PRODUCT SHEET

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SECURE DEBUG HARDWARE IP

The Secure Debug IP provides isolation between 2 domains. It will ensure isolation between the HOST System on one hand, and the HSM System on another hand. Both (HOST and HSM) can access the IP through an AXI Slave interface.

Secure-IC's Secure Debug IP is a hardware IP that provides:

- Hardware Authentication scheme between the HOST and the HSM.
- Communication interface between the HOST and the HSM, mainly for the purpose of the maintenance of the System-on-Chip.

This IP is controlled by a HOST through an AXI Slave Interface. The purpose of the Secure Debug IP is to provide the following services:

- Get life-cycle information from the HSM.
- Provide a Hardware Authentication scheme.
- Allow only one HOST to be logged in at the same time.
- Allow to open the HSM debug port only if life cycle mode values allow it.
- Receive Maintenance requests (first programming, update, lifecycle ...) from an external user.



Activities

- First Programming
- Debug purpose
- Key injection/generation
- On-site Firmware injection/update
- Get life-cycle information from the HSM
- Provide a Hardware Authentication scheme
- Allow only one Host to be logged at the same time
- Open the HSM debug port only if life cycle mode values allow it
- Receive Maintenance requests (First programming, update, lifecycle...) from an external user

Technology

As a front-end module, Secure Debug can be deployed in any ASIC's techno node which Secure-IC has experience with:

• 130nm /65nm /55nm /40nm /28nm /16nm /12nm /10nm /7nm /5nm /3nm





V4.0

