Mira version 2.6.2 Release Notes

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Bugfixes

Make flash command on mkw41z targets with newer J-Link versions

Running make flash on mkw41z targets with newer J-Link versions now works as expected.

Updates

New default APPROTECT behavior - nRF ERRATA-249 workaround implemented

With revision 3 nRF52 chips (build codes nrf52840-QFAA-Fx0, nrf52840-QIAA-Fx0 nrf52840-CKAA-Fx0, nrf52832-QFAA-Gx0, nrf52832-QFAB-Gx0 and nrf52832-CIAA-Gx0), the CTRL-AP access is partially disabled when the MCU starts. It has to be chip erased (for example via `nrfjprog --recover`) to be unlocked for programming and the port will be locked again after a reset or power cycle.

To keep the previous default behavior add: `APPROTECT_DISABLED=yes` to the make file. This will keep the CTRL-AP access enabled for debugging and reprogramming. The APPROTECT register in the UICR can still be written to, and the chip can be locked, but it will not have the added security of the ERRATA-249 workaround. If `APPROTECT_DISABLED=yes` is not defined, or defined as something else, MiraOS will properly lock the CTRL-AP port with APPROTECT according to Nordic Semiconductor's ERRATA-249.

For custom make files, set `MIRA_NRF_APPROTECT_DISABLE=1` before compiling isr_vector.c to keep the previous default behavior.

Note that nrf command line tools *must* be updated to version 10.15 or higher, as they include changes which are needed to fully disable the apportect feature of a revision 3 chip.

nRF [ERRATA-254](#) workaround implemented

With revision 3 nRF52840 chips (build codes QFAA-Fx0, QIAA-Fx0 and CKAA-Fx0), running IEEE802.15.4 modulations with power amplifiers/LNA, out of band emissions and receiver blocking performance could be out of specification. Mira version 2.6.2 implements the workaround specified in [ERRATA-254](#).

TPM0 moved to TPM2 for mkw41z builds

In order to free up TPM channels to users, Mira version 2.6.2 uses TPM2 instead of TPM0. This means that any code using TPM2 will have to be modified to use either TPM0 or TPM1.