RELEASE NOTES

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Product Name : DAvE XC22xxN_Series
Release Version : 2.1
Type of Release : Production

Important Notice:
The delivery is **not** intended to be used for production code

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Name of the Supplier : Infineon Technologies
Date of Release : 01.04.2011

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List of Released Items:

Released Item	Filename	Version	Updated
DAvE DIP	XC22xxN_Series_v2_1.dip	2.1	*
Software Release Notes	DAvE_XC22xxN_Series_Release_Notes_v2_1.pdf	2.1	*
Installation Procedure	DAvE_XC22xxN_Series_Dip_Installation_Procedure_v2_1.pdf	2.1	*

Customer Contact:

If you need any support for the software or documentation, contact Infineon Technologies AG by electronic mail:

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System Requirements:

This release is intended to be used with

- DAvE Mother System version 2.1r22 and above
- Tasking Viper v2.4r2
- Tasking Classic v8.8r1
- Keil uVision v4.00a

Installation Instructions:

Installation instructions for installing XC22xxN_Series_v2.1 dip is provided in "DAvE_ XC22xxN_Series_Dip_Installation_Procedure_v2.1.pdf"

Changes from the previous Release Version v2.0:

List of new Features:

- Enhancements:

ID	Description	Status
AI00058980	Support for XC2238N device is provided. With reference to XC2236N, XC2238N has 6 CAN nodes with 256 Message objects and 6 USIC channels.	Done

List of fixed Bugs:

ID	Description	Status
AI00059146	In USIC SPI module – for slave mode, If no slave select input signal is used default value of UxCx_DX2CR register is corrected.	Fixed

List of Limitations (incl. Workarounds):

- Interrupt disable register (SCU_INTDIS) is configured in MAIN.C as per Errata sheet reference SCU_X.D007.
- LIN support is only available for Tasking Viper.
- LIN baud rate has to be in the range of 5k to 20k.
- If static signal API option is selected, signal size should be less than 8 bits & should fall in byte boundary.
- The LDF reader is designed to read LDF files based upon Lin specification versions 2.0 and 2.1 only. In addition, it supports reading of LDF file without comments.
- In the LDF file, in the section schedule_tables, if “MasterReq” is not defined, Master Request Frame ID (0x3C) will not be generated in the Frame Table. Same limitation will be valid for “SlaveResp” ID

Note / Application Hints:

- Same as in previous release v1.1.

Changes from the previous Release Version v1.1:

List of new Features:

- In MultiCAN Message objects name can be commented in MO Name text box.
- Enhancements:

ID	Description	Status
AI00055880	In MultiCAN module – DLC, Data Fields, IDE and Identifiers are configured if the MO is configured as Gateway destination object.	Done
AI00055881	In MultiCAN module - a check box is provided to enable FIFO BOT pointer as Gateway FIFO base object.	Done

List of fixed Bugs:

ID	Description	Status
AI00056519	In USIC module Channel control register is configured inside the initialization function before the pin setup.	Fixed

List of Limitations (incl. Workarounds):

- Interrupt disable register (SCU_INTDIS) is configured in MAIN.C as per Errata sheet reference SCU_X.D007.
- LIN support is only available for Tasking Viper.
- LIN baud rate has to be in the range of 5k to 20k.
- If static signal API option is selected, signal size should be less than 8 bits & should fall in byte boundary.
- The LDF reader is designed to read LDF files based upon Lin specification versions 2.0 and 2.1 only. In addition, it supports reading of LDF file without comments.
- In the LDF file, in the section schedule_tables, if “MasterReq” is not defined, Master Request Frame ID (0x3C) will not be generated in the Frame Table. Same limitation will be valid for “SlaveResp” ID

Note / Application Hints:

- Same as in previous release v1.1.

Changes from the previous Release Version v1.0:

List of new Features:

ID	Description	Status
AI00056186	Indication if LDF file has loaded correctly is now provided	Done

List of fixed Bugs:

ID	Description	Status
AI00056185	Unused bits in Frame should not be set to “zero” but set as “one” (recessive), is fixed	Fixed
AI00056184	Response Error Frame Number and Bit Number are in correctly configured from DAvE	Fixed
AI00056183	When a LDF is loaded, the order of the Frame ID’s in frame table is not in the order of Node_attributes for slave device	Fixed
AI00056182	Generation of Message “Type Mismatch” while loading some LDF files is fixed	Fixed

List of Limitations (incl. Workarounds):

- Interrupt disable register (SCU_INTDIS) is configured in MAIN.C as per Errata sheet reference SCU_X.D007.
- LIN support is only available for Tasking Viper.
- LIN baud rate has to be in the range of 5k to 20k.
- If static signal API option is selected, signal size should be less than 8 bits & should fall in byte boundary.
- The LDF reader is designed to read LDF files based upon Lin specification versions 2.0 and 2.1 only. In addition, it supports reading of LDF file without comments.
- In the LDF file, in the section schedule_tables, if “MasterReq” is not defined, Master Request Frame ID (0x3C) will not be generated in the Frame Table. Same limitation will be valid for “SlaveResp” ID

Note / Application Hints:

1. LIN support only for XC2236N Device
2. Supports latest LIN driver release V1.4 Beta. Please refer to the driver release notes/user manual for driver details.
3. While using the static signals for master requests and slave responses care should be taken to declare the required variables as “extern”
   Ex:

```
extern uint8 Lin_DiagTxFifo[_DGNSTC_TBUFF_SZ][LIN_DIAG_FRM_LEN];
extern uint8 Lin_DiagRxFifo[_DGNSTC_RBUFF_SZ][LIN_DIAG_FRM_LEN];
extern uint8 Lin_DiagRxFifoRdIdx;
extern uint8 Lin_DiagTxFifoWrIdx;
```

4. While using DAvE option “Internal Buffer Management” for transport protocol, the diagnostic buffers are not defined to be used external to the driver.
5. DAvE LDF parser is not taking any action on the section “Node Composition definition” in ldf file, since this is not required by the driver.

Changes from the previous Release Version v0.4:

List of new Features:

- Support for Tasking Viper V2.4r2.
- Enhancements:

ID	Description	Status
AI00055275	MultiCAN module clock is supported LXBUS frequency and default baud rate is configured for 500kbaud.	Done
AI00055276	MultiCAN default sampling point changed to 80% from existing 60%	Done
AI00055487	System Timer (STM) module support is provided.	Done
AI00055491	ADC trigger with gating input is provided.	Done

List of fixed Bugs:

ID	Description	Status
AI00055272	Dummy reading of `MCAN_KSCCFG` & `CAN_FDRL` provided to avoid pipeline effects in MultiCAN module.	Fixed
AI00055274	In MultiCAN gateway destination can be configured to FIFO base object	Fixed

List of Limitations (incl. Workarounds):

- Interrupt disable register (SCU_INTDIS) is configured in MAIN.C as per Errata sheet reference SCU_X.D007.

Changes from the previous Release Version v0.3:

List of new Features:

- Transport Protocol Buffer management control is added in ECU page.

List of fixed Bugs:

ID	Description	Status
AI00054858	Signal initial values are not generated in LDF.c or .h file.	Fixed
AI00054859	Scalar signals offset restriction of byte boundary is not applicable for 2.1 configurations in DAvE.	Fixed
AI00053498	ADC0_vAliasChNum () function not working correctly when used dynamically.	Fixed
AI00055268	Diagnostic Frame IDs are not generated in “Lin_FrmTbl”	Fixed
AI00055587	No tool tip information in Frame page that other collision resolving schedules can be added in schedule page.	Fixed
AI00055559	Event Triggered Frames are not generated if the interface node name is not related to it.	Fixed

List of Limitations (incl. Workarounds):

- LIN support is only available for Tasking Viper.
- LIN baud rate has to be in the range of 5k to 20k.
- If static signal API option is selected, signal size should be less than 8 bits & should fall in byte boundary.

Note / Application Hints:

1. LIN support only for XC2236N Device
2. Supports latest LIN driver release V1.0 Beta. Please refer to the driver release notes/user manual for driver details.
3. While using the static signals for master requests and slave responses care should be taken to declare the required variables as “extern”
   Ex:
   ```
   extern uint8 Lin_DiagTxFifo[_DGNSTC_TBUFF_SZ][LIN_DIAG_FRM_LEN];
   extern uint8 Lin_DiagRxFifo[_DGNSTC_RBUFF_SZ][LIN_DIAG_FRM_LEN];
   extern uint8 Lin_DiagRxFifoRdIdx;
   extern uint8 Lin_DiagTxFifoWrIdx;
   ```
4. While using DAvE option “Internal Buffer Management” for transport protocol, the diagnostic buffers are not defined to be used external to the driver.
5. If an ldf loaded .dav project is re-opened the interface node name will be set to Master node as default.

Changes from the previous Release Version v0.2:

List of new Features:

ID	Description	Status
AI00053925	Lin LDF Files reading and generation of LDF.c & LDF.h files	Done

List of fixed Bugs:

- None

List of Limitations (incl. Workarounds):

DAvE Configuration Limitations:

- In LDF all signals have initial values. The initial value for a published signal is valid until the node writes a new value to this signal. The initial value is **not** exported to the LDF.c or .h file generated from DAvE.
- Scalar signals offset restriction of byte boundary follows the Lin 2.0 specification and prevents the user to provide a cross-boundary offset.
- Signal encoding type and signal representation (in LDF) is not taken care as is not used by the driver

Changes from the previous Release Version v0.1:

List of new Features:

- Supported XC2265N Device (100 Pin)
- Supported CAN & ASC LLD driver functions
- Enhancements:

ID	Description	Status
AI00053605	SCU Driver in DAvE updated as per SCU Driver LLD v1.0 code	Done
AI00052844	ADC Function “ADC_uwResultValid” supported in DAvE	Done

List of fixed Bugs:

ID	Description	Status
AI00053604	EBC Module configured pins are not disabled for other modules	Fixed
AI00053601	CCU61_COUT2 Pin configuration incorrect	Fixed
AI00053600	DAvE generated definition #define PSW_HLDEN/PL1 provides warning in compiler	Fixed

List of Limitations (incl. Workarounds):

- No known limitations

Notes on Release v0.1

List of Features:

- Following devices are supported
  a. XC2236N
- Following Compilers are supported
  a. Tasking Viper v2.4r1
  b. Tasking Classic v8.7r3
  c. Keil v6.17
- Following System Units & Peripheral Units can be configured through DAvE
  a. Main (Project Settings)
  b. Ports
  c. Interrupt
  d. SCU
  e. WDT
  f. USIC0/1
  g. GPT1/2
  h. RTC
  i. ADC0/1
  j. CC2
  k. CCU60
  l. MultiCAN

List of Limitations (incl. Workarounds):

Limitations:

- No known limitations