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C51 COMPILER V7.04, COMPILATION OF MODULE DACSINE

OBJECT MODULE PLACED IN DACsine.OBJ

COMPILER INVOKED BY: C:\Keil\C51\BIN\C51.EXE DACsine.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 : DACsine.c

8 //

9 // Hardware : ADuC842

10 //

11 // Description : DAC outputs a sine wave 550Hz to DAC0.

12 // Rate calculations assume defualt clock of 2.097152MHz

13 //\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

14

15 #include <stdio.h>

16 #include <ADuC842.h>

17

18 sbit LED = 0x0B4;

19

20 void main (void)

21 {

22 1

23 1 unsigned code values[64][2]={{0x07, 0xFF},{0x08, 0xC8},{0x09, 0x8E},{0x0A, 0x51},{0x0B, 0x0F},

24 1 {0x0B, 0xC4},{0x0C, 0x71},{0x0D, 0x12},{0x0D, 0xA7},{0x0E, 0x2E},

25 1 {0x0E, 0xA5},{0x0F, 0x0D},{0x0F, 0x63},{0x0F, 0xA6},{0x0F, 0xD7},

26 1 {0x0F, 0xF5},{0x0F, 0xFF},{0x0F, 0xF5},{0x0F, 0xD7},{0x0F, 0xA6},

27 1 {0x0F, 0x63},{0x0F, 0x0D},{0x0E, 0xA5},{0x0E, 0x2E},{0x0D, 0xA7},

28 1 {0x0D, 0x12},{0x0C, 0x71},{0x0B, 0xC4},{0x0B, 0x0F},{0x0A, 0x51},

29 1 {0x09, 0x8E},{0x08, 0xC8},{0x07, 0xFF},{0x07, 0x36},{0x06, 0x70},

30 1 {0x05, 0xAD},{0x04, 0xEF},{0x04, 0x3A},{0x03, 0x8D},{0x02, 0xEC},

31 1 {0x02, 0x57},{0x01, 0xD0},{0x01, 0x59},{0x00, 0xF1},{0x00, 0x9B},

32 1 {0x00, 0x58},{0x00, 0x27},{0x00, 0x09},{0x00, 0x00},{0x00, 0x09},

33 1 {0x00, 0x27},{0x00, 0x58},{0x00, 0x9B},{0x00, 0xF1},{0x01, 0x59},

34 1 {0x01, 0xD0},{0x02, 0x57},{0x02, 0xEC},{0x03, 0x8D},{0x04, 0x3A},

35 1 {0x04, 0xEF},{0x05, 0xAD},{0x06, 0x70},{0x07, 0x36}};

36 1

37 1 DACCON = 0x0D; //DAC0 on 12-bit Asynchronous

38 1

39 1 DAC0H = 0x08; //DAC0 mid scale

40 1 DAC0L = 0x00;

41 1

42 1 while (1)

43 1 {

44 2 int i;

45 2 for ( i = 0 ; i < 64; i++)

46 2 {

47 3 DAC0H = values[i][0];

48 3 DAC0L = values[i][1];

49 3 }

50 2 LED ^= 1;

51 2 }

52 1 }

53

54

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MODULE INFORMATION: STATIC OVERLAYABLE

CODE SIZE = 75 ----

CONSTANT SIZE = 256 ----

XDATA SIZE = ---- ----

PDATA SIZE = ---- ----

DATA SIZE = ---- 2

IDATA SIZE = ---- ----

BIT SIZE = ---- ----

END OF MODULE INFORMATION.

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