

EM MICROELECTRONIC



Subject to change without notice Version 1.0, 8-Oct-14 Copyright © 2014, EM Microelectronic-Marin SA www.emmicroelectronic.com





ISO 18000-63 / EPC[™] Gen2 RFID IC

General Description

EM4126 is a UHF RFID IC compliant with both EPCTM Gen2 and ISO/ IEC 18000-63 (formerly known as 18000-6 Type C).

The EM4126 has 224 bits of non-volatile memory (16 bit PC Word and 208 bit UII/EPC Code) enabling the support of ISO or EPC data structures.

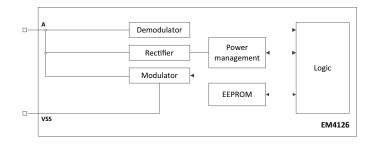
EM4126 achieves a typical read sensitivity of -19 dBm at the chip level, which translates into a typical -21 dBm sensitivity at the tag level for a dipole-like antenna with 2 dBi gain (25us TARI, 250 kHz BLF).

EPC is a trademark of EPCglobal Inc.

Applications

- I Supply chain management
- I Tracking and tracing
- I Container identification
- I Access control
- Asset control

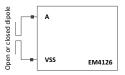
IC Block Diagram



Features

- I ISO 18000-63 compliant
- I EPC Class-1 Generation-2 compliant
- I 208-bit UII / EPC encodings are supported
- I 32-bit Short Tag Identification (TID)
- I -19 dBm (-21 dBm) typical IC (tag) read sensitivity
- I UII/EPC memory contain a default 96-bit UII/EPC code which includes the 32-bit IC serial number
- I Extended temperature range (-40°C to +85°C)

Typical Configuration



Ordering Information

The versions below are considered standards and should be readily available. For other versions or other delivery form, please contact EM Microelectronic-Marin S.A.

For samples, please, order exclusively from the standard version.

Part Number	Package / Die Form	Delivery Form
EM4126V0WS6U	Sawn wafer /	Wafer sawn on
	bumped die –	frame
	thickness of 6 mils	
EM4126V%YYY	Custom	Custom