

## OsmoTRX - Support #3316

### osmo-trx-uhd fails after OpenBTS starts, LimeSDR

06/04/2018 01:44 AM - Xhizors

|                        |        |                    |            |
|------------------------|--------|--------------------|------------|
| <b>Status:</b>         | Closed | <b>Start date:</b> | 06/04/2018 |
| <b>Priority:</b>       | Normal | <b>Due date:</b>   |            |
| <b>Assignee:</b>       |        | <b>% Done:</b>     | 0%         |
| <b>Category:</b>       |        |                    |            |
| <b>Target version:</b> |        |                    |            |
| <b>Spec Reference:</b> |        |                    |            |

#### Description

Hello osmocom community, I'm trying to run OpenBTS with LimeSDR-USB v1.4  
I installed LimeSuite(v18.04.2), UHD and SoapyUHD(libuhdSupport.so 0.3.4-55da7da) and OSMO-TRX on Ubuntu 18.04 system.  
LimeSDR-USB\_HW\_1.4\_r2.16.rbf

After I start the osmo-trx-uhd the transceiver starts, but 1 minute after I start OpenBTS it crashes with "UHD: Device send timed out"

```
# osmo-trx-uhd -C ~/Downloads/osmo-trx-limesdr.cfg
```

```
Info: SSE3 support compiled in and supported by CPU
```

```
Info: SSE4.1 support compiled in and supported by CPU
```

```
Sun Jun 3 05:32:52 2018 DLGLOBAL <0002> telnet_interface.c:104 telnet at 127.0.0.1 4237
```

```
Sun Jun 3 05:32:52 2018 DLCTRL <0009> control_if.c:886 CTRL at 127.0.0.1 4236
```

```
Config Settings
```

```
Log Level..... 3
Device args.....
TRX Base Port..... 5700
TRX Address..... 127.0.0.1
GSM BTS Address..... 127.0.0.1
Channels..... 1
Tx Samples-per-Symbol... 4
Rx Samples-per-Symbol... 4
EDGE support..... 0
Reference..... 0
C0 Filler Table..... 1
Multi-Carrier..... 0
Tuning offset..... 0
RSSI to dBm offset..... 0
Swap channels..... 0
Tx Antennas..... 'BAND1'
Rx Antennas..... 'LNAW'
```

```
[INFO] [UHD] linux; GNU C++ version 7.3.0; Boost_106501; UHD_3.12.0.0-9-gd19c7590
```

```
Sun Jun 3 05:32:53 2018 DMAIN <0000> UHDDevice.cpp:667 [tid=140646755682240] Using discovered UHD
device addr=1d50:6108,driver=lime,label=LimeSDR-USB [USB 3.0] 9060B00472B27,media=USB 3.0,module=
FX3,name=LimeSDR-USB,serial=0009060B00472B27,type=soapy
```

```
[INFO] [UHDSoapyDevice] Make connection: 'LimeSDR-USB [USB 3.0] 9060B00472B27'
```

```
[INFO] [UHDSoapyDevice] Reference clock 30.72 MHz
```

```
[INFO] [UHDSoapyDevice] Device name: LimeSDR-USB
```

```
[INFO] [UHDSoapyDevice] Reference: 30.72 MHz
```

```
[INFO] [UHDSoapyDevice] LMS7002M calibration values caching Disable
```

```
Sun Jun 3 05:32:55 2018 DMAIN <0000> UHDDevice.cpp:484 [tid=140646755682240] Antennas configured
successfully
```

```
Sun Jun 3 05:32:55 2018 DMAIN <0000> UHDDevice.cpp:458 [tid=140646755682240] Rates configured for
LimeSDR 4 SPS
```

```
[INFO] [UHDSoapyDevice] Filter calibrated. Filter order-4th, filter bandwidth set to 6 MHz.Real po
le 1st order filter set to 2.5 MHz. Preemphasis filter not active
```

```
[INFO] [UHDSoapyDevice] TX LPF configured
```

```
[INFO] [UHDSoapyDevice] RX LPF configured
```

```
Sun Jun 3 05:32:56 2018 DMAIN <0000> UHDDevice.cpp:418 [tid=140646755682240] Supported Tx gain ra
nge [-12; 64]
```

```

Sun Jun 3 05:32:56 2018 DMAIN <0000> UHDDevice.cpp:423 [tid=140646755682240] Supported Rx gain range [-12; 61]
Sun Jun 3 05:32:56 2018 DMAIN <0000> UHDDevice.cpp:427 [tid=140646755682240] Default setting Tx gain for channel 0 to 26
Sun Jun 3 05:32:56 2018 DMAIN <0000> UHDDevice.cpp:434 [tid=140646755682240] Default setting Rx gain for channel 0 to 24.5
Sun Jun 3 05:32:57 2018 DMAIN <0000> UHDDevice.cpp:761 [tid=140646755682240]
Single USRP:
  Device: FX3
  Mboard 0: LimeSDR-USB
  RX Channel: 0
    RX DSP: 0
    RX Dboard: 0
    RX Subdev: SoapyRF
  RX Channel: 1
    RX DSP: 1
    RX Dboard: 1
    RX Subdev: SoapyRF
  TX Channel: 0
    TX DSP: 0
    TX Dboard: 0
    TX Subdev: SoapyRF
  TX Channel: 1
    TX DSP: 1
    TX Dboard: 1
    TX Subdev: SoapyRF
-- Transceiver active with 1 channel(s)
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is POWEROFF
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is READFACTORY sdrsn
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:836 [tid=140646755919616] bogus command READFACTORY sdrsn on control interface.
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is RXTUNE 900200
Sun Jun 3 05:36:54 2018 DMAIN <0000> UHDDevice.cpp:1149 [tid=140646755919616]
Tune Result:
  Target RF Freq: 900.200000 (MHz)
  Actual RF Freq: 900.199995 (MHz)
  Target DSP Freq: -0.000005 (MHz)
  Actual DSP Freq: -0.000005 (MHz)

Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is TXTUNE 945200
Sun Jun 3 05:36:54 2018 DMAIN <0000> UHDDevice.cpp:1149 [tid=140646755919616]
Tune Result:
  Target RF Freq: 945.200000 (MHz)
  Actual RF Freq: 945.199995 (MHz)
  Target DSP Freq: 0.000005 (MHz)
  Actual DSP Freq: 0.000005 (MHz)

Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETTSC 2
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:811 [tid=140646755919616] Changing TSC from 0 to 2
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETMAXDLY 4
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETRXGAIN 47
Sun Jun 3 05:36:54 2018 DMAIN <0000> UHDDevice.cpp:532 [tid=140646755919616] Set RX gain to 47dB (asked for 47dB)
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is POWERON
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:238 [tid=140646755919616] Starting the transceiver
Sun Jun 3 05:36:54 2018 DMAIN <0000> radioInterface.cpp:168 [tid=140646755919616] Starting radio device
Sun Jun 3 05:36:54 2018 DMAIN <0000> UHDDevice.cpp:839 [tid=140646755919616] Starting USRP...

```

```

[INFO] [UHDSoapyDevice] Tx calibration finished
[FATAL] [UHDSoapyDevice] Rx Calibration: Frequency out of range, available range: from 2.5 to 120
MHz
Sun Jun  3 05:36:54 2018 DMAIN <0000> UHDDDevice.cpp:814 [tid=140646755919616] Initial timestamp 12
8520
Sun Jun  3 05:36:54 2018 DMAIN <0000> UHDDDevice.cpp:860 [tid=140646755919616] The current time is
0.119575 seconds
Sun Jun  3 05:36:54 2018 DMAIN <0000> radioInterface.cpp:189 [tid=140646755919616] Radio started
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETPOWE
R 10
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:1018 [tid=140646755845888] ClockInterface: s
ending IND CLOCK 46656
Sun Jun  3 05:36:54 2018 DMAIN <0000> UHDDDevice.cpp:517 [tid=140646755919616] Set TX gain to 52dB
(asked for 54dB)
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETSLOT
0 5
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:376 [tid=140646755882752] chan 0 dumping STA
LE burst in TRX->USRP interface (0:46656 vs 3:46658), retrans=0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:376 [tid=140646755882752] chan 0 dumping STA
LE burst in TRX->USRP interface (0:46681 vs 3:46681), retrans=0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:376 [tid=140646755882752] chan 0 dumping STA
LE burst in TRX->USRP interface (0:46691 vs 7:46691), retrans=0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:376 [tid=140646755882752] chan 0 dumping STA
LE burst in TRX->USRP interface (0:46701 vs 3:46702), retrans=0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:376 [tid=140646755882752] chan 0 dumping STA
LE burst in TRX->USRP interface (0:46702 vs 3:46702), retrans=0
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETSLOT
1 1
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 1
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 1
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETSLOT
2 1
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 2
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 2
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETSLOT
3 1
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 3
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 3
Sun Jun  3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETSLOT

```

```

4 1
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 4
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 4
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETSLOT
5 1
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 5
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 5
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETSLOT
6 1
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 6
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 6
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETSLOT
7 1
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 7
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is NOHANDO
VER 7
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:709 [tid=140646755919616] command is SETPOWE
R 10
Sun Jun 3 05:36:54 2018 DMAIN <0000> UHDDevice.cpp:517 [tid=140646755919616] Set TX gain to 52dB
(asked for 54dB)
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:376 [tid=140646755882752] chan 0 dumping STA
LE burst in TRX->USRP interface (0:46732 vs 7:46732), retrans=0
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:376 [tid=140646755882752] chan 0 dumping STA
LE burst in TRX->USRP interface (1:46748 vs 3:46748), retrans=0
Sun Jun 3 05:36:54 2018 DMAIN <0000> Transceiver.cpp:376 [tid=140646755882752] chan 0 dumping STA
LE burst in TRX->USRP interface (1:46752 vs 3:46752), retrans=0
...
Sun Jun 3 05:36:55 2018 DMAIN <0000> Transceiver.cpp:376 [tid=140646755882752] chan 0 dumping STA
LE burst in TRX->USRP interface (5:46869 vs 7:46869), retrans=0
Sun Jun 3 05:36:55 2018 DMAIN <0000> Transceiver.cpp:376 [tid=140646755882752] chan 0 dumping STA
LE burst in TRX->USRP interface (6:46869 vs 7:46869), retrans=0
Sun Jun 3 05:36:55 2018 DMAIN <0000> Transceiver.cpp:1018 [tid=140646755845888] ClockInterface: s
ending IND CLOCK 46872
...
Sun Jun 3 05:36:56 2018 DMAIN <0000> Transceiver.cpp:1018 [tid=140646755845888] ClockInterface: s
ending IND CLOCK 47089
Sun Jun 3 05:36:57 2018 DMAIN <0000> Transceiver.cpp:1018 [tid=140646755845888] ClockInterface: s
ending IND CLOCK 47306
Sun Jun 3 05:36:58 2018 DMAIN <0000> Transceiver.cpp:1018 [tid=140646755845888] ClockInterface: s
ending IND CLOCK 47522
Sun Jun 3 05:36:59 2018 DMAIN <0000> Transceiver.cpp:1018 [tid=140646755845888] ClockInterface: s
ending IND CLOCK 47739
[WARNING] [UHDSoapyDevice] L
[WARNING] [UHDSoapyDevice] L
Sun Jun 3 05:37:40 2018 DMAIN <0000> Transceiver.cpp:1018 [tid=140646755845888] ClockInterface: s
ending IND CLOCK 56630
Sun Jun 3 05:37:41 2018 DMAIN <0000> Transceiver.cpp:1018 [tid=140646755845888] ClockInterface: s
ending IND CLOCK 56847
Sun Jun 3 05:37:42 2018 DMAIN <0000> Transceiver.cpp:1018 [tid=140646755845888] ClockInterface: s
ending IND CLOCK 57063
Sun Jun 3 05:37:43 2018 DMAIN <0000> UHDDevice.cpp:1071 [tid=140646755882752] UHD: Device send ti
med out
Sun Jun 3 05:37:43 2018 DMAIN <0000> UHDDevice.cpp:1071 [tid=140646755882752] UHD: Device send ti
med out
Sun Jun 3 05:37:43 2018 DMAIN <0000> UHDDevice.cpp:1071 [tid=140646755882752] UHD: Device send ti
med out

```

Also configured osmo-trx-lms and osmo-trx but cant seem to start the transceiver with them:

```
# osmo-trx -e -a "driver=lime,device=0"
```

```
linux; GNU C++ version 7.3.0; Boost_106501; UHD_003.010.003.000-0-unknown
```

```
opening configuration table from path :memory:
```

```
Config Settings
```

```
Log Level..... NOTICE
Device args..... "driver=lime,device=0"
TRX Base Port..... 5700
TRX Address..... 127.0.0.1
Channels..... 1
Tx Samples-per-Symbol... 4
Rx Samples-per-Symbol... 4
EDGE support..... Enabled
Reference..... Internal
C0 Filler Table..... Disabled
Multi-Carrier..... Disabled
Diversity..... Disabled
Tuning offset..... 0
RSSI to dBm offset..... 0
Swap channels..... 0
```

```
Exception in static block reg_basic_and_lf_dboards
```

```
LookupError: KeyError: The dboard id 0x0000 is already registered to Basic TX.
```

```
Exception in static block reg_rfx_dboards
```

```
LookupError: KeyError: The dboard id pair [0x0024, 0x0028] is already registered to RFX400.
```

```
Exception in static block reg_xcvr2450_dboard
```

```
LookupError: KeyError: The dboard id pair [0x0061, 0x0060] is already registered to XCVR2450.
```

```
Exception in static block reg_sbx_dboards
```

```
LookupError: KeyError: The dboard id pair [0x0054, 0x0055] is already registered to SBX.
```

```
Exception in static block reg_ubx_dboards
```

```
LookupError: KeyError: The dboard id pair [0x0074, 0x0073] is already registered to UBX v0.3.
```

```
Exception in static block reg_wbx_simple_dboards
```

```
LookupError: KeyError: The dboard id pair [0x0053, 0x0052] is already registered to WBX.
```

```
Exception in static block reg_dbsrx_dboard
```

```
LookupError: KeyError: The dboard id 0x000d is already registered to DBSRX.
```

```
Exception in static block reg_unknown_dboards
```

```
LookupError: KeyError: The dboard id 0xffff0 is already registered to Unknown TX.
```

```
Exception in static block reg_tvr_x_dboard
```

```
LookupError: KeyError: The dboard id 0x0040 is already registered to TVRX.
```

```
Exception in static block reg_dbsrx2_dboard
```

```
LookupError: KeyError: The dboard id 0x0012 is already registered to DBSRX2.
```

```
Exception in static block reg_tvr_x2_dboard
```

```
LookupError: KeyError: The dboard id 0x0046 is already registered to TVRX2.
```

```
Exception in static block reg_twinrx_dboards
```

```
LookupError: KeyError: The dboard id 0x0091 is already registered to TwinRX Rev A.
```

```
double free or corruption (out)[
```

```
INFO] [UHD] Aborted (core dumped)
```

and with osmo-trx-lms:

```
# osmo-trx-lms -C ~/Downloads/osmo-trx-limesdr.cfg
```

```
Info: SSE3 support compiled in and supported by CPU
```

```
Info: SSE4.1 support compiled in and supported by CPU
```

```
Mon Jun 4 04:29:37 2018 DLGLOBAL <0002> telnet_interface.c:104 telnet at 127.0.0.1 4237
```

```
Mon Jun 4 04:29:37 2018 DLCTRL <0009> control_if.c:886 CTRL at 127.0.0.1 4236
```

```
Config Settings
```

```
Log Level..... 3
Device args.....
TRX Base Port..... 5700
TRX Address..... 127.0.0.1
GSM BTS Address..... 127.0.0.1
Channels..... 1
Tx Samples-per-Symbol... 4
Rx Samples-per-Symbol... 4
EDGE support..... 0
Reference..... 0
C0 Filler Table..... 1
```

Multi-Carrier..... 0  
Tuning offset..... 0  
RSSI to dBm offset..... 0  
Swap channels..... 0  
Tx Antennas..... 'BAND1'  
Rx Antennas..... 'LNAW'

```
Mon Jun 4 04:29:37 2018 DMAIN <0000> LMSDevice.cpp:46 [tid=140364825490368] creating LMS device..
.
Mon Jun 4 04:29:37 2018 DMAIN <0000> LMSDevice.cpp:96 [tid=140364825490368] Opening LMS device..
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] Estimated reference cl
ock 30.6588 MHz
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] Reference clock 30.72
MHz
Mon Jun 4 04:29:37 2018 DMAIN <0000> LMSDevice.cpp:123 [tid=140364825490368] Init LMS device
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] INT 158, FRAC 797354,
DIV_LOCH 1, EN_DIV2_DIVPROG 0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCO 5000.00 MHz, RefCl
k 30.72 MHz
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] ICT_VCO: 180
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=64 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=96 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=112 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=120 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=124 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=126 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=127 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] Failed to lock
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=192 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=224 cmphl=2
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=240 cmphl=3
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=232 cmphl=3
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=228 cmphl=3
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=226 cmphl=3
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=225 cmphl=3
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] Failed to lock
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cmphl=2
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCOL : cs=221 tune ok
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] ICT_VCO: 180
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] TuneVCO(SXT) - VCO too
high
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCOM : cs=0 tune fail
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] ICT_VCO: 180
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] TuneVCO(SXT) - VCO too
high
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCOH : cs=0 tune fail
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] Selected: VCOL
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] INT 152, FRAC 262144,
DIV_LOCH 1, EN_DIV2_DIVPROG 0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCO 4800.00 MHz, RefCl
k 30.72 MHz
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] ICT_VCO: 180
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=64 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=96 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=112 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=120 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=124 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=126 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=127 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] Failed to lock
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=192 cmphl=0
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=224 cmphl=3
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=208 cmphl=3
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=200 cmphl=2
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=204 cmphl=3
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=202 cmphl=3
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cs=201 cmphl=3
```

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Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] Failed to lock
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] cmphl=2
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCOL : csw=198 tune ok
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] ICT_VCO: 180
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] TuneVCO(SXR) - VCO too
high
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCOM : csw=0 tune fail
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] ICT_VCO: 180
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] TuneVCO(SXR) - VCO too
high
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCOH : csw=0 tune fail
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] Selected: VCOL
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] INT 77, FRAC 131072, D
IV_OUTCH_CGEN 14
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCO 2400.00 MHz, RefCl
k 30.72 MHz
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] csw 169; interval [166
, 172]
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] INT 77, FRAC 131072, D
IV_OUTCH_CGEN 14
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCO 2400.00 MHz, RefCl
k 30.72 MHz
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] csw 169; interval [166
, 172]
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] M=195, N=3, Fvco=1300.
000 MHz
Mon Jun 4 04:29:37 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] M=195, N=3, Fvco=1300.
000 MHz
Mon Jun 4 04:29:38 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] INT 71, FRAC 233016, D
IV_OUTCH_CGEN 7
Mon Jun 4 04:29:38 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCO 2218.67 MHz, RefCl
k 30.72 MHz
Mon Jun 4 04:29:38 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] csw 129; interval [125
, 133]
Mon Jun 4 04:29:38 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] INT 71, FRAC 233016, D
IV_OUTCH_CGEN 7
Mon Jun 4 04:29:38 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCO 2218.67 MHz, RefCl
k 30.72 MHz
Mon Jun 4 04:29:38 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] csw 129; interval [125
, 133]
Mon Jun 4 04:29:38 2018 DMAIN <0000> LMSDevice.cpp:179 [tid=140364825490368] Setting LPFBW chan 0
Mon Jun 4 04:29:38 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] MCU algorithm time: 10
ms
Mon Jun 4 04:29:38 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] MCU algorithm time: 0
ms
Mon Jun 4 04:29:38 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] MCU Ref. clock: 30.72
MHz
Mon Jun 4 04:29:38 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] MCU algorithm time: 0
ms
Mon Jun 4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] MCU algorithm time: 20
5 ms
Mon Jun 4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] RX LPF configured
Mon Jun 4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] INT 75, FRAC 0, DIV_OU
TCH_CGEN 18
Mon Jun 4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCO 2334.72 MHz, RefCl
k 30.72 MHz
Mon Jun 4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] csw 155; interval [152
, 159]
Mon Jun 4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] MCU algorithm time: 0
ms
Mon Jun 4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] MCU algorithm time: 0
ms
Mon Jun 4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] MCU Ref. clock: 30.72
MHz
Mon Jun 4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] MCU algorithm time: 0
ms
Mon Jun 4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] MCU algorithm time: 70

```

```

ms
Mon Jun  4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] INT 75, FRAC 0, DIV_OU
TCH_CGEN 18
Mon Jun  4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] VCO 2334.72 MHz, RefCl
k 30.72 MHz
Mon Jun  4 04:29:39 2018 DLMS <0001> LMSDevice.cpp:71 [tid=140364825490368] csw 155; interval [152
, 159]
Mon Jun  4 04:29:39 2018 DMAIN <0000> LMSDevice.cpp:198 [tid=140364825490368] Error in LMS open, c
losing:
Mon Jun  4 04:29:39 2018 DMAIN <0000> osmo-trx.cpp:446 [tid=140364825490368] Failed to create radi
o device
Shutting down transceiver...

```

I'm stuck at this point and feels too close to actually start over with older versions. If someone has any input on this issue, please share your thoughts.

Cheers

#### Related issues:

|  |                 |                   |
|--|-----------------|-------------------|
| Related to OsmoTRX - Feature #2919: Native LimeSDR support                       | <b>Resolved</b> | <b>02/09/2018</b> |
| Is duplicate of OsmoTRX - Bug #2723: osmo-trx-uhd: failure to update CLOCK IN... | <b>Closed</b>   | <b>12/08/2017</b> |

#### History

##### #1 - 06/04/2018 11:56 AM - fixeria

OpenBTS is not a part of Osmocom project. OsmoTRX was forked from there, and backward compatibility is not guaranteed. In Osmocom, there is OsmoBTS. Probably, you meant exactly OsmoBTS.

In any case, LimeSDR is not (yet) supported by OsmoTRX, and this hardware works fairly unstable itself. Please see: <https://osmocom.org/issues/2919>

##### #2 - 06/04/2018 01:25 PM - Y2Kot

fixeria wrote:

OpenBTS is not a part of Osmocom project. OsmoTRX was forked from there, and backward compatibility is not guaranteed. In Osmocom, there is OsmoBTS. Probably, you meant exactly OsmoBTS.

In any case, LimeSDR is not (yet) supported by OsmoTRX, and this hardware works fairly unstable itself. Please see: <https://osmocom.org/issues/2919>

Also as

Xhizors wrote:

Hello osmocom community, I'm trying to run OpenBTS with LimeSDR-USB v1.4  
I installed LimeSuite(v18.04.2), UHD and SoapyUHD(libuhdSupport.so 0.3.4-55da7da) and OSMO-TRX on Ubuntu 18.04 system.  
LimeSDR-USB\_HW\_1.4\_r2.16.rbf

After I start the osmo-trx-uhd the transceiver starts, but 1 minute after I start OpenBTS it crashes with "UHD: Device send timed out"  
[...]

Also configured osmo-trx-lms and osmo-trx but cant seem to start the transceiver with them:

[...]

and with osmo-trx-lms:

[...]

I'm stuck at this point and feels too close to actually start over with older versions. If someone has any input on this issue, please share your thoughts.

Cheers

For possible fix you can try to read <https://discourse.myriadrf.org/t/limesdr-report-module-as-fx3-instead-of-stream/2529/10>  
Lime dev advise to use older version of their suite (17.12 is the most stable as for me) and wait before osmo-trx-lms will be complete.

**#3 - 06/12/2018 04:30 PM - pespin**

- Is duplicate of Bug #2723: osmo-trx-uhd: failure to update CLOCK IND, timeout with LimeSDR added

**#4 - 06/12/2018 04:30 PM - pespin**

- Related to Feature #2919: Native LimeSDR support added

**#5 - 06/12/2018 04:31 PM - pespin**

- Status changed from New to Closed

Closing as LimeSDR issues with UHD are being already handled in [#2723](#) and Native LimeSDR status is reported in [#2919](#).