





		tH	200			ns
		tBW	2/FCLK		5/FCLK	μs
		tWL	16/FCLK			μs
		VIL			0.2	VDD
		VIH	0.8			VDD
	VOL>(VDD-1V)	IOH			-200	μA
	VOL<1V	IOL	200			μA
				5		pF
		TFR	2/FCLK			
		tCL	2/FCLK			
		tL	200		tRA	ns
		tH	200			ns
		tRA	4/F			μs
			590	650	720	μV/count
ADC			2 ¹³	2 ¹⁴ -511		Counts
				80		Counts/K
ADC			511		2 ¹⁴ -511	Counts
Value at 300K			6700	8200	9900	Counts
			FCLK * 1.41 / 2048 / PI			Hz
HPF			FCLK / 16 * 1.41 / 2048 / PI			Hz
		FOSC	56	64	74	kHz
		FCLK		FOSC/2		

3.

RM412 PIR RM412
ADC





7) ADC

“ 0 ” “ 1 ”

8)

3.3 SERIN

1.

Bit-No		
[24:17]	[7:0]	6.5μv
[16:13]	[3:0]	(0.5s ..8s)
[12:11]	[1:0]	
[10:9]	[1:0]	(2s ..8s)
[8]	[0]	1= 0=
[7]	[0]	0= 1 =
[6:5]	[1:0] ADC /	0 = PIR (BPF) 1 = PIR (LPF) 2 = (LPF) 3= (LPF)
[4:1]	[0]	
[0]		1= 0=



[16:13]	[3:0]	“ H ” “ L ”
[12:11]	[1:0]	
[10:9]	[1:0]	
[8]		0= 1 =
[7]		0= 1 =
[6:5]	[1:0] ADC	0 = PIR (HPF) 1 = PIR (LPF) 2 = 3 =
[4:1]		
[0]		1= 0=

4.

4.1 PIR

1)

ADC [6:5] PIR LPF (=1)
 $V_{PIR} = (ADC_out - ADC_offset) * 6.5\mu v$

2)

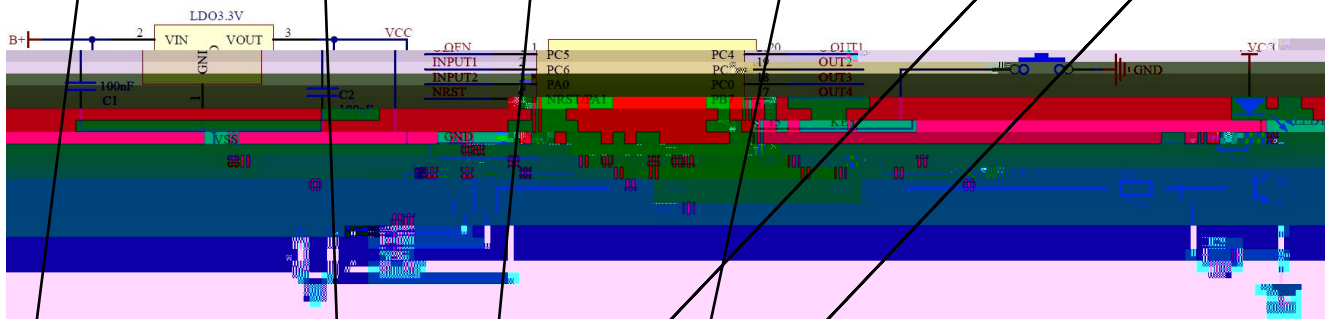
ADC [6:5] PIR HPF (=0)
 $V_{PIR} = ADC_out * 6.5\mu v$

4.2

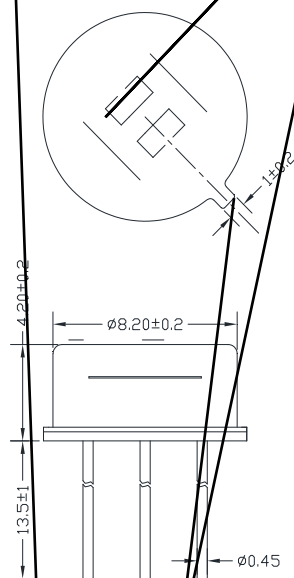
ADC [6:5] (=2)
 $V_{DD} = (ADC_out - ADC_offset) * 650\mu V.$

4.3

ADC [6:5] (=3)
 $= T_{cal} + (ADC_out - ADC_offset(T_{cal})) / 80 * count / K$
 $ADC_offset = ADC @ VIN = 0 = 2^{13}$
 $ADC_offset(T_{cal}) = ADC = 8200@300k$



/ /





1	35	95 RH	500H	
2	-40	500H		3H :1
3	80	500H		
4	-40	1H/	1H/40	1H/10 2
5	260 ± 5	10S		15



