

Inlay Features

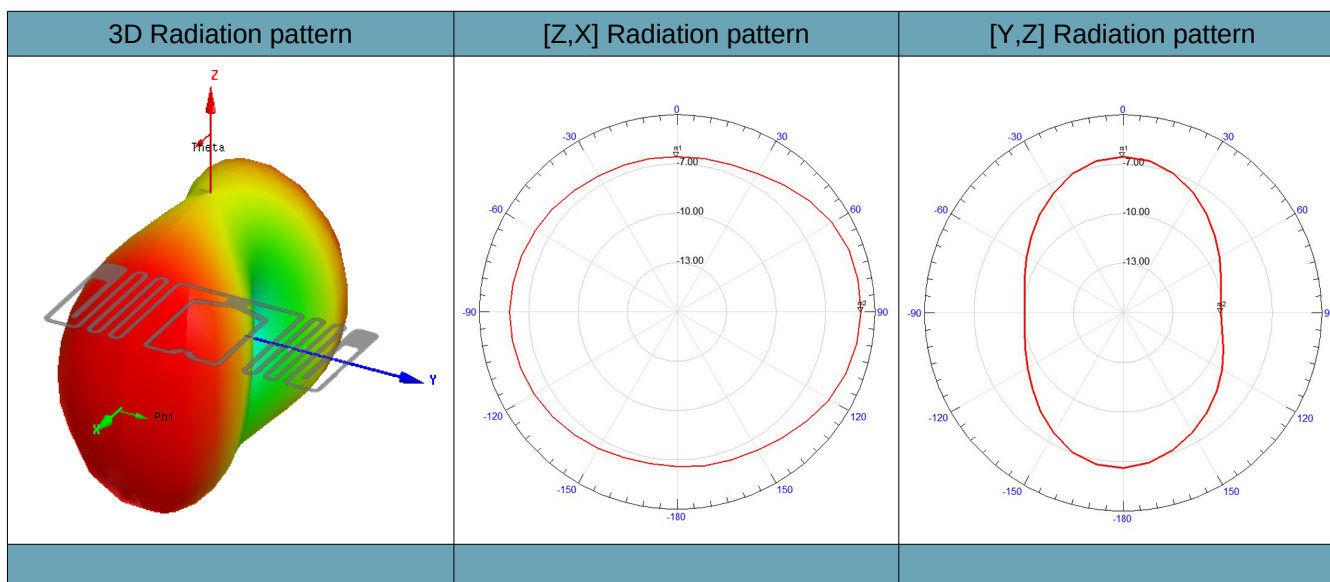
- Rain RFID compliant
- Long read range
- Supports NXP dies

Applications

- Apparel applications
- Item level logistics

Inlay Layout and Dimensions

	SKLI4218
Antenna width	42 mm \pm 0.5 mm (1.65 \pm 0.02 in)
Antenna length	18 mm \pm 0.5 mm (0.71 \pm 0.02 in)
Lengthwise pitch	39.08 mm \pm 0.5 mm (1.54 \pm 0.02 in)
Web width	54 mm \pm 0.5 mm (2.12 \pm 0.02 in)



Inlay Composition

Composition	Material	Thickness* [μm]
Top	Aluminium	$9 \pm 5\%$
Support	Polyester PET	$38 \pm 5\%$

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

Available ICs

	NXP UCode G2iL	NXP UCode G2iL+	NXP UCode G2iM	NXP UCode G2iM+
Product code	SKLI4218-G2iL	SKLI4218-G2iLP	SKLI4218-G2iM	SKLI4218-G2iMP
Operating frequency	840 ÷ 960 MHz			
Standard compliance	EPC Class 1 Gen2 – ISO 18000-6C			
Thickness	$120\mu\text{m} \pm 15\mu\text{m}$	$120\mu\text{m} \pm 15\mu\text{m}$	$120\mu\text{m} \pm 15\mu\text{m}$	$120\mu\text{m} \pm 15\mu\text{m}$
Operating temperature	-40 °C to +85 °C	-40 °C to +65 °C	-40 °C to +65 °C	-40 °C to +65 °C
Storage temperature	-55 °C to +125 °C	-55 °C to +125 °C	-55 °C to +125 °C	-55 °C to +125 °C
Unique serial number	32 bits in TID	32 bits in TID	48 bits in TID	48 bits in TID
EPC code	128 bits	128 bits	256 bits	128-448 bits
User memory	-	-	640 bits	320-640 bits
TID	64 bits (read only)	64 bits (read only)	208 bits 96 bit read only UID + 112 bits user TID	208 bits 96 bit read only UID + 112 bits user TID
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	20 years	20 years	20 years	20 years
Data retention	10 000 cycles	10 000 cycles	10 000 cycles	10 000 cycles

	NXP UCode 7	EM Marin EM4124	EM Marin EM4126	
Product code	SKLI4218-U7	SKLI4218-EM4124	SKLI4218-EM4126	
Operating frequency	860 ÷ 960 MHz			
Standard compliance	EPC Class 1 Gen2 – ISO 18000-6C			
Thickness	$120\mu\text{m} \pm 15\mu\text{m}$	$152\mu\text{m} \pm 15\mu\text{m}$	$152\mu\text{m} \pm 15\mu\text{m}$	

Operating temperature	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C	
Unique serial number	Automatic TID based self serialization	32 bits in EPC & TID bank	32 bits serialized in EPC, non locked	
EPC code	128 bits	96 bits	208 bits	
User memory	-	-	-	
TID (locked)	96 bits	64 bits	32 bits	
Reserved memory	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)	-	
Write endurance	20 years	10 years	10 years	
Data retention	100 000 cycles	10 000 cycles	10 000 cycles	

General supply conditions

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