

Secure iRAM Extender

Overview

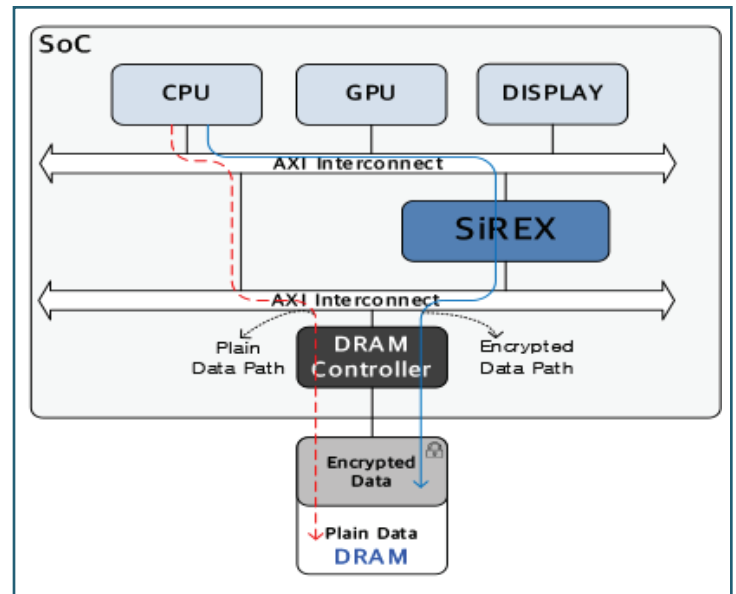
The Secure iRAM Extender (SIREX) is a DRAM protection solution. SIREX encrypts the raw form of data and delivers it to the DRAM controller so that the data written in DRAM through SIREX is stored in encrypted form. SIREX is compliant with the AMBA AXI4 specification. The throughput of SIREX can be scaled, according to system requirement.

Key Features

- Transparent On-the-fly Encryption for DRAM Protection
- Encryption Type : AES CTR Mode (128 bit Key) for Code Confidentiality
- Configurable Options for Secure Software Code
 - o Address Remapping Function for Seamless Software Mapping
 - o Configurable Encrypted DRAM Range (Up to 4 Region)
 - o Bypass (No Encryption) Mode
- Safety Features : Error Correcting Code (SEC-DED)

Deliverables

- Encrypted RTL
- Data Sheet Document
- User Guide Document



Target Applications

- Against DRAM Probing Attack
- Against DRAM Cold-boot Attack

SAMSUNG Foundry

For more information, please contact us at IP@silvaco.com.

©Copyright Silvaco, Inc. All rights reserved. Silvaco is a registered trademark of Silvaco, Inc. Samsung Foundry is a trademark of Samsung Electronics Co. Ltd. All other names mentioned herein are trademarks or registered trademark of their respective owners.

All information provided is for reference purposes only and may be changed without notice.

SILVACO

HEADQUARTERS
2811 Mission College Boulevard, 6th Floor
Santa Clara, CA 95054
Phone: 408-567-1000
Fax: 408-496-6080



CALIFORNIA

sales@silvaco.com
408-567-1000

MASSACHUSETTS

masales@silvaco.com
978-323-7901

TEXAS

txsales@silvaco.com
512-418-2929

JAPAN

jpsales@silvaco.com

EUROPE

eusales@silvaco.com

FRANCE

eusales@silvaco.com

KOREA

krsales@silvaco.com

TAIWAN

twsales@silvaco.com

SINGAPORE

sgsales@silvaco.com

CHINA

cnsales@silvaco.com

WWW.SILVACO.COM