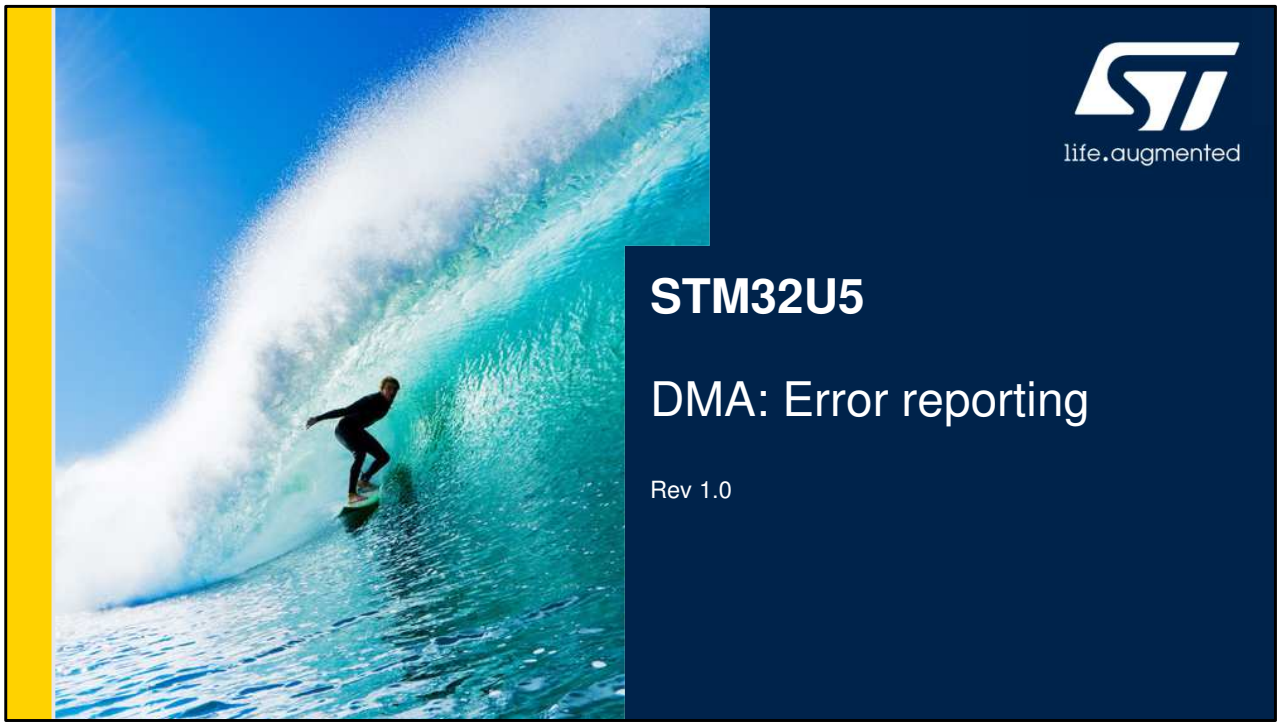

Hello, and welcome to this presentation, that describes the errors reported by the GPDMA and LPDMA controllers.

Error reporting & debug

Error cause	Flag	Channel disabled by hardware	Debug
Data transfer error	DTEF	YES	User should debug code vs product memory mapping and security/protection attributes
Link transfer error	ULEF	YES	
User setting error	USEF	YES	An incorrectly programmed (LLI) transfer is not executed User should debug DMA code

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2

The LPDMA and GPDMA are able to manage and report to the user the following error conditions:

- Data transfer error
- Link transfer error
- User setting error.

In all three cases, the channel encountering the error is automatically disabled by the DMA controller.

All these errors can be reported to the Cortex-M33 core through an interrupt request.

A transfer error occurs in the event of any in one of the following situations:

- During a single or burst data transfer from the source or to the destination (DTEF is set)
- During an update of a DMA channel register from the

programmed LLI in memory (ULEF is set)
- During a tentative execution of a DMA channel with an unauthorized setting (USEF is set)

The user must perform a debug session to correct the DMA channel programming.

Thank you

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In addition to this presentation, you can refer to the other presentations on the GPDMA and LPDMA:

- DMA overview
- Autonomous DMA & low power modes
- DMA transfers hardware and software views
- DMA: Circular buffering & double buffering
- DMA linked list
- DMA 2D addressing
- DMA Register file
- DMA Input-output LLI control.