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;

; Authors : Noam Solan & Ronen Rozin

;

; Date : 26/12/18

;

; File : mpl.lab8.ex1.asm

;

; Hardware : 8051 based processor

;

; Description : ADCs

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#include **<**ADUC841.h**>**

CSEG AT 0000H

**JMP** MAIN

CSEG AT 002BH; timer1 int location

**JMP** TIMER2\_INT

RETI

CSEG AT 0033H; adc int location

**JMP** ADC\_INT

RETI

CSEG AT 0100H

MAIN**:**

**MOV** ADCCON1**,** #0B8H;setting adc with correct settings

CLR CCONV;no continuous conversion

ANL ADCCON2**,**#090H ;adc on

ANL T2CON**,** #044H; config for timer2

ANL DACCON **,** #07FH;config for dac

ORL DACCON **,** #2DH

**SETB** TR2; timer2 enable

**SETB** EADC; adc int

**SETB** ET2; timer2 int

**SETB** EA;all ints

**JMP** **$**; looping

ADC\_INT**:**

**MOV** DAC0L**,**ADCDATAL;fetching data to dac

**MOV** DAC0H**,**ADCDATAH

RETI

TIMER2\_INT**:**

CLR TF2

**SETB** SCONV

RETI

END

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; File : mpl.lab8.ex2.asm

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; Description : ADCs

;

;\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#include **<**ADUC841.h**>**

CSEG AT 0000H

**JMP** MAIN

CSEG AT 0033H; adc int location

**JMP** ADC\_INT

RETI

CSEG AT 0100H

MAIN**:**

**MOV** ADCCON1**,** #0BAH ;setting adc with correct settings

CLR CCONV ; no continuous conversion

ANL ADCCON2**,**#090H ;adc on

ANL T2CON**,** #044H ;config for timer 2

**SETB** TR2; enable timer2

ANL DACCON **,** #07FH ;config for dac

ORL DACCON **,** #2DH

**SETB** EADC ; adc int

**SETB** EA ;all ints

**JMP** **$** ;looping

ADC\_INT**:**

**MOV** DAC0L**,**ADCDATAL ;fetching data to dac

**MOV** DAC0H**,**ADCDATAH

RETI

END

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; Authors : Noam Solan & Ronen Rozin

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; Date : 26/12/18

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; File : mpl.lab8.ex3.asm

;

; Hardware : 8051 based processor

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; Description : ADCs

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#include **<**ADUC841.h**>**

CSEG AT 0000H

**JMP** MAIN

CSEG AT 0033H; adc int location

**JMP** ADC\_INT

RETI

CSEG AT 0100H

MAIN**:**

**MOV** ADCCON1**,** #0B8H ;setting adc with correct settings

**SETB** CCONV; continuous conversion

ANL ADCCON2**,** #090H ;adc on

**SETB** CCONV; continuous conversion

ANL DACCON **,** #07FH ;config for dac

ORL DACCON **,** #2DH

CLR TR2

**SETB** EADC ; adc int

**SETB** EA ;all ints

**SETB** SCONV

**JMP** **$** ;looping

ADC\_INT**:**

**MOV** DAC0L**,**ADCDATAL ;fetching data to dac

**MOV** DAC0H**,**ADCDATAH

RETI

END