		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

0 = 1 =

7) ADC

ADC ADC :

PIR BFP = 0

PIR LPF = 1

= 2

= 3

“0” “1”

8)

9

1= 0=

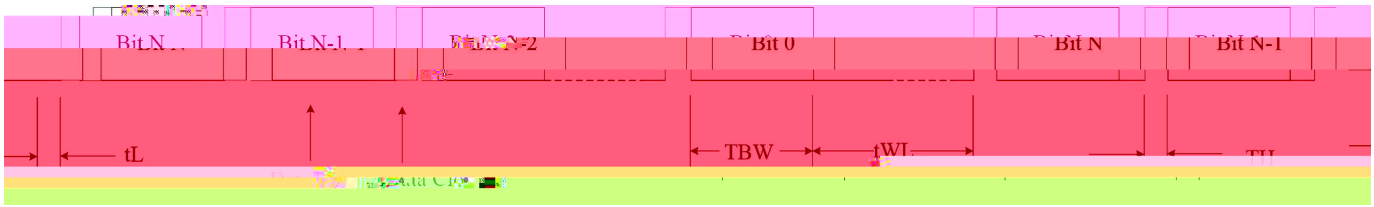
3.3 SERIN

SERIN 0 1

(0/1) “ ” “ ” ( ) TBW RM412

(tbit) RM412 (tbit)

16 (tR)

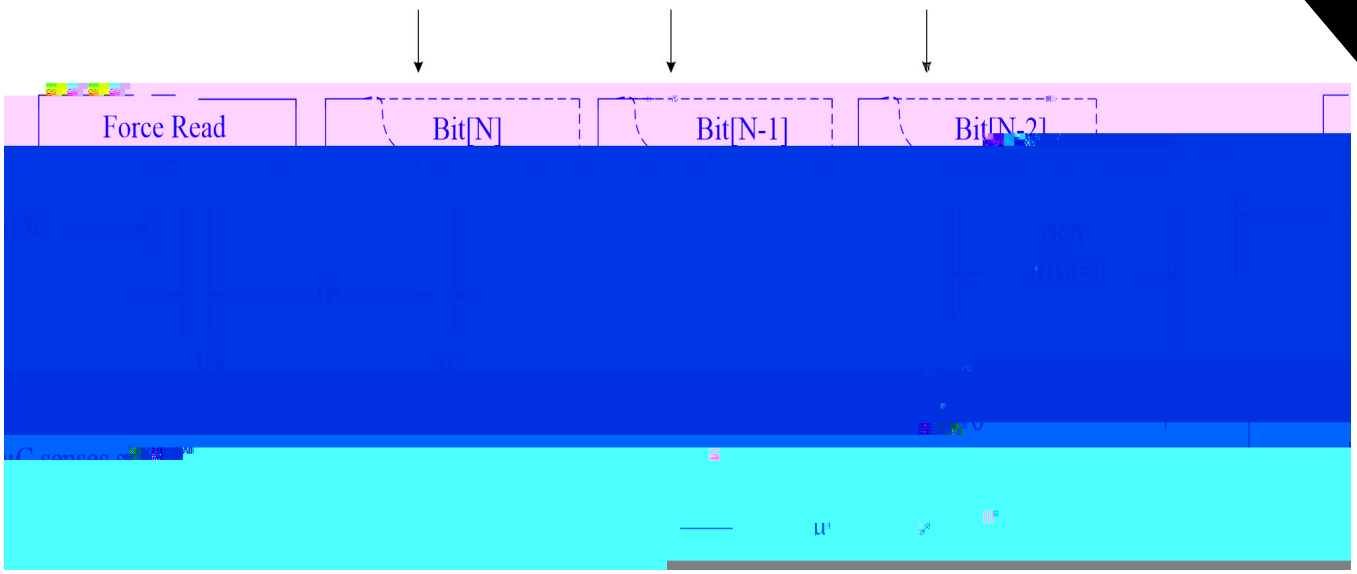


1.

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=

MCU 2 (tFR) DOCI

DOCI 4 “0”



ADC DOCI INTR ADC 512



[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)
VPIR = (ADC_out - ADC_offset) * 6.5μv

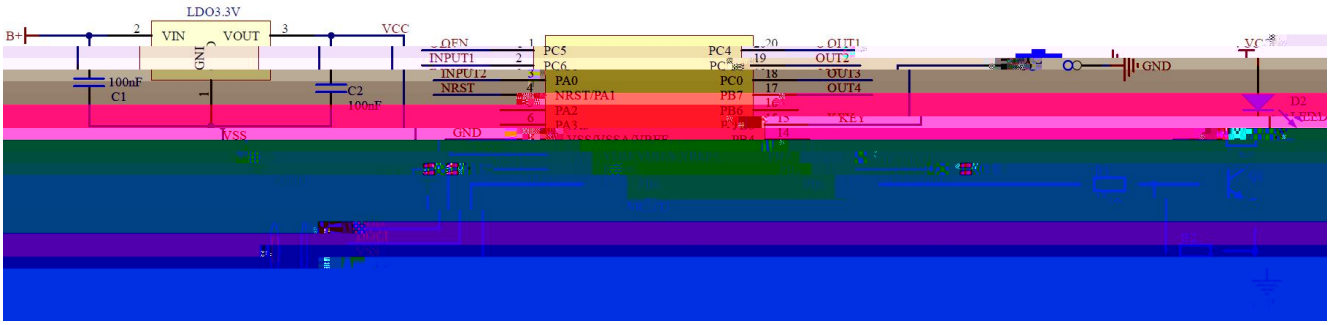
2)
ADC [6:5] PIR HPF (=0)
VPIR = ADC_out * 6.5μv

4.2

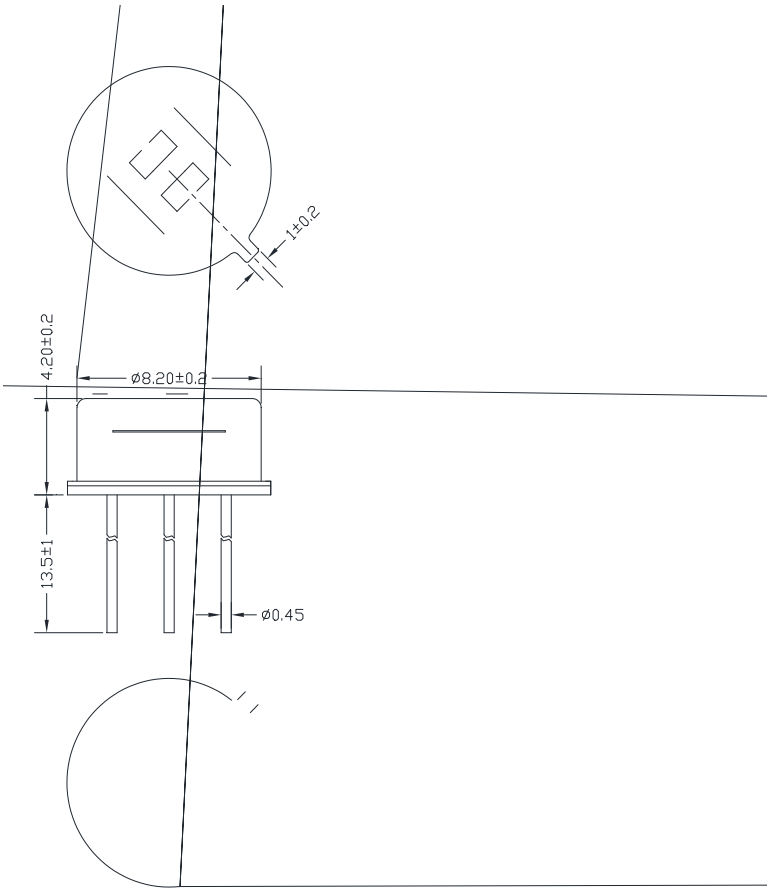
ADC [6:5] (=2)
VDD = (ADC_out - ADC_offset) * 650μV.

4.3

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


LDO3.3V
B+
VIN
VOUT
GND
VCC
100nF
C1
C2
100nF
VSS
GND
INPUT1
INPUT2
NRST
PC5
PC6
PA0
NRST/PA1
PA2
PA3
PC4
PC3
PC0
PB7
PB6
OUT1
OUT2
OUT3
OUT4
KEY
GND
D2

/ /


1±0.2
4.20±0.2
ø8.20±0.2
13.5±1
ø0.45

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

