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C51 COMPILER V7.04, COMPILATION OF MODULE ADCSINGL

OBJECT MODULE PLACED IN ADCSINGL.OBJ

COMPILER INVOKED BY: C:\Keil\C51\BIN\C51.EXE ADCSINGL.C BROWSE DEBUG OBJECTEXTEND

stmt level source

1 /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

2

3 Author : ADI - Apps www.analog.com/MicroConverter

4

5 Date : October 2003

6

7 File : ADCsingl.c

8

9 Hardware : ADuC841

10

11 Description : Performs repeated single ADC conversions and moves

12 results to UART.

13

14

15 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

16

17 #include<stdio.h>

18 #include<aduc841.h>

19

20 sbit LED = 0x0B4; //P3.4 drives red LED on eval board

21

22 void adc\_int() interrupt 6{

23 1 LED=1;

24 1 printf("\n%02BX%02BX\n",ADCDATAH,ADCDATAL);

25 1 return;

26 1 }

27 void DELAY(int); // Function prototype

28 void main(void)

29 {

30 1 int CHAN=0;

31 1

32 1 /\* Set up UART \*/

33 1 T3CON = 0x086;

34 1 T3FD = 0x08;

35 1 SCON = 0x052;

36 1

37 1 /\* PRECONFIGURE...\*/

38 1

39 1 ADCCON1 = 0x08C; // power up ADC /32 + 4 acq clock

40 1 ADCCON2 = CHAN; // select channel to convert

41 1 EA = 1; // enable interrupts

42 1 EADC = 1; // enable ADC interrupt

43 1

44 1 /\* PERFORM REPEATED SINGLE CONVERSIONS...\*/

45 1

46 1 for(;;)

47 1 {

48 2 SCONV = 1; // Perform single conversion

49 2 while (LED==0){}

50 2 LED=0;

51 2 }

52 1

53 1 }

54

55

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57

MODULE INFORMATION: STATIC OVERLAYABLE

CODE SIZE = 101 ----

CONSTANT SIZE = 13 ----

XDATA SIZE = ---- ----

PDATA SIZE = ---- ----

DATA SIZE = ---- ----

IDATA SIZE = ---- ----

BIT SIZE = ---- ----

END OF MODULE INFORMATION.

C51 COMPILATION COMPLETE. 0 WARNING(S), 0 ERROR(S)