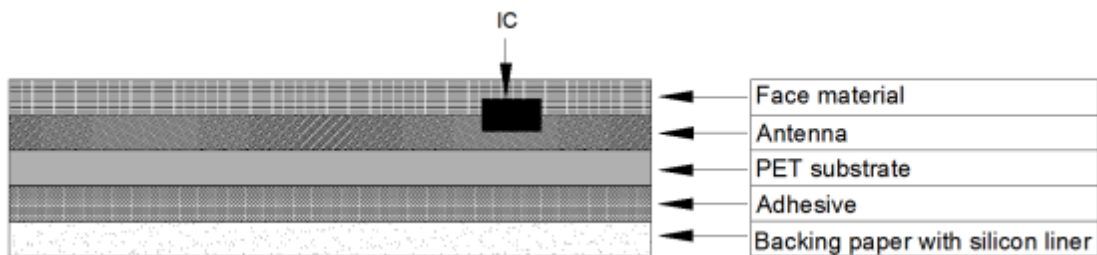
### General characteristics of transponder

Operating temperature (electronics parts)	-40 °C / +85 °C	-40 °F / 185 °F
ESD voltage immunity	± 2 kV peak HBM	
Shelf life: From the date of manufacture 2 years in	+20 °C, 50 % RH	68 °F, 50 % RH
Bending diameter (D)	> 50 mm, tension less than 10 N	

### Delivery form

Transponder format	Die-cut	
Transponder face material	Opaque Matt Paper 79	
Transponder antenna material	Aluminum	
Transponder adhesive	RA-2	
- labelling temperature	min. +5 °C	min. 41 °F
- usage temperature	-40°C - 150 °C	-40 °F - 302 °F
- peel	min. 15 N / 25 mm (FTM 1)	
Final inspection	100 %, known faulty ones marked	
Minimum delivery yield	97 %	
Reel Label	Reel number, Material number, Material description, Yield, Qty of functional inlays, Qty of non-functional inlays, Date	

### Structure



### Delivery details

Appearance	Single row reel form
Reel core	Paper core inner diameter 76 mm (3 in)
Winding of the reel	Face out
Reel size	3000 pcs/reel

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# bibliotheca UHF tag™ Belt

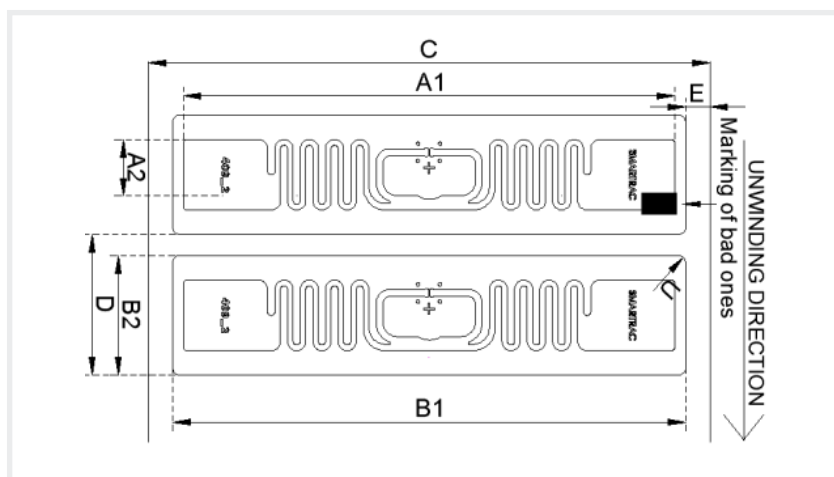
EPC Class 1 Gen 2, ISO 18 000-6C, Impinj Monza R6-P  
Item Code: TAG000120

## Mechanical dimensions

A1 x A2	Antenna size	70 x 10 mm	± 0,5 mm	2,756 x 0,394 in
B1 x B2	Die-cut size	73 x 17 mm	± 0,2 mm	2,874 x 0,669 in
C	Web width	80 mm	± 0,5 mm	3,150 in
D	Pitch, length per piece MD	20 mm	± 1,5 mm	0,787 in
E	Die-cut to web edge	3,5 mm	± 1,5 mm	0,138 in
U	Die-cut corner radius	3 mm	± 1,0 mm	0,118 in

### Product Highlights

- | Chip: Monza RP-6
- | Memory: 128 bit EPC + 32 bit User
- | Tag Format: Paper tag, adhesive on one side
- | Smaller memory ideal for libraries who only want the Item ID (Barcode) on the tag or using a database lookup model
- | Standard UHF form-factor for reduced cost



Lowest cost UHF Tag Offering

### Electrical characteristics

Integrated Circuit (IC)	Impinj Monza R6-P	
Air interface protocol	EPC Class 1 Gen 2, ISO 18000-63	
Operation frequency	860 - 960 MHz	
Memory	128 bit EPC + 32 bit	

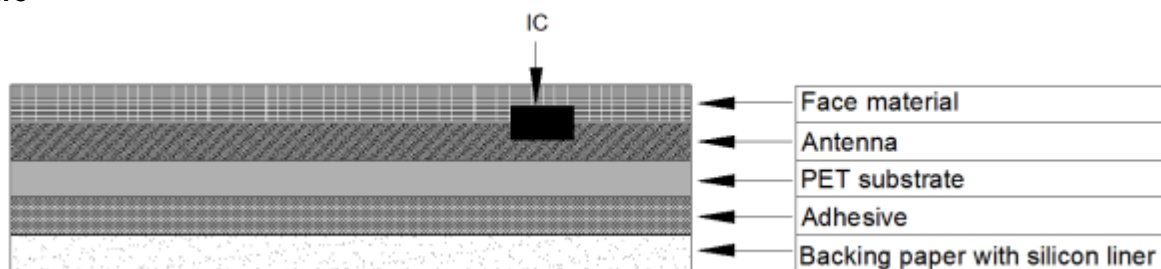
### General characteristics of transponder

Operating temperature (electronics parts)	-40 °C / +85 °C	-40 °F / 185 °F
ESD voltage immunity	± 2 kV peak HBM	
Shelf life: From the date of manufacture 2 years in	+20 °C, 50 % RH	68 °F, 50 % RH
Bending diameter (D)	> 50 mm, tension less than 10 N	

### Delivery form

Transponder format	Die-cut	
Transponder face material	Mid-gloss paper	
Transponder antenna material	Aluminum	
Transponder adhesive	RA-5	
- labelling temperature	min. +0 °C	min. 32 °F
- usage temperature	-20 °C - 80 °C	-4 °F - 176 °F
- peel	min. 10 N / 25 mm (FTM 1)	
Final inspection	100 %, known faulty ones marked	
Minimum delivery yield	97 %	
Reel Label	Reel number, Material number, Material description, Yield, Qty of functional inlays, Qty of non-functional inlays, Date	

### Structure



### Delivery details

Appearance	Single row reel form
Reel core	Paper core inner diameter 76 mm (3 in)
Winding of the reel	Face out
Reel size	5000 pcs/reel
Package size	10000 pcs/box Deliveries only in full packages.

Although we make every effort to ensure information is correct at the time of release, it is possible that specifications and features may vary or change over time. bibliotheca therefore makes no representations or warranties as to the completeness or accuracy of the information contained within this document.