

/ Descriptions

BRCL4058FZR ĩ Đ DFN3×3-8L M [0B] ã ŷ ó Y 5⁄8 [0B] D ` ¨ D ☉ - X ☉ H
BRCL4058FZR ı ő ħ ☐ ℓ / ő ħ ☉ я ı ó í` ı E N[0B] u f t "Q´ ıÆ ê BRCL4058FZR ĩ ж
"А Ă Z ı [0B] т ŷ "Oψ а "H ı Ć ı Q T USB ☉ ♦ = H ☉ ♦ T Ă BRCL4058FZR ı" J
PMOSFET " = ı ı i ĥ X ☉ ı "A@ j u 5 ℓ ☉ = ¨ ~ || q ђ r ı M X ☉ ☉ ℓ
5 u ` ı Q ж р з ı " "HĂă ŷ L □ ŷ† t ĩ M Ъ □ □ ŷ † Q X , ☉ я d ħ̂ 4.2V X ☉
☉ ℓ ı PROG Ů u i A ☉ J ı ω ı 1.2A E ☉ ☉ я ε Γ ℓ Hă USB ☉ ♦ z ů è
"H ı BRCL4058FZR u ☉ A H ☉ ℓ † õ ı ☉ - « ☉ ℓ p3uAQ ĩ BRCL4058FZR[0B] U H ≤ e γ
ú X ☉ ☉ ℓ ~ í H ☉ я з ĭ я 5 u W X ☉ = Ё A ħ̂ "Y~ X ☉ J = ☉ ☉ я ı ☉ [0B]
† õ Â Ů

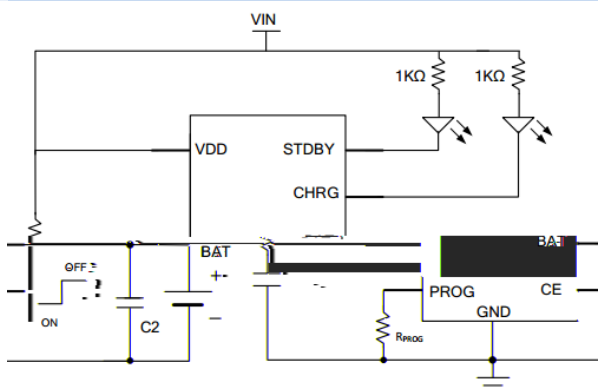
/ Features

- ◆ φ 30 V $\approx$ 3 6.9 V я 3 ĭ
- ◆ $\gamma \dot{y} \chi \cdot_5 \mathbb{L} \supset \text{я} \quad \ddot{\text{O}} \chi 4.2 \text{ V} \gamma \dot{y} \pm 42 \text{ mV}$
- ◆ $\tilde{\text{e}} \supset \mathbb{L} < 3 \mu\text{A}$
- ◆ $\tau \tilde{\omega} \text{BAT-VDD} \quad \text{й} \quad \text{I} \quad \dot{\text{I}}$
- ◆ $\tau \text{H}^{\cdot} \text{Y} 0 \text{V} \supset - \chi \supset$
- ◆ $\text{I} \acute{\text{O}} \chi \supset \text{W} \tilde{\text{A}} \text{ I} \chi \supset \mathbb{L} \text{ I} \quad 1.2 \text{ A}$
- ◆ $\mathbb{L} / \acute{\text{O}} \mathbb{L} / \acute{\text{O}} \text{я} \text{ s} \mathbb{J} \tilde{\text{A}} \chi \supset$
- ◆ $\chi \supset \mathbb{L} \cup \text{ I}$
- ◆ $\chi \supset \mathbb{L} \dot{\text{U}} \dot{\text{I}} \text{я} \quad \text{'}$
- ◆ $\supset - \square \dot{y} \cdot_5 \mathbb{L} \supset \text{I}$
- ◆ $\cdot_5 \cup \text{W} \chi \supset$
- ◆ $\chi \supset \uparrow \tilde{\text{O}}^{\cdot} \text{Y}^{\sim}$
- ◆ $\gamma \text{ IEC62368} \varphi \text{ A} \%^{\cdot}$
- ◆ $\text{DFN3} \times \text{3B-8LM} \quad \text{I} \quad \text{h} \quad \text{f} \quad \beta$

/ Applications

- ◆ Ү Ӯ Ɔ
- ◆ Ӗ Ӑ ӑ ӓ ӕ ӗ ӧ ӡ
- ◆ ӡ ӓ

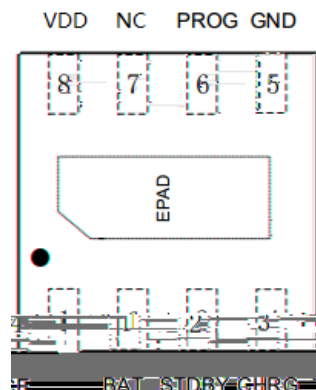
/ Application Circuit



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注 1: 建议取值 (C1/C2 为 1—10 μ F)

/ Pinning



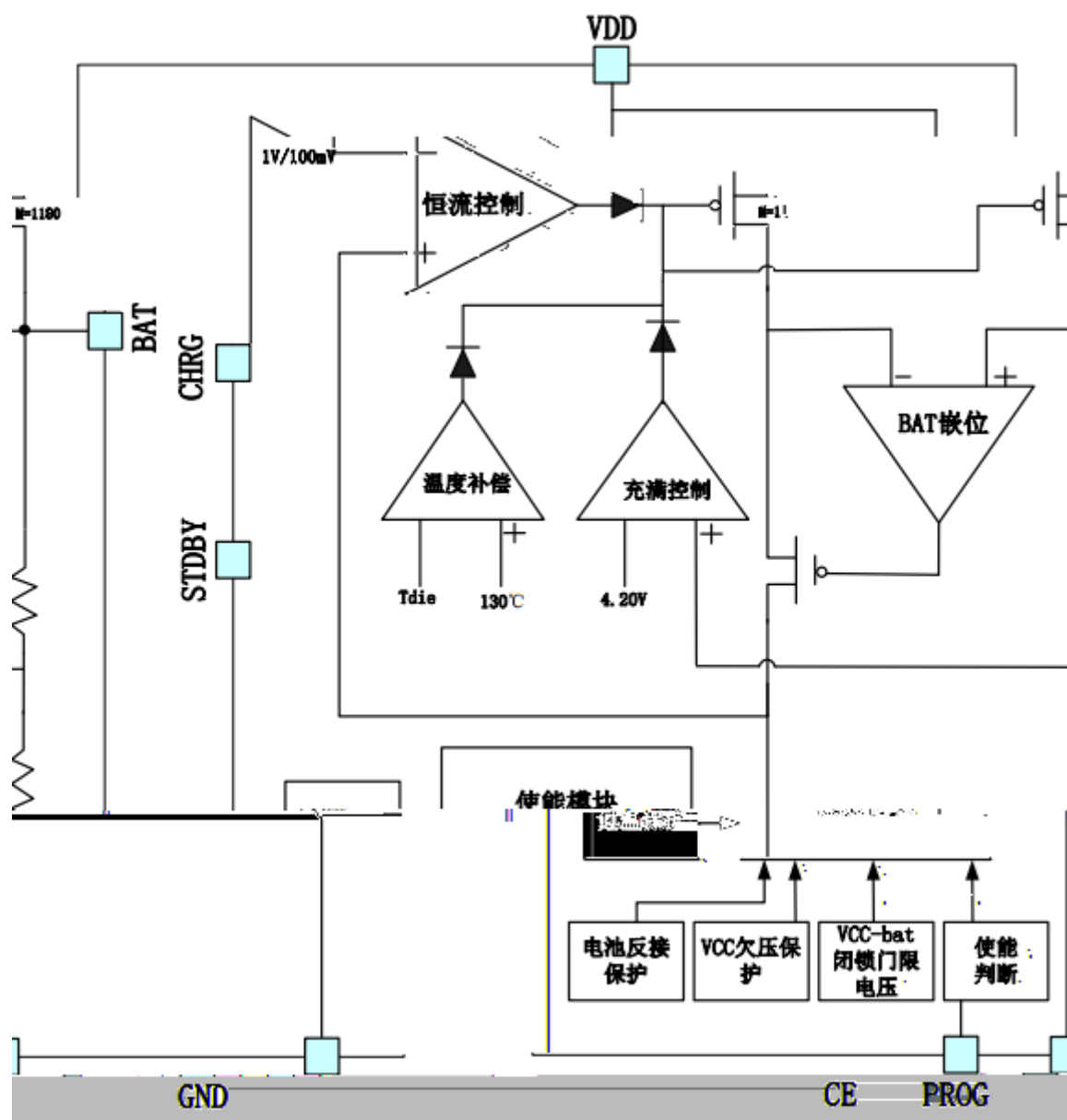
PIN Num.	Symbol	Function
1	BAT	充电电压输入
2	STDBY	待机模式控制
3	CHRG	充电模式控制
4	CE	芯片使能
5	GND	接地
6	SURJ	短路保护
7	NC	无连接
8	VDD	供电电压
EPAD	GND	GND

/ Absolute Maximum Ratings(Ta=25℃)

PARAMETER	SYMBOL	RATINGS	UNITS
Input Supply Voltage	V _{DD}	-0.3~30	V
CHRG Pin Voltage	V _{CHRG}	-0.3~30	
STDBY Pin Voltage	V _{STDBY}	-0.3~30	
CE Pin Voltage	V _{CE}	-0.3~6	
PROG Pin Voltage	V _{PROG}	-0.3~6	
BAT Pin Voltage	V _{BAT}	-0.3~20	
Operating Ambient Temperature Range	T _A	-40~85	℃
Junction Temperature	T _J	150	℃
Storage Temperature	T _{stg}	-55~150	℃
Lead Temperature (Soldering, 10s)	T _{solder}	260	℃
ESD	HBM	2000	V

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Input Supply Voltage			4.5	5.0	6.0	V
Input Over-Voltage Protection Voltage	V_{ovp}	V_{DD} Rising	6.3	6.9	7.5	V
Input Over-Voltage Protection Voltage Hysteresis	ΔV_{OVP}	V_{DD} from High to Low		500		mV
V_{CC} Under voltage Lockout Threshold	V_{UVL}	V_{DD} from Low to High		3.5		V
Lockout Hysteresis	ΔV_{UVL}	V_{DD} from High to Low		200		mV
Input Supply Current	I_{CC}	Charge Mode, $R_{PROG}=1.62\text{ K}$		90	180	μA
		Standby Mode (Charge Terminated)		60	120	
		Shutdown Mode: R_{PROG} Not Connected, $V_{DD}<V_{BAT}$, or $V_{DD}<V_{UVL}$: $CE=GND, OVP$		60	120	

/ Principle block diagram



/ Function description



1. 当输入电压 V_{DD} 在 1.30V 至 1.80V 范围内时，BRCL4058FZR 将保持休眠状态。当输入电压 V_{DD} 上升至 1.80V 以上时，器件将自动唤醒并进入正常工作状态。



2. 当输入电压 V_{DD} 在 1.30V 至 1.80V 范围内时，器件将保持休眠状态。当输入电压 V_{DD} 上升至 1.80V 以上时，器件将自动唤醒并进入正常工作状态。

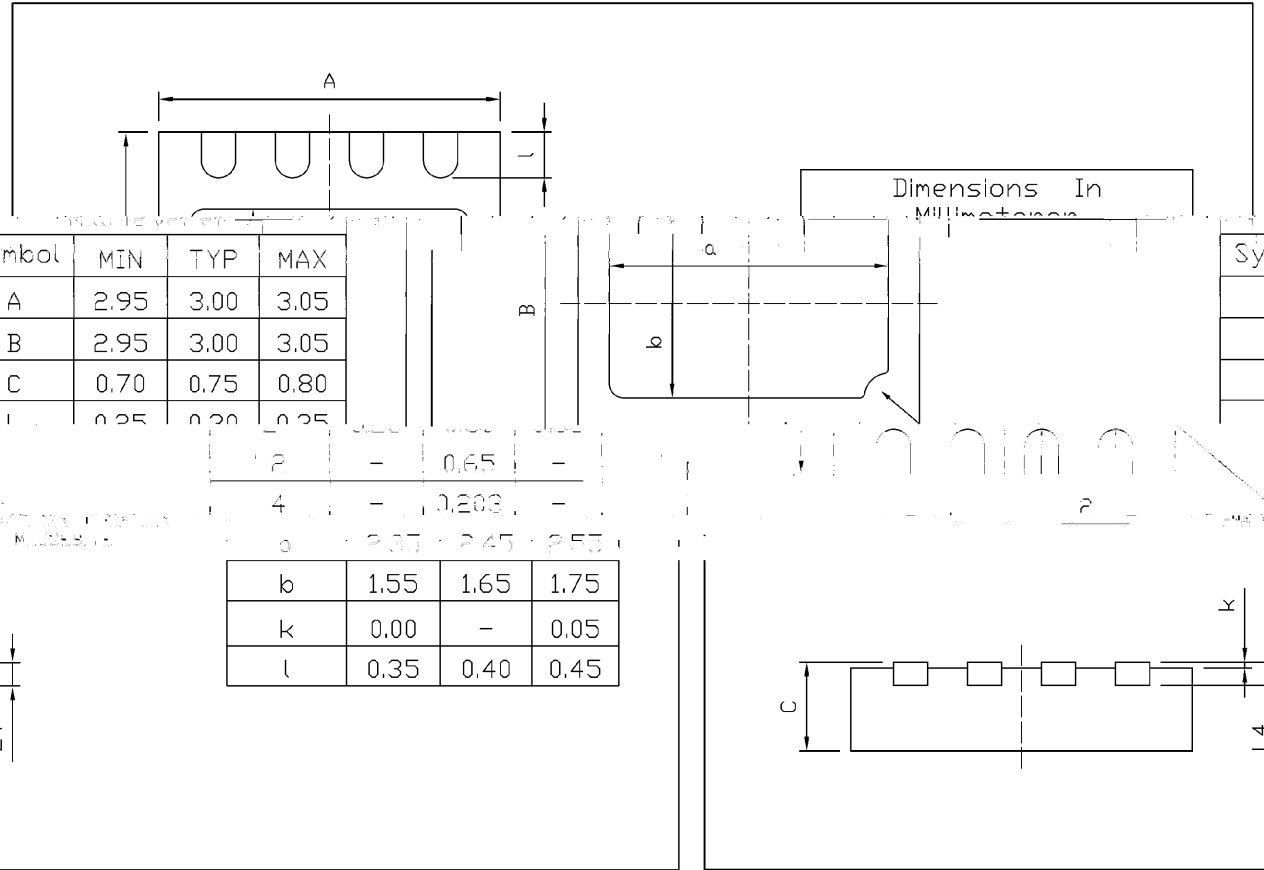


3. 当输入电压 V_{DD} 在 1.30V 至 1.80V 范围内时，器件将保持休眠状态。当输入电压 V_{DD} 上升至 1.80V 以上时，器件将自动唤醒并进入正常工作状态。

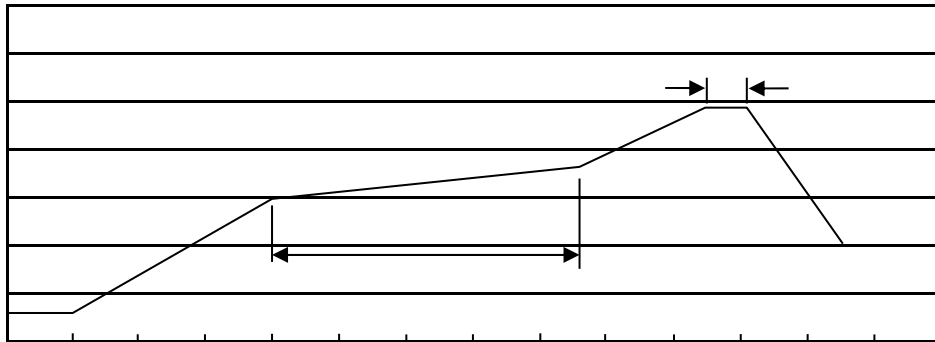
/ Package Dimensions

DFN3X3B-8L

Unit:mm



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” X

- 1 150~180 ℃ 60~90sec;
- 2 245±5 ℃ 5~0.5sec;
- 3 2~10 ℃/sec.

Note:

- 1.Preheating:150~180 ℃ , Time:60~90sec.
- 2.Peak Temp.:245±5 ℃ , Duration:5~0.5sec.
3. Cooling Speed: 2~10 ℃/sec.

/ Resistance to Soldering Heat Test Conditions

260±5 ℃ 10±1 sec. Temp.:260±5 ℃ Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
DFN3×3B-8L	5,000	2	10,000	6	60,000	13 ×12	360×360×50	380×335×366

/ Notices