;File: dac42out.a51

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;Development progress: Dac842.df

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;DacOut==========Output a value on DAC.

;C Function prototype: char DacOut(char cChan, int iDac);

;Description of Function: Causes iDac to be output on channel cChan.

;User interface: Set DAC options by executing DacCfg().

; Put channel number in first parameter.

; Put iDac in second parameter.

; Call DacOut. Parameter2 is output on appropriate DAC pin.

; Returns 1 if parameter in range, else 0.

;Robustness: If parameter2 >4095 output full scale.

; If parameter<0 output 0.

;Side effects: Overwrites a, P.

;

NAME DACOUT

$NOMOD51

$IC(..kei842.inc) ; Parameter passing registers for Keil .

$IC(..kei842.dat) ; SFR definition for Keil .

;

public \_DacOut

?PR?\_DacOut?DACOUT SEGMENT CODE

RSEG ?PR?\_DacOut?DACOUT

\_DacOut:

orl DACCON,#3 ;Activate DAC.

mov a,iP2hc ;if(iDac<0)

jnb ACC.7,DaOPos

mov iP2hc,#0h ; output zero.

mov iP2lc,#0h

mov a,#080h ;Mark range error.

sjmp DaOG

DaOPos: anl a,#0f0h ;else if(iDac>0xfff)

jz DaOG

mov iP2hc,#00fh ; output full scale.

mov iP2lc,#0ffh

mov a,#080h ;Mark range error.

DaOG: xch a,cP1l

jz DaO0 ;if(cChan)

mov DAC1H,iP2hc ; DAC1H/L = iDac;

mov DAC1L,iP2lc

sjmp DaOOut

DaO0: mov DAC0H,iP2hc ; DAC0H/L = iDac;

mov DAC0L,iP2lc

DaOOut: mov cP1l,#1 ;Good return

xch a,cP1l ;if(error)

cjne a,#080h,DaOR

mov cP1l,#0 ; bad return.

DaOR: ret

;

;Function End==========================================================Function End

END