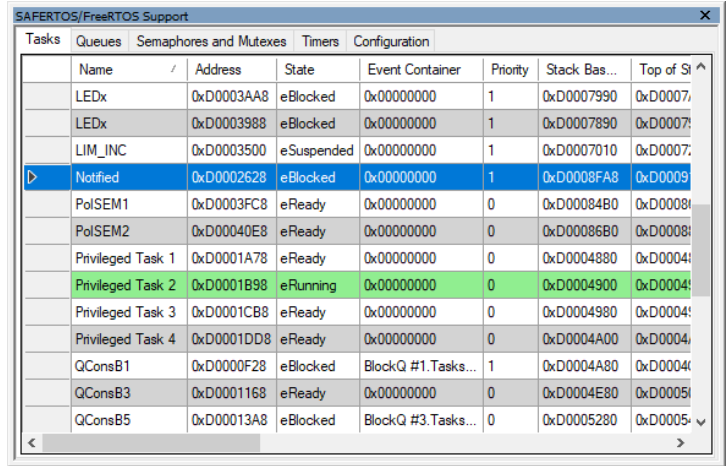


UDE SAFERTOS® Support

Debugging of Real-Time and Safety Critical Applications

The **Universal Debug Engine® (UDE)** is a powerful development platform for debugging, testing and system analysis of microcontroller applications. With an additional add-on, UDE provides extended functions for software development of real-time and safety critical applications, which are under control of the SAFERTOS® real-time operating system from WITTENSTEIN high integrity systems.

- SAFERTOS® support is provided as UDE Add-On and extends a UDE basic debugger license
- SAFERTOS Add-On consists of the SAFERTOS Support Window that provides a comprehensive and detailed view to information about SAFERTOS® resources and objects
- The shown information is directly collected from the target system
- No separate description file or similar is needed
- Available information depends on particular SAFERTOS® configuration. Configuration is determined at compile time and does not change during run-time.



Tasks	Queues	Semaphores and Mutexes	Timers	Configuration		
Name	Address	State	Event Container	Priority	Stack Bas...	Top of St ^
LEDx	0xD0003AA8	eBlocked	0x00000000	1	0xD0007990	0xD0007...
LEDx	0xD0003988	eBlocked	0x00000000	1	0xD0007890	0xD0007...
LIM_JNC	0xD0003500	eSuspended	0x00000000	1	0xD0007010	0xD0007...
Notified	0xD0002628	eBlocked	0x00000000	1	0xD0008FA8	0xD0009...
PolSEM1	0xD0003FC8	eReady	0x00000000	0	0xD00084B0	0xD0008...
PolSEM2	0xD00040E8	eReady	0x00000000	0	0xD00086B0	0xD0008...
Privileged Task 1	0xD0001A78	eReady	0x00000000	0	0xD0004880	0xD0004...
Privileged Task 2	0xD0001B98	eRunning	0x00000000	0	0xD0004900	0xD0004...
Privileged Task 3	0xD0001CB8	eReady	0x00000000	0	0xD0004980	0xD0004...
Privileged Task 4	0xD0001DD8	eReady	0x00000000	0	0xD0004A00	0xD0004...
QConsB1	0xD000F28	eBlocked	BlockQ #1.Tasks...	1	0xD0004A80	0xD0004...
QConsB3	0xD0001168	eReady	0x00000000	0	0xD0004E80	0xD0005...
QConsB5	0xD00013A8	eBlocked	BlockQ #3.Tasks...	0	0xD0005280	0xD0005...

The information that is shown in UDE's SAFERTOS Support Window is updated as soon as the target microcontroller enters the HALT state (e.g. at a breakpoint).

Available Information for Resources and Objects

Tasks

Name, address, state, stack information and utilization, priority, events, mutexes, notifications, etc.

Queues

Name, address, storage information, queued items, blocked tasks and reason for blocking, etc.

Semaphores and Mutexes

Name, address, type, semaphore count, waiting tasks, etc.

Timers

ID, name and address, timer period, call back, etc.

Configuration

Current SAFERTOS® configuration, which was set for the SAFERTOS® build.

Licensing

An additional license (UDE SAFERTOS) is required to use the SAFERTOS support add-on within a UDE base license.

About SAFERTOS®

SAFERTOS® is a preemptive, pre-certified real-time operating system that delivers unprecedented levels of determinism and robustness to embedded systems. With an imperceptible boot time, SAFERTOS® is the ideal choice for systems that need to respond quickly to safety events, when the system must be placed into a safe state in the shortest possible time. SAFERTOS® is available pre-certified to IEC 61508 SIL 3 and ISO 26262 ASILD by TÜV SÜD.

If you have any questions about our products, please feel free to contact us:

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