



昌 勑 股 份 有 限 公 司

Dr . POWER CORPORATION

零 件 規 格 書/承 認 書

SPECIFICATION FOR APPROVAL

CUSTOMER : _____

DESCRIPTION : _____ Battery Pack _____

MODEL : _____ DR-202-GAL _____

CUSTOMER PART NO : _____

APPROVED SIGNATURES

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Rev	Date	Description	Designed	Checked	Approved
A	2026/9/23	Release		Po Chen	

臺北市北投區吉利街 131 號 3 樓

3F, NO. 131, JILI ST., PEITOU, TAIPEI, TAIWAN, R.O.C.

TEL : 886-2-2820-7419 · FAX : 886-2-2827-0348

Revision History

[illegible]

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OUR MODEL	DR-202-GAL	Date	2026/9/21
OUR P/N	-	Rev.	1.0

1. Scope

This specification shall be applied to the lithium battery to be supplied by Homray. The battery pack is use for Tablet Products.

2. Name and Model

Customer Model Name :

Model Name :

DR-202-GAL

Cell Type :

NCR 18650GA

Cell Configuration :

3S-3P

3. Product Specification

No	Item	Rate performance	Remark
1	Typical capacity	9200 mAh	Discharge at 3.45A until cell voltage under 2.8V
2	Normal voltage	10.8 V	
3	Charge voltage	12.6 V	
4	Continuous charge current	5 A	
5	Continuous discharge current	10 A	Max continuous Power $\leq 100W$ at 50°C
6	Maximum peak discharge current	16 A	
7	Suggest system cutoff voltage	9V	
8	Operation temperature	Charge 0~45 °C	
		Discharge -20~60 °C	
9	Storage temperature	0~40 °C	Storage less than 3 months
10	Shipping capacity	20~30%	
11	Power consumption normal mode sleep mode shutdown mode	Average $\leq 800 \mu A$ $\leq 300 \mu A$ $\leq 1 \mu A$	If the battery need to storage in the long term, please charge the battery once time between half year, that can above the battery over discharge by itself, it will keep the battery more healthy.
12	Shipping condition	Normal mode	

4. Protection Function of Protect IC(Ta = 25 °C)

Function item	Control function and operation	Remark
Over charge detection voltage	$4.25 \pm 0.01 V$	
Over charge delay time	1~3 Sec	
Over charge release voltage	$4.1 \pm 0.1 V$	
Over discharge detection voltage	$2.8 \pm 0.1 V$	
Over discharge delay time	2~4 Sec	
Over discharge release voltage	$3.2 \pm 0.1 V$	
Over charge prohibition current	$6 \pm 0.5 A$	
Over charge prohibition delay time	2~4 Sec	
Over discharge prohibition current 1 st	$16 \pm 0.5 A$	
Over discharge prohibition 1 st delay time	4~7 Sec	
Over discharge prohibition current 2 nd	$18 \pm 0.5 A$	
Over discharge prohibition 2 nd delay time	2~4 Sec	
Hardware discharge prohibition current	$25 \pm 1 A$	
Over discharge prohibition 2 nd delay time	4~7 mSec	
Short protection delay time	$122 \pm 300 \mu Sec$	
Over temperature of charge	$55 \pm 3 ^\circ C$	
Delay of charge over temperature	2~4 Sec	
Release temperature of charge	$50 \pm 3 ^\circ C$	

Over temperature of discharge	$65 \pm 3^{\circ}\text{C}$	
Delay of discharge over temperature	2~4 Sec	
Release temperature of discharge	$60 \pm 3^{\circ}\text{C}$	
Under temperature of charge	$0 \pm 3^{\circ}\text{C}$	
Delay of charge under temperature	2~4 Sec	
Release temperature of charge	$5 \pm 3^{\circ}\text{C}$	
Under temperature of discharge	$-20 \pm 3^{\circ}\text{C}$	
Delay of discharge under temperature	2~4 Sec	
Release temperature of discharge	$-15 \pm 3^{\circ}\text{C}$	

5. Protection Function of Permanent Fail(Non-recoverable)

Function Item	Control Function and Operation	Remark
Over charge detection voltage	Anyone cell $\geq 4.4\text{ V}$	15 Sec
Over Temperature Protect	Mosfet Temp $\geq 95^{\circ}\text{C}$	5 Sec
	Cell Temp $\geq 75^{\circ}\text{C}$	5 Sec
FET Failure	C-FET cut off & current $> 100\text{ mA}$	10 Sec
	D-FET cut off & current $> -100\text{ mA}$	

6. Connect Pin Define

Name	Function	Remark
1	P+	
2	SMBus Clock	
3	SMBus Data	
4	ID	390 Ω connect to P-
5	P-	

7. Handling Warning

The battery used in this device may present a risk of fire or chemical burn if misteated. Do not disassemble heat above 60°C , Crush or puncture short circuit external contacts, or dispose in fire or water.

電池組在以下情況使用可能造成起火或是爆炸情況產生，禁止操作環境超過60度、輾壓、刺穿電池組、外部短路、丟入水中及火源。

8. Storage Condition

In case of long storage less than 1 month, store the battry at temperature range $-20 \sim +50$, low humidity(less than 70%RH).
儲存時間低於一個月，建議儲存溫度 $-20 \sim 50$ 度，濕度 $< 70\%$ 。

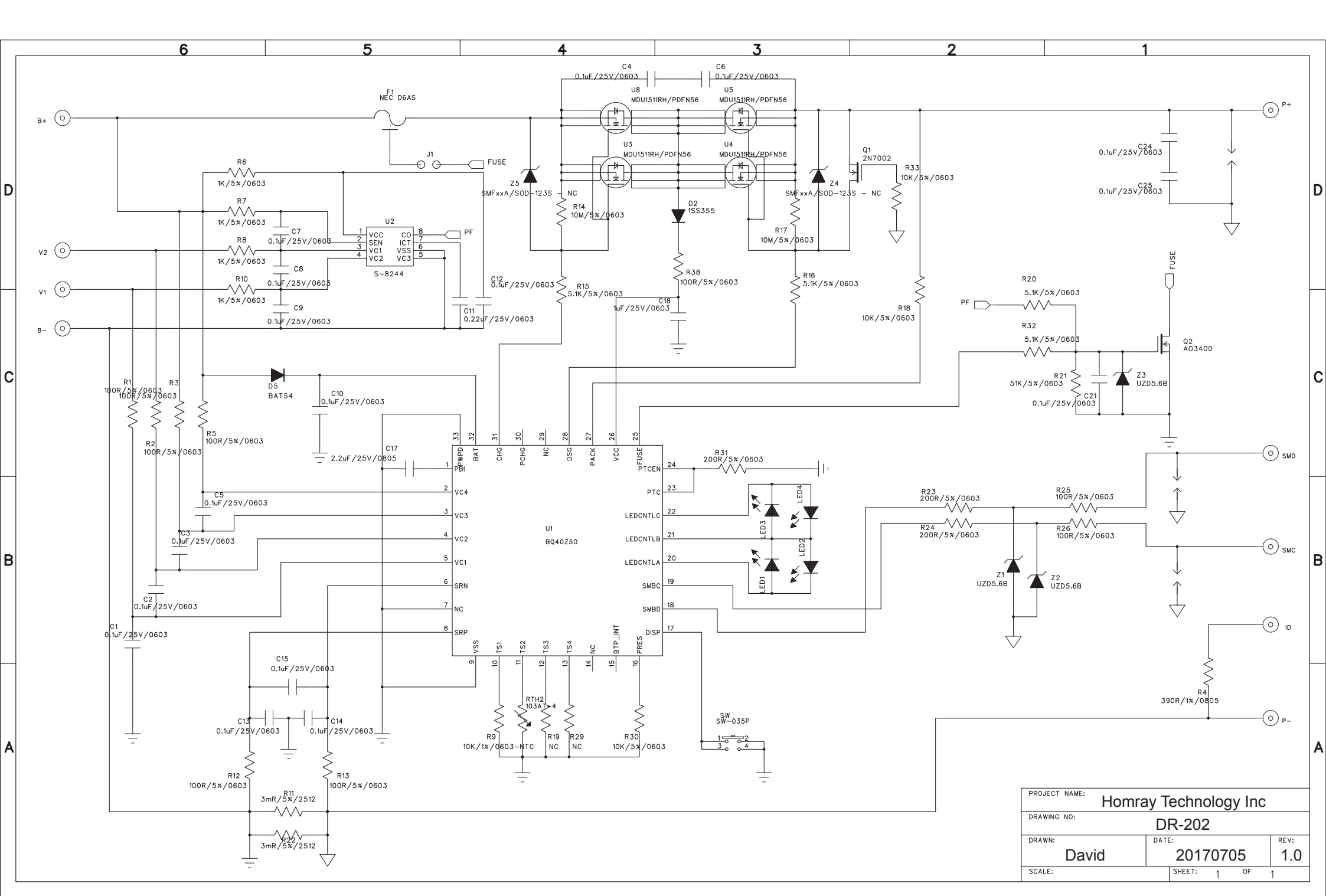
In case of long storage less than 3 months, store the battry at temperature range $0 \sim +40$, low humidity(less than 70%RH).
儲存時間低於三個月，建議儲存溫度 $0 \sim 40$ 度，濕度 $< 70\%$ 。

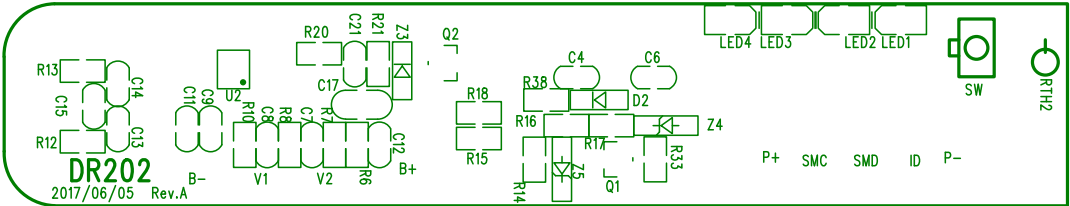
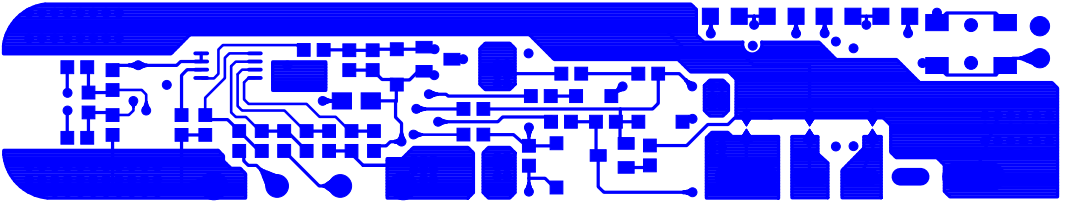
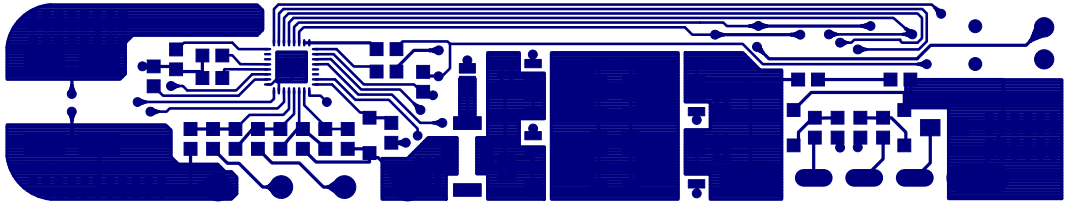
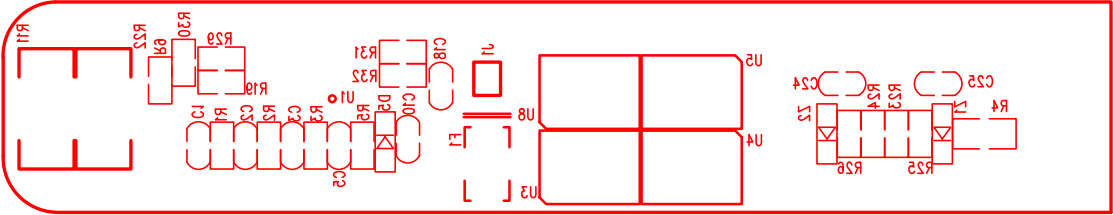
In case of long storage more than 3 months, store the battry at temperature range $0 \sim +20$, low humidity(less than 70%RH).
儲存時間高於三個月，建議儲存溫度 $0 \sim 20$ 度，濕度 $< 70\%$ 。

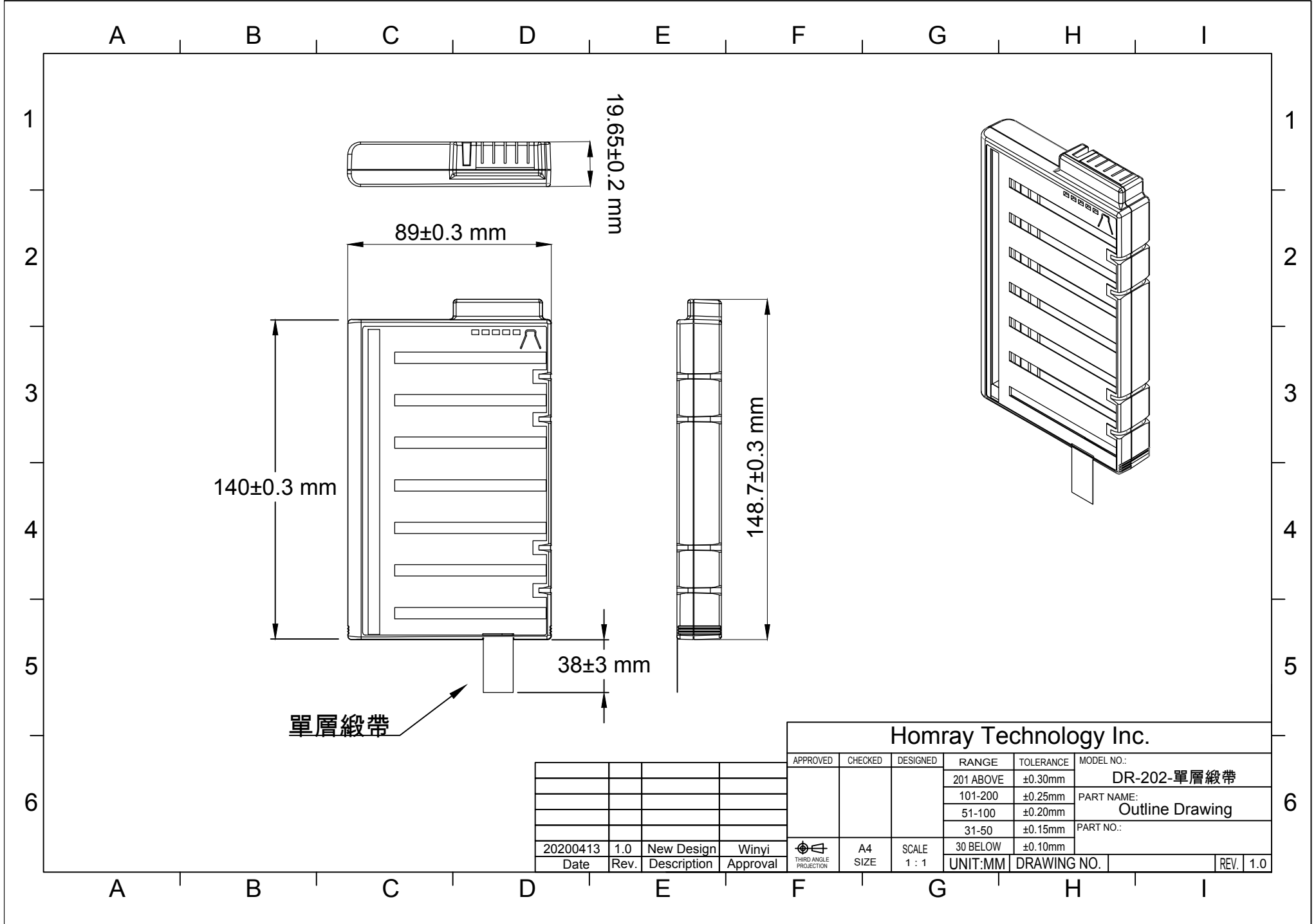
9. Disposal Consideration

Recommended methods for safe and environmentally preferred disposal : Product (waste from residues) Do not throw out a used battery cell. Recycle it through the recycling company. Contaminated packaging Neither a container nor packing is contaminated during normal use. When internal materials leaked from a battery cell contaminates, dispose as industrial wastes subject to special control.

廢棄物建議的處理方式：不要隨意丟棄使用過的鋰電池，應交由專業的回收公司處理。電池在正常使用情況下，電池並非是污染品，但是當電池有漏液、破損現象，請根據工業污染品規定報廢處理







黑底白字
霧面PC, THK = 0.25 mm

LI-ION RECHARGEABLE BATTERY PACK

MODEL: DR-202-GAL DC 10.8V 9200mAh 99.36Wh

Japone Technology Inc. 2F, No.258, Xingzhong Rd., Tamsui Dist., New Taipei City, 25169 Taiwan Made in Taiwan 3INR19/66-3

CAUTION!

When damaged, replace only with the same or equivalent type of battery pack recommended by the manufacturer.
Do not attempt to open. Danger of explosion if battery is incorrectly placed near heat source or immerse in liquid.
Any misuse of battery pack could cause fire, explosion and personal injury.

ATTENTION

Maintenez la batterie éloignée de toute flamme. Évitez de la mettre en court-circuit.
N'essayez jamais de démonter la batterie. Utilisez les chargeurs prévus pour charger la batterie.
Risque d'explosion si la batterie est remplacée par un type incorrect.
Éliminez les batteries usagées conformément aux instructions.

警告！

電池損壞時，請更換與原廠規格相等的電池。
請勿打開電池外殼，且不要暴露於高溫、高熱處，不可放入液體中。
假如誤用可能會引起燃燒、爆炸或傷及人體。



JP2608100004

工厂 Manufacturer

年 Year

月 Month

序号 Serial Number

日 Date

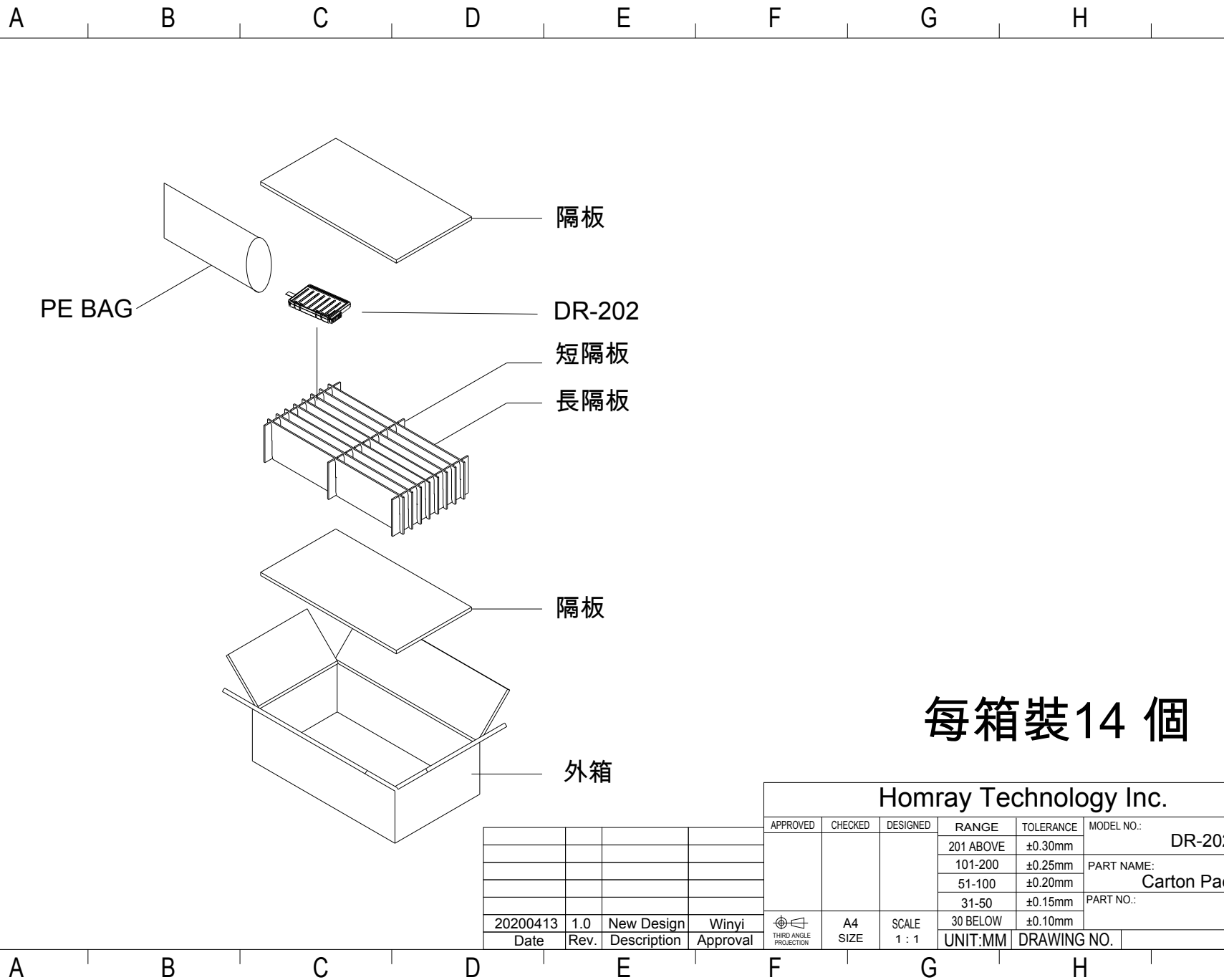
20230905	1.0	New Design	Winyi
Date	Rev.	Description	Approval

Homray Technology Inc.						
APPROVED	CHECKED	DESIGNED	RANGE	TOLERANCE	MODEL NO.:	
			201 ABOVE	±0.30mm	DR-202-GAL-黑標	
			101-200	±0.25mm	PART NAME:	
			51-100	±0.20mm	Label Drawing	
			31-50	±0.15mm	PART NO.:	
			30 BELOW	±0.10mm		
			UNIT:MM	DRAWING NO.	REV.	1.0



A4
SIZE

SCALE
1 : 1



每箱裝14 個

Homray Technology Inc.									
APPROVED	CHECKED	DESIGNED	RANGE	TOLERANCE	MODEL NO.: DR-202				
			201 ABOVE	±0.30mm	PART NAME: Carton Package				
			101-200	±0.25mm					
			51-100	±0.20mm					
			31-50	±0.15mm	PART NO.:				
			30 BELOW	±0.10mm					
20200413	1.0	New Design	Winyi						
Date	Rev.	Description	Approval						

	A4 SIZE	SCALE 1 : 1	UNIT:MM	DRAWING NO.	REV. 1.0
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