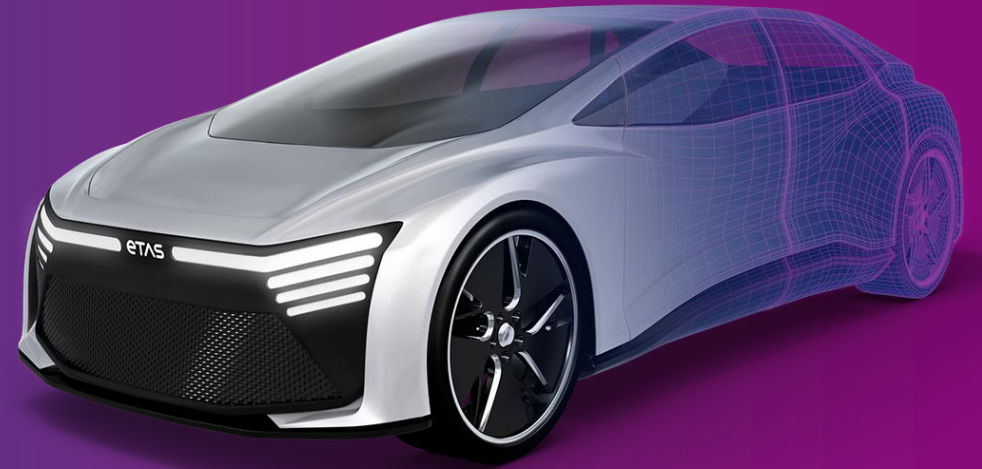


INTECRIO V5.0.5

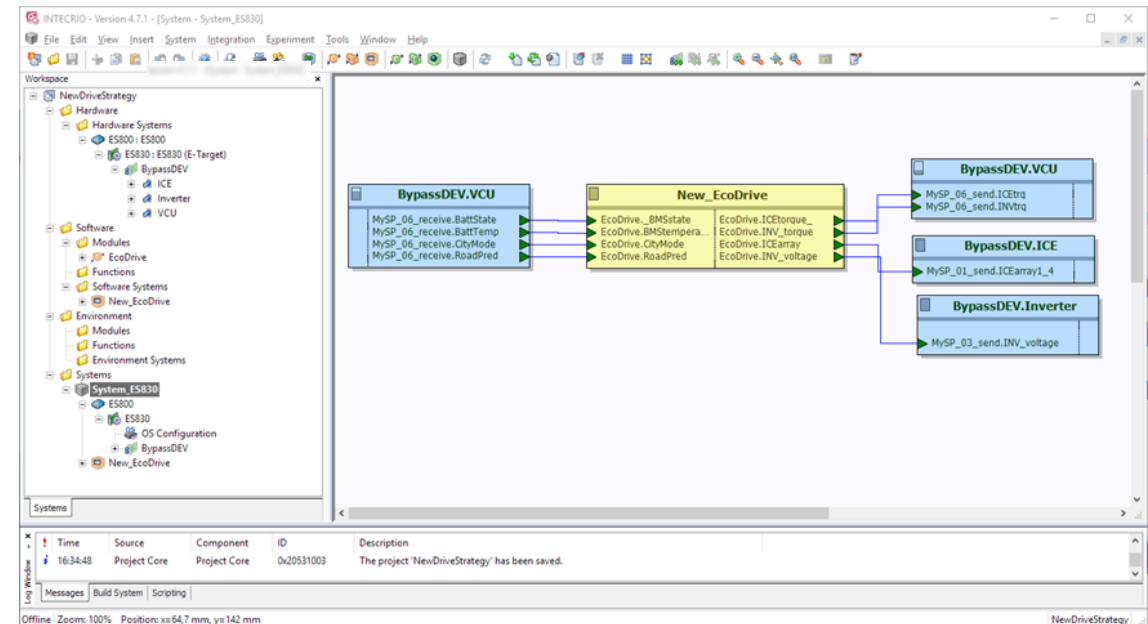
What's new



What's new INTECRIO V5.0.5

Content

1. Automapping of CAN frames
2. Support of Simulink 2022b, 2023a/b
3. Support of ES891.2 and ES886.2
4. Support of FETK-T3, -T4 and BR-XETK-S4
5. Hint: Experiment Environment



What's new INTECRIO V5.0.5

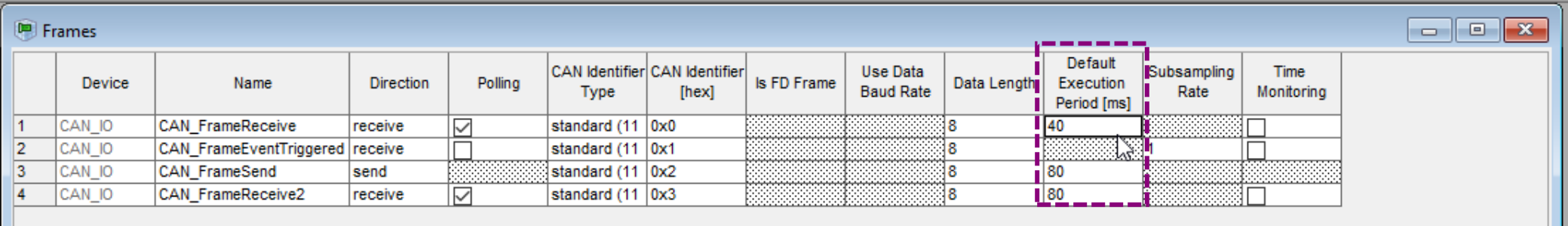
Automapping of CAN frames

With INTECRIO V5.0.5 the CAN/CAN-FD Frame parameter “Default Execution Period” is introduced.

This parameter defines the default period, in milliseconds, to send or receive the CAN frame.

The value is used by the OS Automapping mechanism to determine a suitable timer task to which this CAN frame will be mapped.

For send frames, this parameter is always active. For receive frames, this parameter is active only when parameter “Polling” is true.



	Device	Name	Direction	Polling	CAN Identifier Type	CAN Identifier [hex]	Is FD Frame	Use Data Baud Rate	Data Length	Default Execution Period [ms]	Subsampling Rate	Time Monitoring
1	CAN_IO	CAN_FrameReceive	receive	<input checked="" type="checkbox"/>	standard (11)	0x0			8	40		<input type="checkbox"/>
2	CAN_IO	CAN_FrameEventTriggered	receive	<input type="checkbox"/>	standard (11)	0x1			8			<input type="checkbox"/>
3	CAN_IO	CAN_FrameSend	send		standard (11)	0x2			8	80		
4	CAN_IO	CAN_FrameReceive2	receive	<input checked="" type="checkbox"/>	standard (11)	0x3			8	80		<input type="checkbox"/>

What's new INTECRIO V5.0.5

Automapping of CAN frames

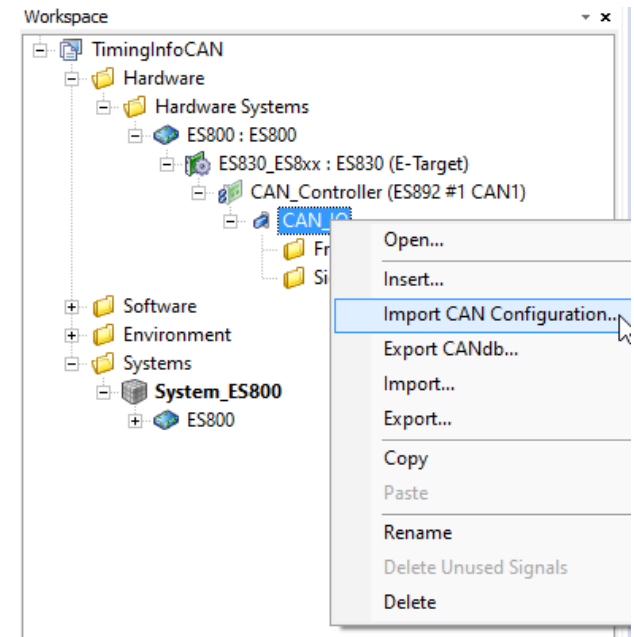
The “Default Execution Period” default value is 0 (zero) and is set during CAN configuration import. Currently the execution time information can only be read from CAN database files (*.dbc), not from AUTOSAR files (*.arxml).

If the imported **configuration file does not contain execution periods:**

- For frames that do not yet exist in the current configuration, Default Execution Period is set to 0.
- For frames that already exist in the current configuration, Default Execution Period remains unchanged.

If the imported **configuration file contains execution periods:**

- For each imported frame, whether it exists in the current configuration or not, Default Execution Period is set to the value given in the configuration file.
- For existing frames with inactive Default Execution Period, the value is imported, but a warning is issued that the value has no influence on the current OS configuration.

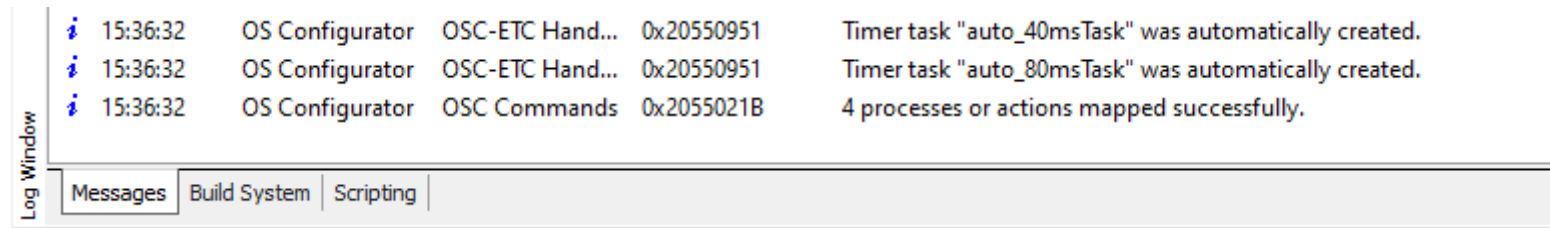


Automapping of CAN frames

When executing the Automapping in the OS configuration the following will happen:

- If Default Execution Period is 0, the OS Automapping mechanism assigns the CAN frame to the fastest timer task. If no timer task exists, the mechanism creates a new 10 ms timer task for this CAN frame.
- If Default Execution Period is set to a value $n > 0$, the OS Automapping mechanism creates a timer task with period n and assigns all CAN frames with Default Execution Period = n to that task.

New created tasks are shown in the Messages windows:



What's new INTECRIO V5.0.5

Automapping of CAN frames

Task configuration after “Automapping”

The screenshot displays the INTECRIO V5.0.5 workspace. On the left, a tree view shows the project structure under 'TimingInfoCAN', including hardware systems (ES800, ES830) and CAN controller configurations. The main area is divided into two panes. The top pane, titled 'Frames', contains a table with the following data:

	Device	Name	Direction	Polling	CAN Identifier Type	CAN Identifier [hex]	Is FD Frame	Use Data Baud Rate	Data Length	Default Execution Period [ms]	Subsampling Rate	Time Monitoring
1	CAN_IO	CAN_FrameReceive	receive	<input checked="" type="checkbox"/>	standard (11)	0x0			8	40		<input type="checkbox"/>
2	CAN_IO	CAN_FrameEventTriggered	receive	<input type="checkbox"/>	standard (11)	0x1			8			<input type="checkbox"/>
3	CAN_IO	CAN_FrameSend	send	<input type="checkbox"/>	standard (11)	0x2			8	80		<input type="checkbox"/>
4	CAN_IO	CAN_FrameReceive2	receive	<input checked="" type="checkbox"/>	standard (11)	0x3			8	80		<input type="checkbox"/>

The bottom pane, titled 'System_ES800 - OS Configuration', shows the 'UserAppMode' configuration. It features two task configurations: 'auto_40msTask' and 'auto_80msTask'. The 'auto_40msTask' is linked to the 'CAN_IO.CAN_FrameReceive' event, and the 'auto_80msTask' is linked to the 'CAN_IO.CAN_FrameReceive2' event. Two arrows originate from the 'Default Execution Period' column in the table above: a purple arrow points from the value '40' to the 'auto_40msTask' configuration, and a cyan arrow points from the value '80' to the 'auto_80msTask' configuration. The bottom right of the interface includes tabs for 'Software', 'Environment', and 'Hardware'.

What's new INTECRIO V5.0.5

Matlab®/Simulink® version support for R2022b, 2023a/b

In total, INTECRIO V5.0.5 supports the following Simulink versions:

- Simulink R2018a and R2018b
- Simulink R2019a and R2019b
- Simulink R2020a and R2020b
- Simulink R2021a and R2021b
- Simulink R2022a and R2022b
- Simulink R2023a and R2023b

What's new INTECRIO V5.0.5

Support of ES891.2 and ES886.2

INTECRIO now supports ES891.2 and ES886.2:

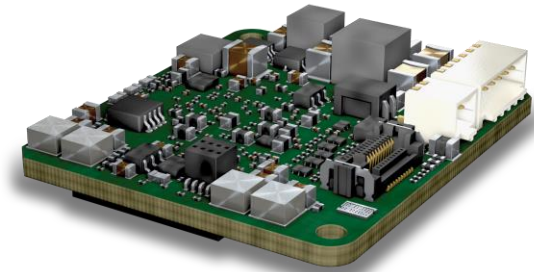
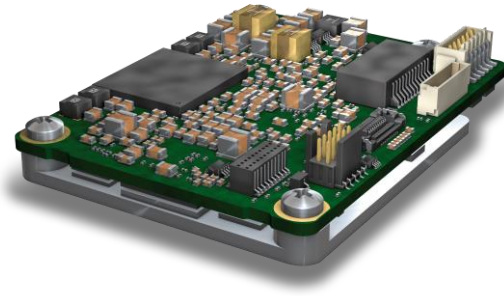
- These devices have integrated a new CAN controller that supports CAN XL in addition to CAN and CAN FD.
- CAN XL is currently only supported for MC with INCA.
INTECRIO currently only supports CAN and CAN FD with the .2 devices.
CAN XL support for Rapid Prototyping will be available in a future release of INTECRIO.
- INTECRIO does not yet differentiate between ES8xx.1 and ES8xx.2.
ES891 or ES886 needs to be selected in for .1 and .2 devices.
- **Hint:** Some CAN FD baud rate combinations are not supported by ES8xx.2 devices.
Nominal/Data bit rate: 50 kb/1 Mb, 83.3 kb/3.2 Mb, 100 kb/3.2 Mb are not supported.
For details see HSP V13.7.0 Release Notes. INTECRIO is not checking the selected baud rate combinations. A model with an unsupported baud rate will start as expected but the CAN FD communication might be not possible or unstable.



What's new INTECRIO V5.0.5

Support of FETK-T3, FETK-T4 and BR-XETK-S4

FETK-T3, FETK-T4 and BR-XETK-S4
are fully supported and can be used for External Bypass setups.



What's new INTECRIO V5.0.5

Hint to Experiment Environment (EE)

From version 5.0.4 onwards, INTECRIO only supports the 64-bit versions of the Experiment Environment.

The Experiment Environment is not shipped anymore together with INTECRIO and can be downloaded directly from www.etas.com/intecrio-ee.

If you need further support:

- Contact your regional ETAS Sales team
- Contact ETAS SE Support, Phone: +49 711 3423-2314, ec.support.de@etas.com

Thank you

Product Management Prototyping Software

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