

BP1708
产品规格书
松恩电子

V1.0

概述:

BP1708 为松恩电子在心率、血压或者心率、血氧方案上的处理芯片，负责心率、血压、血氧（血压和血氧是两套独立的方案）的数据输出，支持串口 **UART** 以及 **IIC** 两种输出模式。体积小，设计方便，使用简单，对接方便的特点。

规格参数:

工作电压: 2.8~3.3V

工作电流: 4mA

工作温度: -40℃~+125℃

封装尺寸: **UFQFPN-28** 4*4MM

贴片温度: 260℃以下 10 秒

存放温度范围: -50℃到 125℃

应用范围:

负责采集 **PPG** 信号，通过串口或者 **IIC** 输出心率、血压、血氧的数值，以及输出 **PPG** 信号。

电气特性:

Reference voltage characteristics

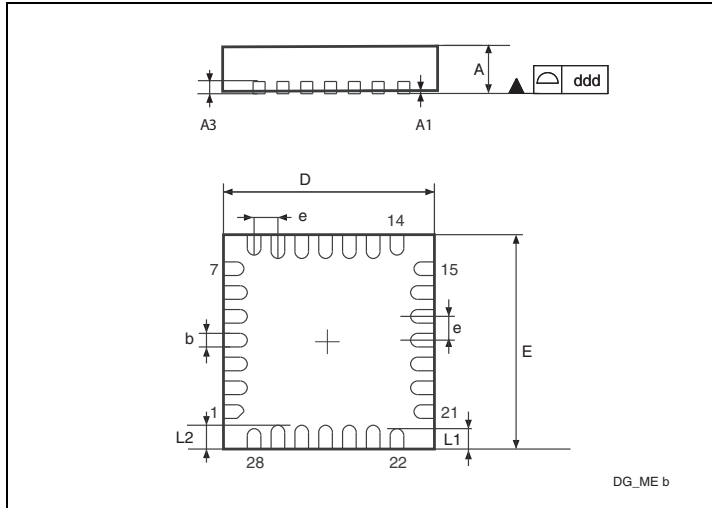
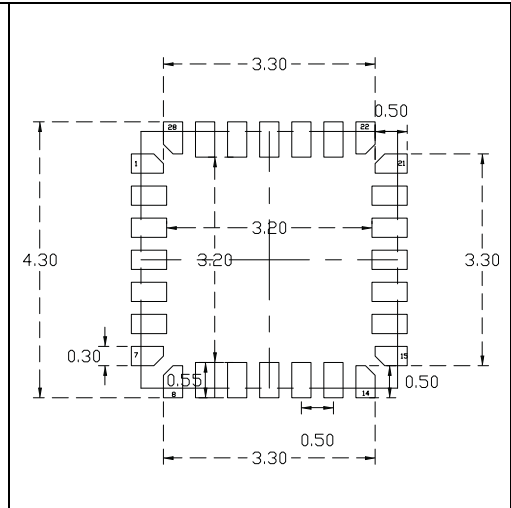
Symbol	Parameter	Min	Typ	Max.	Unit
I_{REFINT}	Internal reference voltage consumption		1.4		μA
$T_{S_VREFINT}$	ADC sampling time when reading the internal reference voltage ⁽²⁾		5	10	μs
I_{BUF}	Internal reference voltage buffer consumption (used for ADC)		13.5	25	μA
V_{REFINT_out}	Reference voltage output	TBD	1.225	TBD	V
V_{REFINT_DIV1}	1/4 reference voltage		25		% V_{REFINT_COMP}
V_{REFINT_DIV2}	1/2 reference voltage		50		
V_{REFINT_DIV3}	3/4 reference voltage		75		
I_{LPBUF}	Internal reference voltage low power buffer consumption (used for comparators or output)		730	1200	nA
I_{REFOUT}	Buffer output current ⁽³⁾			1	μA
C_{REFOUT}	Reference voltage output load			50	pF
$t_{VREFINT}$	Internal reference voltage startup time		2	TBD	ms
t_{BUFEN}	Internal reference voltage buffer startup time once enabled ⁽²⁾			10	μs
$ACC_{VREFINT}$	Accuracy of V_{REFINT} stored in engibyte			± 5	mV
$STAB_{VREFINT}$	Stability of V_{REFINT} in temperature		20	50	ppm/ $^{\circ}C$
$STAB_{VREFINT}$	Stability of V_{REFINT} after 1000 hours			TBD	ppm

1. Based on characterization results, unless otherwise specified

2. Defined when ADC output reaches its final value $\pm 1/2LSB$

3. To guaranty less than 1% V_{REFOUT} deviation

封装尺寸:

Figure 21. WFQFPN28 – 28-lead very very thin fine pitch quad flat no-lead package outline (4 x 4)⁽¹⁾**Figure 22. Recommended footprint (dimensions in mm)⁽¹⁾**

1. Drawing is not to scale.

Table 53. WFQFPN28 – 28-lead very very thin fine pitch quad flat no-lead package (4 x 4), package mechanical data⁽¹⁾

Dim.	mm			inches ⁽²⁾		
	Min	Typ	Max	Min	Typ	Max
A ⁽¹⁾	0.7	0.75	0.8	0.0276	0.0295	0.0315
A1	0	0.02	0.05	0	0.0008	0.002
A3		0.2			0.0079	
b	0.18	0.25	0.3	0.0071	0.0098	0.0118
D		4			0.1575	
E		4			0.1575	
e		0.5			0.0197	
L1	0.25	0.35	0.45	0.0098	0.0138	0.0177
L2	0.3	0.4	0.5	0.0118	0.0157	0.0197
ddd		0.08			0.0031	
	Number of pins					
N	28					

1. Thickness valid for the WFQFPN28 package in the sampling phase. In the production phase, the UFQFPN28 package will be used with a thickness equal to 0.6 mm.

2. Values in inches are converted from mm and rounded to 4 decimal digits.