

RRC-PMM35

Power Management Module for integration into all applications using the RRC3570

P/N: 110297



Picture only for reference



The PMM35 enables internal charging of batteries and facilitates a seamless switch between mains and battery power, ensuring uninterrupted operation and reliable power backup in a space-saving design. Multiple PMMs can be used in parallel inside one device to combine more batteries.

Features & Benefits

- **Easy to design in**
 - Easily integrable into slot design
 - Integrated 90° battery connector for different connection options
 - Maximum flexibility: Various mounting options
 - Small footprint & slim design to not waste space within the application
- **Plug & Play available embedded charging solution for RRC3570**
 - Time to market: no development time, immediate product availability
 - No NRE: no additional development, approvals, or design costs
 - Low total cost of ownership
- **Power management functionality**
 - Seamless switch between mains and battery power
 - Up to 180W charging power in power supply mode
- **Fully Compliant with Smart Battery Specification**
 - SMBus communication with battery and host
- **Worldwide certified for industrial and medical applications**
- **Configurable**
 - Programmable limits for input current, charging current and charging voltage
 - Status signal can directly drive a LED

Characteristics

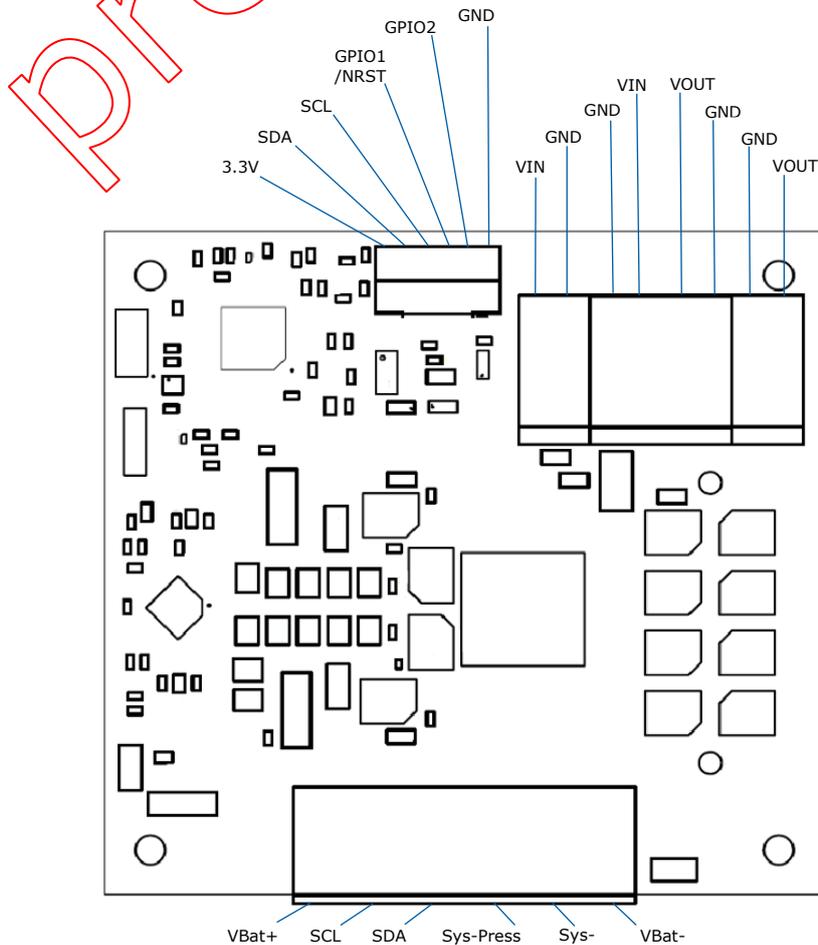
Input (Power Supply Output)	
Input voltage range	19.00V – 24.00VDC
Input power	480.00W max.
Input current	20.00A max.
Input fuse	TBD
Protection	Reverse polarity, short current
Application Output	
Total output power	504.00W max. in battery mode 480.00W max. in power supply mode
Output current	20.00A max.
Output fuse	TBD
Power Management	
Automatic power source selection with seamless transition between ext. DC power supply and battery	
Battery Input / Output	
Battery charge voltage	Up to 29.40V
Battery charge current	Up to 6.00A
Battery charge power	Up to 180.00W
Battery discharge current	20.00A cont.
Protection	Battery short circuit, over temperature, over voltage, over current & reverse polarity
Standby current	TBD
Environmental Condition	
Operating Temperature	-20° to 60°C
Transport & Storage Temperature	-20° to 60°C
Relative Humidity	5% - 95% non-condensing
Altitude	5000m for operation and storage

TECHNICAL DATA SHEET

RRC-PMM35

Regulatory Approvals	
International	TBD
Europe	CE, UKCA (EMC)
USA	FCC (EMC)
Environmental	RoHS REACH WEEE

Mechanical Details	
Board dimensions (LxWxH)	~80mm x 75mm, without cables and connectors With 4 mounting holes
Weight	TBD
Battery Connector	1x battery pack accessible via 90° mating connector for RRC35xx batteries
Input/Output Connector	1x 90° / 8pin (2pin+4pin+2pin) JST S2P-VH and JST S4P-VH style header on PCBA, 3.96mm pitch, 10A(AWG#16) per pin
Communication Interface	180° / 6pin JST S6B-PH style header on PCBA with 2xSMBus lines, 3.3V (<3mA), GND and 2xGPIO, 2mm pitch



To facilitate a fast design-in process for developers, RRC is providing 3D data of the power management module RRC-PMM35 and the battery housings of RRC smart battery. For an application note related to the power management module with additional details contact your RRC representative. For further information on the RRC smart batteries please refer to the RRC website (www.rrc-ps.com).

Germany/Headquarters

RRC power solutions GmbH
Technologiepark 1
66424 Homburg / Saar

Tel.: +49 6841 98090
Fax: +49 6841 9809280
Email: sales@rrc-ps.de
Web: www.rrc-ps.com

USA

RRC power solutions Inc.
18340 Yorba Linda Blvd.,
107-437
Yorba Linda, CA 92886

Tel.: +1 714 777 3604
Fax: +1 714 777 3658
Email: usa@rrc-ps.com
Web: www.rrc-ps.com

Hong Kong

RRC power solutions Ltd.
S-V,6/F, Valiant Industrial
Centre 2-12 Au Pui Wan Street
Fo Tan, N.T., Hong Kong

Tel.: +852 2376 0106
Fax: +852 2375 0107
Email: hkrcc@rrc-ps.cn
Web: www.rrc-ps.cn

China

RRC power solutions Ltd.
Room 1306, C Building,
Tianan International building,
Renmin South Road, Luohu
District, Shenzhen 518021

Tel.: +86 755 8374 1908
Fax: +86 755 8374 1861
Email: hkrcc@rrc-ps.cn
Web: www.rrc-ps.cn