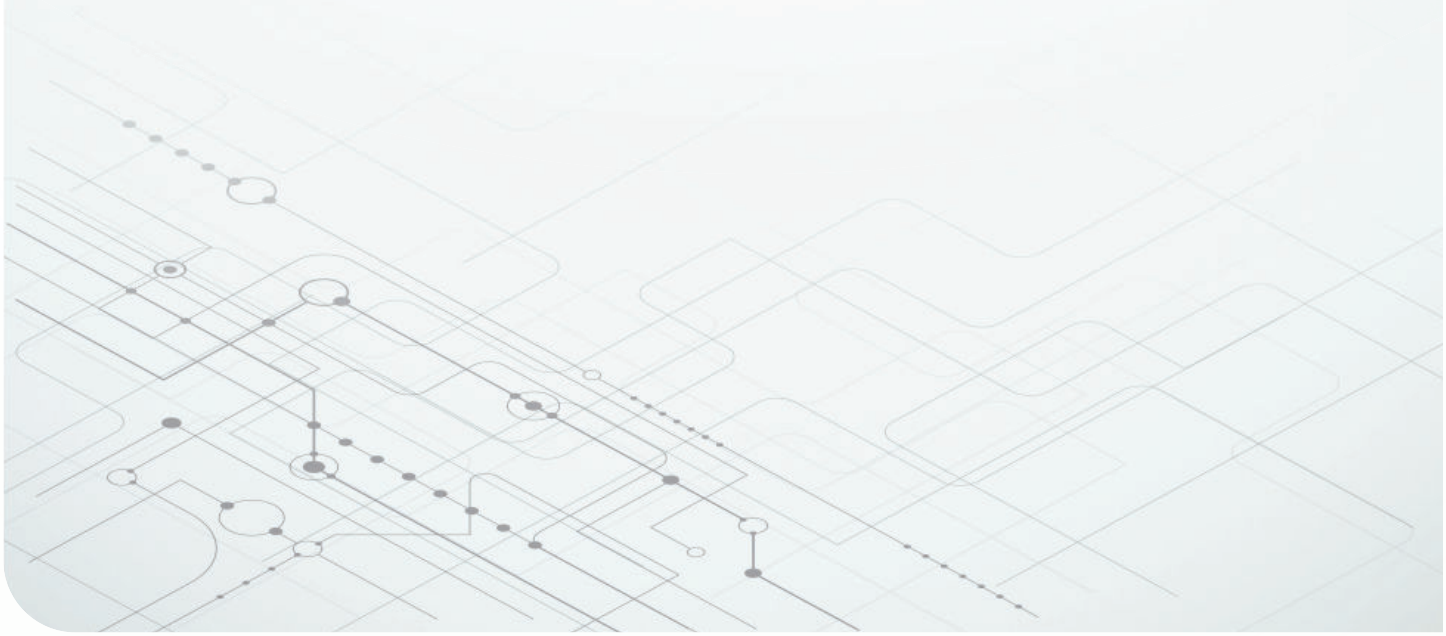
Jacinto Functional Safety Enablers

Texas Instruments



Leverage our functional safety diagnostic software library, compiler qualification kits, third party operating systems & development tools, and additional functional safety documentation to help your system-level certification efforts.

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Functional Safety Assessments	Products	Descriptions	Access
TUV-SUD certificate for QRAS-AP00210	TDA4VM DRA829 DRA821	Functional safety development process for IEC 61508 and ISO 26262 Compliant Hardware Components	**Download**
TUV-SUD certificate for QRAS-AP00216	TDA4VM DRA829 DRA821	Functional safety development process for IEC 61508 and ISO 26262 Compliant Software Development	**Download**
Device Safety Assessment Certificate	TDA4VM DRA829 (*Automotive*)	SoC meets ISO 26262 standards to achieve up to ASIL-D.	**Download**
	TDA4VM DRA829 (*Industrial*)	SoC meets IEC 61508 standards to achieve up to SIL-3	**Download**
	DRA821	SoC meets ISO 26262 and IEC 61508 standards to achieve up to ASIL-D/SIL-3.	In Progress
Device Safety Assessment Certificate (Report on Safety Certificate)	TDA4VM DRA829 (*Automotive*)	SoC meets ISO 26262 standards to achieve up to ASIL-D.	**Download**
	TDA4VM DRA829 (*Industrial*)	SoC meets IEC 61508 standards to achieve up to SIL-3	**Download**
Jacinto Family Safety Collateral			**Access** ***(NDA Is Required)***
Device Safety Assessment Technical Report	TDA4VM DRA829	SoC meets ISO 26262 and IEC 61508 standards to achieve up to ASIL-D/SIL-3.	**Request**
Safety Manual	TDA4VM DRA829 (*Automotive*)	Provides information to aid customers in designing systems in compliance with ISO 26262 functional safety standards	**Request**
	TDA4VM DRA829 (*Industrial*)	Provides information to aid customers in designing systems in compliance with IEC 61508 functional safety standards	**Request**
	DRA821 (*Prelim. Draft*)	Provides information to aid customers in designing systems in compliance with ISO 26262/ IEC61508 functional safety standards	**Request**

Functional Safety Assessments	Products	Descriptions	Access
FMEDA	TDA4VM DRA829 (*Automotive*)	Detailed, tunable, quantitative FMEDA for Jacinto functional safety Automotive products	**Request**
	TDA4VM DRA829 (*Industrial*)	Detailed, tunable, quantitative FMEDA for Jacinto functional safety Industrial products	**Request**
	DRA821 (*Prelim. Draft*)	Detailed, tunable, quantitative FMEDA for Jacinto functional safety products	**Request**
Safety Analysis Report	TDA4VM DRA829 (*Automotive*)	Summary of FIT rates, diagnostic coverage, and assumptions at the device level Jacinto functional safety Automotive products	**Request**
	TDA4VM DRA829 (*Industrial*)	Summary of FIT rates, diagnostic coverage, and assumptions at the device level Jacinto functional safety Industrial products	**Request**
	DRA821 (*Prelim. Draft)*	Summary of FIT rates, diagnostic coverage, and assumptions at the device level Jacinto functional safety products	**Request**
Safety Manual and FMEDA Training	Jacinto Processors	Video walk through on utilizing Safety Manual and FMEDA to implement functional safety concept for automotive and industrial products	In Progress
HW Safety User Guide	TDA4VM DRA829	High-level description of device safety capability, assumptions of use, safety collaterals and support and tailoring to aid customers use the SoC in designing systems	**Request**
Functional Safety Software			
Functional Safety Diagnostic Software Library (SDL)	TDA4VM DRA829	Safety Diagnostic Software Library with Compliance Support Package	**Download**
Safety Compiler Qualification Kit	TDA4VM DRA829	Developed to assist customers in qualifying their use of the TI ARM, C6000, C7000 or C2000/CLA C/C++ Compiler to functional safety standards IEC 61508 and ISO 26262.	**Download**
Functional Safety Autosar MCAL	TDA4VM DRA829 DRA821	Autosar MCAL drivers with compliance support package	In Progress
TI Safety Driver CSP	TDA4VM DRA829 DRA821	Software modules with Compliance Support Package with User Guide	In Progress
Third Party Support			
SafeRTOS	Jacinto Processors	Safety certified Real Time Operating System (RTOS) for embedded processors	**Visit**
AutoSAR - KPIT	Jacinto Processors	AUTOSAR basic software developed according to ISO 26262.	**Visit**
AutoSAR – Vector	Jacinto Processors	AUTOSAR basic software developed according to ISO 26262.	**Visit**

Functional Safety Assessments	Products	Descriptions	Access
QNX OS for Safety – BlackBerry QNX	Jacinto Processors	An embedded OS pre-certified for IEC 61508 SIL3, ISO 26262 ASIL D and IEC 62304 Class C.	**Visit**
Additional Resources			
White Papers and Application Notes	Jacinto Processors	Streamlining Functional Safety Certification in Automotive and Industrial	**Download**
White Papers and Application Notes	Jacinto Processors	Leverage Jacinto™ 7 Processors Functional Safety Features for Automotive Designs	**Download**
White Papers and Application Notes	Jacinto and Sitara Processors	Optimizing Functional Safety for Industrial Robots	**Download**
White Papers and Application Notes	Jacinto Processors	PMIC User Guide for TDA4VM/ DRA829	**Download**
Safety Concept	TDA4VM	TUV certified safety concept document for collision avoidance in AMR and Last Mile delivery Robot using TDA4VM.	In Progress

Table 1. *Jacinto Functional Safety Enablers*

2 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from August 1, 2022 to December 31, 2022 (from Revision * (August 2022) to Revision A (December 2022))	Page
• Updated Jacinto Functional Safety Enablers table.....	2

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