

# openairinterface5g

Техническая документация

Сгенерировано: 2025-06-15 22:14

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# Release Notes & Latest Changes

- **2025.w24** — 2025-06-13

Integration 2025 week 24 \* !3354 Preparation Work for N2 Handover \* !3383 Add configurable values of NR RLC and NR PDCP to the configuration file \* !3468 Resolve "SSB frequency at gnb.sa.band78.fr1.24PRB.usrpb210.conf is invalid" \* !3466 YAML related updates \* !3460 SRS configuration \* !3474 Fix AMF selection fallback by PLMN ID when no UE identity is present or matching \* !3473 Fix various bugs and inconsistencies in config read, SCTP, ITTI, GTP \* !3169 NR RU improvements for analog beamforming \* !3456 CI: update config for AW2S pipeline \* !3369 Add Security Mode Reject lib/unit test and adopt in stack \* !3457 Fix NR reestablishment \* !3412 [E2 agent] E2AP README update and OAI-FlexRIC CI pipeline improvements

- **2025.w23** — 2025-06-04

Integration 2025 week 23 \* !3302 Enhance UE identity management in Initial UE Message and other NGAP improvements \* !3400 T bugfix: check input data a bit better \* !3459 Improvements in NR band tables according to Rel.17 \* !3465 Fix checking that amf\_ip\_address section is not set. \* !3463 Move RRC radio parameters file to DÜ \* !3389 Relax NR\_UE\_CAPABILITY\_SLOT\_RX\_TO\_TX asserts \* !3417 Imscope updates \* !3443 Fix data race in NR UE MSG3 scheduling \* !3467 remove dead globals

- **2025.w22** — 2025-05-28

Integration 2025 week 22 \* !3415 several fixes and cleanup for nrLDPC\_coding\_t2 \* !3448 T: macpdu2wireshark: dump to file instead of sending UDP packets \* !3449 bugfix: pass correct buffer \* !3453 CI: revert modification of SSB per RACH occasion in SC-FDMA test \* !3440 Update NAS documentation \* !3451 fix the number of preambles per SSB at UE in case PRACH is configured with groupB \* !3441 Replace hashtable with epoll\_event\_t in rfsimulator \* !3277 Add CI test to force RRC IDLE and new connection setup with 5G-S-TMSI \* !3454 Keep old MAC stats after re-establishment \* !3450 Make number of UL/DL actors in NR UE fully configurable \* !3458 (doc): update README with build icons for dedicated arch and os

- **2025.w20** — 2025-05-20

Integration 2025 week 20 \* !3168 Improvements for LDPC encoding \* !3386 E1 Bearer Context Release enc/dec lib and unit test \* !3394 Fix Liteon with MTU 1500 and update the FHI docs \* !3437 CI: RFsim F1/HO: Use hanging-workaround to avoid blocking of second client \* !3384 Add enc/dec library and unit test for E1 Bearer Context Modification Failure \* !3418 Use common function to generate CSI-RS signal \* !3379 Add physim tests into ctest framework \* !3420 Added intercommunication between namespaces \* !3422 Tutorials: updates for NR SA Tutorials \* !3436 Beam switching small fixes \* !3439 Fix RRC resources periodicity determination according to number of slots per period \* !3434 Remove EPC/UE main.py parameters \* !3423 Fix PDSCH and PUSCH BWP Start and Size when PXSCH is scheduled with a DCI

format x\_0 in any type of PDCCH common search space \* !3442 Fix UL channel estimates mapping in 2-layer MMSE receiver

- **2025.w19** — 2025-05-13

Integration 2025 week 19 \* !3409 Correctly handle minimum RB condition in MAC \* !3421 Fix DMRS for PUCCH format 2 \* !3424 limit the number of HARQ processes in case of DCI00 and 10 \* !3116 ue txData more contextual, but still global as it is entangled with usrp driver \* !3408 Handling 2 search spaces per slot in SIB1 \* !3419 PRACH configuration index warning \* !3429 CI: Add '-l' option for the UL iperf test \* !3381 Add 5GMM Authentication Failure enc/dec lib and unit test

- [8c0641c](#) — 2025-06-13 (Robert Schmidt): Merge branch 'integration\_2025\_w24' into 'develop'
- [736ea53](#) — 2025-06-13 (luis\_pereira87): Only reestablish RLC while processing reconfiguration complete after a RRCReestablishment and not for every RRCReconfiguration
- [5b9d770](#) — 2025-06-13 (Robert Schmidt): Merge remote-tracking branch 'origin/e2-fixes-updates' into integration\_2025\_w24 (!3412)
- [9513d48](#) — 2025-06-13 (Robert Schmidt): Merge remote-tracking branch 'origin/fix\_nr\_reestablishment' into integration\_2025\_w24 (!3457)
- [dfadcab](#) — 2025-06-12 (Robert Schmidt): Store spCellConfig during reestablishment for reconfiguration
- [81dbaf0](#) — 2025-06-12 (Robert Schmidt): Add comment on reestablishment in MAC-RRC DL handler
- [15370e7](#) — 2025-06-12 (Robert Schmidt): Implement RB suspend at gNB MAC
- [f3802d7](#) — 2025-06-12 (Robert Schmidt): Merge remote-tracking branch 'origin/nr-ue-nas-sec-mode-reject' into integration\_2025\_w24 (!3369)
- [690be9c](#) — 2025-06-12 (Robert Schmidt): Merge remote-tracking branch 'origin/ci-asue-test' into integration\_2025\_w24 (!3456)
- [27ece7e](#) — 2025-06-12 (Jaroslava Fiedlerova): CI: update AmariUE configuration file, add RF configuration

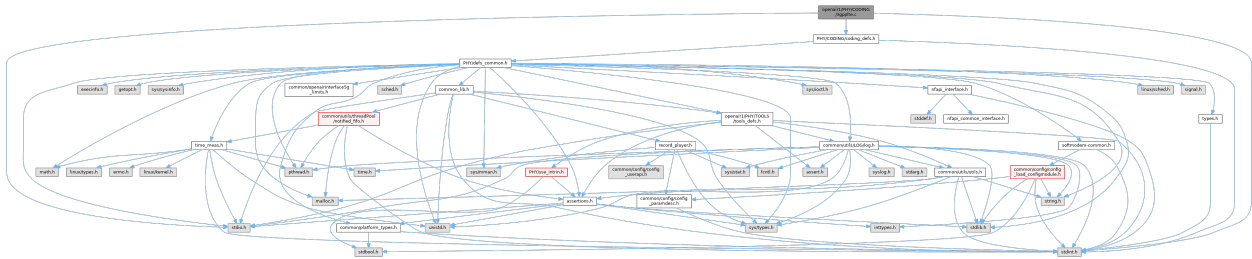
# 3gpplte.c File Reference

```
#include <stdint.h>
```

```
#include <stdio.h>
```

```
#include "PHY/CODING/coding_defs.h"
```

Include dependency graph for 3gpplte.c:



## Functions

void **threegpplte\_interleaver\_reset** (void)

**uint16\_t** **threegpplte\_interleaver** (**uint16\_t** f1, **uint16\_t** f2, **uint16\_t** K)

**uint8\_t** **threegpplte\_rsc** (**uint8\_t** input, **uint8\_t** \*state)

**uint8\_t** **threegpplte\_rsc\_lut** (**uint8\_t** input, **uint8\_t** \*state)

void **threegpplte\_rsc\_termination** (**uint8\_t** \*x, **uint8\_t** \*z, **uint8\_t** \*state)

void **threegpplte\_turbo\_encoder** (**uint8\_t** \*input, **uint16\_t** input\_length\_bytes, **uint8\_t** \*output, **uint8\_t** F)

short **threegpp\_interleaver\_parameters** (**uint16\_t** bytes\_per\_codeword)  
**\_\_attribute\_\_((constructor))**

## Variables

```
uint32_t threegppte_interleaver_output
```

```
uint32_t threegppte_interleaver_tmp
```

```
uint8_t output_lut [16]
```

```
uint8_t state_lut [16]
```

```
int turbo_encoder_init = 0
```

```
uint32_t bit_byte_lut [2048]
```

```
const interleaver_TS_36_212_t f1f2 [188]
```

```
t_interleaver_codebook * f1f2mat
```

```
short * il_tb
```

## Function Documentation

### ◆ \_\_attribute\_\_((

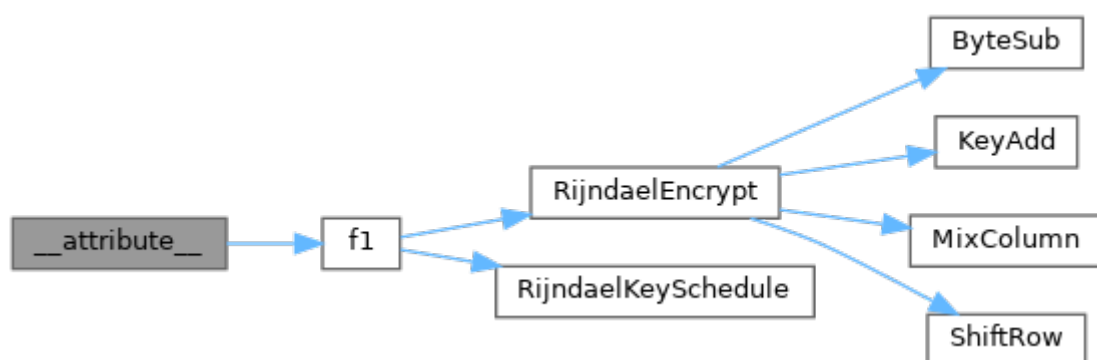
\_\_attribute\_\_

(

(constructor)

)

Here is the call graph for this function:



### ◆ threegpp\_interleaver\_parameters()

```
short
threegpp_interleaver_parameters ( uint16_t bytes_per_codeword )
```

inline

Here is the call graph for this function:

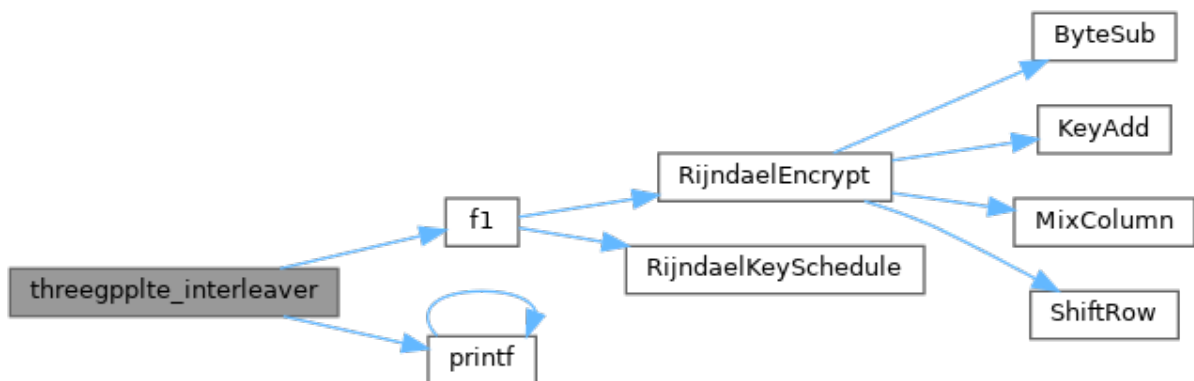


## ◆ threegpplte\_interleaver()

```
uint16_t threegpplte_interleaver ( uint16_t f1,
                                   uint16_t f2,
                                   uint16_t K )
```

inline

Here is the call graph for this function:



Here is the caller graph for this function:



## ◆ threegpplte\_interleaver\_reset()

void threegpplte_interleaver_reset	(	void	)
------------------------------------	---	------	---

inline

Here is the caller graph for this function:

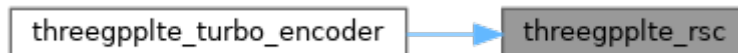


## ◆ threegpplte\_rsc()

uint8_t threegpplte_rsc	(	uint8_t	input,
		uint8_t *	state )

inline

Here is the caller graph for this function:



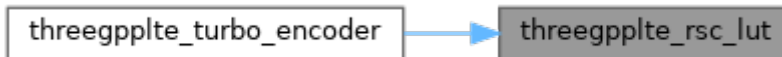
## ◆ threegpplte\_rsc\_lut()



<b>uint8_t</b> threegpplte_rsc_lut	(	<b>uint8_t</b>	input,
		<b>uint8_t</b> *	state )

inline

Here is the caller graph for this function:



## ◆ threegpplte\_rsc\_termination()

void threegpplte_rsc_termination	(	<b>uint8_t</b> *	x,
		<b>uint8_t</b> *	z,
		<b>uint8_t</b> *	state )

inline

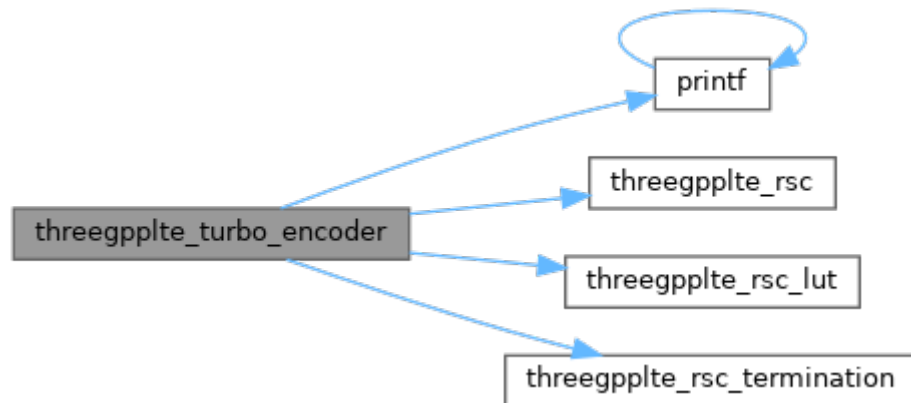
Here is the caller graph for this function:



## ◆ threegpplte\_turbo\_encoder()

void threegpplte_turbo_encoder	(	uint8_t *	input,
		uint16_t	input_length_bytes,
		uint8_t *	output,
		uint8_t	F )

Here is the call graph for this function:



## Variable Documentation

### ◆ bit\_byte\_lut

```
uint32_t bit_byte_lut[2048]
```

### ◆ f1f2

```
const interleaver_TS_36_212_t f1f2[188]
```

### ◆ f1f2mat

**t\_interleaver\_codebook\*** f1f2mat

◆ **il\_tb**

short\* il\_tb

◆ **output\_lut**

**uint8\_t** output\_lut[16]

◆ **state\_lut**

**uint8\_t** state\_lut[16]

◆ **threegpplte\_interleaver\_output**

**uint32\_t** threegpplte\_interleaver\_output

◆ **threegpplte\_interleaver\_tmp**

```
uint32_t threegpplte_interleaver_tmp
```

## ◆ turbo\_encoder\_init

```
int turbo_encoder_init = 0
```