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Approve of sample

Customer name				Product number	4S-EBD02-AB
Date of sample				Customer type	4S-EBD02-AB
Edition	01	Page		File number	
Checked by			Approved by		Made by
					HKY
Material number					
Customer confirm					
Advice confirm:					
Certification:					
Date:					

Contents

1、Outline

This specification is suitable 4-cell Lithium ion Battery Protection circuit manufactured by KEEPOWER TECHNOLOGY CO., LIMITED.

2 Application

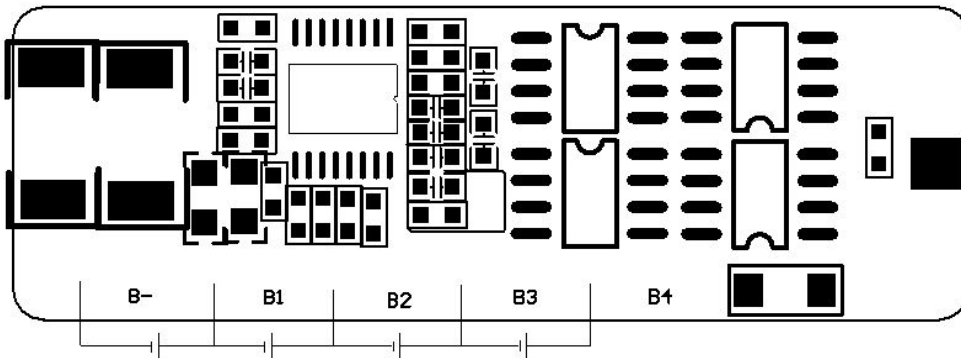
- (1) Lithium-ion rechargeable battery packs
- (2) Lithium-ion polymer battery packs

3 Electrical characteristics (IC: S8254AAG、MOS: ME60N04*2)

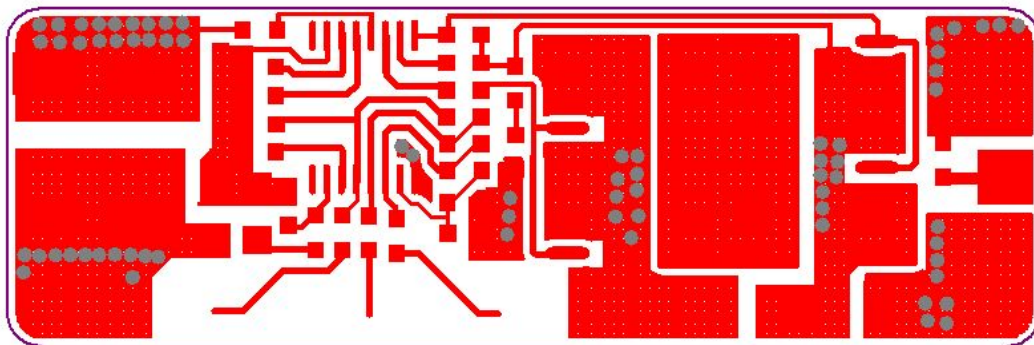
 $T_{opt}=25^{\circ}\text{C}$

Item	Symbol	Content	Criterion
Over charge Protection	V_{DET1}	Over charge detection voltage	4. 275±0.025V/CELL
	tV_{DET1}	Over charge detection delay time	1±0.5s
	V_{REL1}	Over charge release voltage	4. 075±0.05V/CELL
Over discharge protection	V_{DET2}	Over discharge detection voltage	2.3±0.08V/CELL
	tV_{DET2}	Over discharge detection delay time	100±50ms
	V_{REL2}	Over discharge release voltage	2.7±0.1V/CELL
Over current protection	V_{DET3}	Over current detection voltage	0.13±0.025V
	I_{DP}	Over current detection current	26±2A
	tV_{DET3}	Detection delay time	10±5ms
		Release condition	Cut load
Short protection		Detection condition	Exterior short circuit
		Short Detection delay time	300±250uS
		Release condition	Cut short circuit
Interior resistance	R_{DS}	Main loop electrify resistance	$V_C=4V$; $R_{DS}\leq 45m\Omega$
Current consumption	I_{DD}	Current consume in normal operation	60μA Type 100μA Max

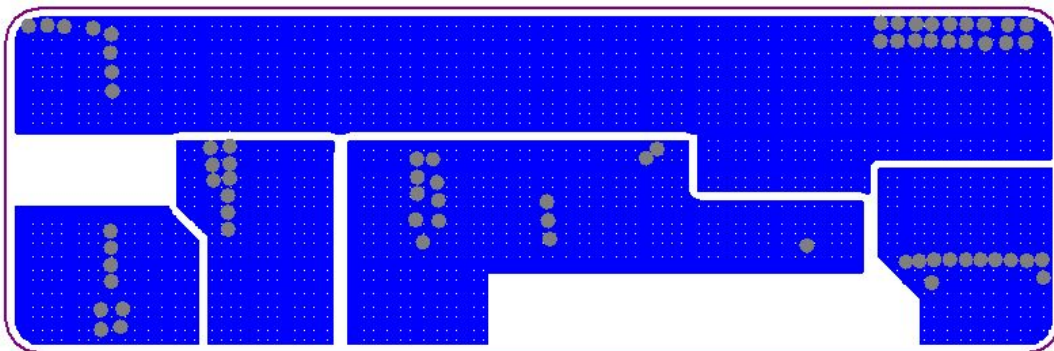
4、 THE CONNECT CAPTURE



5、 PCB layout



TOPLAYER



BOTTOMLAYER

6、BOM 单

SPEC	NAME	QTY	REMARK
I-S8254AAG-TSSOP16	CONTROL IC	1	U1
M-AO4407-SO-8	MOSFET	4	U2,U3,U4,U5
RP-1K-0603-5%	RESISTANCE	5	R4,R5,R6,R7,R9
RP-5.1K-0603-5%	RESISTANCE	3	R1,R3,R8
CP-104-0603-20%50V	CAPACITOR	9	C1C2C3C4C5C6C8 C9 C10
CP-105-0603-20%25V	CAPACITOR	1	C7
RP-51R-0805-5%	RESISTANCE	1	R13
RP-1M-0603-5%	RESISTANCE	1	R2
RP-0.01R-2512-1%	金属膜电阻 (大毅)	2	R14,R15
RW-10KNTC-0603-1%	NTC(B=3435)卓依社	1	RT
4*2*0.3mm	镍片	1	F1
46*15 *1.0mm 绿油	PCB(喷锡)	1	4S-EBD02-AB
备注:			

7、SIZE

