



# ICODE DNA NFC Forum Type 5 Tag with AES Cryptography

## SL2S6002FUD

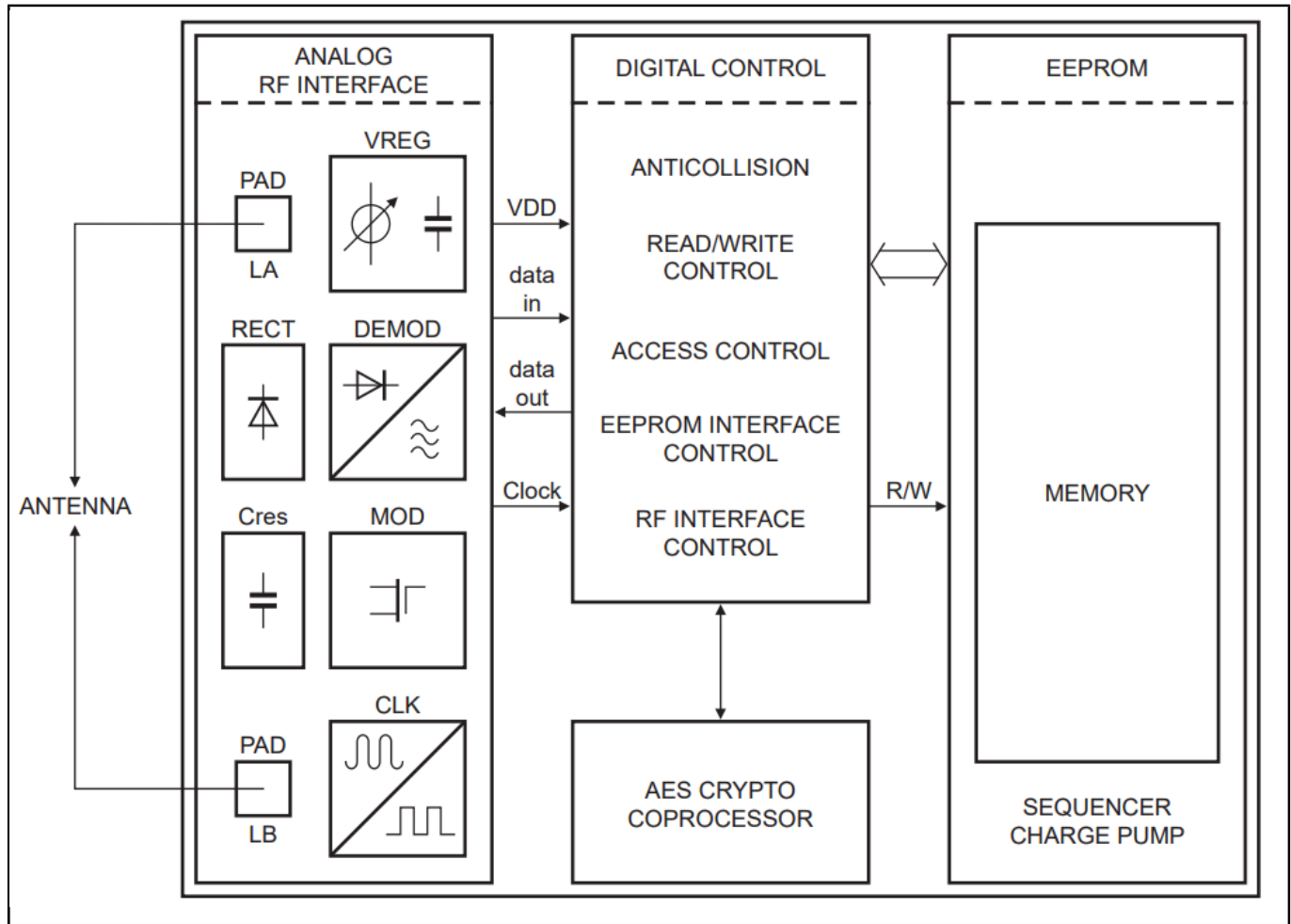
Last Updated: May 11, 2022

The ICODE DNA is a leading-edge HF tag IC targeting brand protection tagging applications which require HF long read range as well as cryptographic authentication check. This security is based in the first place on a 128-bit AES key which is securely stored on IC's and which is used to perform cryptographic authentication by an AES coprocessor. The ICODE DNA IC can be operated without line of sight up to a distance of 1.5 m (gate width). No battery is needed. When the smart label is positioned in the field of an interrogator antenna, the high-speed RF communication interface enables data to be transmitted up to 53 kbit/s.

The ICODE DNA contains an intelligent anticollision function enables several tags to operate in the field simultaneously. The anticollision algorithm selects each tag individually and ensures that the execution of a transaction with a selected tag is performed correctly without data corruption resulting from other tags in the field.

Several security and privacy aspects are contained on the ICODE DNA such as UID, Originality signature, EAS and AFI functionality, among others.

# ICODE DNA Block Diagram Block Diagram



View additional information for [ICODE DNA NFC Forum Type 5 Tag with AES Cryptography](#).

**Note:** The information on this document is subject to change without notice.

[www.nxp.com](http://www.nxp.com)

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2022 NXP B.V.