**Design Document for RTC Driver**

 

# Outline

This document describes the RTC driver in Linux kernel of MVF TOWER BOARD (XTWR-VF600) with MVF SoC.

# Existing code to be changed

## Source

* Secure Real Time Clock

Based on the driver below.

Drivers/rtc/rtc-snvs.c

## Modifications

* Add definition of Platform resource

For arch/arm/plat-mxc/devices/platform-imx\_snvs\_rtc.c, the following definition is added.

const struct imx\_snvs\_rtc\_data vf6xx\_imx\_snvs\_rtc\_data \_\_initconst =

imx\_snvs\_rtc\_data\_entry\_single(VF6XX);

Define RTC base address and IRQ, and made adjustment so that RTC driver can prove.

* Register Platform resource

In order to register this RTC driver for initialization process of mach-mvf/board-twr\_vf600.c, add function call vf6xx\_add\_imx\_snvs\_rtc(); and register resource.

# API of new functions

None

# Expected register settings

None

# Expected functionality and usage

Since the Real Time clock framework (rts\_ops\_class) is utilized for this RTC driver, the operation complies with it,

# Any other pertinent information

To use this RTC driver, enable CONFIG\_RTC\_DRV\_SNVS.