/\* ###################################################################

\*\* Filename : main.c

\*\* Project : Lab\_8

\*\* Processor : MK20DX128VLH5

\*\* Version : Driver 01.01

\*\* Compiler : GNU C Compiler

\*\* Date/Time : 2019-09-25, 19:42, # CodeGen: 0

\*\* Abstract :

\*\* Main module.

\*\* This module contains user's application code.

\*\* Settings :

\*\* Contents :

\*\* No public methods

\*\*

\*\* ###################################################################\*/

/\*!

\*\* @file main.c

\*\* @version 01.01

\*\* @brief

\*\* Main module.

\*\* This module contains user's application code.

\*/

/\*!

\*\* @addtogroup main\_module main module documentation

\*\* @{

\*/

/\* MODULE main \*/

/\* Including needed modules to compile this module/procedure \*/

#include "Cpu.h"

#include "Events.h"

#include "AD1.h"

#include "AdcLdd1.h"

#include "Term1.h"

#include "Inhr1.h"

#include "ASerialLdd2.h"

#include "PWM1.h"

#include "PwmLdd1.h"

#include "TU1.h"

/\* Including shared modules, which are used for whole project \*/

#include "PE\_Types.h"

#include "PE\_Error.h"

#include "PE\_Const.h"

#include "IO\_Map.h"

/\* User includes (#include below this line is not maintained by Processor Expert) \*/

uint16 adc\_result;

/\*lint -save -e970 Disable MISRA rule (6.3) checking. \*/

int main(void)

/\*lint -restore Enable MISRA rule (6.3) checking. \*/

{

/\* Write your local variable definition here \*/

/\*\*\* Processor Expert internal initialization. DON'T REMOVE THIS CODE!!! \*\*\*/

PE\_low\_level\_init();

/\*\*\* End of Processor Expert internal initialization. \*\*\*/

/\* Write your code here \*/

AD1\_Calibrate(TRUE);

PWM1\_SetRatio8(0);

/\* For example: for(;;) { } \*/

for(;;)

{

AD1\_Measure(TRUE);

AD1\_GetValue16(&adc\_result);

Term1\_SendNum(adc\_result);

Term1\_SendStr("\r\n");

if(adc\_result > 65000){

PWM1\_SetRatio8(255);

}

else if(adc\_result < 55000){

PWM1\_SetRatio8(0);

}

else{

PWM1\_SetRatio8((adc\_result-55000)/40);

}

}

/\*\*\* Don't write any code pass this line, or it will be deleted during code generation. \*\*\*/

/\*\*\* RTOS startup code. Macro PEX\_RTOS\_START is defined by the RTOS component. DON'T MODIFY THIS CODE!!! \*\*\*/

#ifdef PEX\_RTOS\_START

PEX\_RTOS\_START(); /\* Startup of the selected RTOS. Macro is defined by the RTOS component. \*/

#endif

/\*\*\* End of RTOS startup code. \*\*\*/

/\*\*\* Processor Expert end of main routine. DON'T MODIFY THIS CODE!!! \*\*\*/

for(;;){}

/\*\*\* Processor Expert end of main routine. DON'T WRITE CODE BELOW!!! \*\*\*/

} /\*\*\* End of main routine. DO NOT MODIFY THIS TEXT!!! \*\*\*/

/\* END main \*/

/\*!

\*\* @}

\*/

/\*

\*\* ###################################################################

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\*\* This file was created by Processor Expert 10.5 [05.21]

\*\* for the Freescale Kinetis series of microcontrollers.

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