**Listing 1. Stworzony w oparciu o funkcje SPL kod pliku main.c**

#include "stm8s.h"

uint16\_t Pulse **=** 0**;**

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**;**

//TIM configuration

TIM2\_DeInit**();**

TIM2\_TimeBaseInit**(**TIM2\_PRESCALER\_1**,** 100**);**

TIM2\_OC3Init**(**TIM2\_OCMODE\_PWM1**,** TIM2\_OUTPUTSTATE\_ENABLE**,**Pulse**,** TIM2\_OCPOLARITY\_HIGH**);**

TIM2\_Cmd**(**ENABLE**);**

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

**{**

TIM2\_SetCompare3**(**Pulse**);**

Pulse**++;**

**if(**Pulse **==** 99**)** Pulse **=** 0**;**

delay**(**1000**);**

**}**

**}**

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

**{**

unsigned long int i**;**

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

**}**