UCODE 9xe FEATURES MORE EPC MEMORY, FOR EVEN SMARTER IOT APPLICATIONS

Offering 128 bits of EPC memory, this UCODE 9 variant can store important attributes, like expiration date or production information, directly on the IC, so IoT applications can be even smarter.

TARGET APPLICATIONS

- Perishable-food tracking, to ensure freshness
- Real-time, point-to-point tracking on any product within the supply chain
- Omnichannel retail support, with precise tracking from source to store
- High-speed store checkouts for increased consumer satisfaction

Designed as a drop-in replacement for the high-performance UCODE 9, the UCODE 9xe offers the same feature set, RF performance, and compatibility with Auburn ARC-certified antennas as the UCODE 9, but with 128 bits of Electronic Product Code (EPC) memory to support a wider range of IoT use cases. The result is a RAIN RFID tag that benefits brand owners, retailers, and consumers alike.

KEY FEATURES

- Read sensitivity -24 dBm
- Write sensitivity -22 dBm
- 128-bit EPC Memory
- Drop-in replacement for UCODE 9/ UCODE 8
- Self-adjust
- Memory safeguard
- Pre-serialization of 96-bit EPC

KEY BENEFITS

- Store retail/ supply-chain attributes directly on the chip
- Generate accurate and fast inventory counts
- Save time and increase tag encoding throughput
- Promote environmental sustainability

QUICK DESIGN-IN

UCODE 9xe offers the same RF performance as UCODE 9 and may use the very same inlay antenna design. This saves time and effort, enabling a quick project ramp-up.

MEMORY SAFEGUARD

Two features in the UCODE 9xe Memory Safety System to protect data and ensure accuracy. The Error Correction Code (ECC) algorithm safeguards EPC numbers by automatically detecting and correcting potential single-bit errors in the entire UCODE 9xe memory, and can also be used to detect and flag multi-bit errors, while the parity check detects possible changes to any manufacturer-programmed Tag Identifier (TID) codes used in the application.

THE CHOICE FOR SUSTAINABILTY

RAIN RFID technology helps reduce waste in production and the supply chain, by making it easier to match production with demand. The high performance of the UCODE 9 family makes it possible to use a smaller RFID antenna, so designs use less aluminum and PET resin. What's more, the extended EPC memory of the UCODE 9xe makes it possible to store the kinds of data points and flags that make it easier to recycle, re-sell, and re-use products.

UCODE 9xe PRODUCT DETAILS

Performance	Read sensitivity	-24 dBm
	Write sensitivity	-22 dBm
	Self-adjust	Yes
Memory	EPC memory	128-bit
	TID memory	96-bit
	Kill password	32-bit
	Endurance/data retention	100 K/20 y
	Memory safeguard	Yes
	Block write (32-bit)	Yes
	Permalock	One-time lock
Ambient Conditions	Temperature range	-40 to +85 °C
Delivery Type	Wafer diameter	12"
	Large gold (Au) pads	Yes

ORDERING INFORMATION

Product	Delivery Form	Type	12NC
UCODE 9xe	Die on sawn 12" wafer; large pads	SL3S1216FUD2/HAPAZ	9354 304 59035