

Private Shared



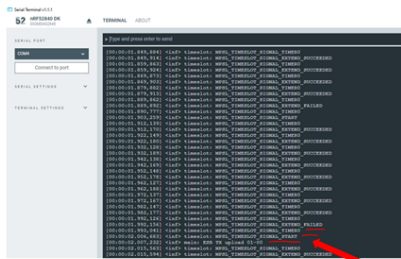
Before, our distributor FAE raised an issue regarding the implementation of BLE ESB MPSL on the 5340 network core. The details can be found at <https://devzone.nordicsemi.com/support/316715>.

However, in the case of the 5340, the situation is different. When `MPSL_TIMESLOT_SIGNAL_EXTEND_FAILED` occurs, and after applying for `MPSL_TIMESLOT_SIGNAL_ACTION_REQUEST`, the Bluetooth protocol stack enters an abnormal working state. In this state, the thread functions normally, but the Bluetooth protocol stack does not respond to any events.

[illegible]

Log for normal NRF52 conditions as shown in the diagram:





After SIGNAL_EXTEND_FAILED, start
a new timeslot request successfully

Question :

Could you please provide insight into what might be causing this situation? Or are there specific areas that need attention? I have tried enabling `CONFIG_MPSL_LOG_LEVEL_DBG` and `CONFIG_BT_DEBUG_LOG`, but there is no log output. Therefore, I am currently stuck at this point, unable to continue identifying the root cause of the problem.



19 days ago

Online [Torbjørn Øvrebekk](#)

20441 pts.

Hi David

I have had it on my todo list to update this demo for the nRF5340 for a while, and finally started looking into it yesterday.

To be honest I didn't expect the sample would run at all on the nRF5340 netcore, but it seems it is able to run with relatively few modifications.

I was able to reproduce your issue, and managed to fix it by removing the normal Bluetooth configuration from the configuration and instead adding the configuration from the `hci_rpmsg` sample, inspired by [this unofficial nRF5340 timeslot sample](#) made by another Nordic developer.

You will find my modifications in the `feature_5340_support_test1` branch [here](#). Only the PTX sample is modified, to be able to run it on the nRF5340 netcore.

Please note there is still plenty of work left to have a reliable implementation (it asserts quite often), but the timeslot extend bug is not there and I can see that the ESB data is successfully received by the PRX.

With some luck I will be done with the nRF53 port by the end of next week.

Best regards

Torbjørn



18 days ago

Online [David Duan](#)

24 pts.

Thanks Torbjørn ! !



15 days ago

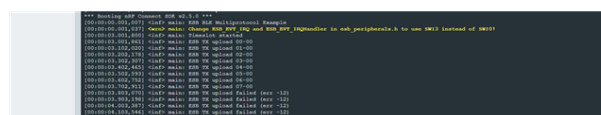
Online [Torbjørn Øvrebekk](#)

20441 pts.

You welcome David, hopefully I will have some updates for you soon.

Torbjørn

Torbjørn



5 days ago
Online [Torbjørn Øvrebekk](#)
20441 pts.

Hi David

All you have to do to run any BLE example on the appcore is to include the following configuration, to ensure that the netcore won't be flashed with the default hci_rpmsg project:

Fullscreen

```
1 CONFIG_NCS_INCLUDE_RPMSG_CHILD_IMAGE=n
```

For debugging purposes it is also possible to add an overlay to forward control of the LED pins from the appcore to the netcore, which can be done like this:

Fullscreen

```
1 /{
2     gpio_fwd: nrf-gpio-forwarder {
3         compatible = "nordic,nrf-gpio-forwarder";
4         status = "okay";
5         leds {
6             gpios = <&gpio0 28 0>, <&gpio0 29 0>, <&gpio0 30 0>, <&gpio0 31 0>
7         };
8     };
9 };
```

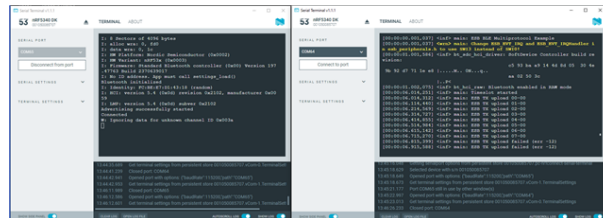
Best regards

Torbjørn

4 days ago
Online [David Duan](#)
24 pts.

Hi Tobjorn

Thanks for your great help!! now The ble + ESB is work in NCS 2.5



just for take note, i upload my app core application at here.

[peripheral_lbs_app.7z](#)

BR

15 hours ago
[Hung Bui](#)
42921 pts.

Hi David,

Torbjørn is away for 2 weeks. Thanks for sharing the peripheral_lbs with us.

I hope you don't mind I shared it with another customer that doing exactly the same.

I assume everything works and the ticket can be closed now ?

43 minutes ago
Online [David Duan](#)



24 pts.

Hi Hung Bui

yes please share. i will close the ticket.

BR

[Previewing Staged Changes](#)