Description of STM8 LIN software package (STSW-STM8A-LIN) - Release 5.1

Introduction

The STM8 LIN package (STSW-STM8A-LIN) release 5.1 implements the LIN 2.x (2.1 and 2.0) and LIN 1.3 protocols on STM8AF Series and STM8AL Series microcontrollers.

- STM8AF6226TxSSS and STM8AF6x4x/66/68 LINUART (referred as UART2 in RM0016 and SCI1 in LIN package source code) can be configured either in LIN master or LIN slave mode.
- STM8AF5xxx and STM8AF6x69/7x/8x/9x/Ax LINUART (referred as UART3 in RM0016 and SCI1 in LIN package source code) can be configured either in LIN master or LIN slave mode.
- STM8AF5xxx and STM8AF6x69/7x/8x/9x/Ax USART (referred as UART1 in RM0016 and SCI2 in LIN package source code) can be configured in LIN master mode only. LIN package supports dual channel LIN master mode on these devices.
- STM8AL316x, STM8AL314x, STM8AL313x, STM8AL3L6x and STM8AL3L4x USART1 (referred as USART1 in RM0031 and SCI1 in LIN package source code) can be configured in LIN slave mode. Note that automatic resynchronization is not available on these devices.
- STM8AF6223 and STM8AF6226T LINUART (referred as UART4 in RM0016 and SCI1 in LIN package source code) can be configured in LIN slave mode.

This release note describes the content of the STM8 LIN software package release 5.1, the bugs fixed and the remaining limitations.

The results of the conformance tests with LIN 2.x specifications are also provided. These tests have been performed for the five standard baudrates: 20000, 19200, 10417, 9600 and 2400 bps (for further details, see Section 4: LIN 2.x conformance tests).

Table 1. STSW-STM8A-LIN 5.1 release summary

Type	Summary
Major release	• Implemented code size optimization. • Added support for STM8AF6223 and STM8AF6226T devices.

Customer support

For more information or help concerning STSW-STM8A-LIN, please contact the nearest sales office. For a complete list of ST offices and distributors, please refer to www.st.com.

Software updates

Software updates and all the latest documentation can be downloaded from the STMicroelectronics support webpage at www.st.com.

1 Minimum requirements

1.1 Software toolchain

- ST Visual Develop version 4.3.3
- CXSTM8 COSMIC C compiler version 4.3.9
- Raisonance RKit-STM8-Lite
- IAR Embedded Workbench for STM8

1.2 Hardware

- STM8AL board of STM8A-DISCOVERY (MB1037B)
- STM8AF board of STM8A-DISCOVERY (MB1036B)
- Host PC running under Windows®
- ST-LINK or RAISONANCE RLink
- STM8/128-EVAL evaluation board revision B

2 Release 5.1 content

2.1 Directory structure

The STM8 LIN package release 5.1 is organized into four folders:

- *demo*
- *lingen*
- *make*
- *src*

2.1.1 Folder "demo"

The *demo* folder contains two separate demos:

Demo based on STM8/128-Eval boards (master and slave), for STM8AF microcontrollers

This demo has been designed to demonstrate the communication between the master and slave nodes using STM8/128-EVAL boards. To run the demo, the two evaluation boards must be connected to each other through the LIN2 connector. Each demo reads the positions of the DIP switches present on the evaluation board and converts them into LIN frame signals that are then transmitted to the other board. The status of the switches is then displayed on the evaluation board LEDs.

Changing the position of buttons 1, 2, 3 of DIP switch (S1) on either board changes the status of LEDs LD4, LD3, LD2 respectively on the other board. Similarly, pressing the Key button (B1) changes the status of LED LD1.

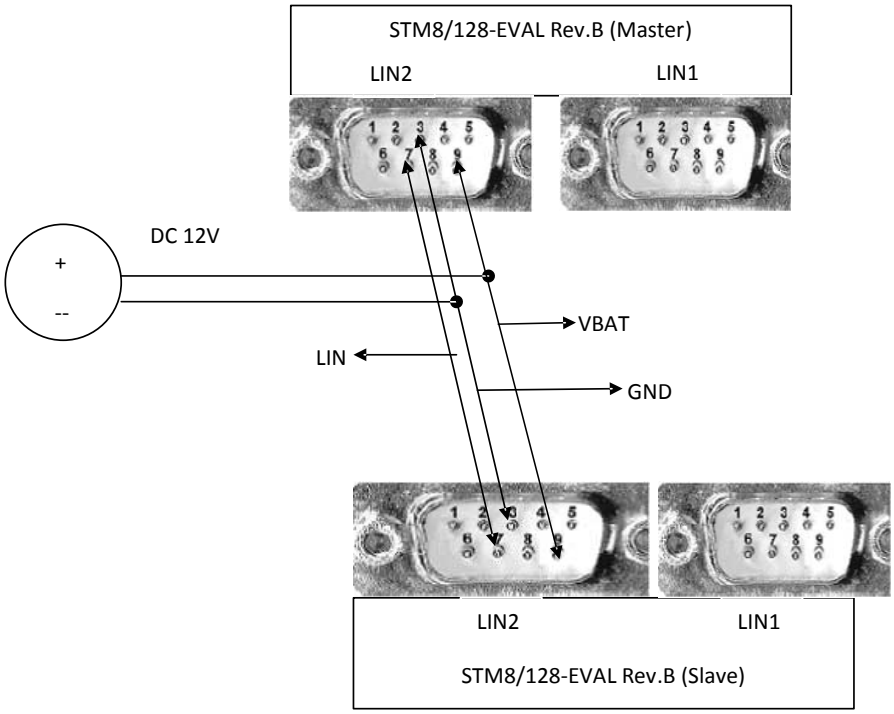
Master demo location: *\demo\stm8_128-eval\lin_basic_demo\master*

Slave demo location: *\demo\stm8_128-eval\lin_basic_demo\slave*

Table 2. Hardware connections between master and slave evaluation boards for demo

STM8/128-EVAL REV.B (Master)	STM8/128-EVAL REV.B (Slave)
UART2 or UART3 - LIN_SCI1 Interface	
LIN2 (CN14 connector) PIN3 (GND)	LIN2 (CN14 connector) PIN3 (GND)
LIN2 (CN14 connector) PIN7 (LIN)	LIN2 (CN14 connector) PIN7 (LIN)
LIN2 (CN14 connector) PIN9 (VBAT = 12 V)	LIN2 (CN14 connector) PIN9 (VBAT = 12 V)
Master clock source: Crystal 8 MHz	Slave clock source: HSI 8 MHz

Figure 1. **Hardware connections between Master and Slave evaluation boards for demo**



Demo based on STM8A-DISCOVERY (STM8AF board) (configured as master) and STM8A-DISCOVERY (STM8AL board) (configured as Slave), for STM8AL microcontrollers

This demo has been designed to demonstrate the communication between the STM8AL Series microcontroller acting like a slave node and the STM8AF Series microcontroller acting like a master node. For information about connecting the two boards, refer to the user manual *Discovery kit for STM8A microcontrollers* (UM1574).

Pressing the User1 button on the STM8AL board turns on LEDs LD4, LD5, LD6 and LD7 one at a time on the STM8AF board. Pressing the User2 button turns off the LEDs one at a time on the STM8AF board.

Similarly, pressing the User1 button on the STM8AF board turns on LCDs BAR1, BAR2, BAR3 and BAR4 one at a time on the STM8AL board. Pressing the User2 button turns off the BAR LCDs one at a time on the STM8AL board.

Master demo location: *demo\stm8-discovery\lin_basic_demo\master*

Slave demo location: *demo\stm8-discovery\lin_basic_demo\slave*

For more information on STM8 microcontrollers, refer to the related documentation (datasheets, reference manuals, application notes, and user manuals) available from www.st.com.

2.1.2 Folder "lingen"

The *lingen* folder contains the software to generate the network configuration files

2.1.3 Folder "make"

The *make* folder contains the MAKE_LIN file.

2.1.4 Folder "src"

The *src* folder contains the source code.

2.2 Difference between release 5.1 and previous release

The release 5.1 is adding the support to STM8AF6223 and STM8AF6226T devices, as explained in Section 3 Working with STM8_LIN_Package_5.1.

3 Working with STM8_LIN_Package_5.1

For code size optimization, some compiler options have been used in the following part of the firmware:

demo → stm8_128-eval → lin_basic_demo → slave

The firmware is configured by default for STM8AF6223 and STM8AF6226T devices, however it can be configured to support other devices (STM8AF Series / STM8AL Series) by setting correct parameters.

The table below shows the code size obtained with different compilers using the above mentioned compiler options.

Table 3. LIN driver code size

-	Cosmic		IAR		RAISONANCE	
	FLASH	RAM	FLASH	RAM	FLASH	RAM
LIN 2.1 with mandatory node configuration services only	4 K	135	3.4 K	135	6 K	155
Full services: LIN 2.1 with all optional node configuration and diagnostic services, TP cooked API	6.1 K	164	5.4 K	165	9 K	175

3.1 Device selection

There are two options for the device selection:

- In case of STM8AF6223 or STM8AF6226T devices, make sure the following statement appears in lin_def_stm8.h file:

```
#define STM8AF622x
```

- For any other product make sure the following statement appears in lin_def_stm8.h file:

```
#undef STM8AF622x
```

3.2 CPU frequency selection

CPU frequency is selected with " LIN_BOARD_CPU_FREQ_HZ" parameter in *lin_def_stm8.h*. It can be set to either 8000000 or 16000000:

```
#define LIN_BOARD_CPU_FREQ_HZ 8000000
```

or

```
#define LIN_BOARD_CPU_FREQ_HZ 16000000
```

3.3 Memory model selection

3.3.1 Cosmic compiler

Cosmic compiler offers four memory models: modsl, mods, modsl0 and mods0. Two memory models (modsl and mods0) are used in release 5.1. The memory models can be selected depending on the device as follows:

- "mods0": applies to STM8AF6223 and STM8AF6226T devices. This memory model is suitable for small code and small data.
- "modsl" applies to any other device. This is the most general memory model.

The following files are involved in the memory model selection:

- *lin_slave_app.lkf*
- *makefile*

The table below lists the configurations that need to be selected in the files *lin_slave_app.lkf* and *makefile* according to the chosen memory model.

Table 4. Memory model selection

File	Memory model "mods0"(1)	Memory model "modsl"
lin_slave_app.lkf	obj\crtsi0.sm8	obj\crtsi.sm8
	obj\libis0.sm8	obj\libisl.sm8
	obj\libm0.sm8	obj\libm.sm8
makefile	CCOMMON = -v -ov -os -oc +mods0 +proto +split +debug -no	CCOMMON = -v -ov -os -oc +modsl +proto +split +debug –no

1. - *crtsi0.sm8, libm0.sm8 and libs0.sm8 files should be present in obj folder for compilation. These can be copied from "C:\Program Files\COSMIC\CXSTM8_32K\Lib".*
   - *Add "@near" modifier in global variables if the required RAM size is greater than 256 Kbytes.*

3.3.2 IAR compiler

There are two linker files: *lin_slave_app_8K.icf* and *lin_slave_app_128K.icf*, located in *C:\STM8_LIN_Package_5.1\demo\stm8_128-eval\lin_basic_demo\slave\cfg*.

- In case of STM8AF6223 or STM8AF6226T devices, copy the content of the *lin_slave_app_8K.icf* file to the *lin_slave_app.icf* file.
- For any other product, copy the content of the *lin_slave_app_128K.icf* file to the *lin_slave_app.icf* file.

The stack size and heap size must be configured in the makefile according to the microcontroller device. The table below shows two typical makefile configurations according to the selected device.

Table 5. Typical makefile configuration (typical values)

File	STM8AF6223 or STM8AF6226T device	Any other device
makefile	Stack size: 0x200 Heap size: 0x200	Stack size:0x200 Heap size:0x1000

4 LIN 2.x conformance tests

Conformance tests were performed on the STM8A Series microcontroller using the STM8/128-EVAL evaluation board revision B. Two sets of tests were executed:

- LIN 2.1 slave and master conformance tests

  The objective of these tests is to confirm that the new release of the package is compliant with *LIN specification package revision 2.1 of LIN consortium*. The tests were done both on master and slave nodes.

  The LIN 2.1 slave conformance tests are based on *LIN conformance test specification for LIN specification package revision 2.1*, while the LIN 2.1 master conformance tests are based on *LIN conformance test specification for LIN specification package revision 2.0*. All the tests were performed using CANOE software suite v7.2.
- LIN 2.0 master and slave conformance tests

  The objective of these tests is to check that the new release of the package is compliant with *LIN specification package revision 2.0 of LIN consortium*. The tests were done both on master and slave nodes.

  The LIN 2.0 slave conformance tests are based on *LIN conformance test specification for the LIN specification package revision 2.0*. They were performed using CANOE software suite v6.0.63 (SP3).

The table below shows the configurations for which LIN2.0 master node conformance tests have been done:

Table 6. Configurations for master node conformance tests

Master node					
Test number	**Clock frequency**	**Clock sources**	**UART2 or UART3, UART 1**	**SCIx**	**Baud rate**
1	8 MHz and 16 MHz	External clock (quartz)	UART2 or UART3	SCI1	2400
2					9600
3					10417
4					19200
5					20000
6			UART 1	SCI2	2400
7					9600
8					10417
9					19200
10					20000

The table below shows the configurations for which LIN2.0 and LIN 2.1 conformance tests have been done for the STM8AF Series slave node.

Table 7. Configurations for STM8AF Series slave node conformance test

Slave node					
Test number	**Clock frequency**	**Clock sources**	**UART2 or UART3**	**SCIx**	**Baud rate**
1	16 MHz	HIS (internal RC oscillator)	UART2 or UART3 or UART4 (with Autosync enabled)	SCI1	2400
2					9600
3					10417
4					19200
5					20000

The LIN conformance tests with the STM8AL Series microcontroller were performed using the STM8A-DISCOVERY (STM8AL board) kit. The following tests were executed:

- LIN 2.1 slave conformance tests

  The objective of these tests is to check that the new release of the package is compliant with *LIN specification package revision 2.1 of LIN consortium*. The tests were done for slave nodes.

  The LIN 2.1 slave conformance tests are based on *LIN conformance test specification for LIN specification package revision 2.1*. All the tests were performed using CANOE software suite v7.2.

- LIN 2.0 slave conformance tests

  The objective of these tests is to check that the new release of the package is compliant with *LIN specification package revision 2.0 of LIN consortium*. The tests were done for slave nodes.

  The LIN 2.0 slave conformance tests are based on LIN conformance test specification for the *LIN specification package revision 2.0*. They were performed using CANOE software suite v6.0.63 (SP3).

Table 8. Configurations for STM8AL Series slave node conformance test

Slave node					
Test number	**Clock frequency**	**Clock sources**	**Peripheral**	**SCIx**	**Baud rate**
1	16 MHz	External clock (quartz))	USART	SCI1	2400
2					9600
3					10417
4					19200
5					20000

For additional information on the test results, refer to the technical note *Results of the conformance tests performed on the STM8 LIN software package* (TN0322) available at www.st.com.

5 Known limitations

The STM8 LIN package release 5.1 has one known limitation:

- Master and slave node transmission handler not completely tested.

  The two state machines described in sections 5.4.4 and 5.5 of LIN specification package revision 2.1 of LIN consortium were implemented but not tested. These state machines are used since a node can receive or transmit both normal or diagnostic frames, and it must know at any time if, how, and to which requests it must respond, and which requests/data has to be sent. A new API (l_ifcStatusTPWord()) has been introduced to manage these state machines.

6 Deliverables

The table below shows the files that are installed by running the setup. The version corresponds to the revision number of the file stored under the configuration management system.

The items in blue rows have been updated in release 5.1, and their revision number changed, while those in white were not.

Table 9. Deliverables

Family	File Name	Version
Documents	**ReadMe.txt**	**5.1**
Source	**\demo\generic\lin_basic_demo\slave\stm8-discovery\lin_basic_demo_slave.c**	**1.1**
Source	\demo\generic\lin_basic_demo\slave\stm8-discovery\lin_basic_demo_slave.h	1.0
Source	\demo\generic\lin_basic_demo\master\stm8-discovery\lin_basic_demo_master.c	1.0
Source	\demo\generic\lin_basic_demo\master\stm8-discovery\lin_basic_demo_master.h	1.0
Source	**\demo\generic\lin_basic_demo\slave\stm8_128-eval \lin_basic_demo_slave.c**	**4.2**
Source	\demo\generic\lin_basic_demo\slave\stm8_128-eval \lin_basic_demo_slave.h	1.1
Source	**\demo\generic\lin_basic_demo\master\stm8_128-eval \lin_basic_demo_master.c**	**4.1**
Source	\demo\generic\lin_basic_demo\master\stm8_128-eval \lin_basic_demo_master.h	1.0
Prompt Dos	**'demo\stm8_128-eval\lin_basic_demo\master\Command Prompt.lnk'**	**4.2**
Make file	'demo\stm8_128-eva\lin_basic_demo/master\make.exe'	1.0
Make file	**'demo\stm8_128-eva\lin_basic_demo\master\makefile'**	**4.2**
Batch file	'demo\stm8_128-eva\lin_basic_demo\maste\rm.bat'	1.0
Locator file	'demo\stm8_128-eva\lin_basic_demo\master\cfg\lin_master_app.lkf'	2.0
Source	'demo\stm8_128-eva\lin_basic_demo\master\lin_config\lin_basic_demo.ldf'	2.0
Source	'demo\stm8_128-eva\lin_basic_demo\master\lin_config\lin_basic_demo.lgn'	1.0
Source	'demo\stm8_128-eva\lin_basic_demo\master\lin_config\lin_def.c'	2.0
Source	'demo\stm8_128-eva\lin_basic_demo\master\lin_config\lin_def.h'	4.0
Source	'demo\stm8_128-eva\lin_basic_demo\master\lin_config\lin_def_stm8.h'	2.1
CXSTM8 Library	'demo\stm8_128-eva\lin_basic_demo\master\obj\crtsi.sm8'	2.0
CXSTM8 Library	'demo\stm8_128-eva\lin_basic_demo\master\obj\libisl.sm8’	2.0
CXSTM8 Library	'demo\stm8_128-eva\lin_basic_demo\master\obj\libm.sm8’	2.0
Source	'demo\stm8_128-eva\lin_basic_demo\master\src\interrupt_vector.c’	2.0
Source	**'demo\stm8_128-eva\lin_basic_demo\master\src\lin_master_app.c'**	**3.1**
Source	'demo\stm8_128-eva\lin_basic_demo\master\src\lin_test_hardware.h'	4.0
Prompt Dos	**'demo\stm8_128-eva\lin_basic_demo\slave\Command Prompt.lnk'**	**4.2**
Make file	'demo\stm8_128-eva\lin_basic_demo\slave\make.exe'	1.0
Make file	**'demo\stm8_128-eva\lin_basic_demo\slave\makefile'**	**4.2**
Batch file	'demo\stm8_128-eva\lin_basic_demo\slave\rm.bat'	1.0
Locator file	**'demo\stm8_128-eva\lin_basic_demo\slave\cfg\lin_slave_app.lkf'**	**2.1**
Source	'demo\stm8_128-eva\lin_basic_demo\slave\lin_config\lin_basic_demo.ldf'	2.0
Source	'demo\stm8_128-eva\lin_basic_demo\slave\lin_config\lin_basic_demo.lgn'	1.0

Family	File Name	Version
Source	**'demo\stm8_128-eva\lin_basic_demo\slave\lin_config\lin_def.c'**	**2.1**
Source	**'demo\stm8_128-eva\lin_basic_demo\lin_config\lin_def.h'**	**4.1**
Source	**'demo \stm8_128-eva\lin_basic_demo\slave\lin_config\lin_def_stm8.h'**	**2.1**
CXSTM8 Library	'demo\stm8_128-eva\lin_basic_demo\slave\obj\crtsi.sm8'	2.0
CXSTM8 Library	'demo\stm8_128-eva\lin_basic_demo\slave\obj\libisl.sm8'	2.0
CXSTM8 Library	'demo\stm8_128-eva\lin_basic_demo\slave\obj\libm.sm8'	2.0
Source	**'demo\stm8_128-eva\lin_basic_demo\slave\src\interrupt_vector.c'**	**2.1**
Source	**'demo\stm8_128-eva\lin_basic_demo\slave\src\lin_slave_app.c'**	**3.1**
Source	**'demo\stm8_128-eva\lin_basic_demo\slave\src\lin_test_hardware.h'**	**3.1**
Prompt Dos	**'demo\stm8-discovery\lin_basic_demo\master\Command Prompt.lnk'**	**5.1**
Make file	'demo\stm8-discovery\lin_basic_demo\master\make.exe'	1.0
Make file	**'demo\stm8-discovery\lin_basic_demo\ master\makefile'**	**5.1**
Batch file	'demo\stm8-discovery\lin_basic_demo\ master\rm.bat'	1.0
Locator file	'demo\stm8-discovery\lin_basic_demo\ master\cfg\lin_master_app.lkf'	1.0
Source	'demo\stm8-discovery\lin_basic_demo\ master\lin_config\ lin_basic_demo.ldf'	2.0
Source	'demo\stm8-discovery\lin_basic_demo\ master\lin_config\lin_basic_demo.lgn'	1.0
Source	'demo\stm8-discovery\lin_basic_demo\ master\lin_config\lin_def.c'	2.0
Source	'demo\stm8-discovery\lin_basic_demo\ master\lin_config\lin_def.h'	4.0
Source	**'demo\stm8-discovery\lin_basic_demo\ master\lin_config\lin_def_stm8.h'**	**2.1**
CXSTM8 Library	'demo\stm8-discovery\lin_basic_demo\master\obj\crtsi.sm8'	2.0
CXSTM8 Library	'demo\stm8-discovery\lin_basic_demo\master\obj\libisl.sm8'	2.0
CXSTM8 Library	'demo\stm8-discovery\lin_basic_demo\master\obj\libm.sm8'	2.0
Source	'demo\stm8-discovery\lin_basic_demo\master\src\interrupt_vector.c'	2.0
Source	'demo\stm8-discovery\lin_basic_demo\master\src\lin_master_app.c'	3.0
Source	'demo\stm8-discovery\lin_basic_demo\master\src\lin_test_hardware.h'	4.0
Prompt Dos	**'demo\stm8-discovery\lin_basic_demo\slave\Command Prompt.lnk'**	**5.1**
Make file	'demo\stm8-discovery\lin_basic_demo\slave\make.exe'	1.0
Make file	**'demo\stm8-discovery\lin_basic_demo\slave\makefile'**	**5.1**
Batch file	'demo\stm8-discovery\lin_basic_demo\slave\rm.bat'	1.0
Locator file	'demo\stm8-discovery\lin_basic_demo\slave\cfg\lin_slave_app.lkf'	1.0
Source	'demo\stm8-discovery\lin_basic_demo\slave\lin_config\lin_basic_demo.ldf'	2.0
Source	'demo\stm8-discovery\lin_basic_demo\slave\lin_config\lin_basic_demo.lgn'	1.0
Source	'demo\stm8-discovery\lin_basic_demo\slave\lin_config\lin_def.c'	2.0
Source	'demo\stm8-discovery\lin_basic_demo\slave\lin_config\lin_def.h'	4.0
Source	'demo\stm8-discovery\lin_basic_demo\slave\lin_config\lin_def_stm8l.h'	2.0
CXSTM8 Library	'demo\ stm8-discovery\lin_basic_demo\slave\obj\crtsi.sm8'	2.0
CXSTM8 Library	'demo\ stm8-discovery\lin_basic_demo\slave\obj\libisl.sm8'	2.0
CXSTM8 Library	'demo\ stm8-discovery\lin_basic_demo\slave\obj\libm.sm8'	2.0
Source	'demo\ stm8-discovery\lin_basic_demo\slave\src\interrupt_vector.c'	2.0
Source	'demo\ stm8-discovery\lin_basic_demo\slave\src\lin_slave_app.c'	3.0

Family	File Name	Version
Source	'demo\ stm8-discovery\lin_basic_demo\slave\src\lin_test_hardware.h'	3.0
Documents	\doc\reports\Software Release Note for STM8 LIN Package.pdf	3.0
Documents	\doc\reports\Software Test Report for STM8 LIN Package.pdf	3.0
Documents	\doc\user guide\LIN 2.1 - Master user guide.pdf	2.0
Documents	\doc\user guide\LIN 2.1 - Slave user guide.pdf	2.0
Executable	\lingen\BIN\win\lingen.exe	3.5.0
Make file	**'make\stm8\Make_LIN'**	**3.1**
Make file	\make\MAKE_LIN_DEPENDENCIES	2.0
Source	\src\lin.h	3.0
Source	**\src\lin_version_control.h**	**5.1**
Source	\src\arch\lin_arch_include.h	2.0
Source	\src\arch\lin_def_arch_include.h	2.0
Source	'src\arch\stm8\lin_def_stm8_gen.h'	2.0
Source	**'src\arch\stm8\lin_stm8.c'**	**2.1**
Source	**'src\arch\stm8\lin_stm8.h'**	**2.1**
Source	**\src\config\lin_def_stm8.h**	**2.1**
Source	\src\config\lin_def.h	4.0
Source	\src\config\lin_def.c	3.0
Source	\src\diag\lin_diag.c	4.0
Source	\src\diag\lin_diag.h	4.0
Source	\src\diag\lin_diag_api.h	2.0
Source	\src\diag\lin_diag_master.c	3.0
Source	\src\diag\lin_diag_master.h	1.0
Source	**\src\diag\lin_diag_slave.c**	**4.2**
Source	**\src\diag\lin_diag_slave.h**	**2.1**
Source	\src\general\lin_def_gen.h	2.0
Source	**\src\general\lin_general.c**	**3.1**
Source	**\src\general\lin_general.h**	**3.1**
Source	\src\general\lin_types.h	2.0
Source	\src\master\lin_master.c	2.0
Source	\src\master\lin_master.h	1.0
Source	\src\slave\lin_slave.c	4.0
Source	\src\slave\lin_slave.h	1.0
Source	\src\timer\lin_timer.c	2.0
Source	\src\timer\lin_timer.h	2.0
Source	\src\arch\stm8\lin_stm8.c	3.0

7 Reference documents

Table 10. **Reference documents**

Title	Revision
LIN conformance test specification for the LIN specification package revision 2.0 (in particular LIN OSI Layer 2 – Data Link Layer)	1.0 [01/08/2004]
Technical Note TN0946: Results of the conformance tests performed on the STM8 LIN software package release 5.1	2.0
LIN specification package revision 2.1 of LIN consortium	2.1 [24/11/2006]
LIN conformance test specification for LIN specification package 2.1	2.1 [10/10/2008]
LIN 2.1 specification errata sheet	1.1 [30/07/2008]

Revision history

Table 11. **Document revision history**

Date	Version	Changes
03-Dec-2012	1	Initial release.
05-Jul-2013	2	Updated: • Introduction • Table 1. STSW-STM8A-LIN 5.1 release summary • Section 1.1 Software toolchain • Section 3 Working with STM8_LIN_Package_5.1 • Section 4 LIN 2.x conformance tests • Table 7. Configurations for STM8AF Series slave node conformance test • Table 9. Deliverables
26-Apr-2018	3	Updated Section 2.1 Directory structure Moved table "Reference documents" from the cover page to the new section Section 7 Reference documents

Contents

List of tables