

BD71850MWV Reference Schematic

Page	Contents
1	Table of Contents
2	Legal Disclaimer
3	Power Map
4	Schematic for BUCKs
5	Schematic for LDOs and MISC

Rev	Page	Contents	Rev 1p0
1p0		Initial Release	

Notice

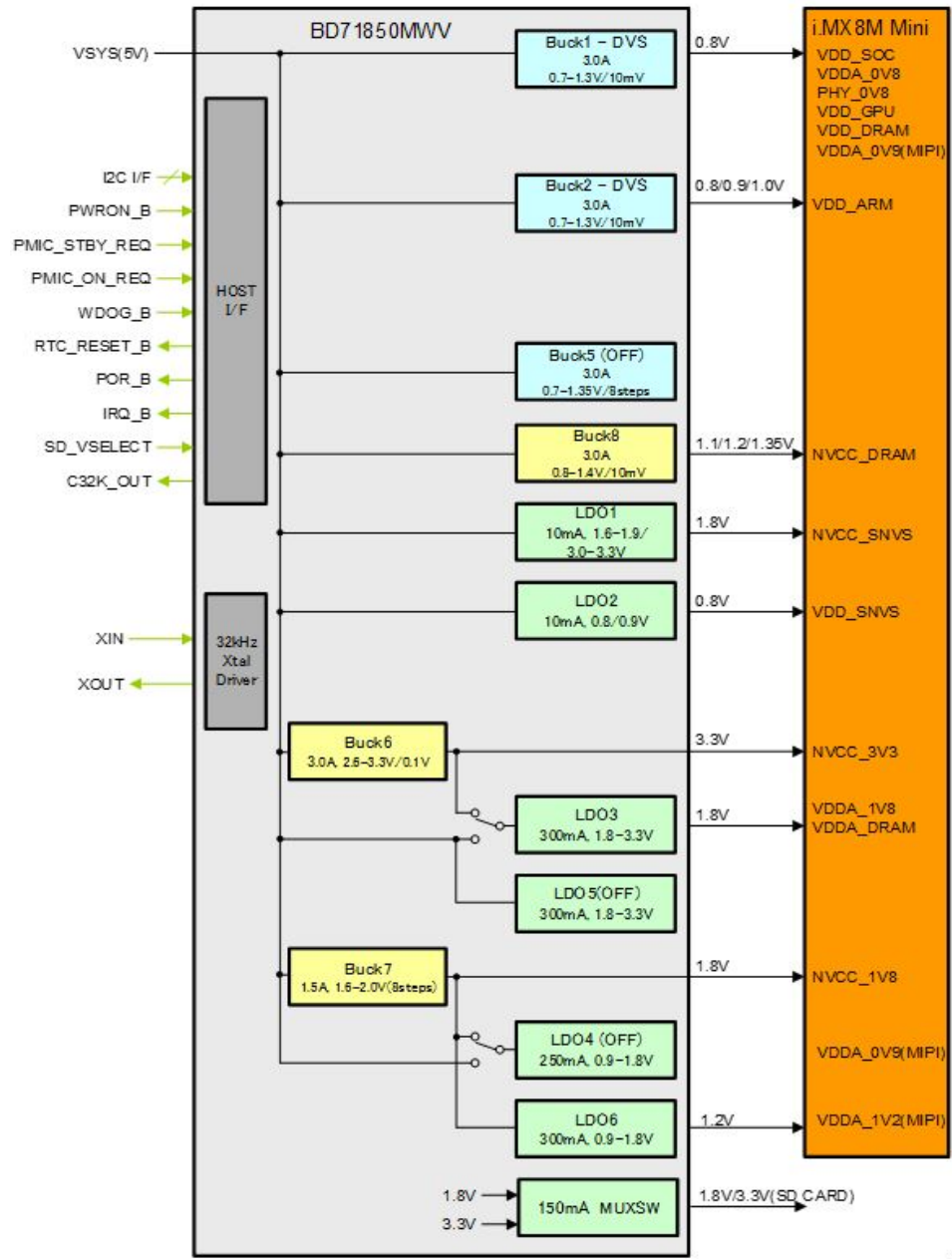
1. The information contained herein can change without notice owing to product and/or technical improvements. Before using the product, please make sure that the information being referred to is up-to-date.
2. The outline of action and examples for application circuits described herein have been chosen as an explanation for the standard action and performance of the product. When planning to use the product, please ensure that the external conditions are reflected in the actual circuit, assembly, and program designs.
3. When designing your product, please use our product below the specified maximum ratings and within the specified operating ranges including, but not limited to, operating voltage, power dissipation, and operating temperature.
4. ROHM SEMICONDUCTOR assumes no responsibility or liability whatsoever for any failure or unusual or unexpected operation resulting from misuse, neglect, improper installation, repair, alteration or accident, improper handling, or unusual physical or electrical stress including, but not limited to, exposure to parameters beyond the specified maximum ratings or operation outside the specified operating range.
5. Neither indemnity against nor license of a third party's industrial and intellectual property right, etc. is granted by us in connection with the use of the product and/or the information and drawings contained herein. No responsibility is assumed by us for any infringement of a third party's right which may result from the use thereof.
6. The products listed in this document are intended for use in general electronics equipment for commercial applications (e.g., office automation, communication equipment, measurement equipment, consumer electronics, etc.). These products are not, unless specifically authorized by ROHM SEMICONDUCTOR authorized for use in any system or application that requires special or enhanced quality and reliability characteristics nor in any system or application where the failure of such system or application may result in the loss or damage of property, or death or injury to humans. Such applications include, but are not limited to, aerospace equipment, nuclear power control, medical equipment, and life-support systems.
7. Certain products in this document may need government approval before they can be exported to particular countries. The purchaser assumes the responsibility of determining the legality of export of these products and will take appropriate and necessary steps at their own expense for these.
8. Although every reasonable effort has been made to ensure the accuracy of this Manual, please report any errors or discrepancies to your nearest ROHM SEMICONDUCTOR representative.
9. Code Names mentioned in this document are for use by Intel Corporation to identify products, platforms, programs, services, etc. ("products") in development by Intel Corporation that have not been made commercially available to the public, i.e., launched or shipped. They are never to be used as "commercial" names for products or intended to function as trademarks.
10. Other product names and company names mentioned in this document are trademarks or registered trademarks of their respective owners. (In this document, the name with these trademarks shows with the mark of " * ".)
11. No part of the contents contained herein may be reprinted or reproduced without our prior permission.

Copyright (c) 2019, ROHM SEMICONDUCTOR CO., LTD. All rights reserved.

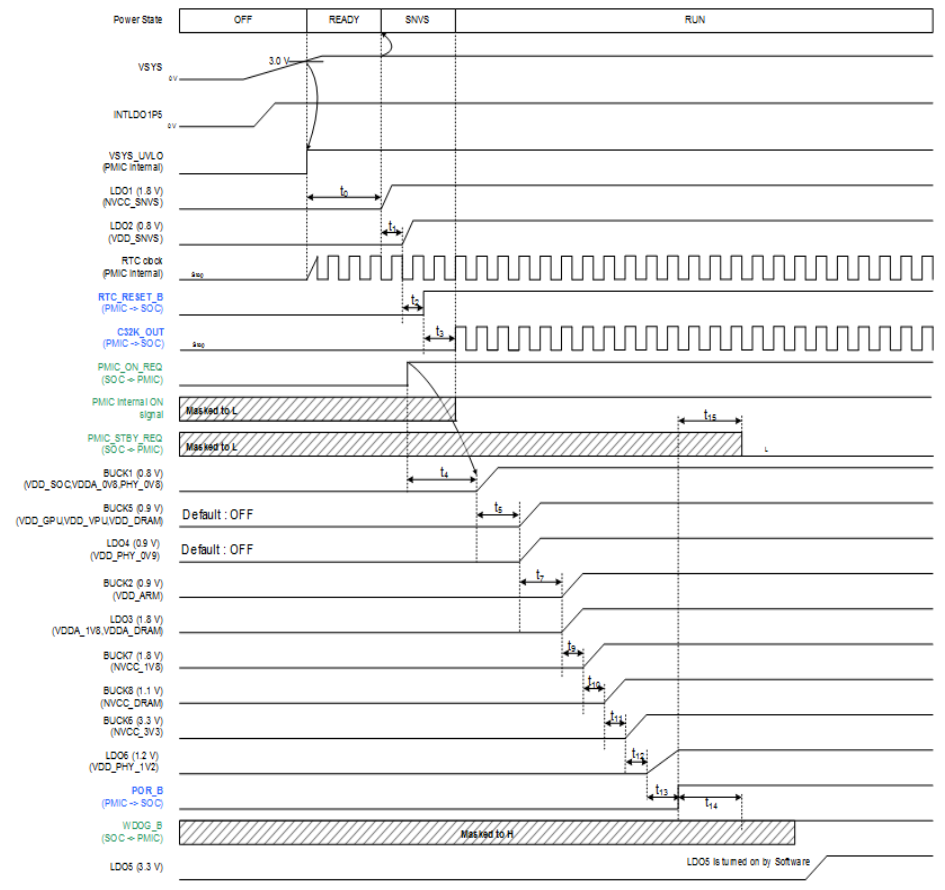
Unit of Parts size: mm

ROHM CONFIDENTIAL				
Title				
BD71850MWV Reference Board Schematic				
Size	Document Number	PS262-BD71850MWV-0002	Board Rev.	SOM Rev.
A3	ROHM DISCLAIMER		1p0	1p0
Date:	Wednesday, July 03, 2019		Sheet	2 of 5

POWER MAP



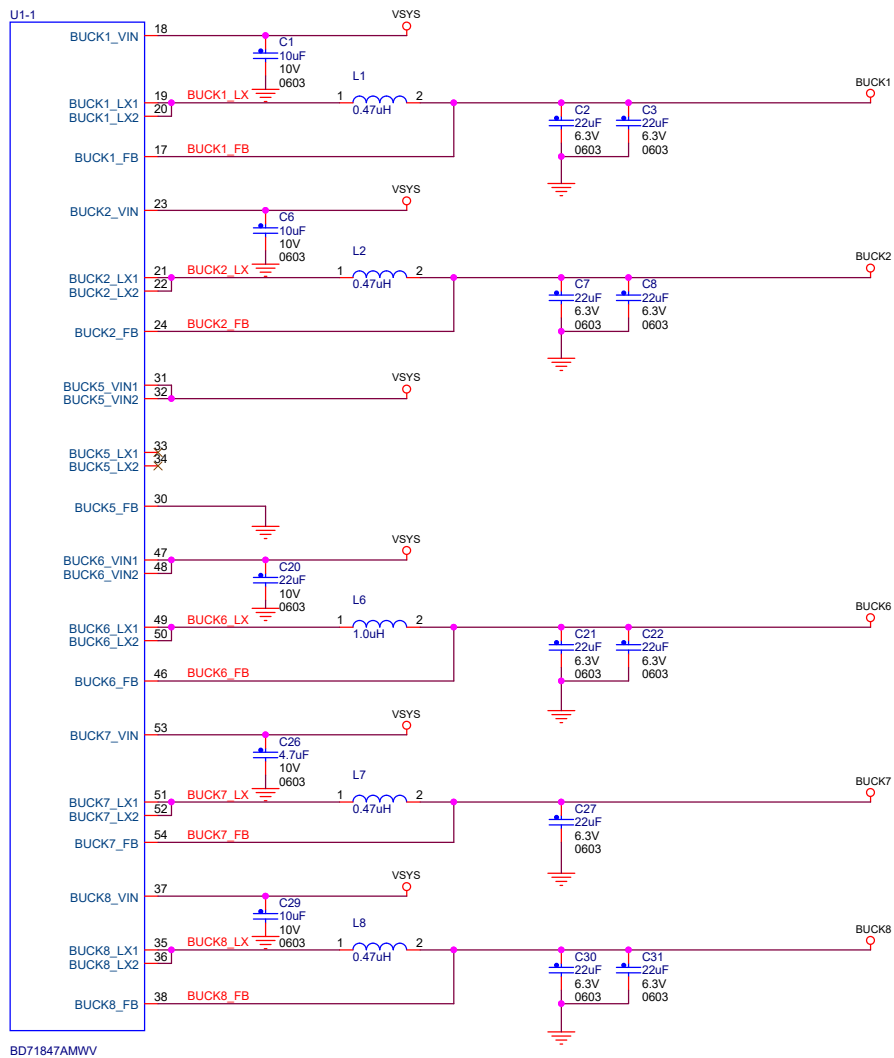
Power ON Sequence



Unit of Parts size: mm

ROHM CONFIDENTIAL				
Title: BD71850MWV Reference Board Schematic				
Size: A3	Document Number: PS262-BD71850MWV-0002	Board Rev: 1p0	SOM Rev: 1p0	
Date: Wednesday, July 03, 2019	Sheet: 3	of: 5		

BD71850MWV Reference Schematic <BUCK Converter Block>



[BUCK1]
Vout=0.8V, Iomax=300mA

[BUCK2]
Vout=0.9V, Iomax=300mA

[BUCK5]
Vout=0.9V, Iomax=300mA
This VR is set to off as the default condition.

[BUCK6]
Vout=3.3V, Iomax=300mA

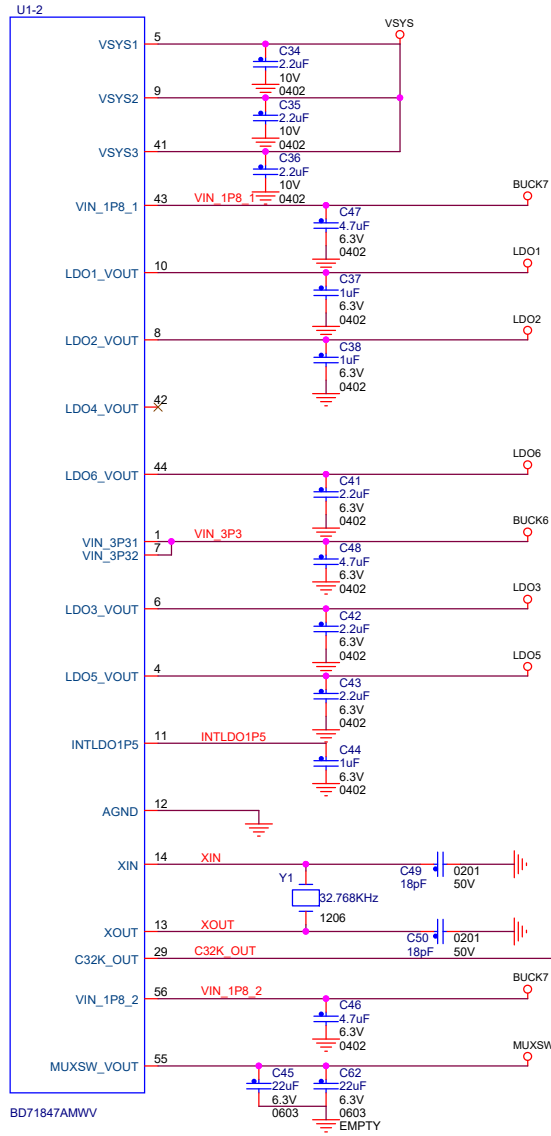
[BUCK7]
Vout=1.8V, Iomax=150mA

[BUCK8]
Vout=1.1V, Iomax=300mA

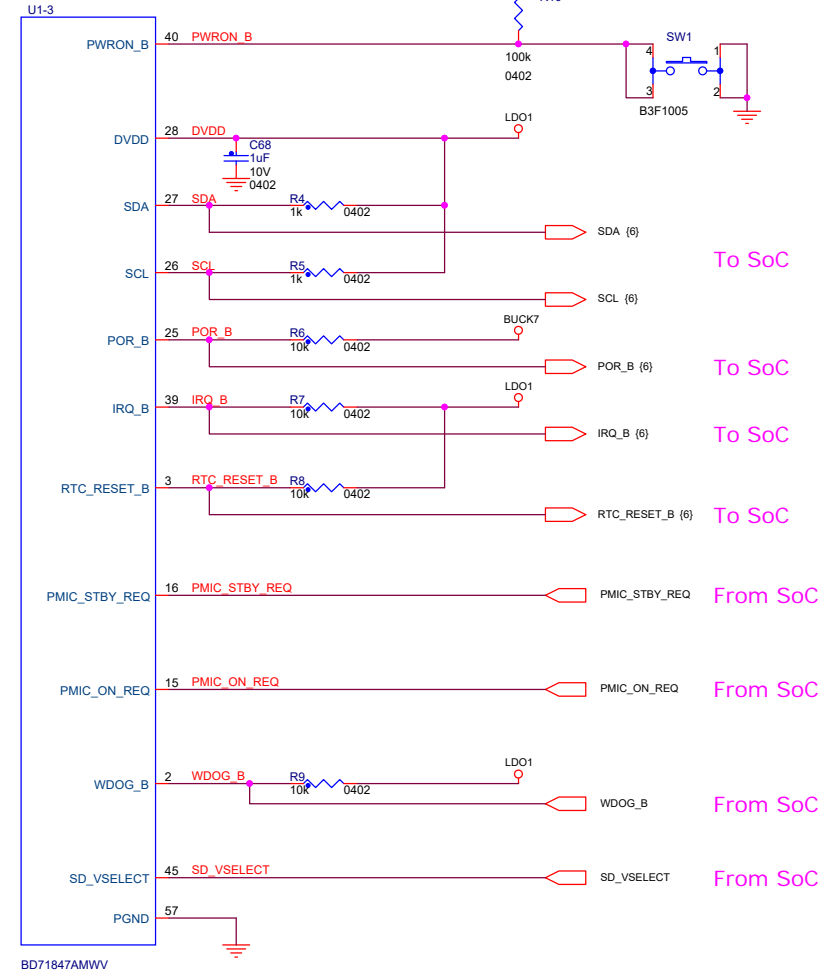
Unit of Parts size: mm

ROHM CONFIDENTIAL				
Title BD71850MWV Reference Board Schematic				
Size A3	Document Number BD71847AMWV Reference Schematic	PS262-BD71850MWV-0002	Board Rev. 1p0	SOM Rev. 1p0
Date: Wednesday, July 03, 2019	Sheet 4	of 4	5	

BD71850MWV Reference Schematic <LDOs and MISC>



- [VSYS1]
LDO3,5 input supply
- [VSYS2]
LDO1,2 input supply
- [VSYS3]
LDO4 input supply
- [VIN_1P8_1]
LDO4,6 input supply
- [LDO1]
Vout=1.8V, Iomax=10mA
- [LDO2]
Vout=0.8V, Iomax=10mA
- [LDO4]
Vout=0.9V, Iomax=250mA
This VR is set to off.
- [LDO6]
Vout=1.2V, Iomax=300mA
- [VIN_3P3]
LDO3 MUXSW input supply
- [LDO3]
Vout=1.8V, Iomax=300mA
- [LDO5]
Vout=3.3V, Iomax=300mA
- [VIN_1P8_2]
MUXSW input supply
- [MUXSW]
Vout=1.8V/3.3V, Iomax=150mA



- To SoC
- To SoC
- To SoC
- To SoC
- To SoC
- From SoC
- From SoC
- From SoC
- From SoC

Unit of Parts size: mm

ROHM CONFIDENTIAL				
Title BD71850MWV Reference Board Schematic				
Size A3	Document Number PS262-BD71850MWV-0002 BD71847AMWV Reference Schematic	Board Rev. 1p0	SOM Rev. 1p0	
Date: Wednesday, July 03, 2019	Sheet 5	of 5		