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IC

## 1 IP2312U

- ◇
- ◇ 94% 3.7V/2A
- ◇ 3A
- ◇
- ◇
- ◇ 4.20V/4.30V/4.35V/4.4V
- ◇ NTC
- ◇ LED
- ◇ MOS
- ◇ 750KHz 1uH
- ◇
- ◇ IC
- ◇
- ◇ ESD 4KV

## 2 IP2312U

- /

## 3 IP2312U

- IP2312U 5V
- IC
- IP2312U MOS
- BOM
- IP2312U 750KHz 3A 5V 3.7V/2A
- 94%;
- IP2312U 5V
- IP2312U ESOP8

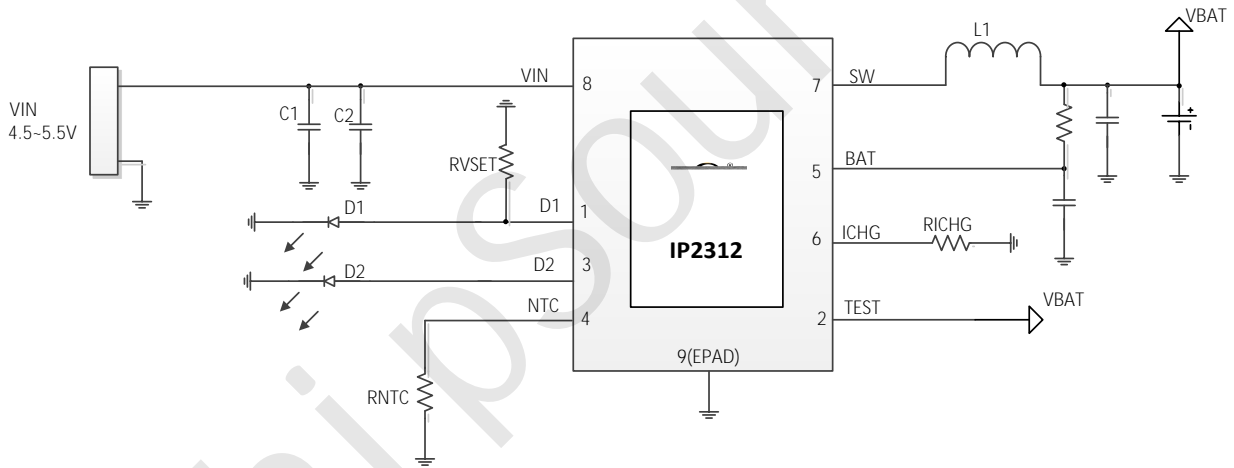


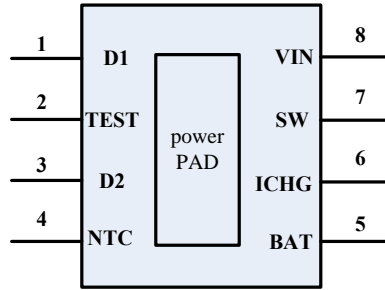
图 1 简化应用原理图



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IC

## 4 IP2312U



ESOP8

图 2 IP2312U 引脚图

Pin Name	Pin Number	Pin Description
D1	1	LED / IP2312U_VSET
TEST	2	1K
D2	3	LED
NTC	4	NTC NTC
BAT	5	
ICHG	6	
SW	7	DC-DC
VIN	8	5V
EPAD	--	GND

## 5 IP2312U

IP2312U		
IP2312U_VSET	IP2312U	1 4.2V/4.3V/4.35V/4.4V
IP2312U_VSET_NOOT	IP2312U_VSET	



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IC

## 6 IP2312U

VIN SW BAT 10uS		9	V
VIN SW BAT 10uS		6.5	V
D1 D2 NTC ICHG TEST		6	V
PMOS VDS		-12	V
PMOS		5	A
NMOS VDS		12	V
NMOS		6	A
	T <sub>J</sub>	-40 ~ 150	
	Tstg	-60 ~ 150	
	J <sub>A</sub>	60	/W
HBM	ESD	4	KV

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## 7 IP2312U

	V <sub>IN</sub>	4.5	5	5.5	V
	I <sub>CHRG</sub>	0	2.1	3	A

\*

## 8 IP2312U

TA=25 L=1uH V<sub>IN</sub>=5V V<sub>BAT</sub>=3.7V

	V <sub>IN</sub>	4.5	5	5.5	V	
	V <sub>TRGT</sub>	4.15	4.2	4.23	V	
	I <sub>CHRG</sub>	V <sub>IN</sub> =5V V <sub>BAT</sub> =3.7V R <sub>ICHG</sub> =NC	1.8	2.1	2.4	A



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IC

	$R_{\text{CHG}}$		170	175	180	K
	$f_s$		650	750	850	KHz
	$I_{\text{TRKL}}$	$V_{\text{IN}} = 5V$ $V_{\text{BAT}} = 2.7V$	50	100	300	mA
	$V_{\text{TRKL}}$		2.9	3.0	3.1	V
	$V_{\text{RCH}}$		4.08	4.1	4.13	V
	$T_{\text{END}}$		20	24	28	Hour
	$V_{\text{IN-UVLO}}$		4.4	4.5	4.6	V
	$V_{\text{IN-OVP}}$		5.5	5.6	5.7	V
PMOS	$r_{\text{DS(on)}}$		30	35	40	m
NMOS			25	30	35	m
	$I_{\text{STB}}$	$V_{\text{IN}} = 0V$ $V_{\text{BAT}} = 3.7V$	30	40	50	uA
LED	$I_{\text{L1}}$		3	5	10	mA
	$I_{\text{L2}}$					
	$I_{\text{L3}}$					
	$T_{\text{OTP}}$		110	135	150	
	$T_{\text{OTP}}$		70	85	100	

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IC

9 IP2312U

3 IP2312U

IP2312U  
94%

Buck

750KHz 5V

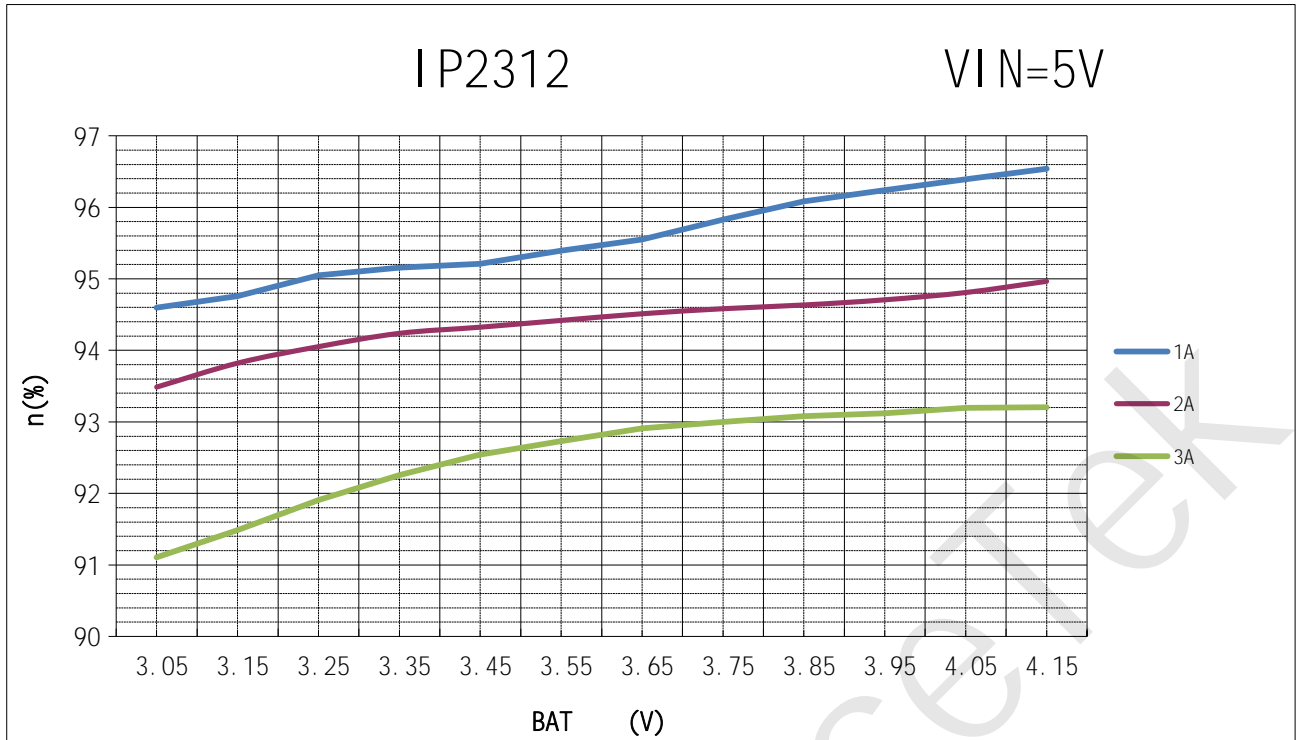
3.7V/2A

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IC



- IP2312U      CC/CV
- 3V                      100mA
- 3V
- 4.2V                      300mA                      4
- 4                      4.15V                      4.15V
- 4.1V

IP2312U

- IP2312U      VIN                      VIN                      IP2312U
- 8                      4.5V                                      8                      4.5V                      4.8V
- IP2312U      VIN                      IP2312U                      8                      5.6V



NC	2.1A
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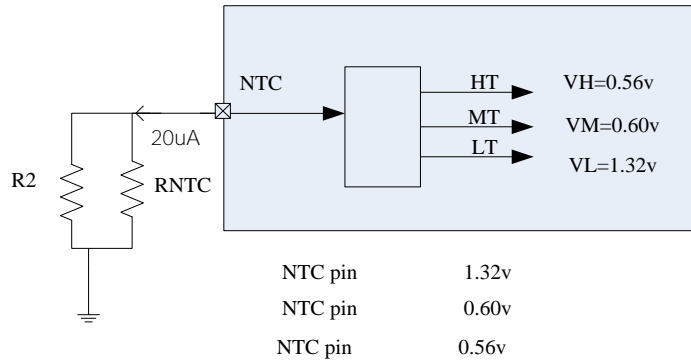
## NTC

IP2312U

NTC

NTC

charger



4 NTC

- NTC 45 0~43 43
  - NTC NTC 51K NTC
  - NTC 20uA NTC GND
- RNTC=100K @25





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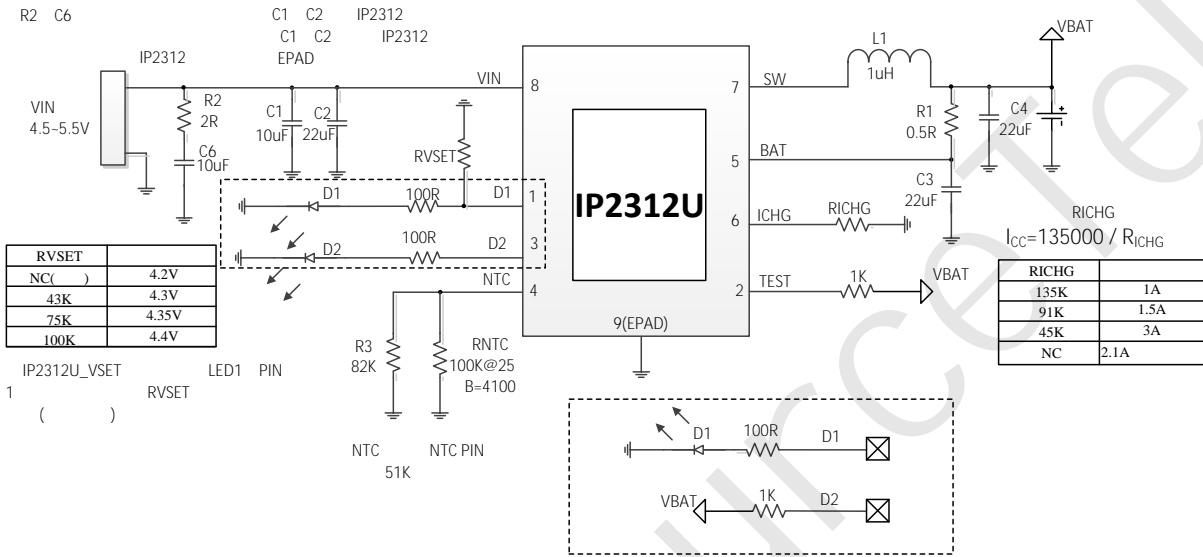
IC

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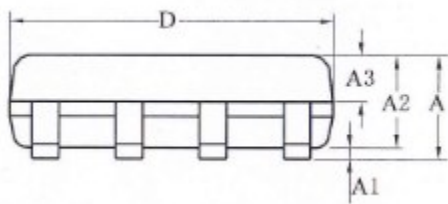
		D1
		0.5Hz

## 10 IP2312U



5

# 11 IP2312U



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A			



ChipSourceTek