EM MICROELECTRONIC

A COMPANY OF THE **SWATCH GROUP**

EM4325 Coin Cell Reference Design

General Description

The EM4325 Coin Cell Reference Design is an easy interface to get started with the multi-purpose EPC gen2 IC EM4325. It provides an easy way to demonstrate three specific use cases with a very small tag form factor (38mm of diameter). There are

1) Passive tag with temperature reading on demand

2) Passive tag with tamper detection and temperature reading on demand

3) BAP tag with tamper detection, temperature monitoring, and alarm indicators

Starting from these three simple examples, the gerber file can be quickly adapted to fit the other application use cases of the EM4325.

A complete design documentation and the production gerber files are available on the EM website under the support page of the EM4325 for free.

Please contact emdirect@emmicroelectronic.com for more information.

Theoretical RF Sensitivity and Read Range

Parameter	Frequency (MHz)	
	867	915
IC Sensitivity (dBm)	-28.0	-28.0
Inlay Sensitivity (dBm)*	-18.55	-17.7
Read Range (EU / NA)*	24.3' (7.4m)	29.3' (8.9m)

*Theoretical inlay sensitivity and read range for the 0.010" reference antenna design.

Option Available

Two options are available on request. Please use the exact reference name when ordering.

Reference	Description
EM4325CoinCellV1	Antenna reference design adapted for a 0.25mm thick PCB
EM4325CoinCellV2	Antenna reference design adapted for a 1.6mm thick PCB

Tag Overview