SPECIFICATION

Customer Name			
Product Type	GW-8465YX-EB-V1. 0 -16strings LiFePO4 Active Balance Board/16SLFP Active Balance Board		
Customer Type			
Edition	A0		
File No.		Preparation Date	2020\06\19
Approval	Audit	Docan Power Prepared by	
	Yantao		
Customer acknowledges column			
confirmation: signature: Date: Date:			

1. Outline

This specification describes the scope of lithium battery protection circuit, electrical performance parameters relevant content,wiringin structions,sizes,and other projects.

All project standards described in this specification can be used as quality inspections tandards and basis.

2. Product Applications

Rechargeablelithiumbatteries

3. Product appearance and process indicators

No.	Project		Test methods and tools	Inspection standard
1	Product appearance		Visually	Protective plate appearance should meet the following requirements: a reasonable wiring, components arranged in neat rows, each pad and welding point no oxidation, no abnormal color, components and PCB board surface clean, no stains, does not affect its commercial value
2		Welding Technology	Visually, with a magnifying glass	Joints sleek, solid and reliable welding, no false welding, Weld, burrs and other welding defects. FR-4
		Sheet material		
		PCB production process		Lead rosin process
		Finished plate welding process		Lead welding process

4. Product electrical performance

Test conditions:room temperature 25℃; overcurrent protection board and there sistance value is the dynamic parameters of the test individual cell voltages required≥3.2V

Project	Symbol	The detailed content	Standard
Overcharge protection	V_{DET1}	Single overcharge detection voltage	Ternary/Lithium Iron
	tV_{DET1}	Overcharge detection delay time	\
	V_{REL1}	Single overcharge release voltage	\
Cell balance	V_{BU}	Cell-balance detection voltage	Voltage difference≧0.08V ±10mV
	V_{BL}	Cell-balance release voltage	When the voltage difference is less than 45mV, the equalization delay timing is completed (the delay can be set to 0.5, 1, 2, or 4 hours)
	I_B	Balance current	Maximum 5A (balance current is proportional to the voltage difference between batteries)
Over-discharge protection	V_{DET2}	Overdischarge detection delay time	\
	tV_{DET2}	Level 1 overcurrent protection current (battery voltage = 3.4V)	\
	V_{REL2}	Single over-discharge detection voltage	\
Over current protection	I_{DP1}		\
	tV_{DET1}	Detection delay time	\
	I_{DP2}	Level 2 overcurrent protection current (battery voltage = 3.7V/3C)	\
	tV_{DET2}	Detection delay time	\
短路保护 Short circuit protection		Exterior short circuit	\
	T_{SHORT}	Detection delay time	\
		Protection of release condition	\

Resistance	RDS	Main loop resistance (battery voltage = 3.4V)	\
Current consumption	IDD	Internal consumption during operation of the circuit	250mW
Charging maximum Voltage	VDS	Charging port connected to the charger maximum	\
Chip maximum Voltage	VDS	Input voltage between each string battery node	DC5V
Continuous Discharge Current		Sustainable discharge current	\
Continuous charge current		Sustainable charging current	\
Ratedcurrent temperature Mosfet		Rated current discharge MOSFET surface temperature	＜45°
Temperaturecontrol switch		**Close the charging and discharging function at above rated temperature**	\
Chargingreverse protection		When charging, avoid the positive polarity and negative polarity reversal of charging.	NO
PCB Size		PCB Length,Width,Thickness	≦84*65*17mm

5. Wiring instructions:

5.2、Voltageacquisitionwires:

PCM Board PCB Pads

B0、B1.....(B+)

5.3 Wire instruction Diagram

B- and PC- conductors must use high and low temperature resistant silicone wires with a current of ≥35A. B0~B+ acquisition lines use one 11P/2.0 and one 6P/2.0 cable.

6. Main line connection diagram