APPROVAL SHEET FOR 063450AR BATTERY

Date:

To:

From:

Model No. : 063450AR

Specification: 3.7V /1050 mAh

Total No. of Pages: Total 13pages including this cover sheet

Approved by

Section	written	checked	Issues	
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1. Battery Assembly

1-1.	Model No.	:	063450AR		
1-2.	Battery Type	:	Lithium Ion		
1-3.	Battery Cells	:	063450AR*1		
1-4.	Nominal Voltage	:	3.7V		
1-5.	Maximum Charge Voltage	:	4.2V		
1-6.	Discharge Cut of Voltage	:	2.75V		
1-7.	Typical Capacity	:	1050mAh at 0.2C*		
1-8.	Internal Resistance		Less than $180 \text{m}\Omega$		
1-9.	Temperature Range	:	Charge:0∼45°C		
			Discharge :-20∼55℃		
			Storage:-20∼35℃		
1-10.	Safety Features Battery	:	: Each Lithium Ion cell is provided with several internal		
			safety features to prevent over-charge, over-current and to		
			resist physical abuse. Each has a temperature sensitive		
			shut down separator, pressure sensitive tear away for		
			current interruption, a safety vent, and the industries only		
			temperature actuated current interrupter.		
1-11	Protection Circuit Board	:	Over charge limit per cell:(4.35V+/-0.05V)/Cell		
			Over charge release: remove charger and discharging		
			Over discharge limit per cell:(2.30V+/-0.05V)/Cell		
			Over discharge release Voltage Charging		
			Over Charge Current Protection:2A~6A		
			Over Discharge Current Protection:2A~6A		
			Over charge delay time:1s+/-0.5s		
			Over discharge delay time:20ms+/-10ms		
			Over discharge current delay time:6ms+/-4ms		
			Short circuit delay time:<17ms		
			Maximum current comsumption:0.015mA		
1-12.	Warranty	:	Twelve(12) months limited warranty from date of		
			purchase.		
1-13	Weight		$25\pm1g$		
1-14	humidity range		Operating humidity range: Less than 75% RH		
			Storage humidity range: Less than 75% RH		
1-15	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 $(mm \pm 0.2)$



Circuit Diagram



]2-2: PCBA SPECIFICATION



2-3:.Photo of the product



2-4. Pin Assignment



ATTACHMENT#1

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- A-1-1. General Description
- A-1-2. PCM AND Board Connection
- A-1-3. Application Note

Assembly Diagram

A-1-4. Schematic

A-1-5. BOM

- 1. The protection module adopts the Fortune DW01 to monitor Li-Ion cell for over-voltage, under-voltage, over-charge current and over-discharge current.
- 2. External N-FET AO8830 will be driven to cut off the loop of charge and discharge if any abnormal condition occurs.

ТОР



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 -
Т	Resistor (100% \pm 5%)10K NTC

Assembly diagram



A-1-4.Schematic



No.	Name	Function		manufactory	unit	Quan	Symbol
1	Capacitor	0. 1uF 25V	10% 0603	TDK	pcs	1	C3
2	Resistor	100Ω 1/16W	5% 0603	YAGEO	pcs	1	R3
3	Resistor	1KΩ 1/16W	5% 0603	YAGEO	pcs	1	R2
4	Thermister	10K NTC 1/16W	5% 0603	YAGEO	pcs	1	R1
5	FET	A08830	TSS0P8	AOS	pcs	1	U1
6	IC	DW01	S0T-23-6	FORTUNE	pcs	1	U2
7	РСВ	DB-PD	A03-B	\	pcs	1	

3.Standard Environmental Test Condition

Temperature: 25±2°C,

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.

- Do not use the battery with other maker's batteries, different types snd/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.

- 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°C-+60°CStore less than 1 month: -20°C-+60°CStore less than 3 months: -20°C-+60°CStore less than 1 year: -20°C+25°C