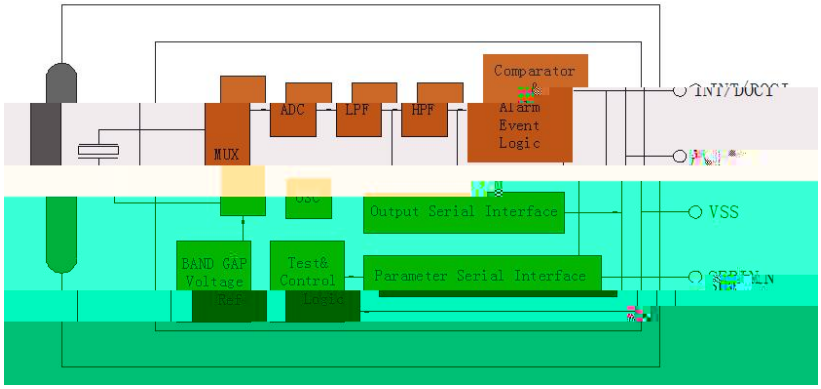



Comparator
&
Alarm
Event
Logic
ADC
LPF
HPF
MUX
Output Serial Interface
VSS
BAND GAP
Voltage
Ref
Test&
Control
Logic
Parameter Serial Interface

S23-S340R PIR

ADC

1 MUX

ADC PIR

2 (BAND GAP Volatage Ref)

3 (OSC)

64kHz

4 (LPF HPF)

7Hz 0.4Hz

5 (Comparator&Alarm Event Logic)

0 = 1 =

7) ADC

ADC ADC :

PIR BFP = 0

PIR LPF = 1

= 2

= 3

“0” “1”

8)

9

1= 0=

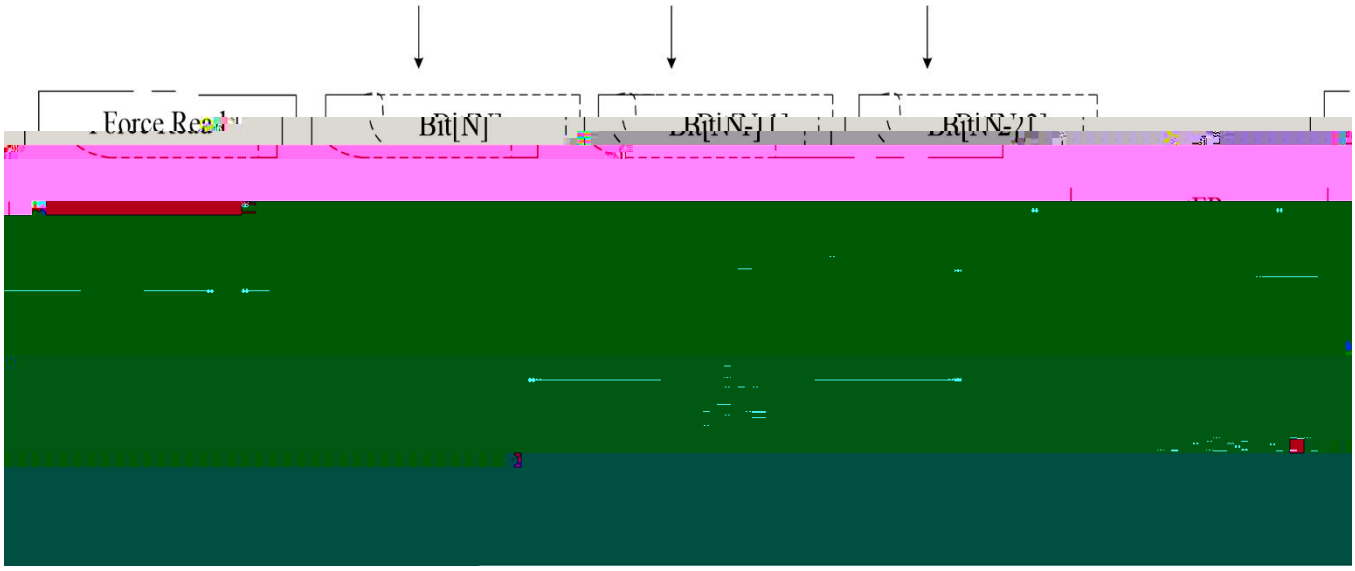
3.7.3 SERIN

SERIN 0 1

D M

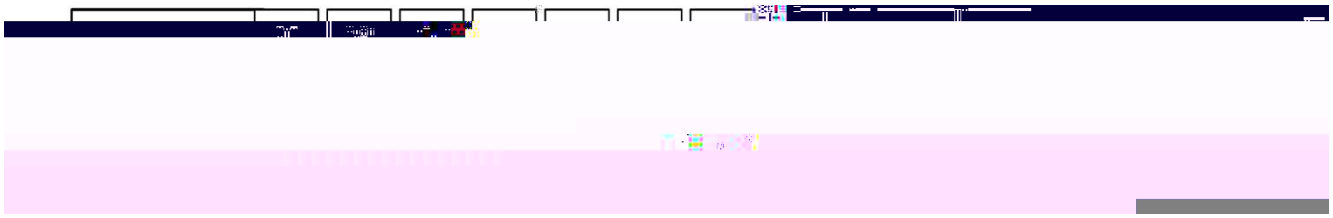
3.7.4 DOCI

MCU 2 (tFR) DOCI
DOCI 4 “0”



ADC DOCI / INTR ADC 512

PIR DOCI



[6:5]	[1:0] ADC	0 = PIR (HPF) 1 = PIR (LPF) 2 = 3 =
[4:1]		
[0]		1= 0=

3.8

3.8.1 PIR

1)
ADC [6:5] PIR LPF (=1)
VPIR = (ADC_out - ADC_offset) * 6.5μv

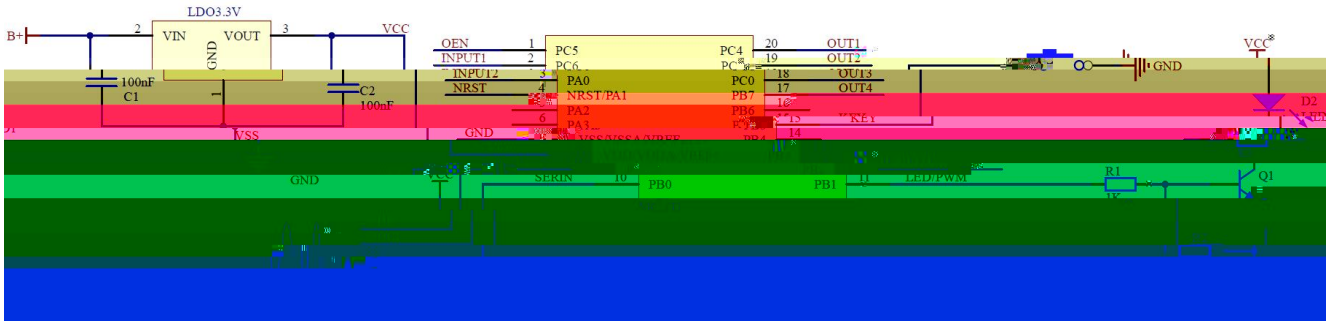
2)
ADC [6:5] PIR HPF (=0)
VPIR = ADC_out * 6.5μv

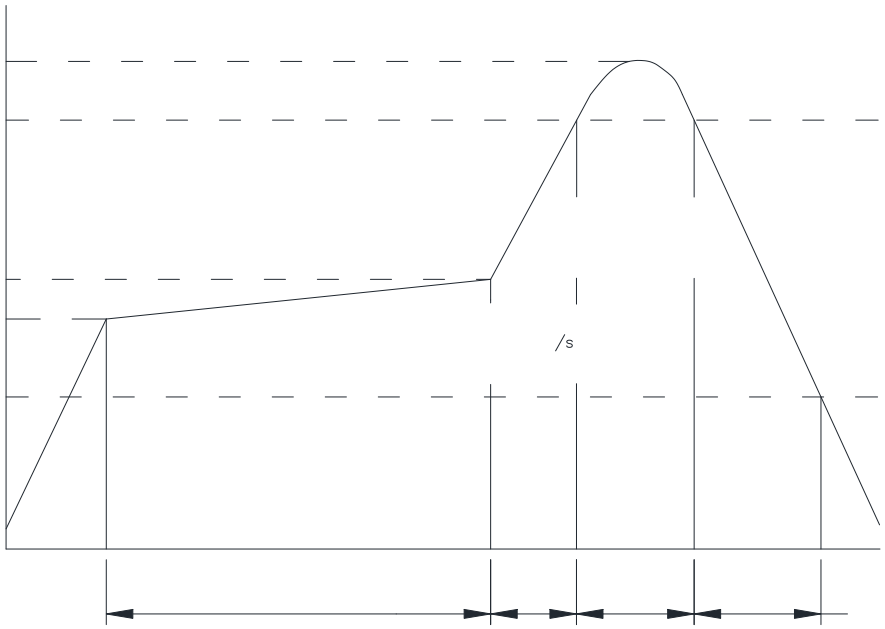
3.8.2

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

3.8.3

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




/s