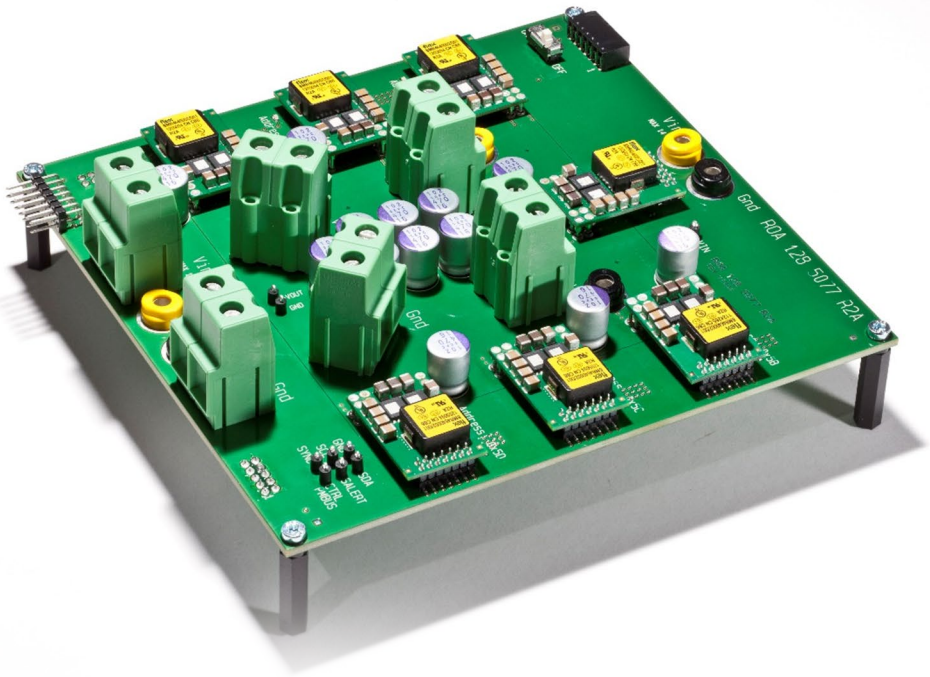
Evaluation Board User Guide

ROA 128 5077

User Guide for paralleling BMR463, BMR463



Contents

1 Introduction

This User Guide provides a brief introduction and instruction on how to use the Reference Board ROA 128 5077 for paralleling of BMR463 and BMR464.

1.1 How to contact Flex Power Modules

For general questions or interest in our products, please contact your local sales representative. Contact details are found on our our website:

Flexpowermodules.com

2 User Guide

2.1 Power up/down instructions

This section of the document describes how to connect correctly power supply for different cases to avoid mistake during measurements.

2.2 Power supply connections

Add 5-14 V DC power to the "Vin" and "Gnd" connectors (see Fig 1).

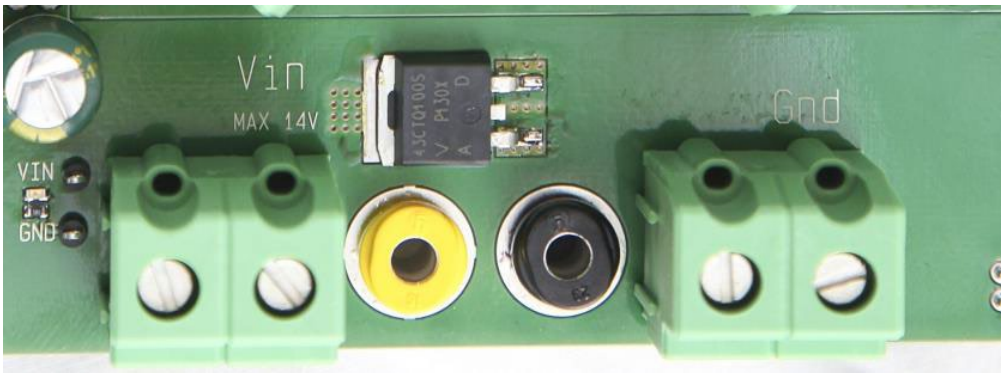


Fig 1: Connect 5-14 V either to the Vin or Gnd DC power connectors located in both ends of the board

Figure 2 shows the RC switch in "On" position.

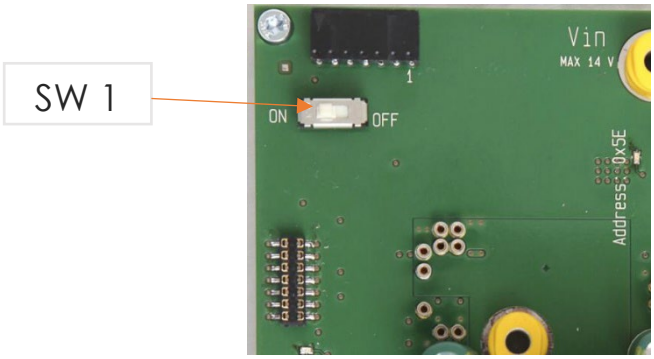


Figure 2: RC switch in 'On' position

Figures 3 & 4 show the connection of two types of USB-to-PMBus adapters.

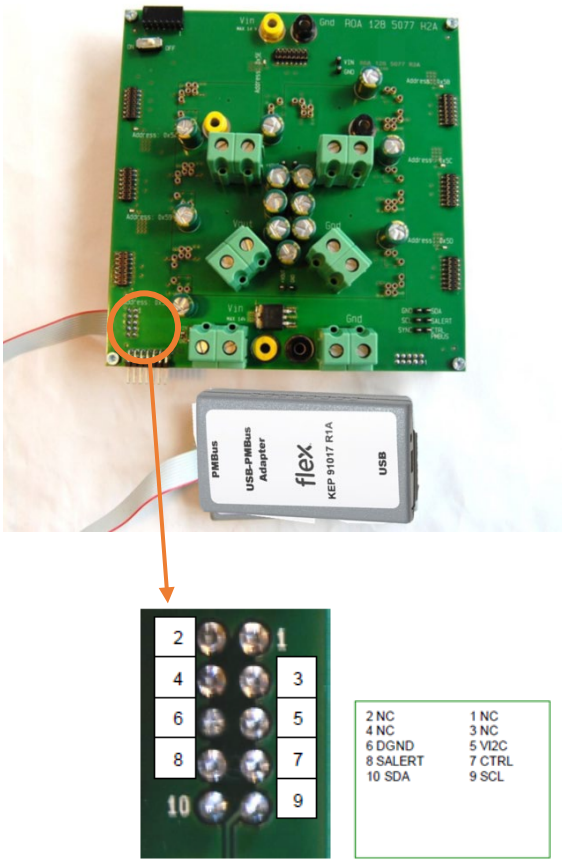


Figure 3: Connection o FPM KEP91017 PMBus to USB adapter

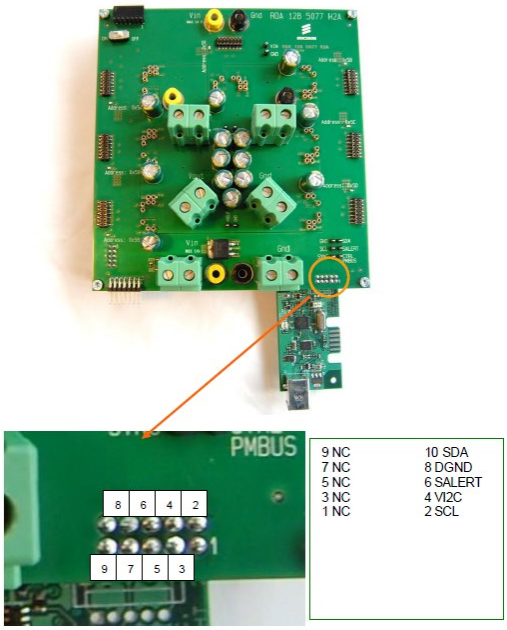


Figure 4: Connection of the Intersil ZLUSBREF02 PMBus to USB adapter

Power-up instructions:

- Mount the BMRs in desired positions
- Turn the RC switch in 'Off' position
- Connect and turn on 5-14 V supply
- Connect the PMBus adapter/cable to the board
- Start the necessary software program in order to perform re-configuration required to operate the modules in parallel
- After re-configuration of modules, cycle the 5-14 V supply
- Turn the RC switch in 'On' position

If the modules are now starting up properly, the Power Good LED of each module should give green light.
Note: If any of the PMBus interfaces are connected to the board the LEDs will light continuously in positions where no modules are mounted.

Power-down instruction:

- Turn RC switch in 'Off' position or turn Off the 5-14V Supply
- Now the BMR modules can be removed/replaced

3 Address and v out range resistors

This section describes the locations of the Address and Vout range pin strap resistors. To know what resistor value to mount, please look in the actual Technical Specification of the BMR product found on our website. Fig 5 shows the positions of the address and Vout range resistors, they are found at the bottom side of the board.

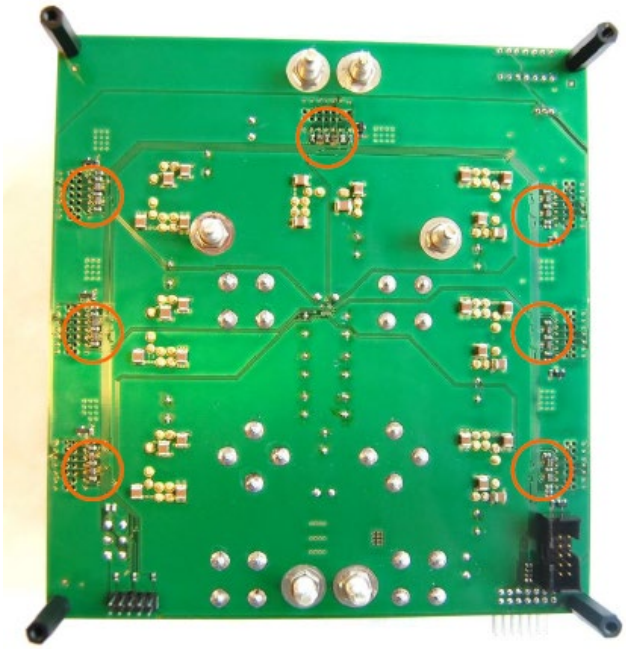


Figure 5: Positions of the address and Vout range resistors

3.1 Change of address resistors

3.2 BMR463/464 adjustment of address resistors

To change the address in a position, change the resistors as shown in figure 6. See table below for each position of resistors.

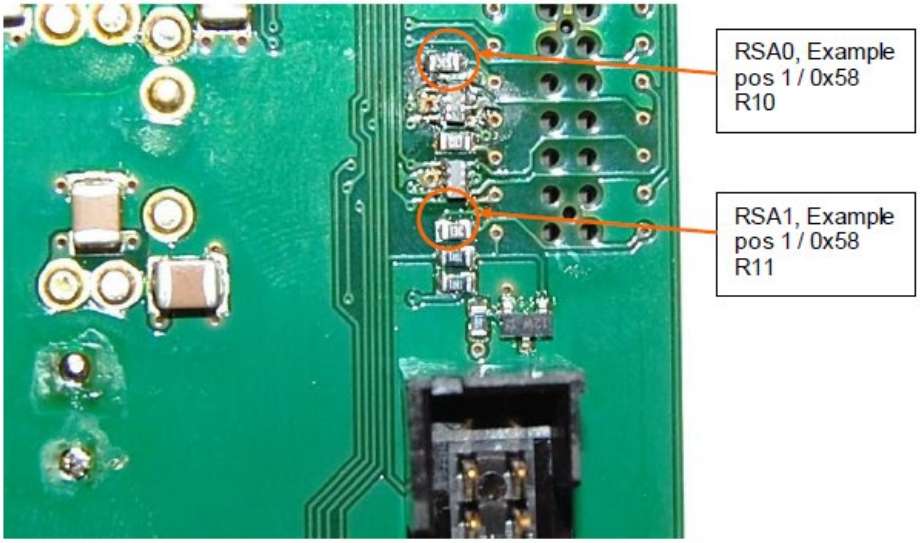
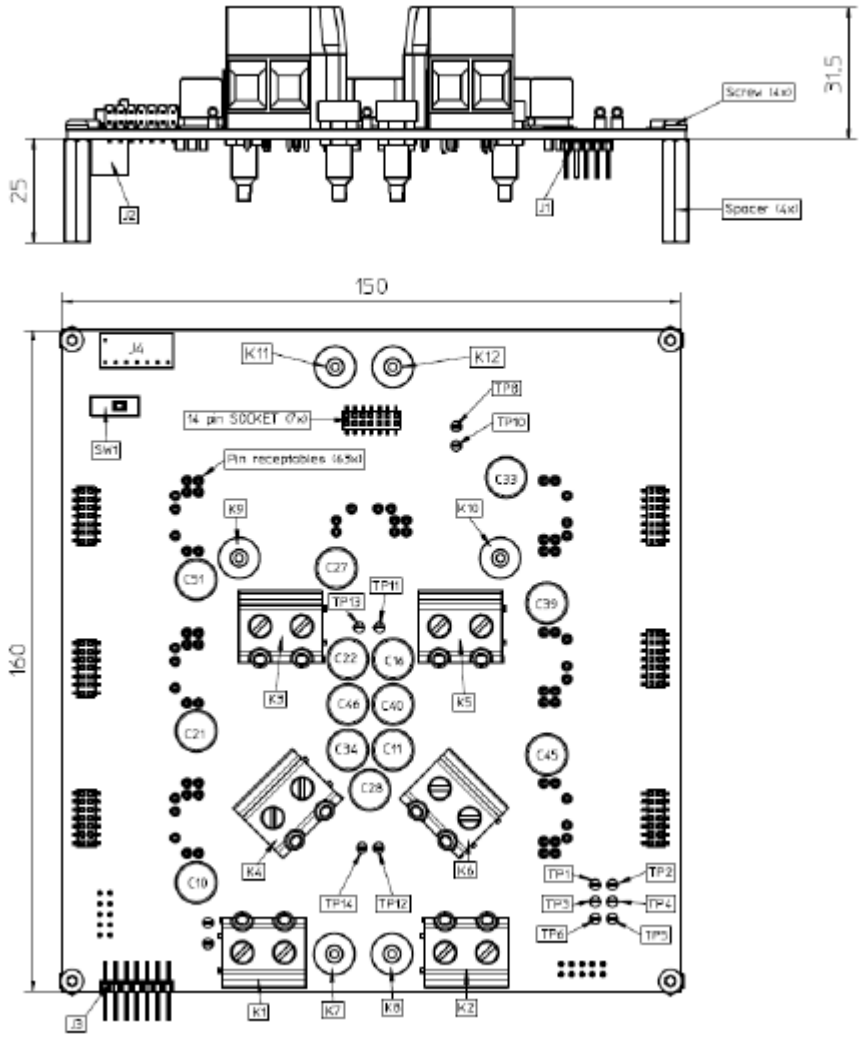


Figure 6: Address resistors in position for BMR463/464

PoL position	Address resistors	Vout range resistors
1/ 0x58	R10, R11	R12
2/ 0x59	R13, R15	R14
3/ 0x5A	R16, R18	R17
4/ 0x5C	R19, R21	R20
5/ 0x5C	R22, R24	R23
6/ 0x5D	R25, R25	R26
7/ 0x5E	R28, R30	R29

4 Dimensions

The outer dimensions (in mm) of the test board are shown in the picture below.



The whole test board has the outer dimensions 150 x 160 x 56.5 mm (L x W x H). Weight of the complete test board is 370 g.

5 Revision

Rev	Date	Revisor	Changes
A	2012-02-08		New document
B	2022-05-11	Kartwaer	New Flex format