OSLAR_EL1, OS Lock Access Register

The OSLAR_EL1 characteristics are:

Purpose

Used to lock or unlock the OS Lock.

Configuration

External register OSLAR_EL1 bits [31:0] are architecturally mapped to AArch64 System register OSLAR_EL1[31:0].

OSLAR_EL1 is in the Core power domain.

The OS Lock can also be locked or unlocked using DBGOSLAR.

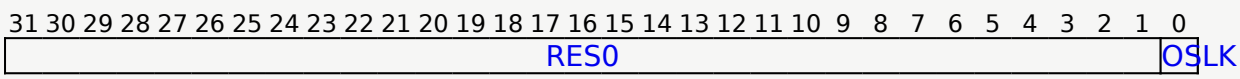
If FEAT_Debugv8p2 is not implemented, it is implementation defined whether external debug accesses to OSLAR_EL1 are ignored and return an error when AllowExternalDebugAccess() returns FALSE for the access.

If FEAT_Debugv8p2 is implemented, external debug accesses to OSLAR_EL1 are ignored and return an error when AllowExternalDebugAccess() returns FALSE for the access.

Attributes

OSLAR_EL1 is a 32-bit register.

Field descriptions



Bits [31:1]

Reserved, res0.

OSLK, bit [0]

On writes to OSLAR_EL1, bit[0] is copied to the OS Lock.

Use EDPRSR.OSLK to check the current status of the lock.

Accessing OSLAR_EL1

Note

SoftwareLockStatus() depends on the type of access attempted and AllowExternalDebugAccess() has a new definition from Armv8.4. Refer to the Pseudocode definitions for more information.

OSLAR_EL1 can be accessed through the external debug interface:

Component	Offset	Instance
Debug	0x300	OSLAR_EL1

This interface is accessible as follows:

- When IsCorePowered(), !DoubleLockStatus(), AllowExternalDebugAccess() and SoftwareLockStatus(), accesses to this register are **WI**.
- When IsCorePowered(), !DoubleLockStatus(), AllowExternalDebugAccess() and !SoftwareLockStatus(), accesses to this register are **WO**.
- When IsCorePowered(), !DoubleLockStatus(), ! AllowExternalDebugAccess() and FEAT_Debugv8p2 is not implemented, accesses to this register are **IMPDEF**.
- Otherwise, accesses to this register generate an error response.

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