

# CYSBSYSKIT-01 Rapid IoT Connect Platform RP01 Feather Kit

<b>CONTENTS</b>	
<b>PAGE</b>	<b>DESCRIPTION</b>
01	Title , Table of Contents, Drawing Numbers
02	Block Diagram
03	USB, Battery Charger & Buck Boost Converter
04	3V3 & 1V8 LDO
05	CYSBSYS-RP01 Module
06	On-Board Components and Feather Headers
07	KitProg3 Interface & Level Translator
08	KitProg3 and 10 pin SWD/JTAG Header
09	Accessory
10	Revision History

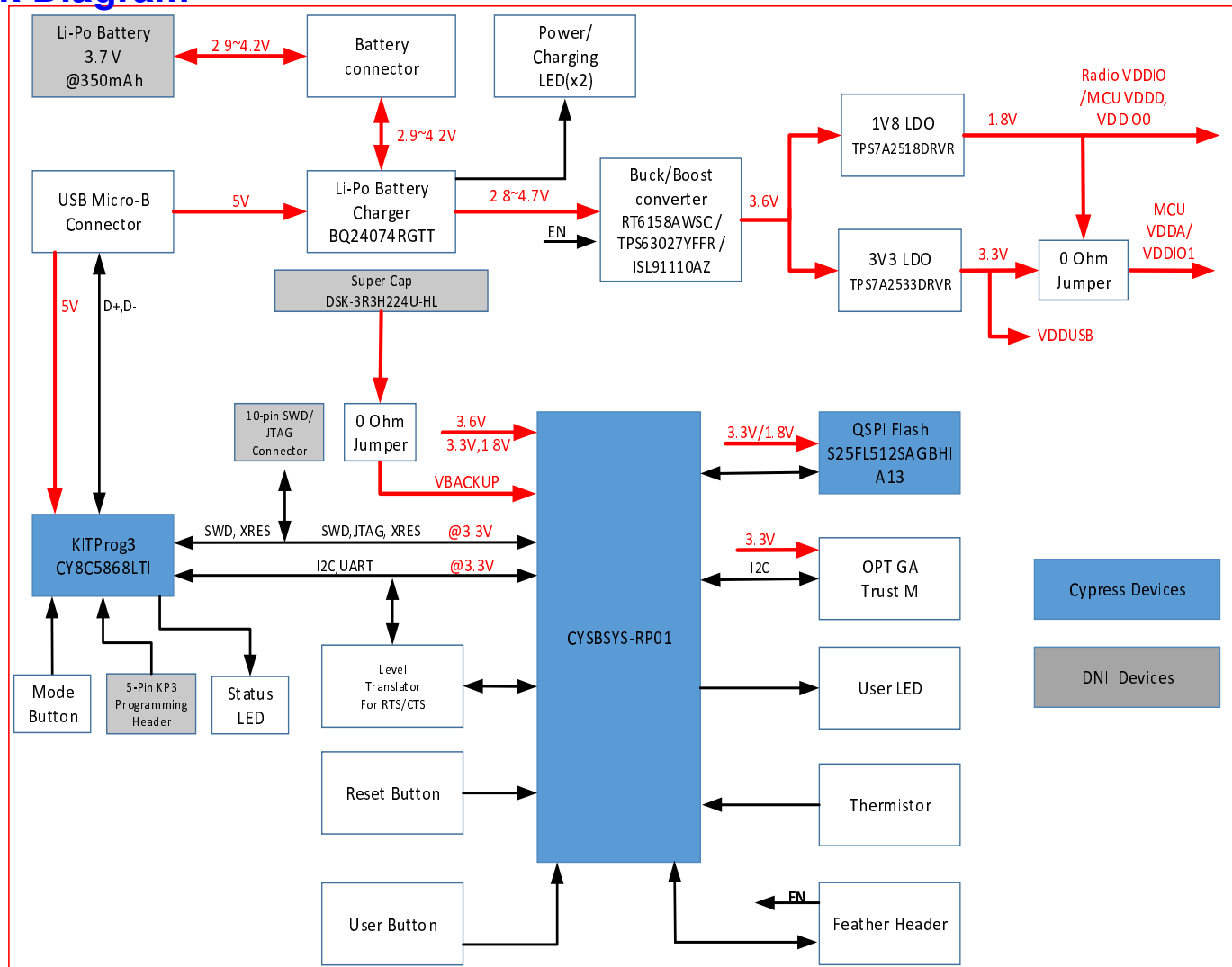
<b>Drawing Numbers</b>	
PCBA	121-60571-01
PCB	600-60571-01
FAB DRW	610-60571-01
ASSY DRW	620-60571-01
SCH DRW	630-60571-01

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<b>Page Title: Title Page</b>				
Size	Document Number	Drawn By	Approved By	Rev
A4	<b>630-60571-01</b>	<b>YUVS</b>	<b>KACN</b>	<b>3.2</b>
Date: Thursday, September 23, 2021			Sheet 1 of 10	

# Block Diagram



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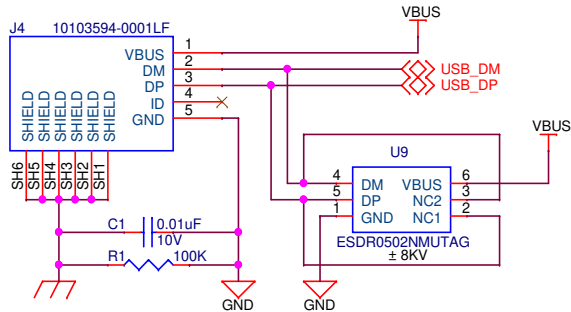
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Page Title : Block Diagram

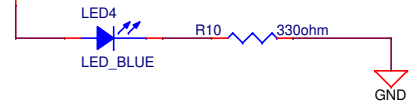
Size	Document Number	Drawn By	Approved By	Rev
A4	630-60571-01	YUVS	KACN	3.2
Date:	Thursday, September 23, 2021		Sheet	2 of 10

# USB, Battery Charger & Buck Boost Converter

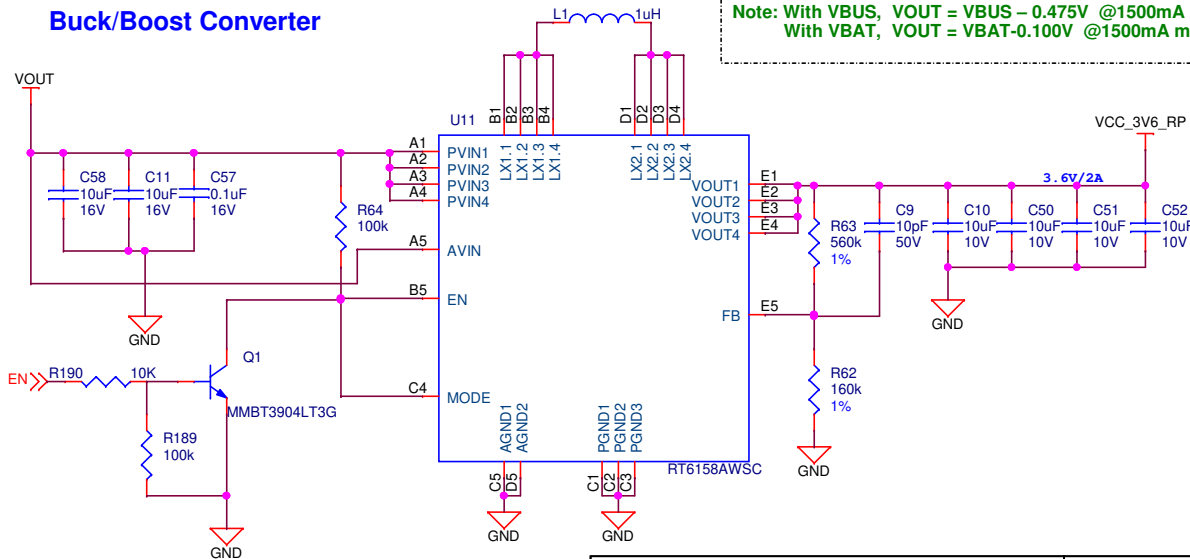
## USB Connector



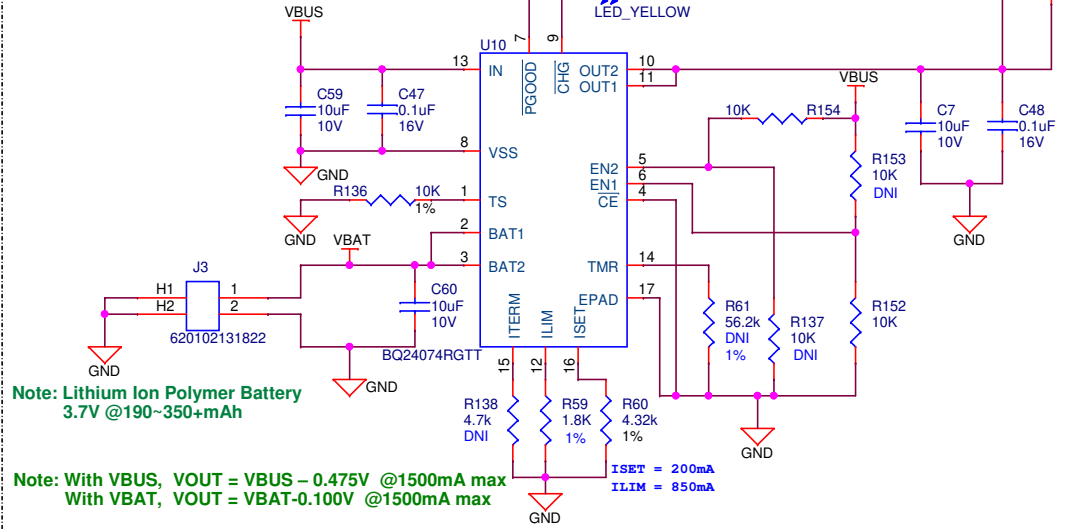
## Power LED



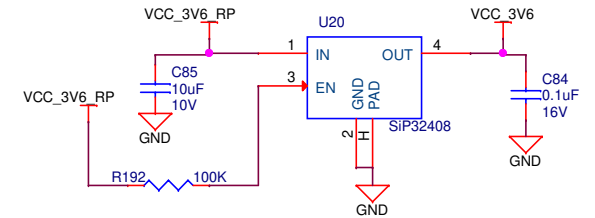
## Buck/Boost Converter



## Li-Po Battery Charger



## Load Switch / Reverse Voltage Protection for 3V6



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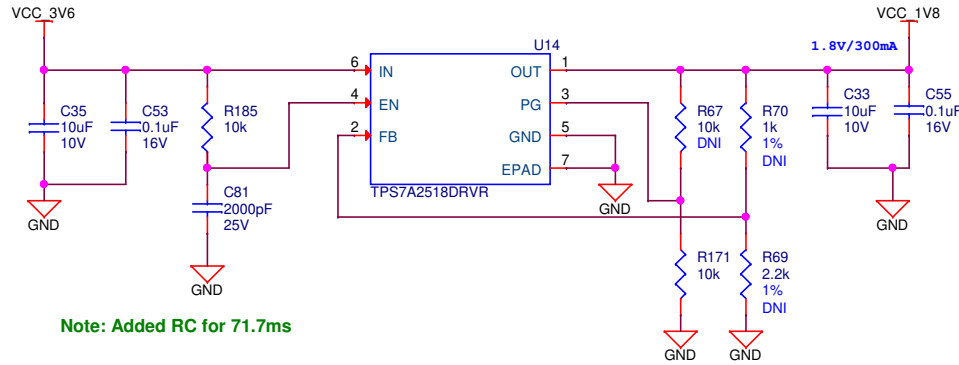
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Size	Document Number	Drawn By	Approved By	Rev
A4	630-60571-01	YUVS	KACN	3.2

Date: Thursday, September 23, 2021 Sheet 3 of 10

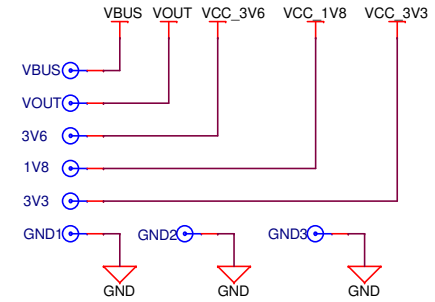
# 3V3 & 1V8 LDO

## 1V8 LDO

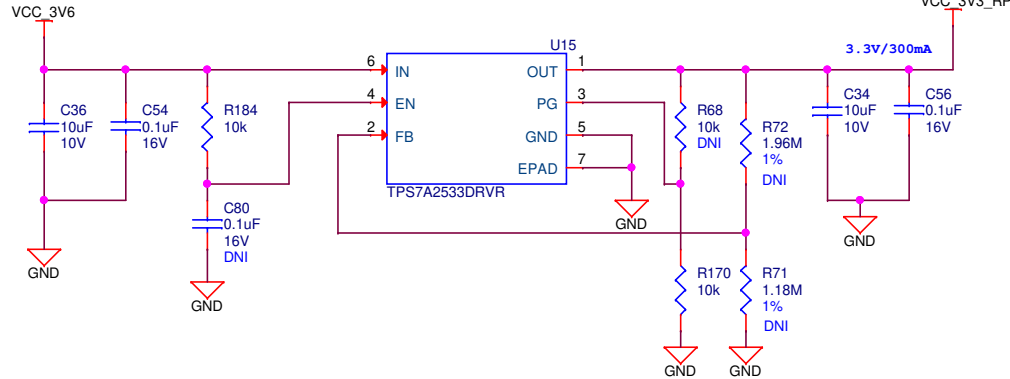


Note: Added RC for 71.7ms

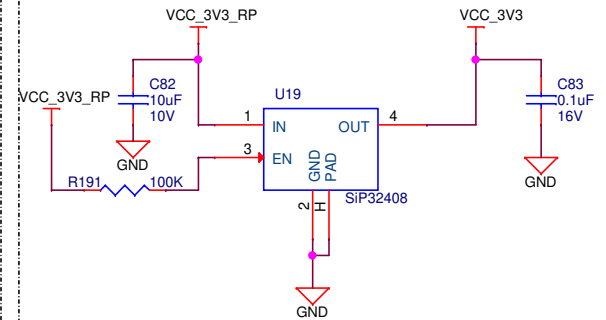
## POWER DOMAIN TEST POINT



## 3V3 LDO



## Load Switch / Reverse Voltage Protection for 3V3



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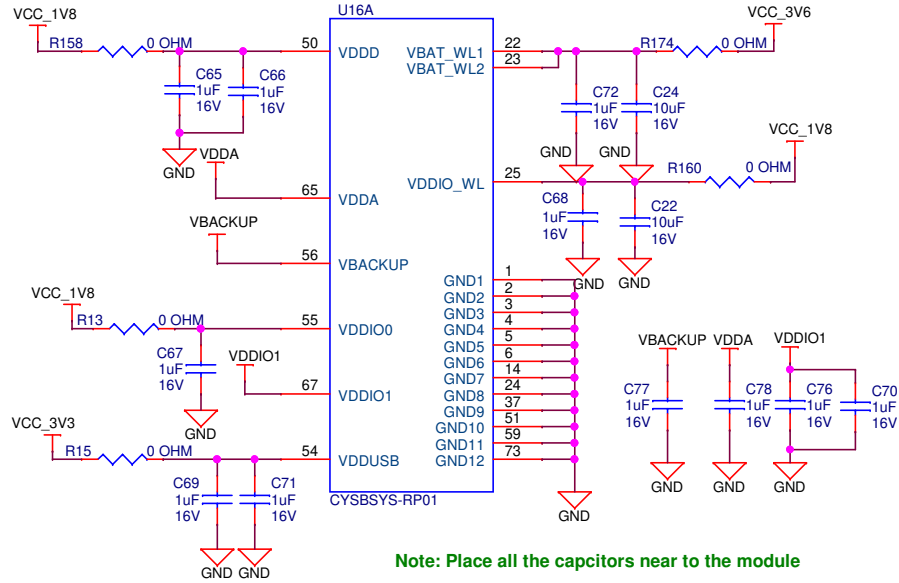
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Size	Document Number	Drawn By	Approved By	Rev
A4	630-60571-01	YUVS	KACN	3.2

Date: Thursday, September 23, 2021 Sheet 4 of 10

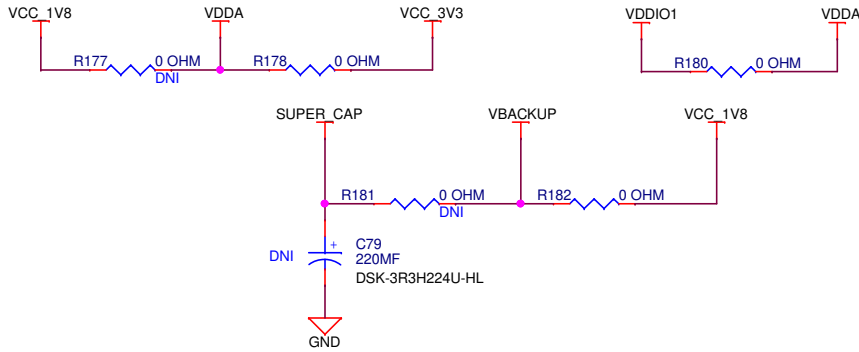
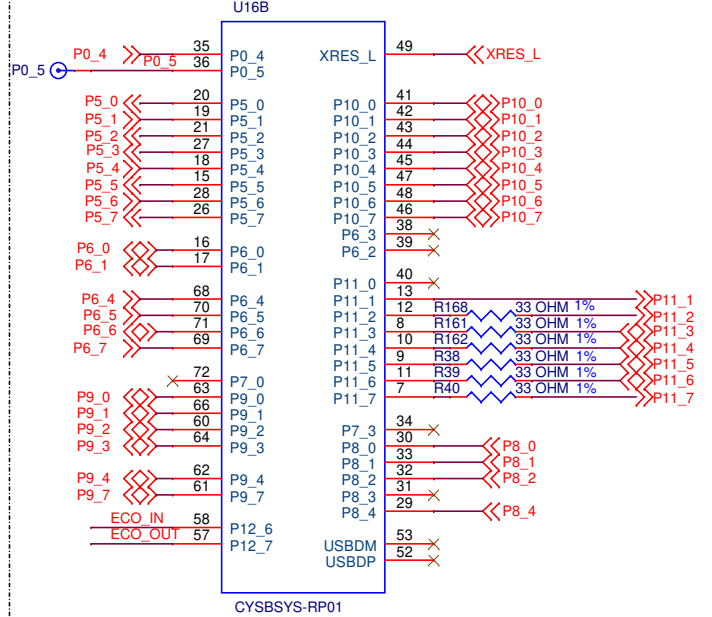
# CYSBSYS-RP01 Module

## Power

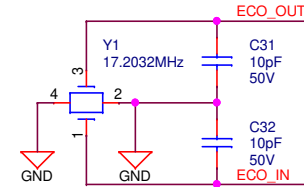


Note: Place all the capacitors near to the module

## MCU I/Os



## ECO



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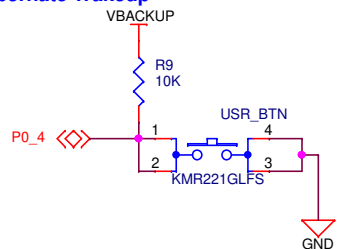
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Page Title : CYBSYS-RP01 Module

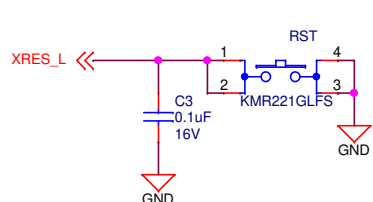
Size	Document Number	Drawn By	Approved By	Rev
A4	630-60571-01	YUVS	KACN	3.2
Date:	Thursday, September 23, 2021		Sheet	5 of 10

# On-Board Components and Feather Headers

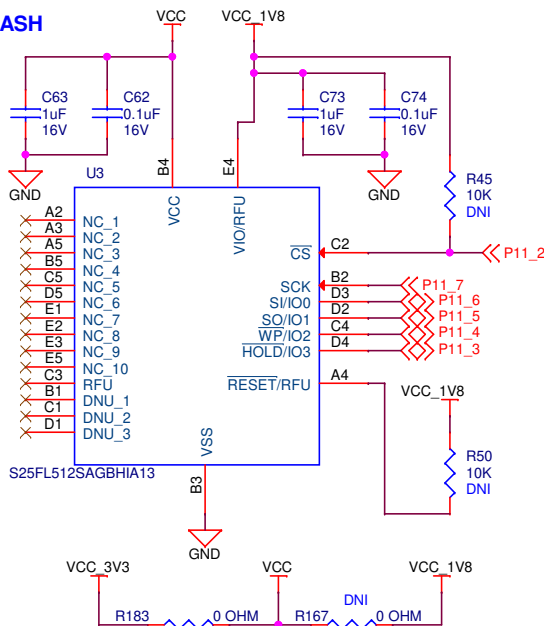
## User Button / Hibernate Wakeup



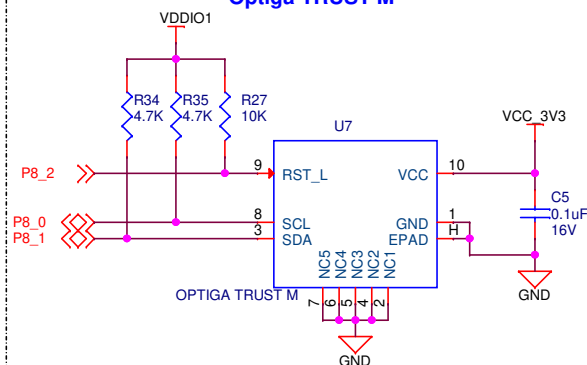
## Reset Button



## NOR FLASH



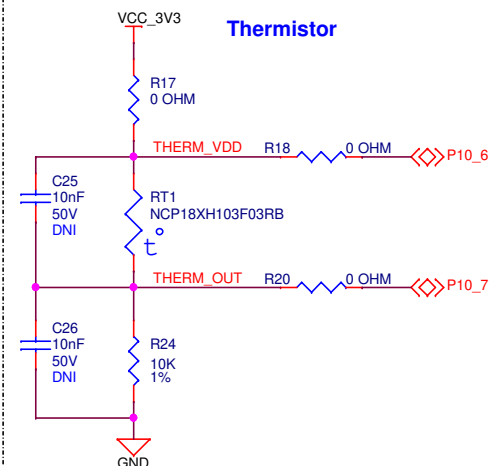
## Optiga TRUST M



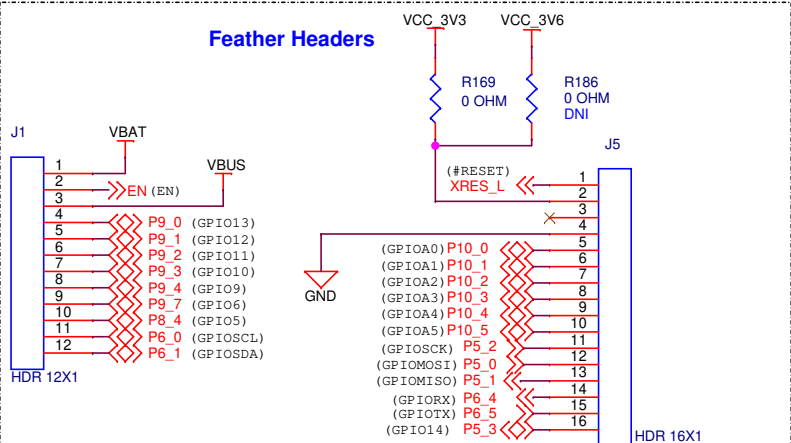
## User LED



## Thermistor



## Feather Headers



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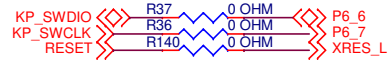
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Size	Document Number	Drawn By	Approved By	Rev
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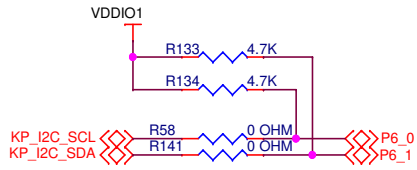
Date: Thursday, September 23, 2021 Sheet 6 of 10

# KitProg3 Interface & Level Translator

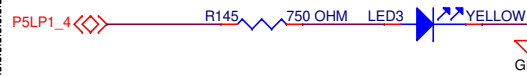
## Target MCU SWD KitProg3 Interface



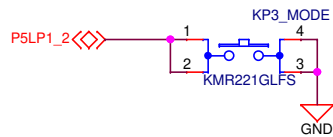
## KitProg3 I2C Interface



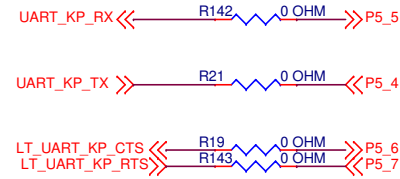
## KitProg3 Status LED



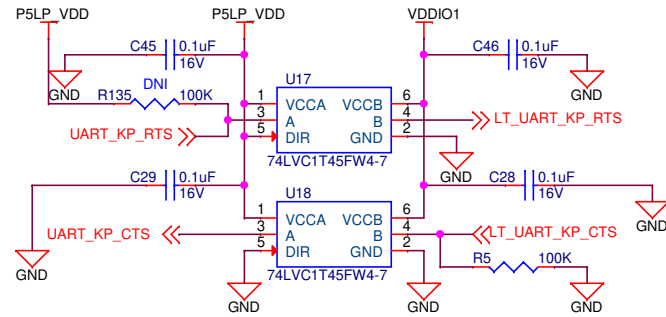
## Mode Switch



## KitProg3 UART Interface



## UART H/W Flow Control Level Translator



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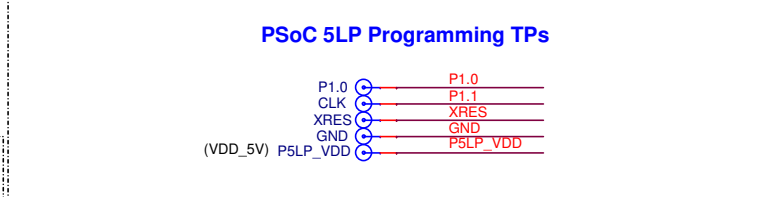
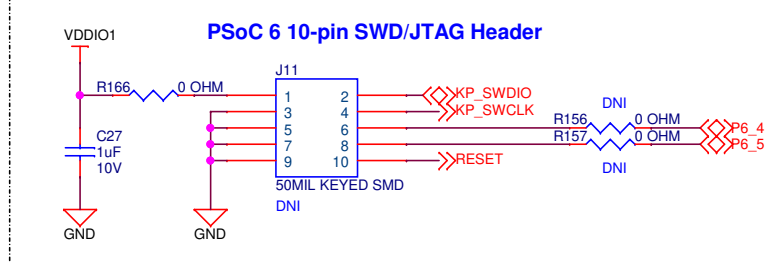
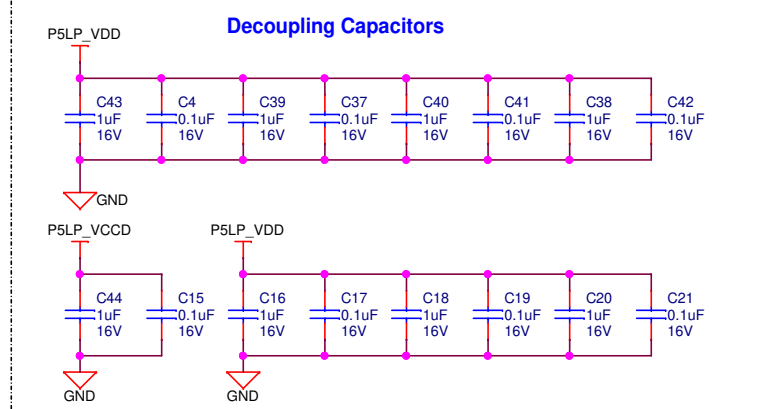
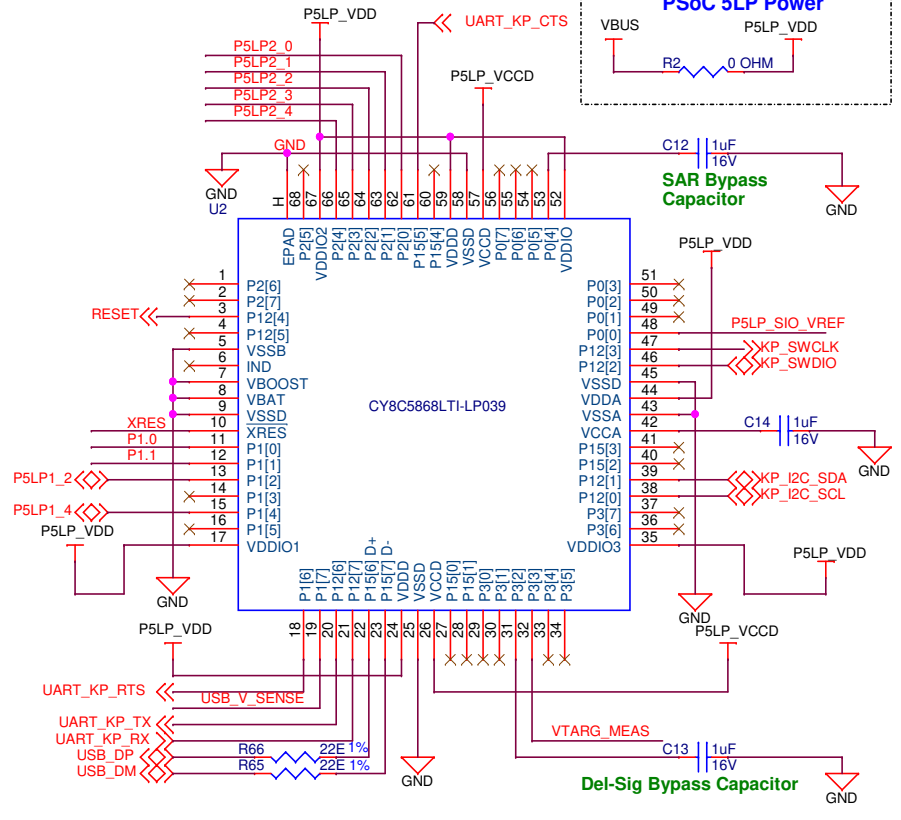
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Size	Document Number	Drawn By	Approved By	Rev
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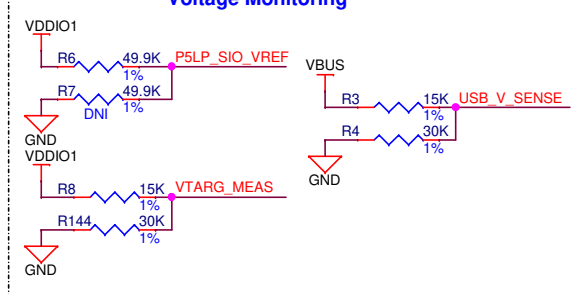
Date: Thursday, September 23, 2021 Sheet 7 of 10

# KitProg3 and 10 pin SWD/JTAG Header

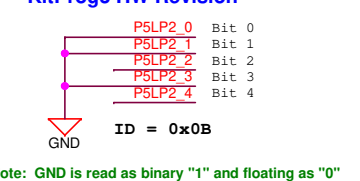
## PSoc 5LP based KitProg3



## Voltage Monitoring



## KitProg3 HW Revision

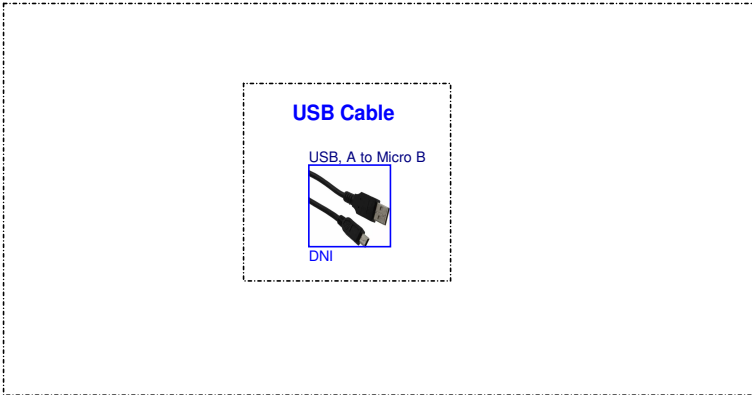


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<b>Page Title : KitProg3 and 10 pin SWD/JTAG Header</b>				
Size	Document Number	Drawn By	Approved By	Rev
A4	630-60571-01	YUVS	KACN	3.2
Date:	Thursday, September 23, 2021		Sheet	8 of 10



# Accessory



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<b>Page Title : Accessory</b>				
Size	Document Number	Drawn By	Approved By	Rev
A4	630-60571-01	YUVS	KACN	3.2
Date:	Thursday, September 23, 2021		Sheet	9 of 10

## REVISION HISTORY

REV	DESCRIPTION OF CHANGE	Orig. of Change	DATE
00.01	Initial Draft		26/07/2019
00.02	Updated Schematic as per cypress comment provided on 30-7-2019		01/08/2019
00.03	Updated Schematic as per cypress comment provided on 5-8-2019		07/08/2019
00.04	Updated Block Diagram		19/08/2019
00.05	Updated Schematic as per cypress comment provided on 20-8-2019		20/08/2019
00.06	Updated Schematic as per cypress comment provided on 22-8-2019		16/09/2019
00.07	Removed R172 on U11 mode pin		17/09/2019
00.08	R7 Package Changed to 0603		20/09/2019
1.0	Release file		23/09/2019
1.1	Interchanged RX ,TX and RTS,CTS		30/09/2019
2.0	Release file		03/10/2019
3.0	Moved the Decoupling capacitors towards RP01 Module	YUVS	26/11/2020
3.01	Updated Schematic with IFX template	YUVS	05/01/2021
3.02	Updated Optiga Trust M, U14 and U15 MPNs and made R70, R69, R72, R71 as DNL.	YUVS	01/03/2021
3.2	Updated C9 with 10pF capacitor, Added alternative parts for U11	YUVS	23/09/2021

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A4	630-60571-01	YUVS	KACN	3.2

Date: Thursday, September 23, 2021 Sheet 10 of 10