APPROVAL SHEET
FOR
30120 BATTERY

Date: 2014-8-12

From:

Model No. : 30120

Specification: 3.7V /1000mAh

Total No. of Pages: Total 14 pages including this cover sheet

Approved by

	Section	written	checked	Issues
	Name			
	Approve			

Presented by

	Section	written	checked	Issues
	Name	滕建军		
	Approve	2014-8-12	2014-8-12	2014-8-12

Model	Execution date	Edition explain	edition no.
30120	2014/8/12	First make	V1.0

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1. Battery Assembly

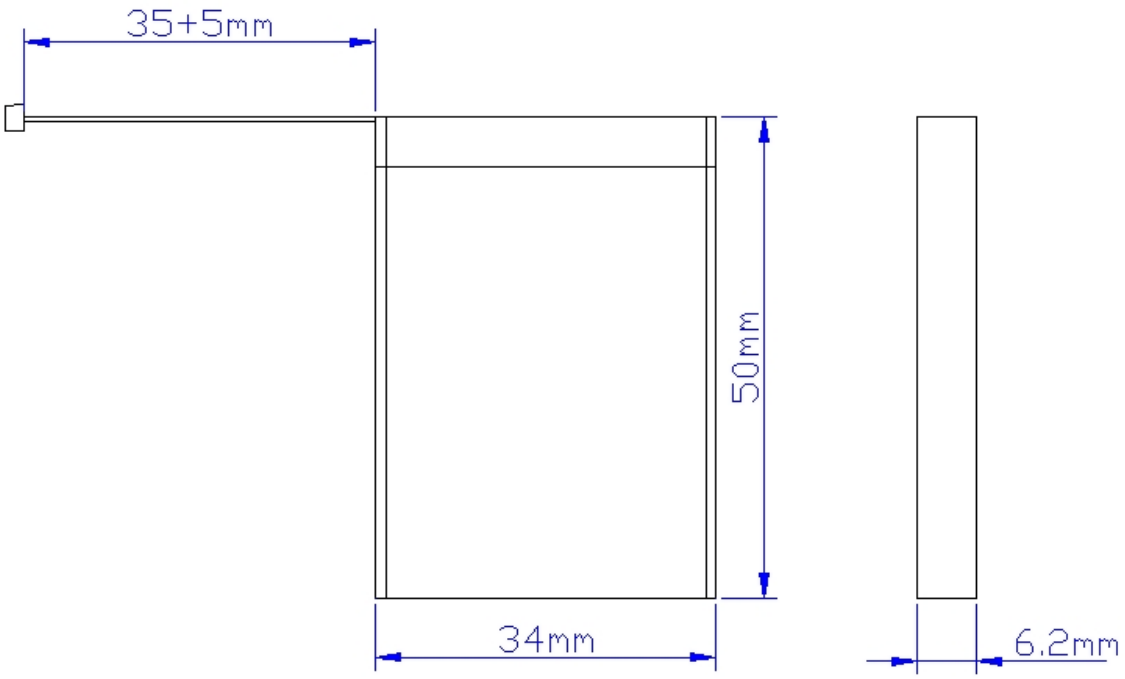
1-1.	Model No.	:	30120
1-2.	Battery Type	:	Polymer
1-3.	Battery Cells	:	063448PL*1 / 1000mAh
1-4.	Nominal Voltage	:	3.7V
1-5.	Maximum Charge Voltage	:	4.2V
1-6.	Discharge Cut of Voltage	:	2.8V
1-7.	Typical Capacity	:	1000mAh at 0.2Ca
1-8.	Internal Resistance		Less than 180mΩ
1-9.	Temperature Range	:	Charge:0-45℃ Discharge :-20～60℃ Storage:-20-45℃ -10～25℃ More than 3 months
1-10	Protection Circuit Board	:	Over charge limit per cell: (4. 25V~4.35V)*1 Over charge release: remove charger and discharging Over discharge limit per cell: (2.3V~2. 5V)*1 Over discharge release Voltage Charging Over Charge Current Protection 2A~6A Over Discharge Current Protection: 2A~6A Over charge delay time : 50ms~150ms Over discharge delay time: 10ms~40ms Over discharge current delay time: 5ms~15ms Short circuit delay time≤700us Maximum current comsumption:0.1uA
1-11	Warranty	:	Twelve (12) months limited warranty from date of purchase.
1-12	Weight		19. 0±2g
1-13	humidity range		Operating humidity range: Less than 75% RH Storage humidity range: Less than 75% RH
1-14	Polyswitch		\

‘*’Data valid only when the battery pack is on fully charged condition.

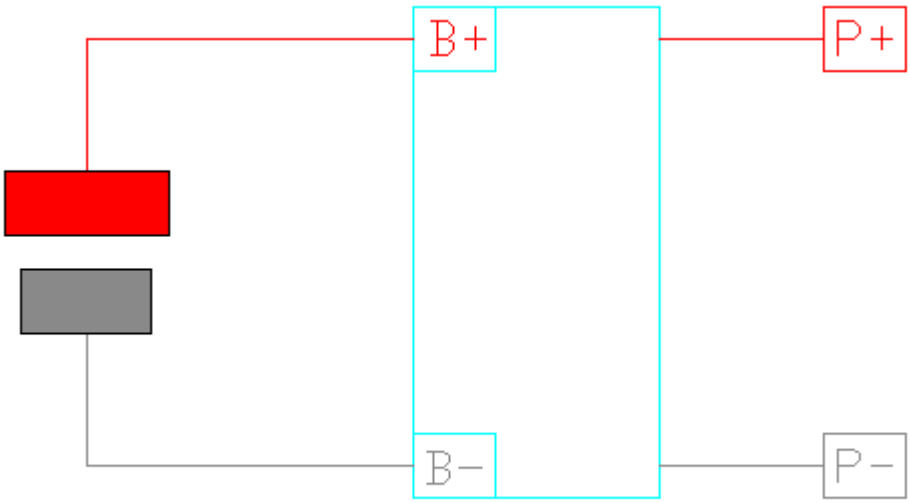
‘*’Battery pack should be firstly charged and discharged for 3 complete cycles as a warm-up. (Detail refers to Lithium-Ion Battery Product Specification.

2. Mechanical

2-1.Mechanical Drawing（MAX）

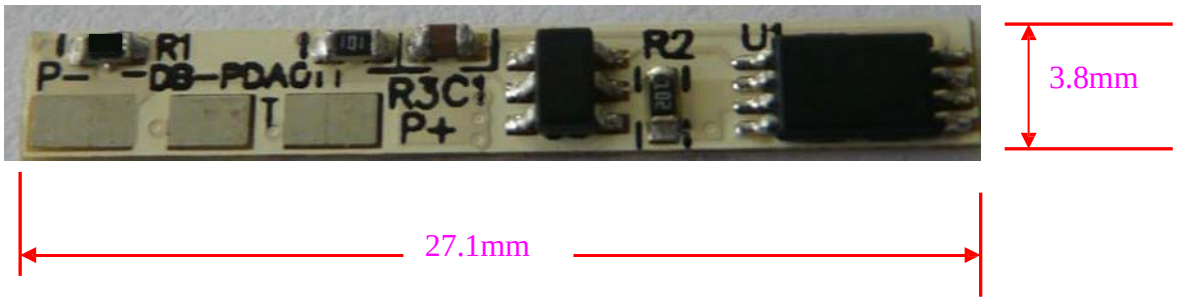


Circuit Diagram

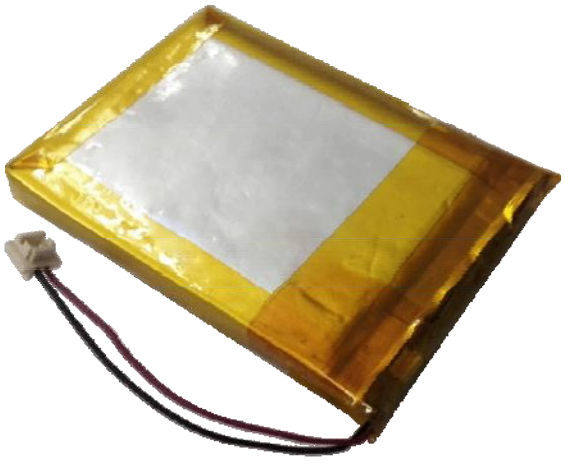


2. Mechanical

2-2: PCBA SPECIFICATION



2-3:.Photo of the product



<Top side view>

<Bottom side view>

2-4. Pin Assignment

(-) = Negative supply

(+) = Positive supply

ATTACHMENT#1

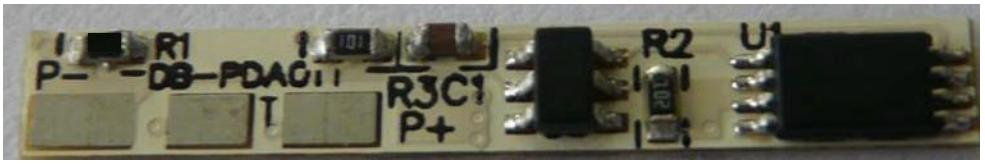
Table of Contents

A-1-1.General Description

1. The protection module adopts the **DW01 SOT-23-6** to monitor LI-Ion cell for over-voltage, under-voltage, over-charge current and over-discharge current.
2. External N-FET **AO8205** will be driven to cut off the loop of charge and discharge if any abnormal condition occurs.

A-1-2 PCM and Board Connection

TOP



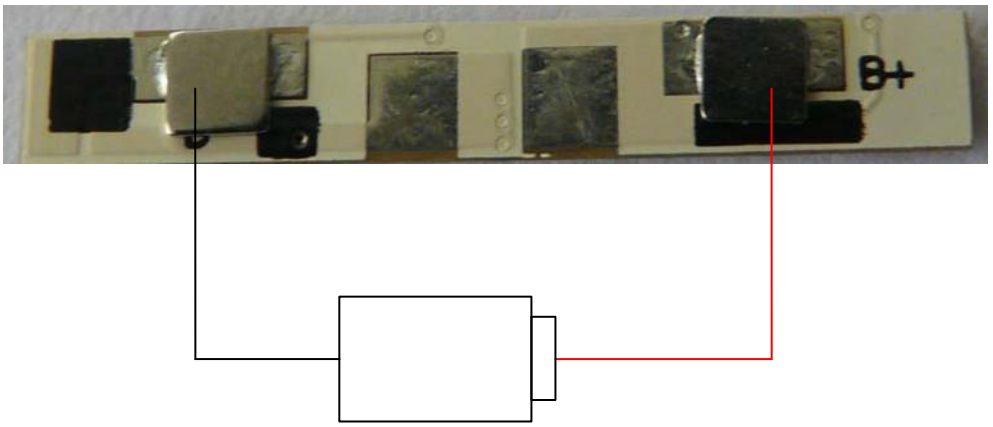
BOTTOM

Board Connection

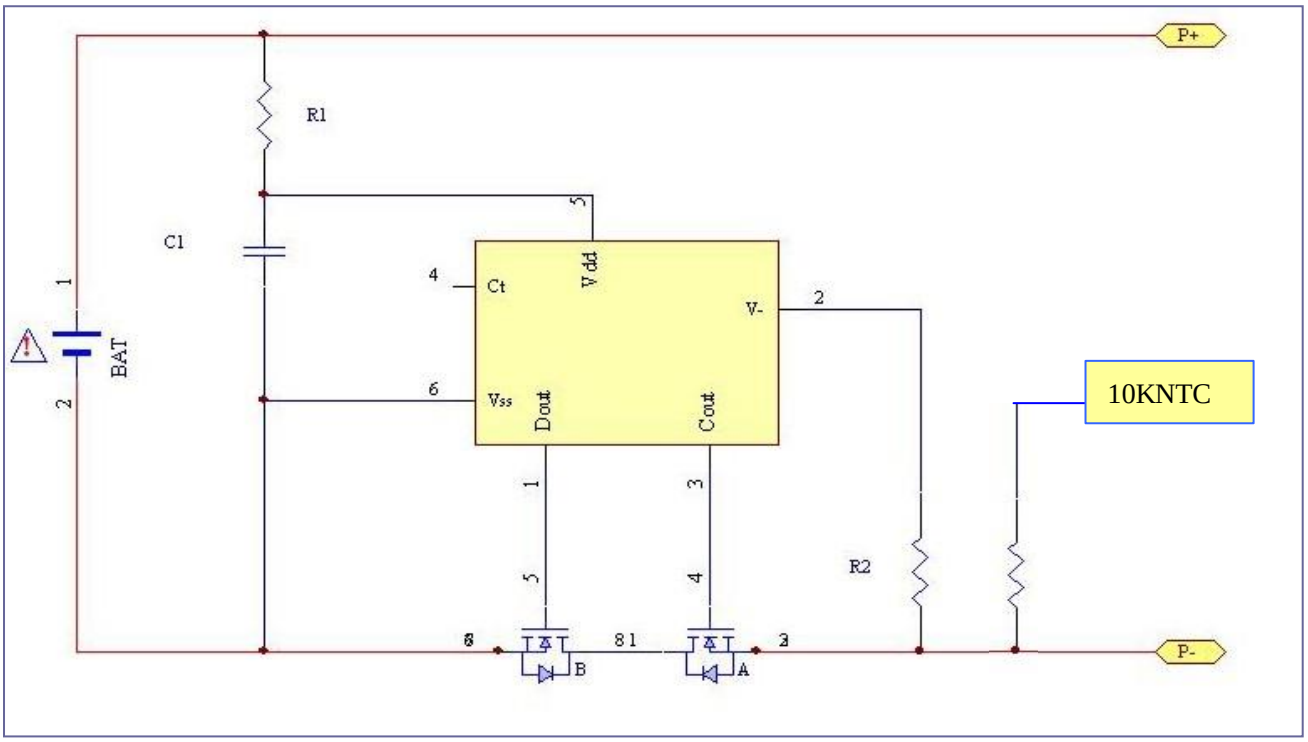
Pin	Description
B+	Connect to Positive terminal of cell1
B-	Connect to negative terminal of cell1
P+	Connect to Camcorder +/Charger +
P-	Connect to Camcorder -/ Charger +

A-1-3.Application Note

Assembly diagram



A-1-4.Schematic



A-1-5.BOM

No.	Name	Function	Unit	Qty	Symbol
1	PCB	DB PDA011 V1.0	PCS	1	/
2	IC	DW01 SOT-23-6	PCS	1	U1
3	FET	AO8205 TSSOP-8	PCS	1	U2
4	Resistor	100Ω±5% 0603	PCS	1	R1
5	Resistor	1KΩ±5% 0603	PCS	1	R2
6	Resistor	10K ±5% NTC 0603	PCS	1	R3
7	Capacitor	0.1uF 50V Y5V M 0603	PCS	1	C1

Standard Environmental Test Condition

Temperature: 25±2℃

Relative Humidity: 45%~75%

Barometric Pressure: 86kpa~106kpa

(unless otherwise specified)

Please read and follow the handling instructions for the battery before usage,any mis-operation of the battery may cause heat, rupture, damage or capacity deterioration of the battery.

WARNING

1. Do not put the battery into a fire, or heat the battery. Do not store the battery in high temperature environment.
2. Do not connect the battery reversed in positive (+) and negative (-) terminals in the charger or equipment.
3. Do not let the battery terminals (+ and -) contact a wire or any metal (like a metal necklace or a hairpin) with which or stored together, may cause short-circuit.
4. Do not drive a nail in, hit with a hammer, or stamp on the battery, do not strike the battery in other ways.

5. Do not disassemble or alter the batteries' outside structure.

   Do not submerge the battery in water, do not wet the battery when store the battery.

NOTICE

Battery should be charged and discharged with proper charger, in compliance With correct operation contents.

1. Do not use the battery with other maker's batteries, different types and/or models of batteries such as dry batteries, nickel-metal hydride batteries, or nickel-cadmium batteries, or new and old lithium batteries together.
2. Do not leave the battery in a charger or equipment if it generates an older and/or heat, changes color and/or shape, leaks electrolyte, or cause any other abnormality.
3. Do not discharge the battery continuously when it is not charged.

CAUTION

In case young children use the battery, instruct them on the contents of the instructions and ensure the battery is correctly used by them at all times.

1. The battery was inspected carefully by QA before shipment to confirm with the specifications. However, in the case any abnormality of bad smell or heat, etc, arise after purchase, bring it and communicate with us.
2. For long-term storage, please charge at 0.5C for about one hour in advance.
3. Do not use the battery in other than the following conditions, otherwise, the battery might cause heat generation, damage, or deterioration of its performance.

Operating environment:

Charge : 0℃-+45℃

Discharge :-20℃-+60℃

Store less than 1 month : -20℃-+60℃

Store less than 3 months : -20℃-+45℃

Store less than 1 year : -10℃+25℃