# openairinterface5g

Техническая документация

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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

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 DU \* !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 reestablishment \* !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 chanel 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

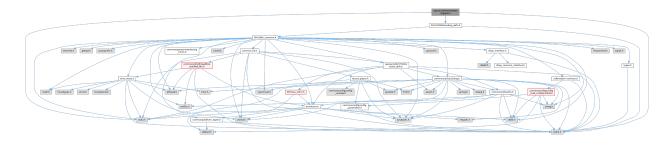
#### **Recent Commits**

- 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 threegpplte_interleaver_output

uint32_t threegpplte_interleaver_tmp

uint8_t output_lut [16]

uint8_t state_lut [16]

int turbo_encoder_init = 0

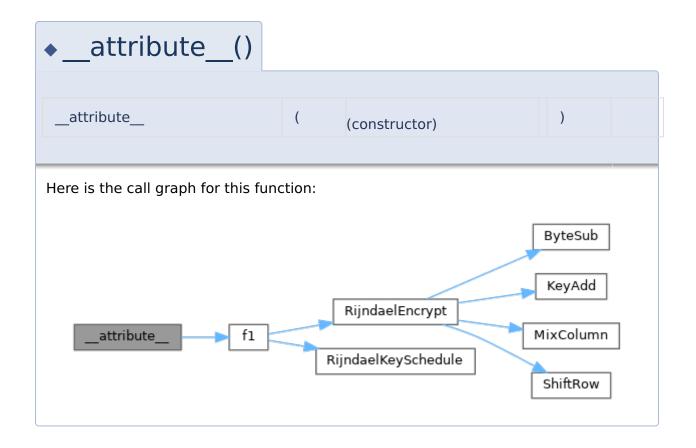
uint32_t bit_byte_lut [2048]

const interleaver_TS_36_212_t f1f2 [188]

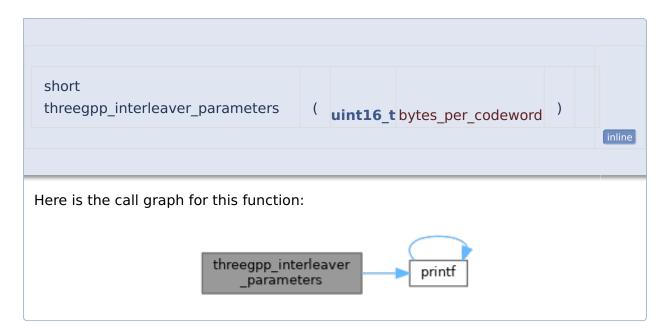
t_interleaver_codebook* f1f2mat

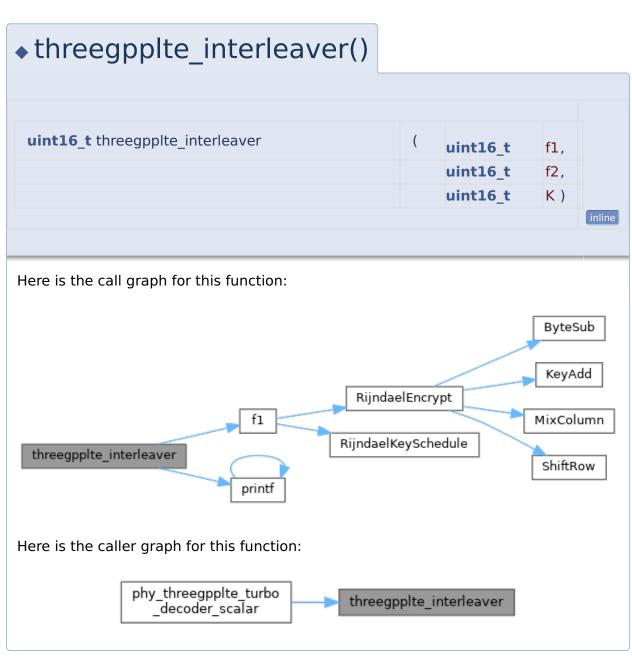
short* il_tb
```

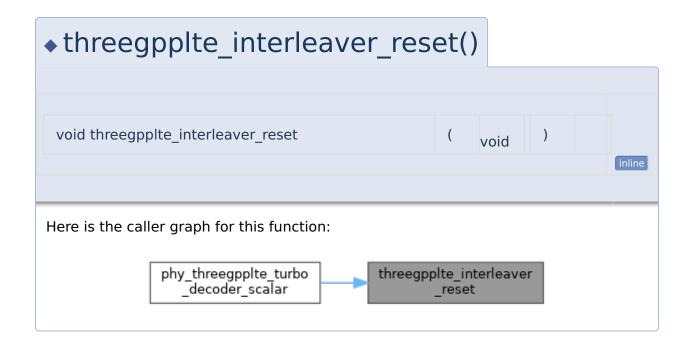
#### **Function Documentation**

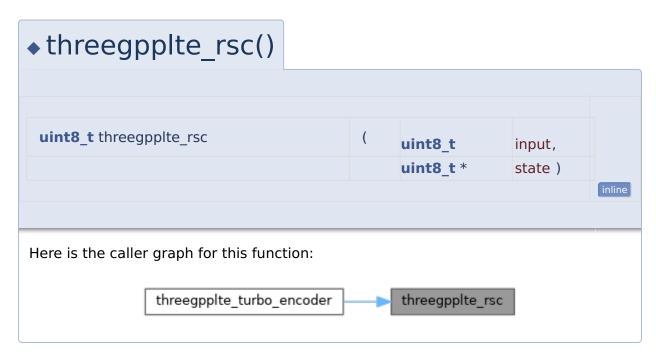


• threegpp\_interleaver\_parameters()

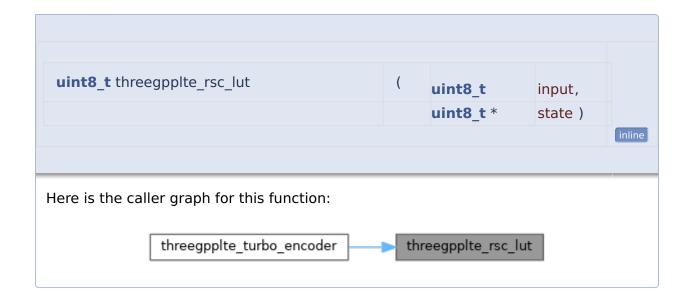


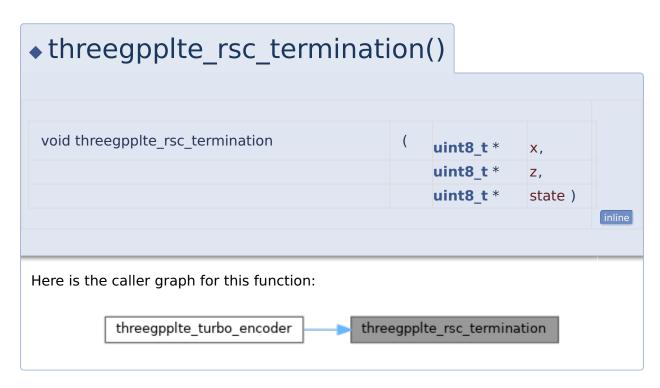




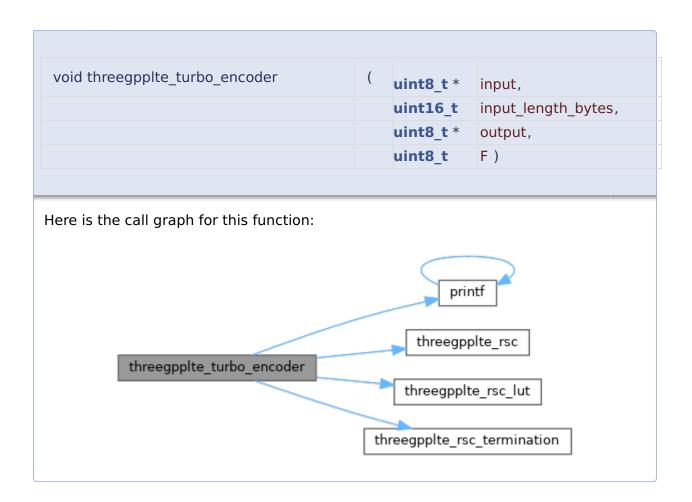


threegpplte\_rsc\_lut()





threegpplte\_turbo\_encoder()



## 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