**Listing 1. Wykonany w oparciu o funkcje SPL kod pliku main.c dla aplikacji z trybem HALT**

#include "stm8s.h"

void delay**(**unsigned long int how\_long**);**

main**()**

**{**

//delay to avoid irreversible blocking of SWIM

delay**(**100000**);**

//configuration of unused pins

GPIOA**->**DDR **|=** GPIO\_PIN\_2**;**

GPIOB**->**DDR **|=** GPIO\_PIN\_0 **|** GPIO\_PIN\_1 **|** GPIO\_PIN\_2 **|** GPIO\_PIN\_3 **|** GPIO\_PIN\_6 **|** GPIO\_PIN\_7**;**

GPIOC**->**DDR **|=** GPIO\_PIN\_1 **|** GPIO\_PIN\_2 **|** GPIO\_PIN\_7**;**

GPIOD**->**DDR **|=** GPIO\_PIN\_0 **|** GPIO\_PIN\_2 **|** GPIO\_PIN\_4 **|** GPIO\_PIN\_7**;**

GPIOE**->**DDR **|=** GPIO\_PIN\_5**;**

GPIOF**->**DDR **|=** GPIO\_PIN\_4**;**

//configuration of used pins: PC3 as input (button), PA3 as output (LED)

GPIO\_Init**(**GPIOC**,** GPIO\_PIN\_3**,** GPIO\_MODE\_IN\_FL\_IT**);**

GPIO\_Init**(**GPIOA**,** GPIO\_PIN\_3**,** GPIO\_MODE\_OUT\_PP\_LOW\_FAST**);**

//configuration of external interrupt

EXTI\_SetExtIntSensitivity**(**EXTI\_PORT\_GPIOC**,** EXTI\_SENSITIVITY\_RISE\_ONLY**);**

//configuration of Flash memory in Power-down mode

FLASH\_SetLowPowerMode**(**FLASH\_LPMODE\_POWERDOWN**);**

enableInterrupts**();**

halt**()**

GPIO\_WriteHigh**(**GPIOA**,** GPIO\_PIN\_3**);**

**while** **(**1**)**

**{**

**}**

**}**

void delay**(**unsigned long int how\_long**)**

**{**

unsigned long i**;**

**for** **(**i **=** 0**;** i**<** how\_long**;** i**++)**

**{**

**}**

**}**

**Listing 2. Wykonany w oparciu o funkcje SPL kod pliku main.c dla aplikacji z trybem ACTIVE HALT**

#include "stm8s.h"

void delay**(**unsigned long int how\_long**);**

main**()**

**{**

//delay to avoid irreversible blocking of SWIM

delay**(**100000**);**

//configuration of unused pins

GPIOA**->**DDR **|=** GPIO\_PIN\_2**;**

GPIOB**->**DDR **|=** GPIO\_PIN\_0 **|** GPIO\_PIN\_1 **|** GPIO\_PIN\_2 **|** GPIO\_PIN\_3 **|** GPIO\_PIN\_6 **|** GPIO\_PIN\_7**;**

GPIOC**->**DDR **|=** GPIO\_PIN\_1 **|** GPIO\_PIN\_2 **|** GPIO\_PIN\_7**;**

GPIOD**->**DDR **|=** GPIO\_PIN\_0 **|** GPIO\_PIN\_2 **|** GPIO\_PIN\_4 **|** GPIO\_PIN\_7**;**

GPIOE**->**DDR **|=** GPIO\_PIN\_5**;**

GPIOF**->**DDR **|=** GPIO\_PIN\_4**;**

//GPIO configuration

GPIO\_Init**(**GPIOA**,** GPIO\_PIN\_3**,** GPIO\_MODE\_OUT\_PP\_LOW\_FAST**);**

//Consumption optimisations: Flash and regulator

FLASH\_SetLowPowerMode**(**FLASH\_LPMODE\_POWERDOWN**);**

CLK**->**ICKR **|=** CLK\_ICKR\_SWUAH**;**

//AWU configuration

AWU\_DeInit**();**

AWU\_Init**(**AWU\_TIMEBASE\_12S**);**

AWU\_Cmd**(**ENABLE**);**

enableInterrupts**();**

halt**();**

GPIO\_WriteHigh**(**GPIOA**,** GPIO\_PIN\_3**);**

**while** **(**1**)**

**{**

**}**

**}**

void delay**(**unsigned long int how\_long**)**

**{**

unsigned long int i**;**

**for** **(**i **=** 0**;** i**<** how\_long**;** i**++)**

**{**

**}**

**}**