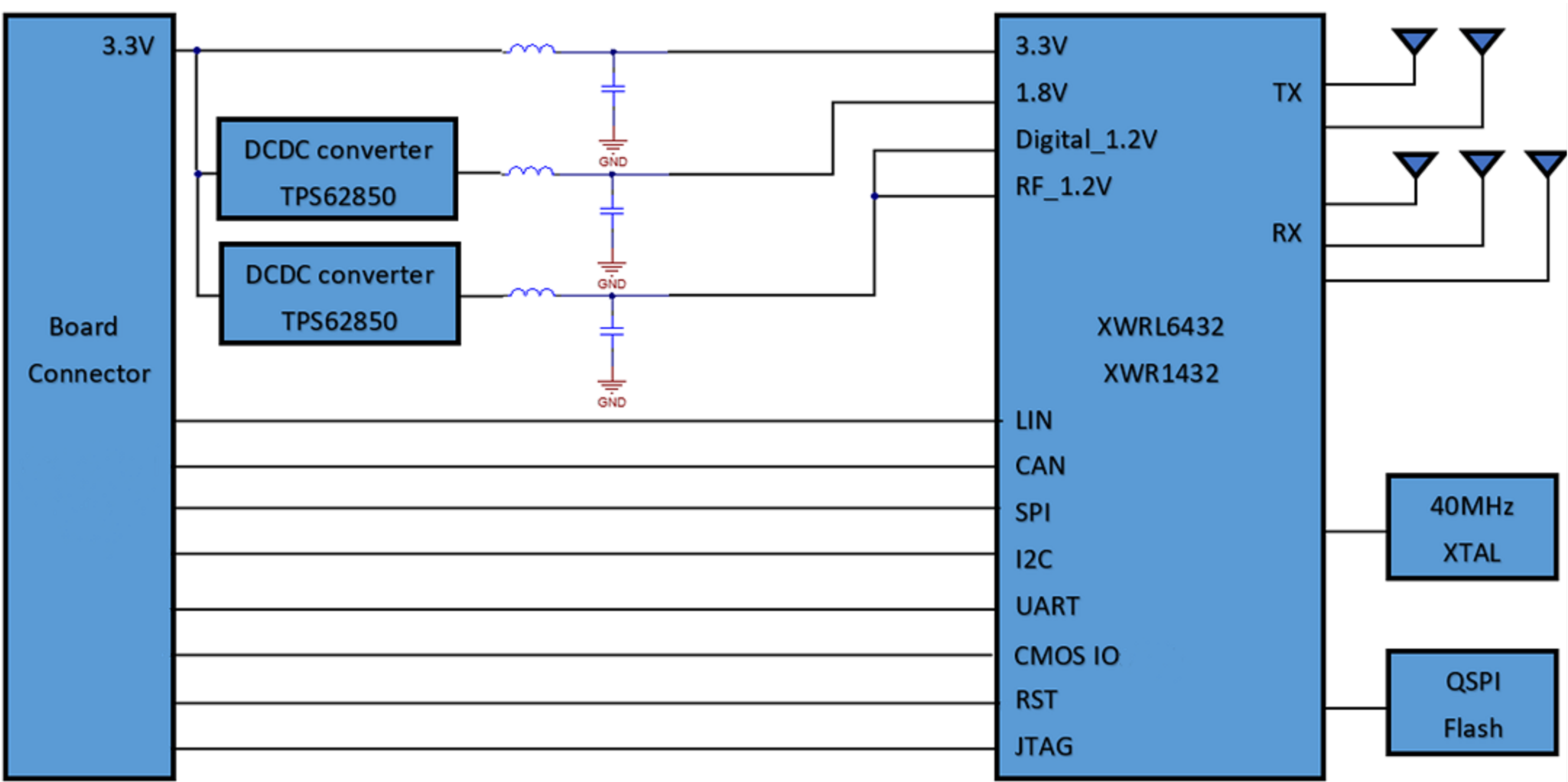


Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
B	N/A	2024/6/28	Kumar Y. B., Chethan	Optimize changes for low power mode, and stackup material changes.

BLOCK DIAGRAM



Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

Orderable: IWRL6432FSPEVM		Designed for: Public Release		Mod. Date: 6/26/2024	
TID #: N/A		Project Title: IWRL6432 FCCSP Power optimized design			
Number: PROC198	Rev: B	Sheet Title: BLOCK DIAGRAM			
SVN Rev: Not in version control		Assembly Variant: 001_IWR		Sheet: 1 of 8	
Drawn By: Justin Yin		File: PROC198_Diagram.SchDoc		Size: B	
Engineer: Justin Yin		Contact: http://www.ti.com/support			


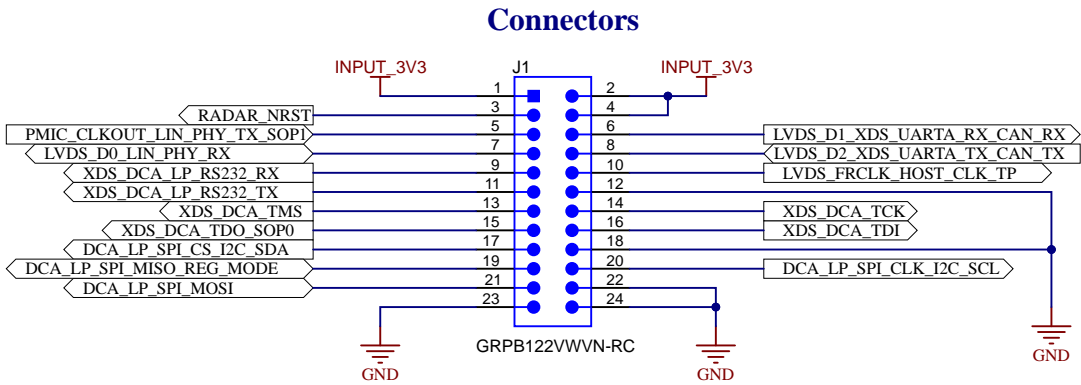

<http://www.ti.com>
© Texas Instruments 2024

TABLE OF CONTENTS


SHEET NO.	SHEET NAME
1	BLOCK DIAGRAM
2	TABLE OF CONTENTS
3	PWR_CONNECTOR
4	DC REGULATORS
5	xWRL6432_CHIP
6	DECOUPLING_CAPS
7	QSPI_FLASH
8	HARDWARE

Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.



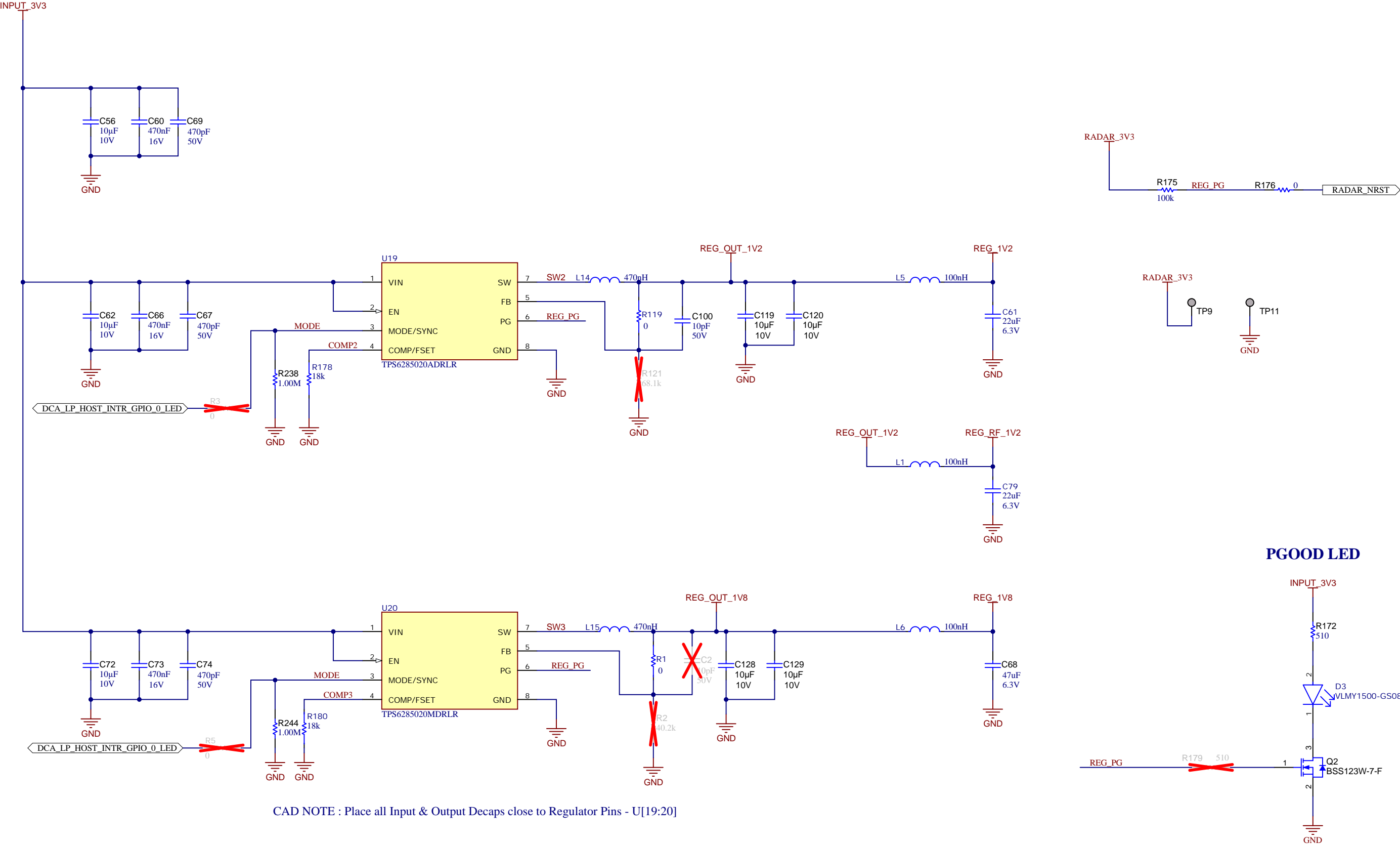
Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

Orderable: IWRL6432FSPEVM		Designed for: Public Release		Mod. Date: 6/26/2024	
TID #: N/A		Project Title: IWRL6432 FCCSP Power optimized design			
Number: PROC198	Rev: B	Sheet Title: PWR Connector			
SVN Rev: Not in version control		Assembly Variant: 001_IWR		Sheet: 3 of 8	
Drawn By: Justin Yin		File: PROC198_PWR_Connector.SchDoc		Size: B	
Engineer: Justin Yin		Contact: http://www.ti.com/support			

 **TEXAS
INSTRUMENTS**

<http://www.ti.com>
© Texas Instruments 2024

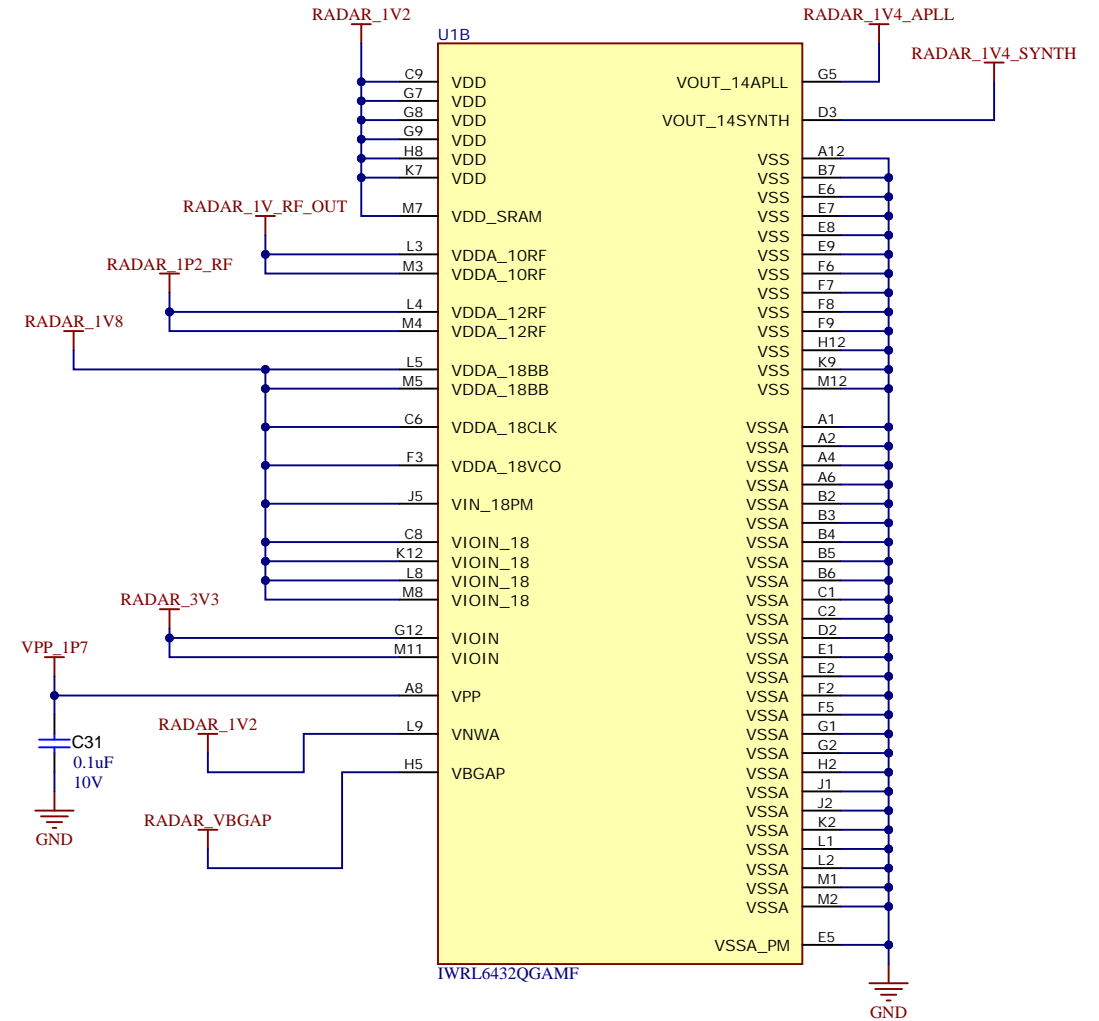
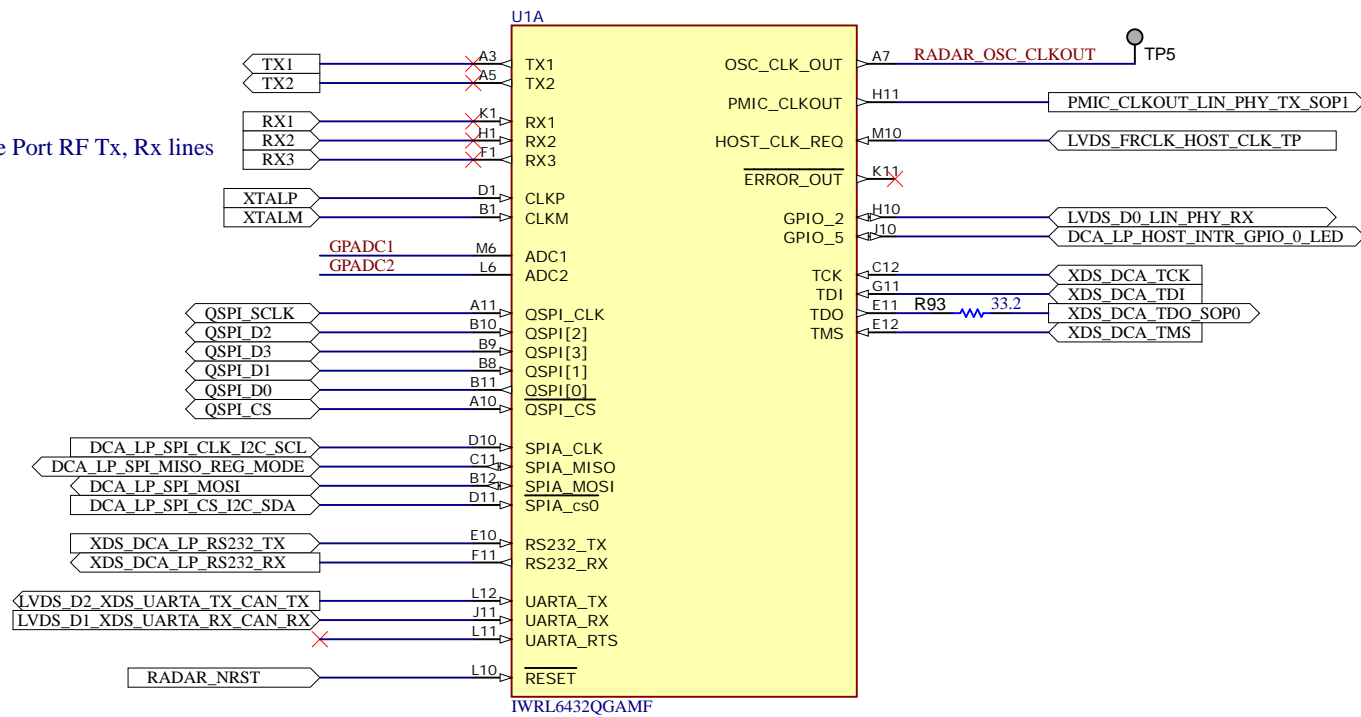
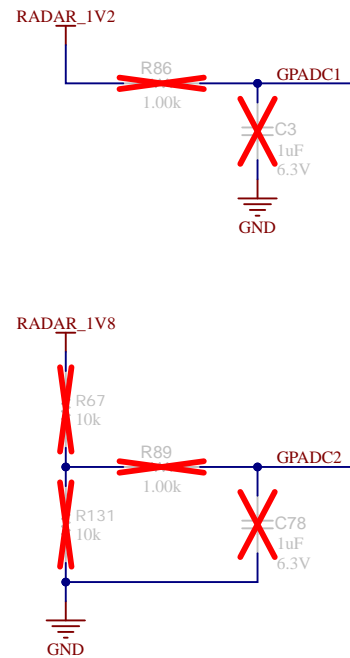
DC-DC REGULATORS - 3.3V, 1.2V & 1.8V OUTPUTS



xWRL6432 CHIP

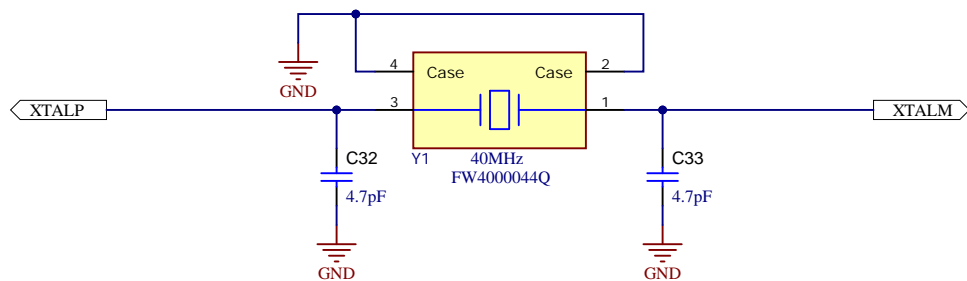
Design Note:

1. Antenna traces are GCPW traces
2. 'Generic No ERCs' were placed intentionally on Single Port RF Tx, Rx lines



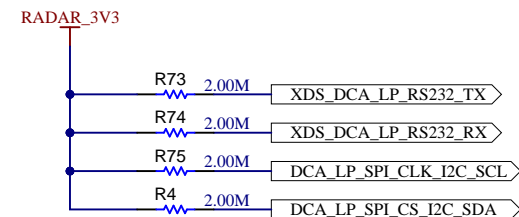
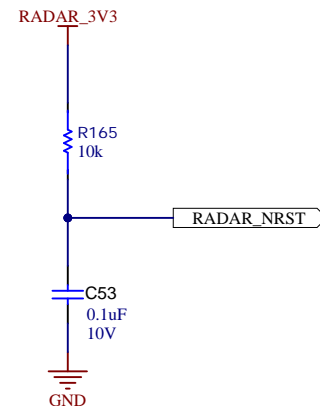
CAD Note: Place C3 and C78 close to xWRL6432 IC

40 MHz CRYSTAL OSCILLATOR



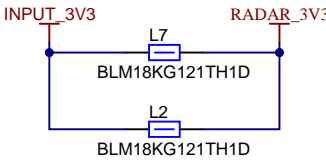
Alternate Crystal part number : CX2016SA40000D0PTWC1

RESET

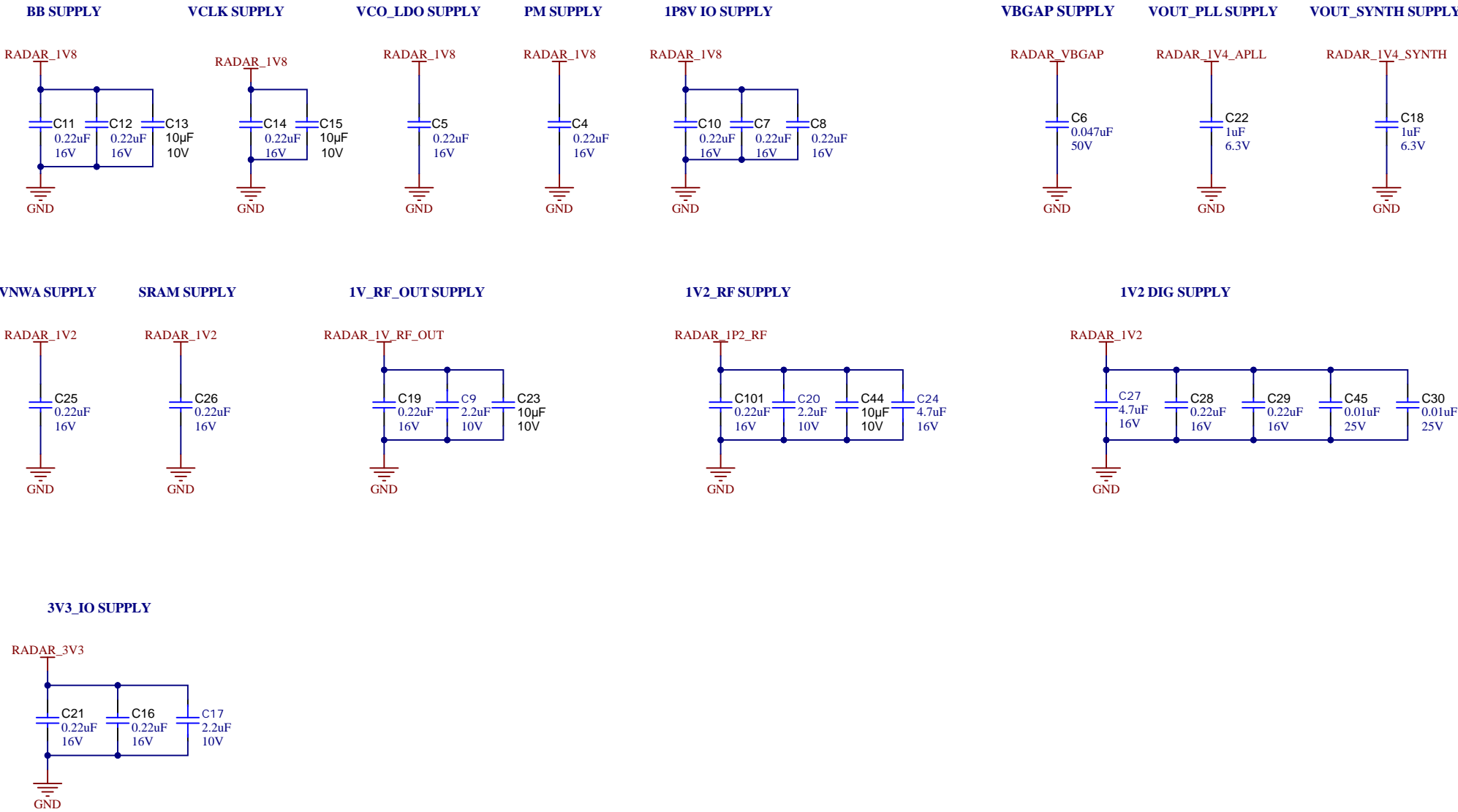
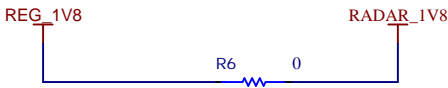


Orderable: IWRL6432FSPEVM	Designed for: Public Release	Mod. Date: 6/27/2024	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2024
TID #: N/A	Project Title: IWRL6432 FCCSP Power optimized design		
Number: PROC198	Rev: B	Sheet Title: xWRL6432_CHIP	
SVN Rev: Not in version control	Assembly Variant: 001_IWR	Sheet: 5 of 8	
Drawn By: Justin Yin	File: PROC198_xWRL6432_Chip.SchDoc	Size: B	
Engineer: Justin Yin	Contact: http://www.ti.com/support		

SUPPLY_DECOUPLING_CAPS



DC-DC CURRENT MEASUREMENT



Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.





PCB Number: PROC198
PCB Rev: B

PCB
LOGO
Texas Instruments

Variant/Label Table	
Variant	Label Text
001_IWR	IWRL6432FSEVM
002_AWR	AWRL6432FSEVM

CAPACITORS HIGHLIGHTED IN THE RED COLOR BOXES ARE ADDED FOR IMPROVEMENT AND THOSE ARE NOT MANDATORY.

ZZ1
Label Assembly Note
This Assembly Note is for PCB labels only

ZZ2
Assembly Note
These assemblies are ESD sensitive, ESD precautions shall be observed.

ZZ3
Assembly Note
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ4
Assembly Note
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

ZZ5
Assembly Note
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.