



Inlay Layout and Dimensions

	IN533	IN543
Antenna width	45mm ± 0.02mm(1.77in ± 0.01in)	45mm ± 0.02mm(1.77in ± 0.01in)
Antenna length	76mm ± 0.02mm(2.9in ± 0.01in)	76mm ± 0.02mm(2.9in ± 0.01in)
Web width	48mm ± 0.02mm(1.89in ± 0.01in)	53mm ± 0.02mm(2.09in ± 0.01in)
Lengthwise pitch	91mm ± 0.02mm(3.58in ± 0.01in)	84.67mm ± 0.02mm(3.33in ± 0.01in)

Inlay Composition

Composition	Material	Thickness* [µm]
Top	Aluminum	30
Support	Polyester PET	38
Bottom	Aluminum	10 ÷ 20

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

Available ICs

	ST25TV512	ST25TV02K	NXP ICODE SLIX	NXP ICODE X SLIX-S	NXP ICODE X SLIX-L
Product code	IN533-ST25TV512 IN543-ST25TV512	IN533-ST25TV02K IN543-ST25TV02K	IN533-SLX IN543-SLX	IN533-SLXS IN543-SLXS	IN533-SLXL IN543-SLXL
Operating frequency	13.56 MHz	13.56 MHz	13.56 MHz	13.56 MHz	13.56 MHz
Standard compliance	ISO 15693 ISO 18000-3	ISO 15693 ISO 18000-3	ISO 15693 ISO 18000-3	ISO 15693 ISO 18000-3	ISO 15693 ISO 18000-3
Thickness	75± 15µm 120 ± 15µm	75± 15µm 120 ± 15µm	120µm ± 15µm	120µm ± 15µm	120µm ± 15µm
Operating temperature	-40°C to +85°C	-40°C to +85°C	-25°C to +85°C	-25°C to +85°C	-25°C to +85°C
Storage temperature	n/a	n/a	-55°C to +140°C	-55°C to +140°C	-55°C to +140°C
Unique serial number	8 bytes	8 bytes	8 bytes	8 bytes	8 bytes
Memory size	512 bits	2048 bits	1024 bits	2048 bits	512 bits
Memory organization	64 blocks of 4 bytes	64 blocks of 4 bytes	32 blocks of 4 bytes	16 pages with 4 blocks of 4 bytes	16 blocks of 4 bytes
Data retention	60 years	60 years	50 years	50 years	50 years
Write endurance	100 000 cycles	100 000 cycles	100 000 cycles	100 000 cycles	100 000 cycles

General supply conditions

Reel dimensions	Internal diameter	76 mm
	External diameter	300 mm
Reel quantity	Inlay per reel	8000 ± 10% (custom sizes available upon request)