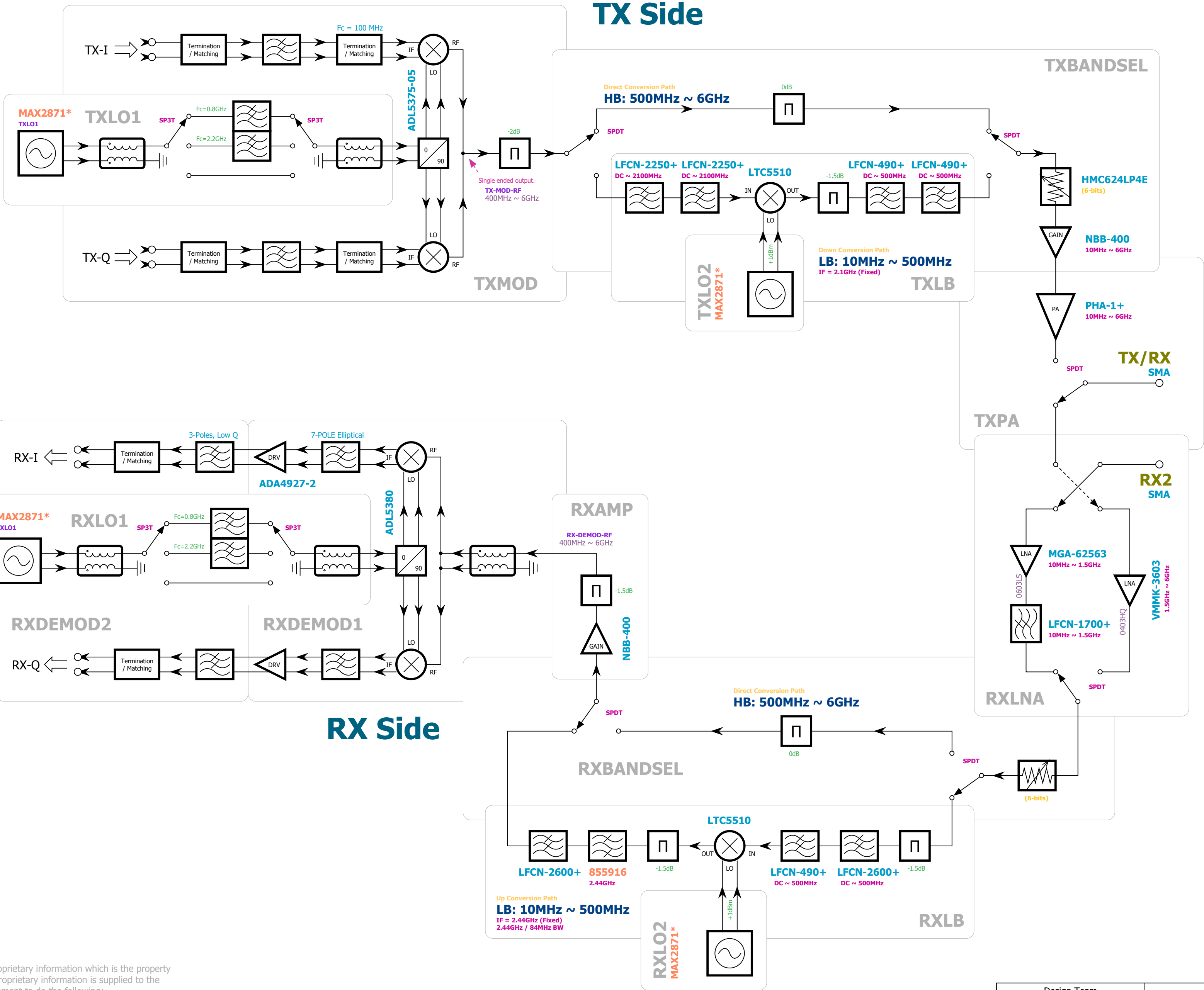



Revisions	
REV	Description
1	INITIAL PRODUCTION VERSION
2	NO ENGINEERING CHANGE, ONLY System Revision Compliance Update
3	Removed D7 and R52 to make U6 permanently "ON"
C	Relocated F3 / F26 to avoid conflict to the stand screw / Fixed Ettus Logo Size

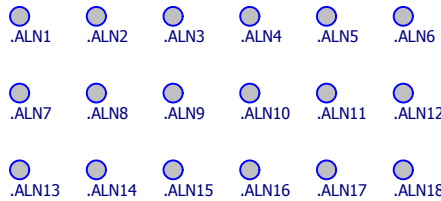
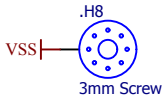
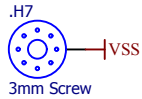
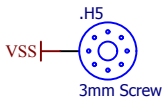
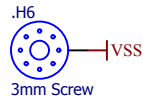
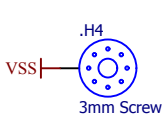
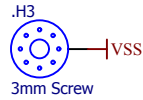
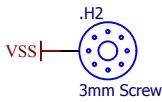
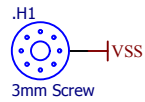
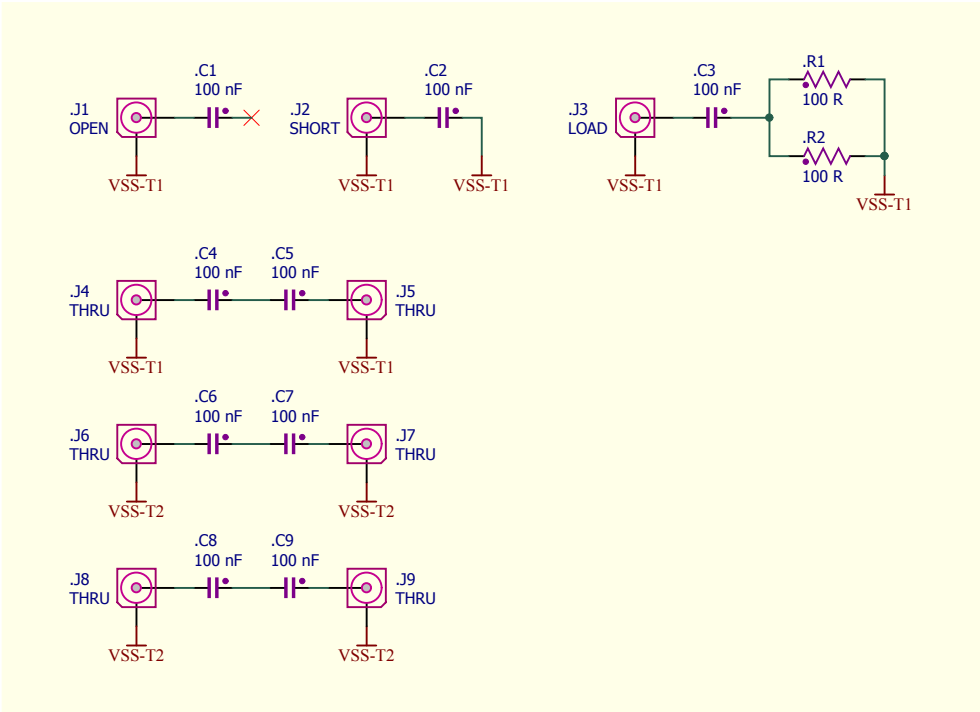


This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

(C) Copyright 2014 National Instruments Corporation. All rights reserved

Design Team		 <div>4600 Patrick Henry Drive Santa Clara, CA 95054 USA</div>			
DRAWN BY	DATE				
Shyu Lee (Xu Li)	03/19/2015				
REVISED BY	DATE				
-	-	<div>System Block Diagram</div> <div>UBX USRP DAUGHTERBOARD, 10MHz-6GHz</div>			
VERIFIED BY					
Matt Ettus / Jon Kiser					
TECHNICIAN	Ryan Reyes	SIZE	DOC CODE	DRAWING PROJECT NO	REV
ENGINEER	Shyu Lee (Xu Li)	D	610-	158278B-01	1
FILE NAME		01_BlockDiagram.SchDoc		DATE	9/8/2015
				SHEET	1 OF 13



ESD

.LOGO1

WEEE

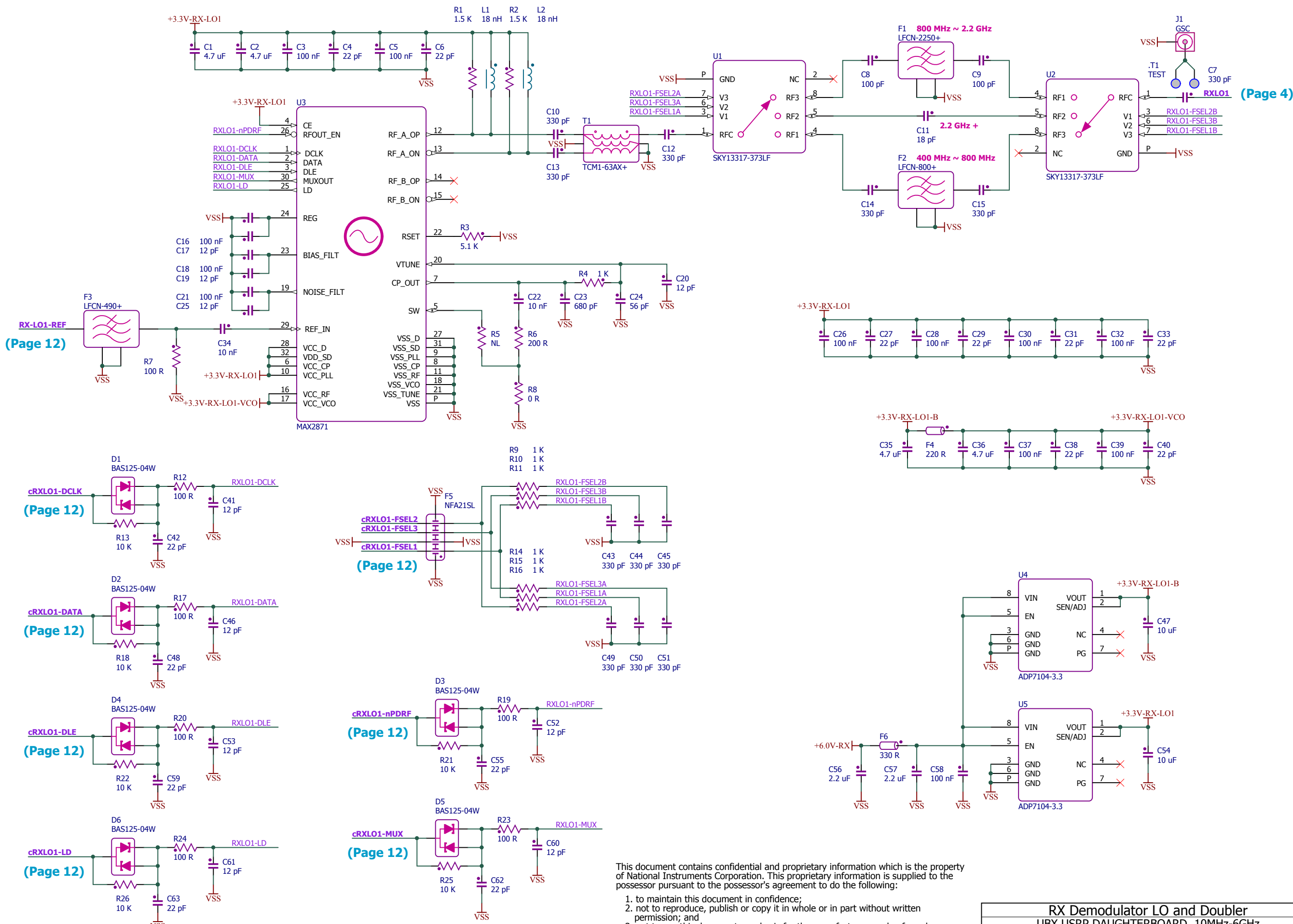
.LOGO2

This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

(C) Copyright 2014 National Instruments Corporation. All rights reserved

Essential Hardware Elements			
UBX USRP DAUGHTERBOARD, 10MHz-6GHz			
SIZE	DOC CODE	DRAWING PROJECT NO	REV
C	610-	158278B-01	1
FILE NAME	02_EssentialElements.SchDoc		DATE 9/8/2015 SHEET 2 OF 13



This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

(C) Copyright 2014 National Instruments Corporation. All rights reserved

RX Demodulator LO and Doubler			
UBX USRP DAUGHTERBOARD, 10MHz-6GHz			
SIZE	DOC CODE	DRAWING PROJECT NO	REV
C	610-	158278B-01	1
FILE NAME		03_RX_LO1.SchDoc	DATE 9/8/2015
		SHEET 3	OF 13

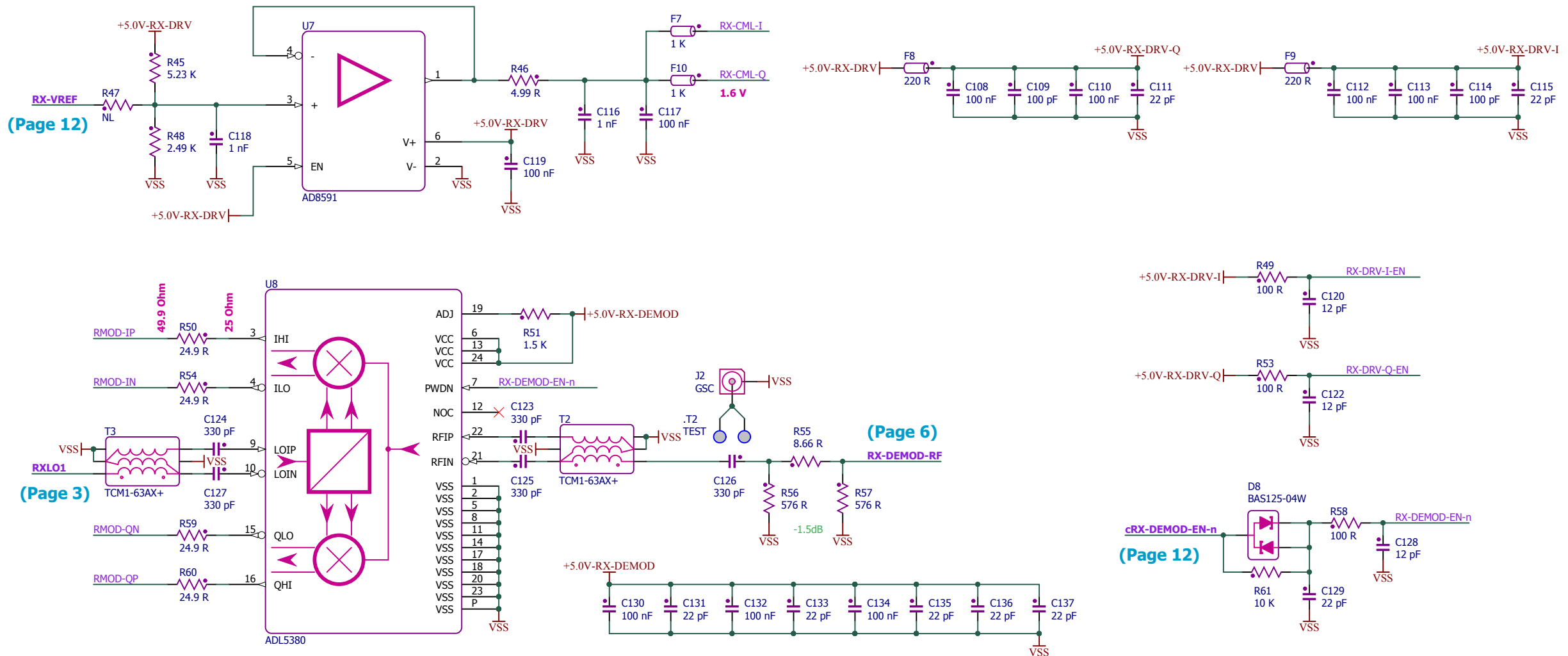
This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

(C) Copyright 2014 National Instruments Corporation. All rights reserved

(Page 12)

(Page 12)

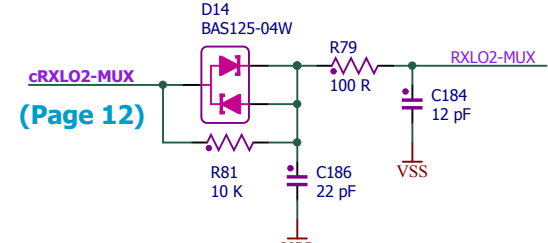
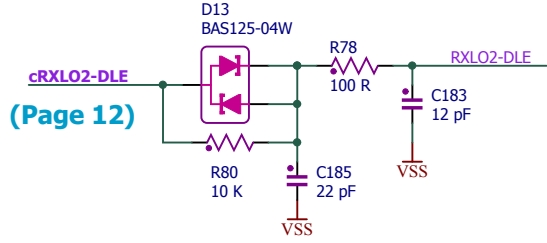
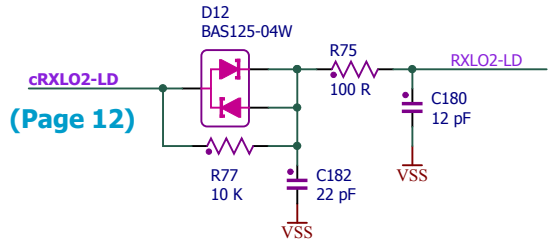
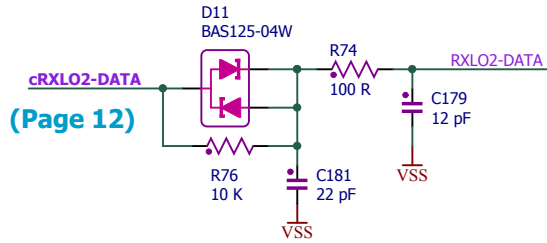
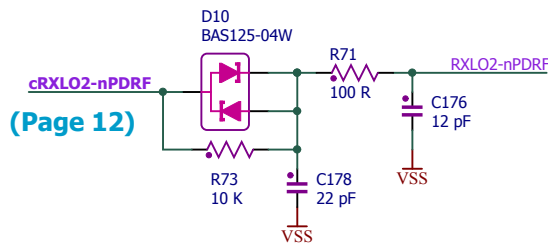
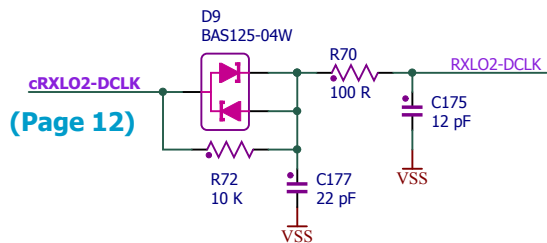
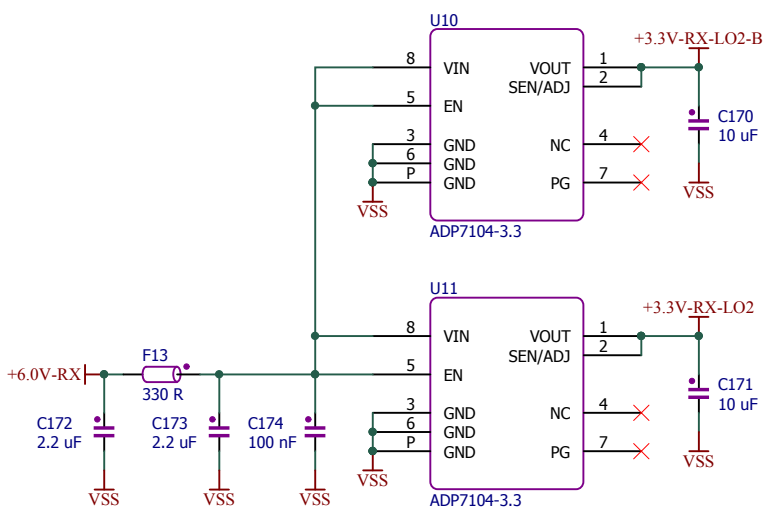
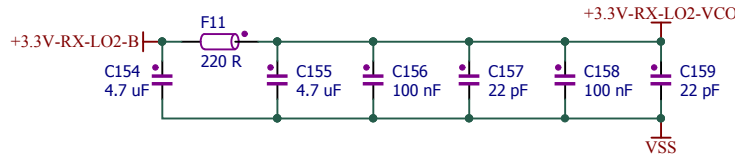
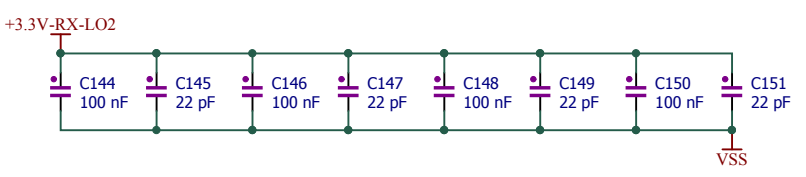
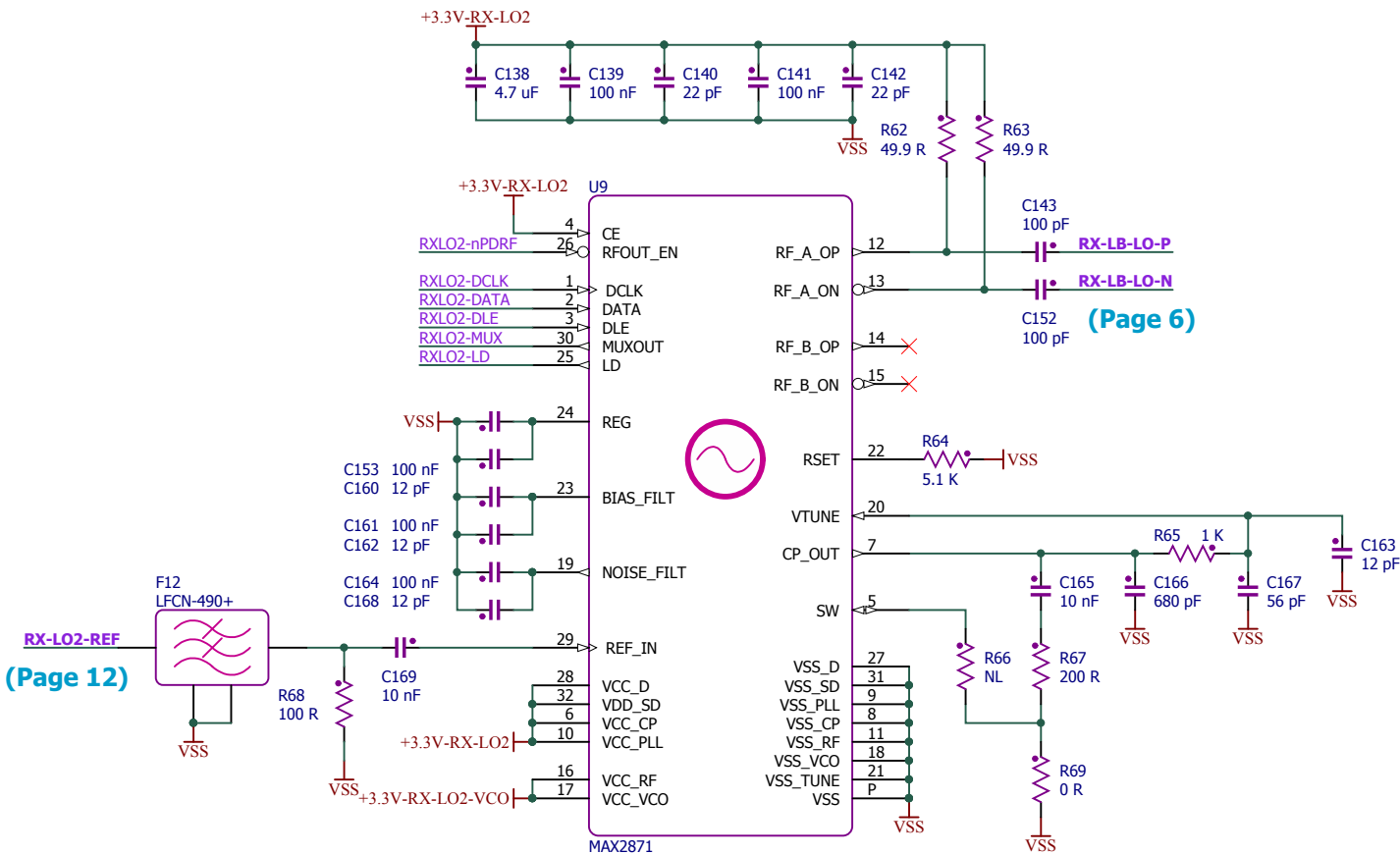


RX Demodulator and ADC Driver			
UBX USRP DAUGHTERBOARD, 10MHz-6GHz			
SIZE	DOC CODE	DRAWING PROJECT NO	REV
C	610-	158278B-01	1
FILE NAME		04_RX_DEMOD.SchDoc	DATE 9/8/2015
		SHEET 4	OF 13

This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

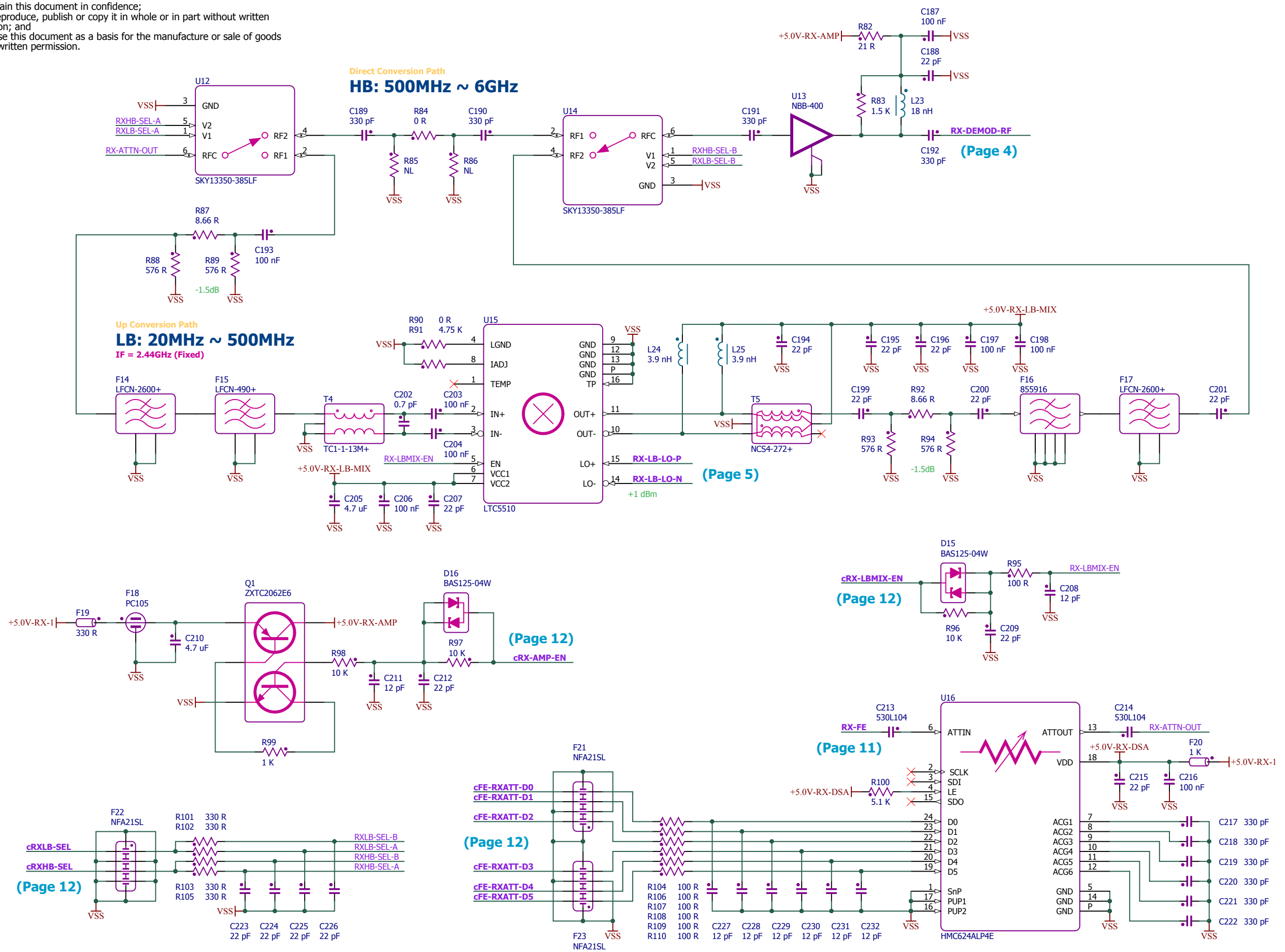
1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

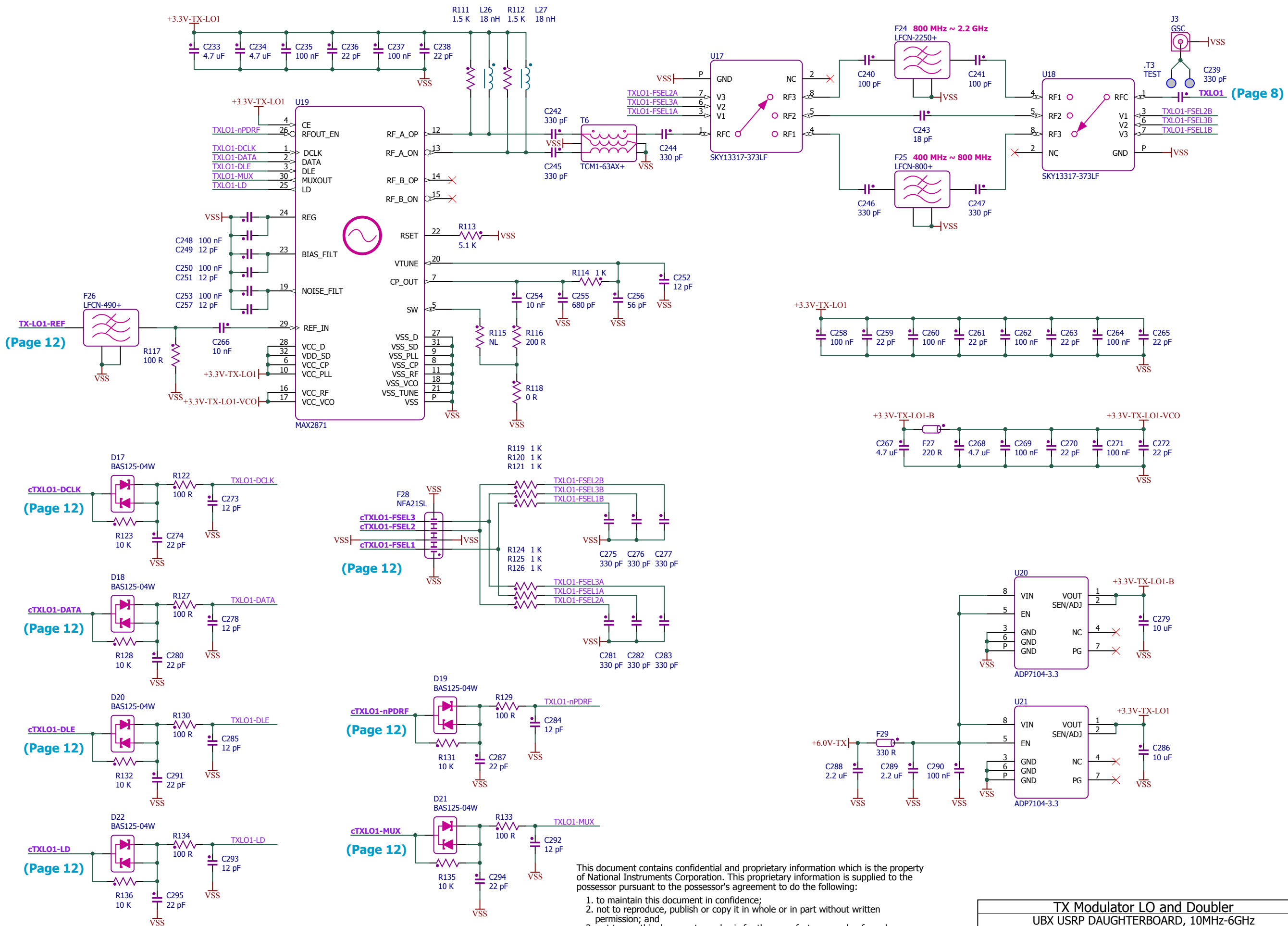
(C) Copyright 2014 National Instruments Corporation. All rights reserved



RX Low Band LO PLL and Mixer Driver			
UBX USRP DAUGHTERBOARD, 10MHz-6GHz			
SIZE	DOC CODE	DRAWING PROJECT NO	REV
C	610-	158278B-01	1
FILE NAME		05_RX_LO2.SchDoc	DATE 9/8/2015 SHEET 5 OF 13

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.





This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

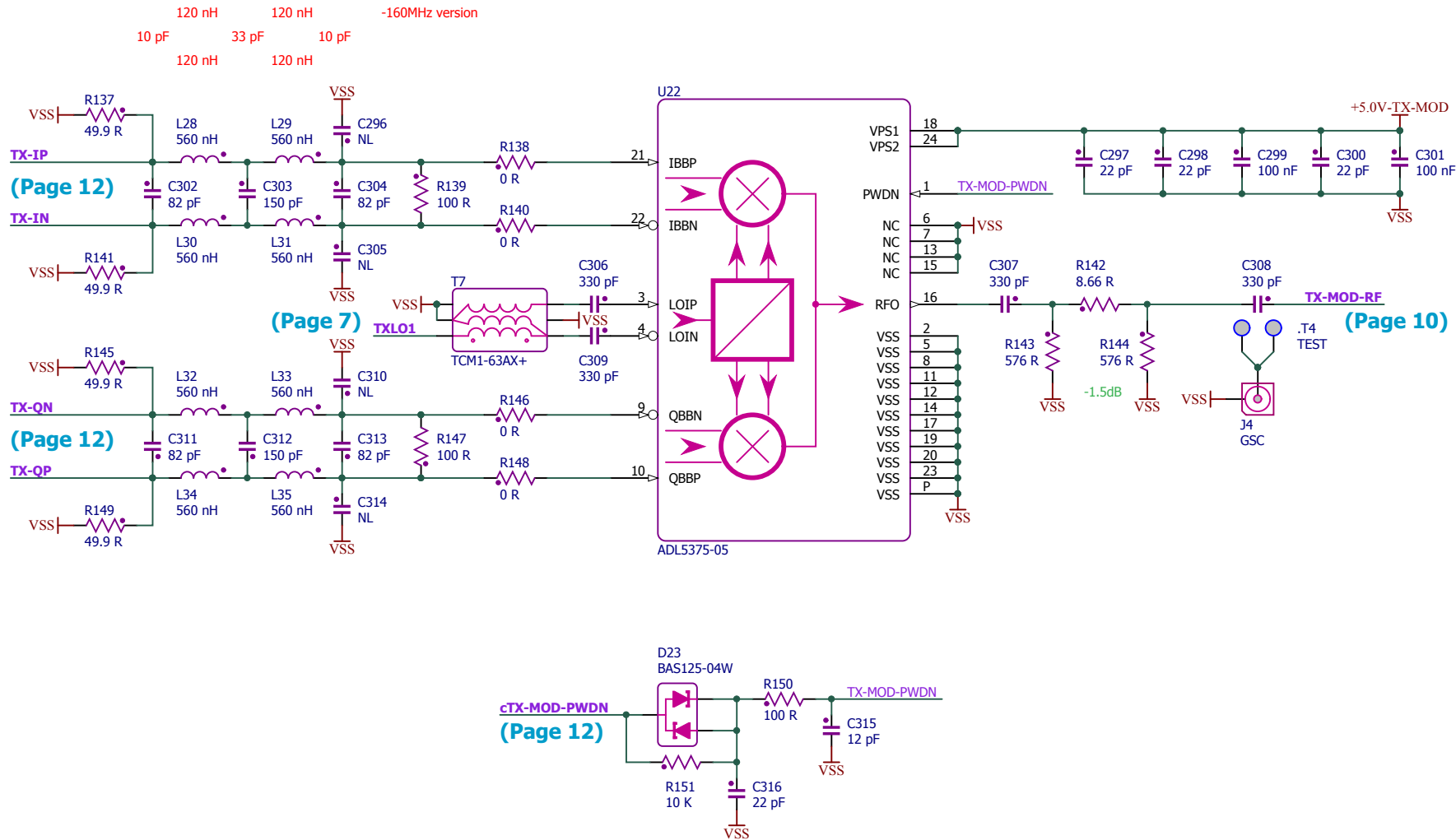
(C) Copyright 2014 National Instruments Corporation. All rights reserved

TX Modulator LO and Doubler			
UBX USRP DAUGHTERBOARD, 10MHz-6GHz			
SIZE	DOC CODE	DRAWING PROJECT NO	REV
C	610-	158278B-01	1
FILE NAME 07_TX_LO1.SchDoc		DATE 9/8/2015	SHEET 7 OF 13

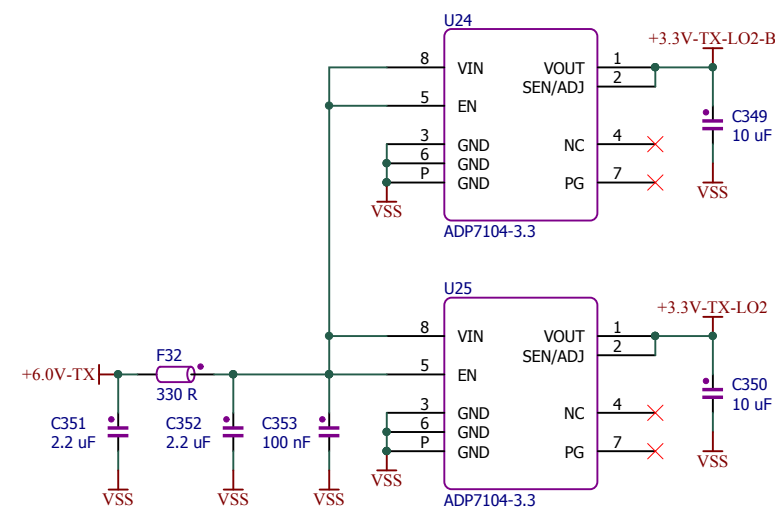
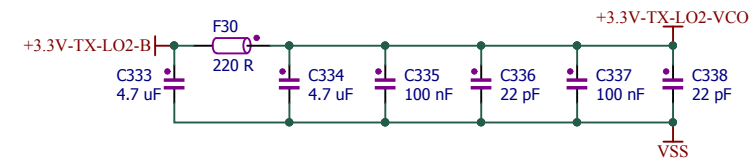
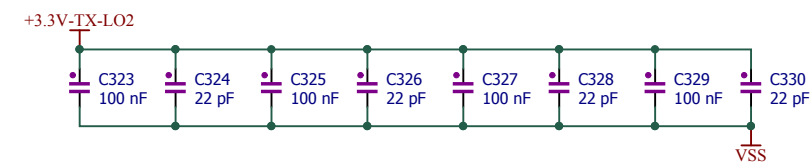
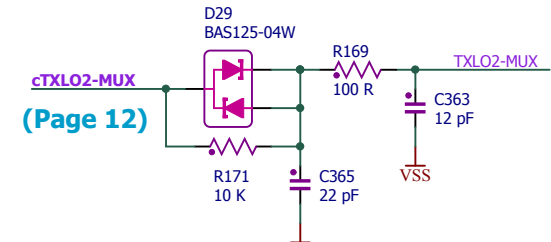
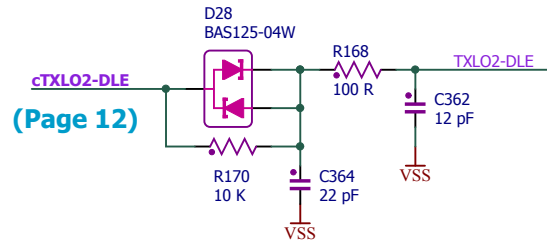
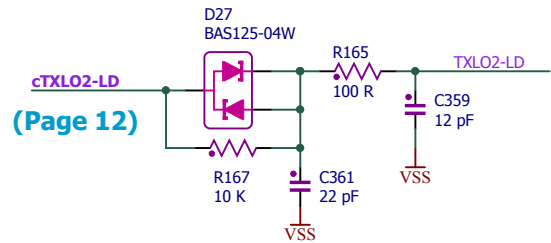
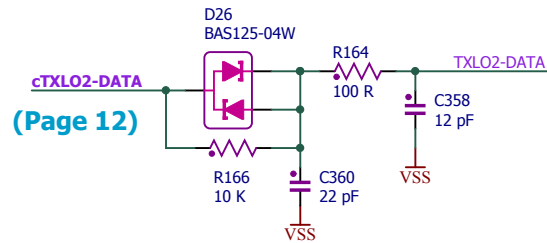
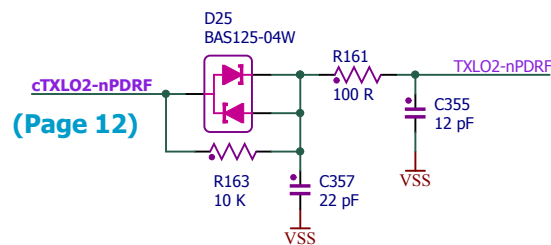
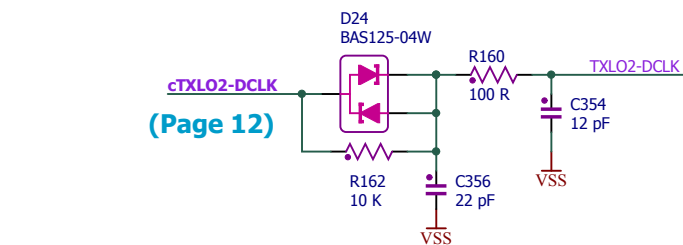
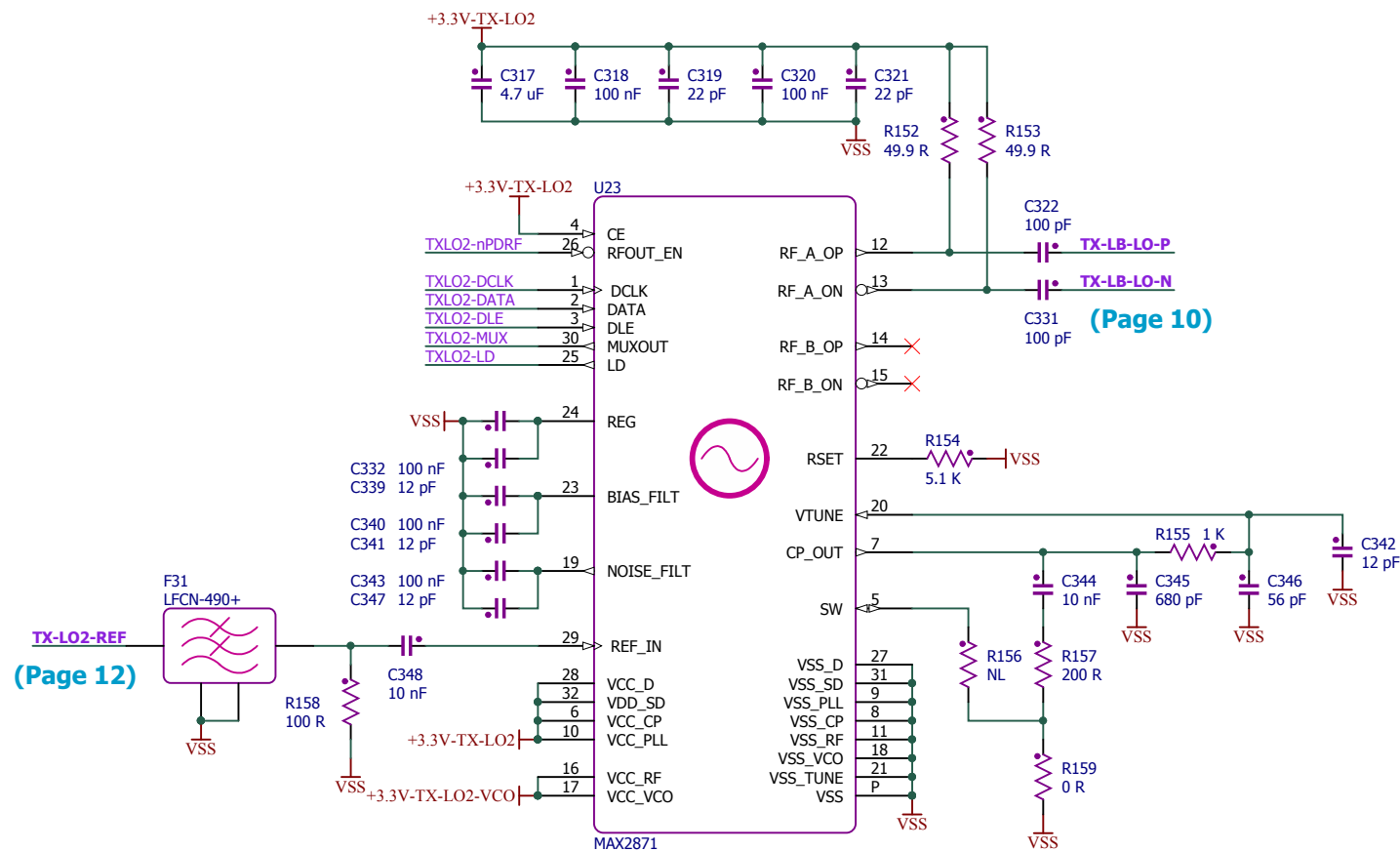
This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

(C) Copyright 2014 National Instruments Corporation. All rights reserved



TX Modulator				
UBX USRP DAUGHTERBOARD, 10MHz-6GHz				
SIZE	DOC CODE	DRAWING PROJECT NO		REV
C	610-	158278B-01		1
FILE NAME	08_TX_MOD.SchDoc	DATE	9/8/2015	SHEET 8 OF 13

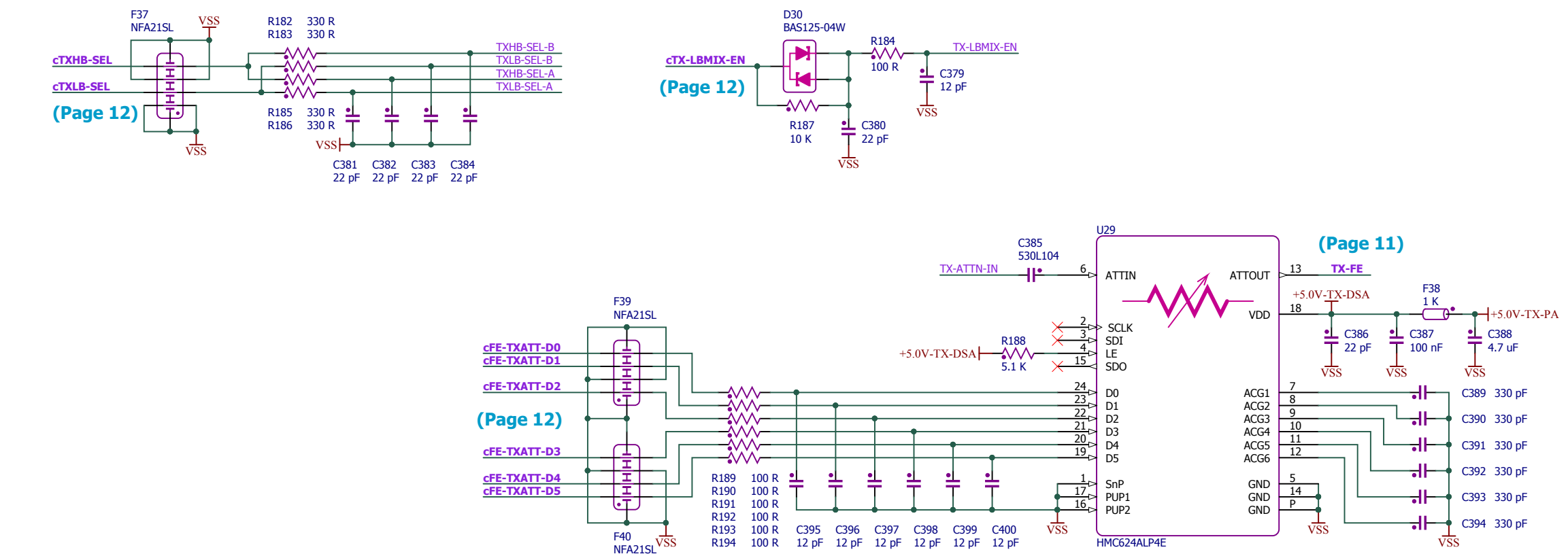
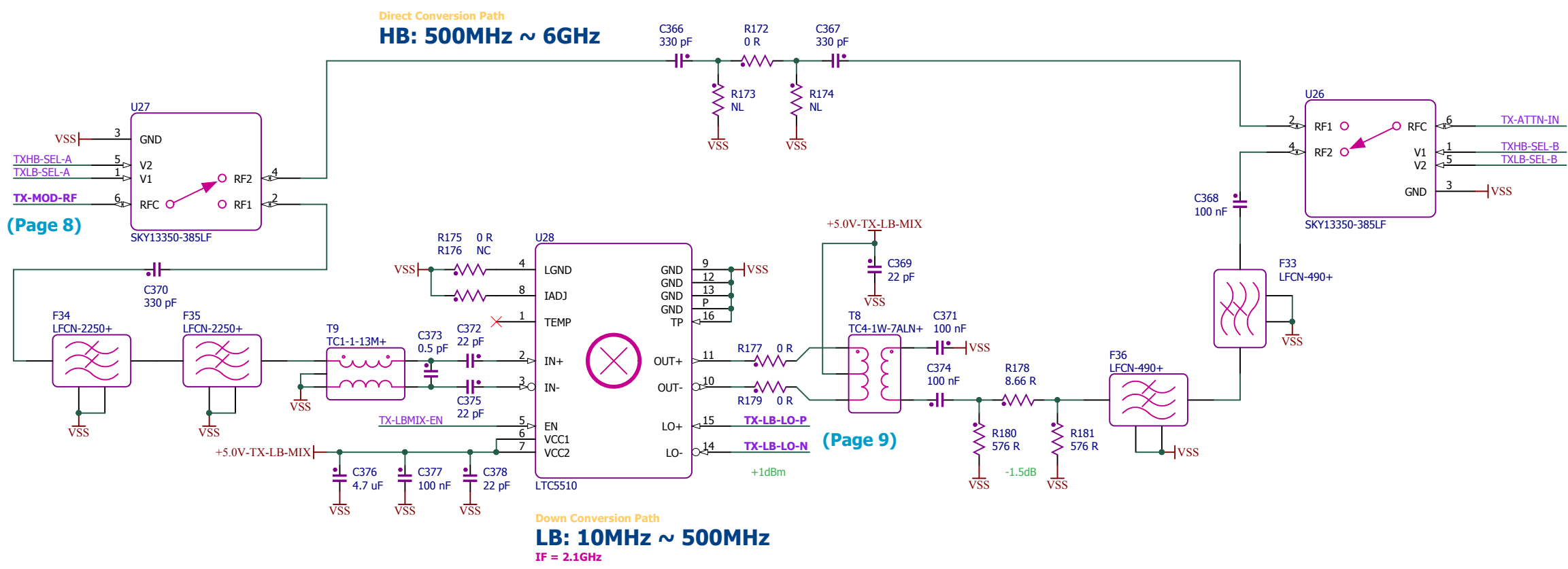


This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

(C) Copyright 2014 National Instruments Corporation. All rights reserved

RX Low Band LO PLL and Mixer Driver			
UBX USRP DAUGHTERBOARD, 10MHz-6GHz			
SIZE	DOC CODE	DRAWING PROJECT NO	REV
C	610-	158278B-01	1
FILE NAME		09_TX_LO2.SchDoc	DATE 9/8/2015
		SHEET 9	OF 13



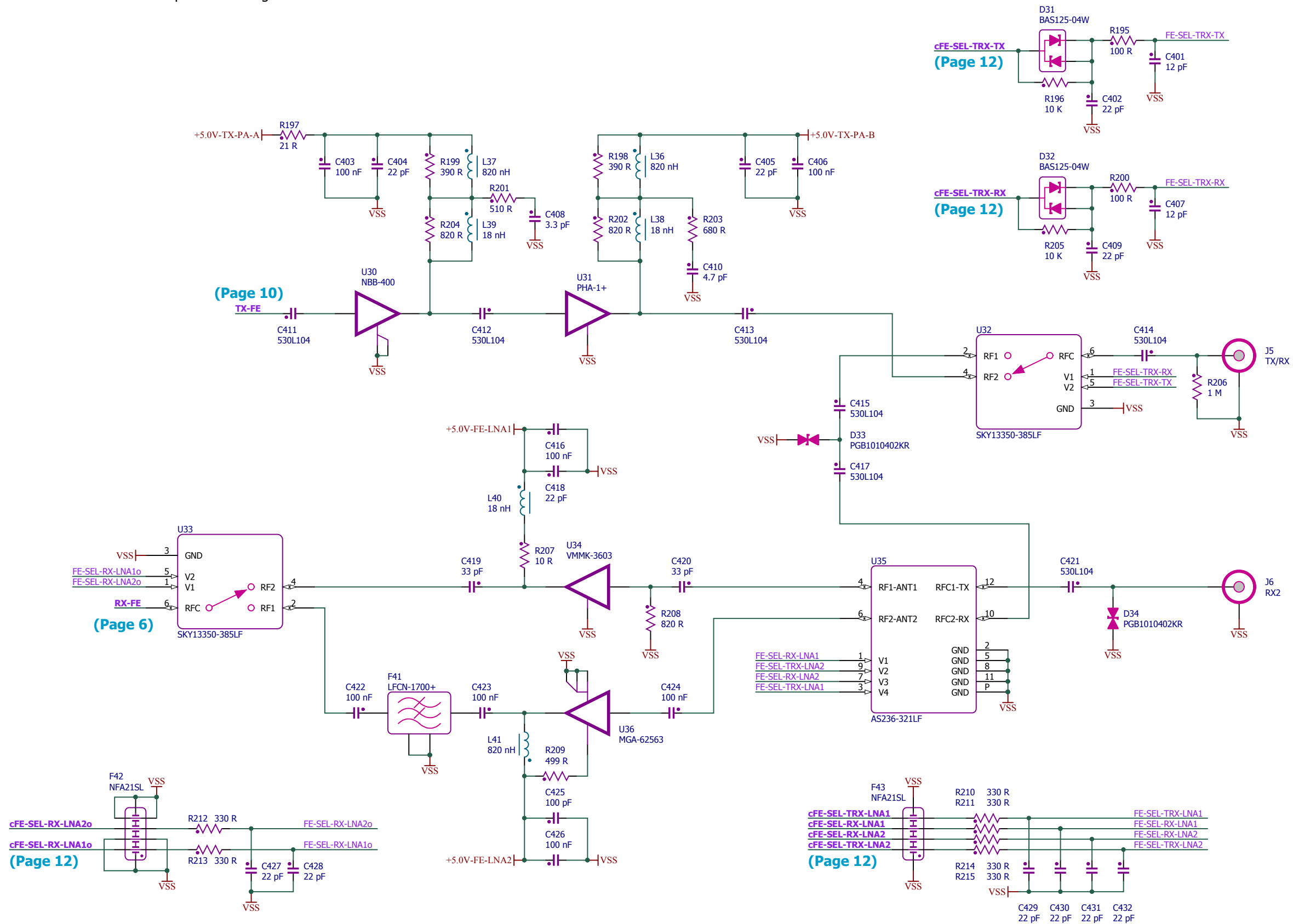
This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

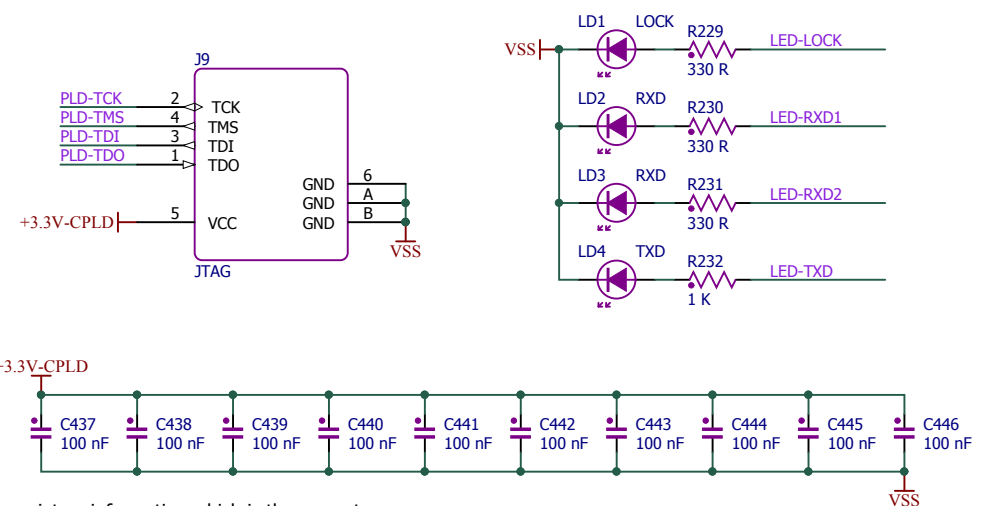
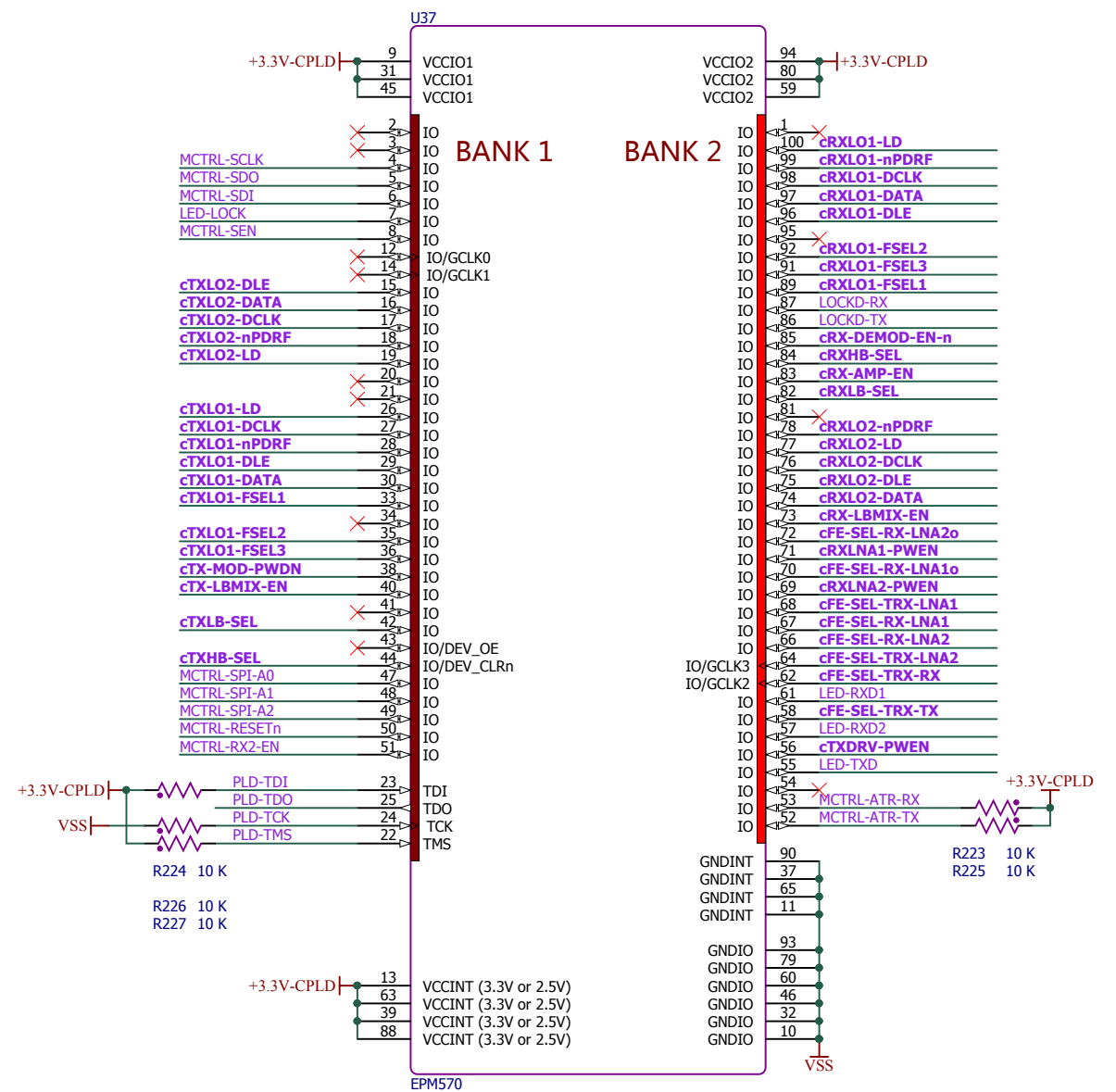
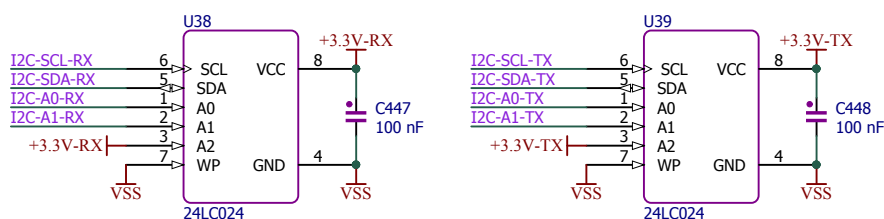
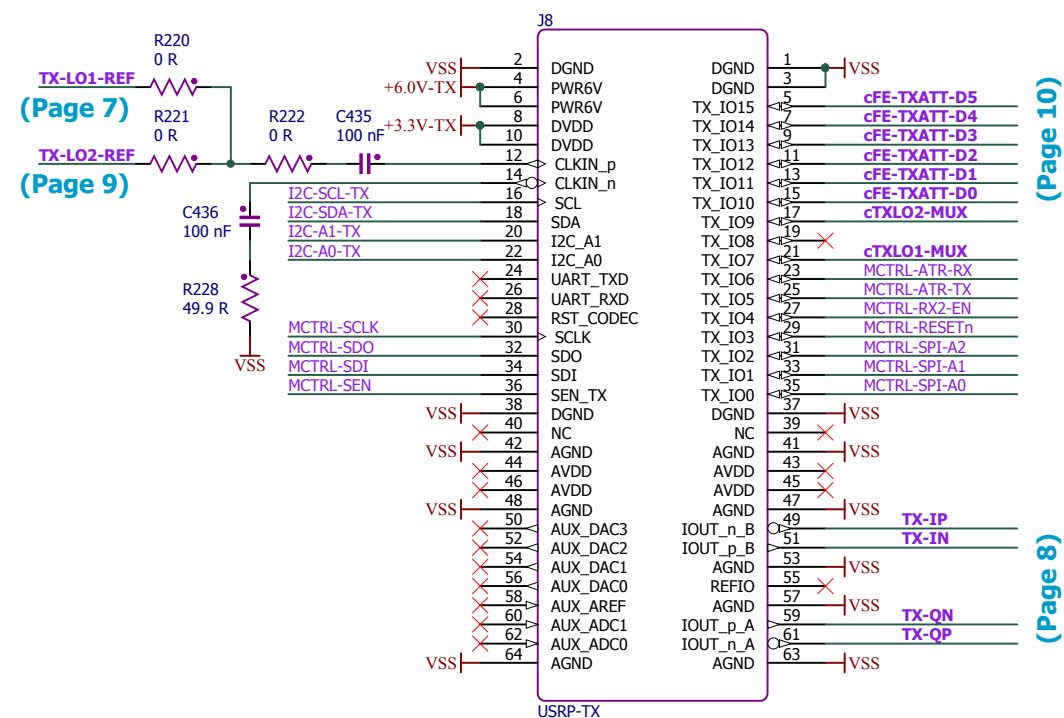
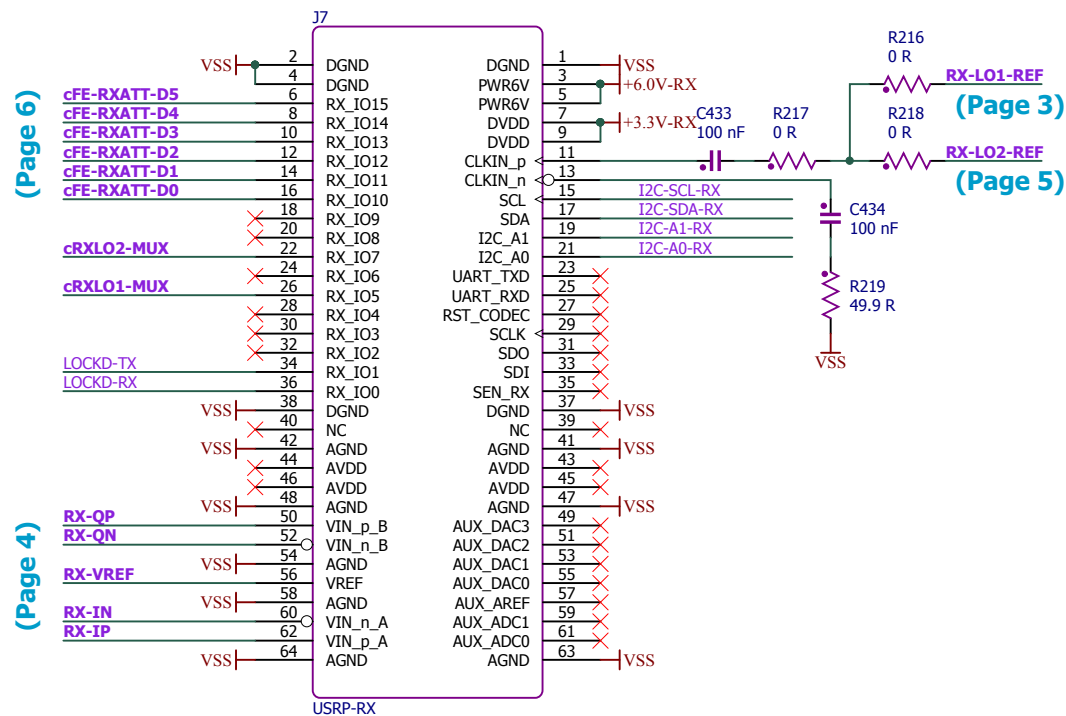
(C) Copyright 2014 National Instruments Corporation. All rights reserved

TX Band Selector and Low Band Mixer			
UBX USRP DAUGHTERBOARD, 10MHz-6GHz			
SIZE	DOC CODE	DRAWING PROJECT NO	REV
C	610-	158278B-01	1
FILE NAME	10_TX_BANDSEL.SchDoc	DATE 9/8/2015	SHEET 10 OF 13

(C) Copyright 2014 National Instruments Corporation. All rights reserved



RF Frontend			
UBX USRP DAUGHTERBOARD, 10MHz-6GHz			
SIZE C	DOC CODE 610-	DRAWING PROJECT NO 158278B-01	REV 1
FILE NAME	11_FrontEnd_SchDoc	DATE 9/8/2015	SHEET 11 OF 13



This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

(C) Copyright 2014 National Instruments Corporation. All rights reserved

USRP Standard Daughter Board Elements				
UBX USRP DAUGHTERBOARD, 10MHz-6GHz				
SIZE	DOC CODE	DRAWING PROJECT NO	REV	
C	610-	158278B-01	1	
FILE NAME	12 USRP-10 To SchDoc	DATE 9/8/2015	SHEET 12 OF 13	

D

C

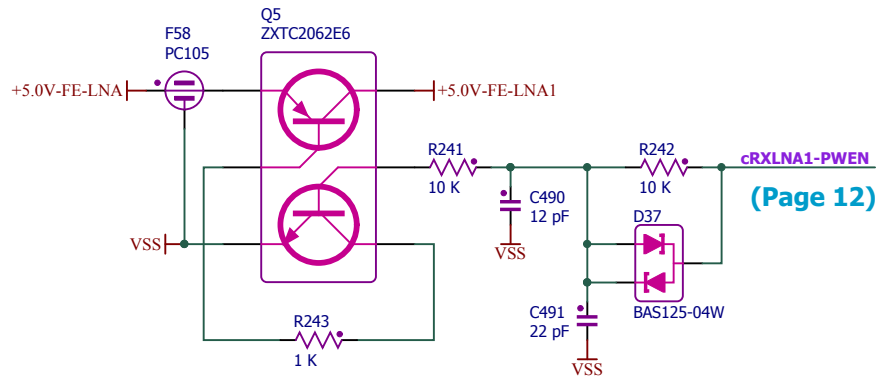
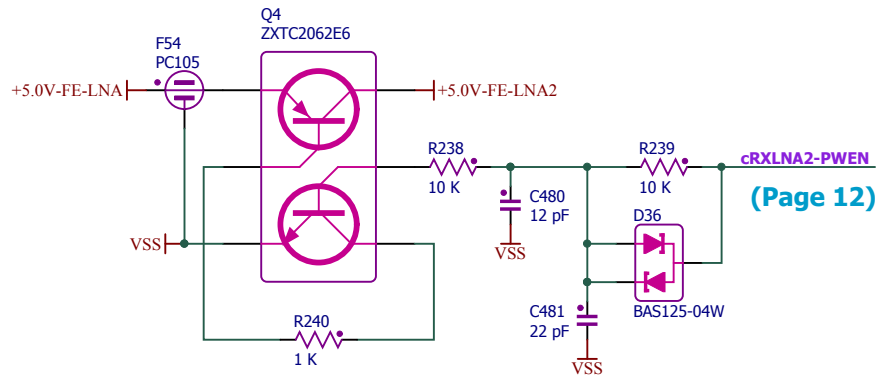
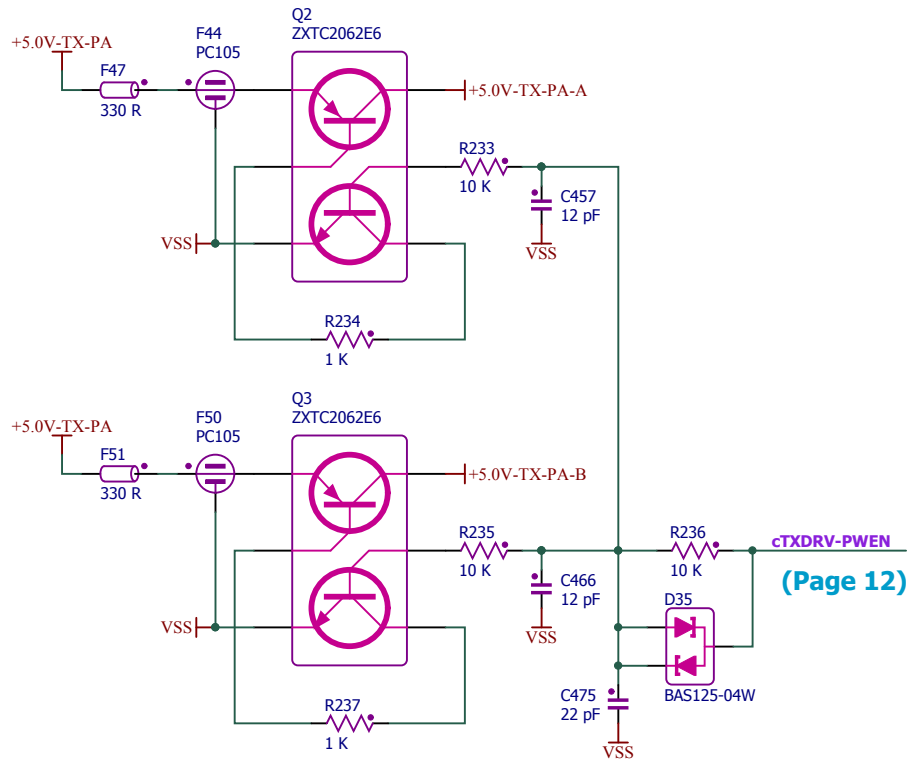
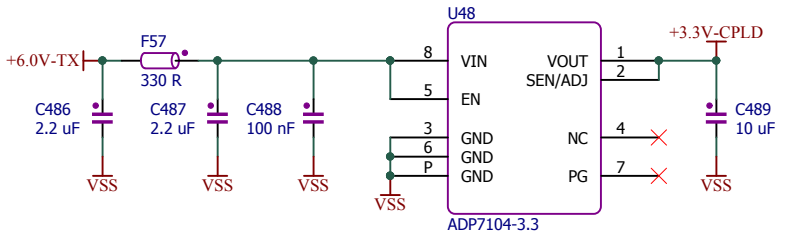
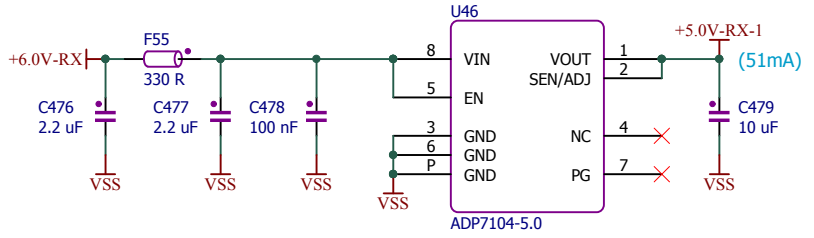
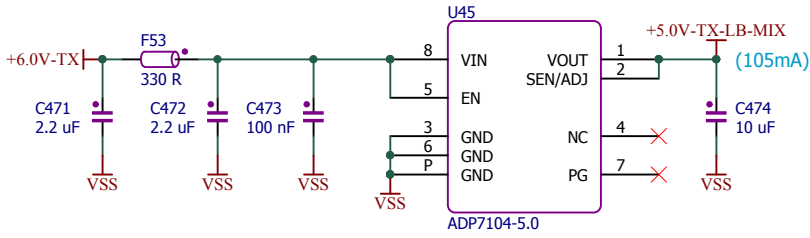
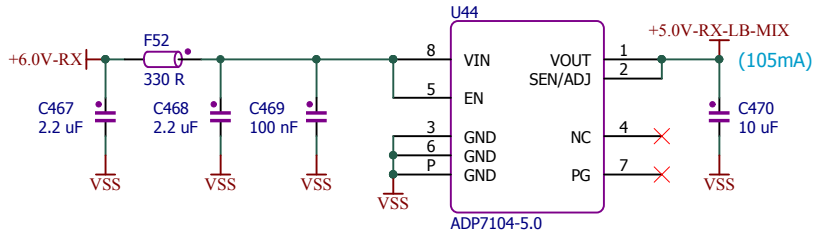
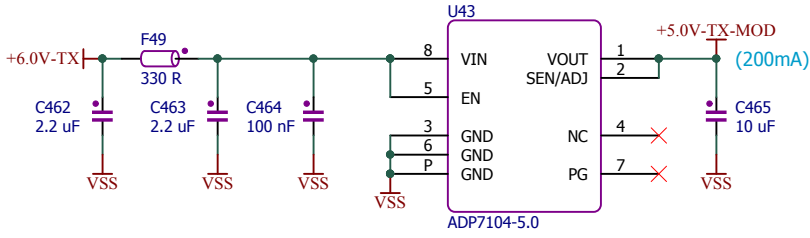
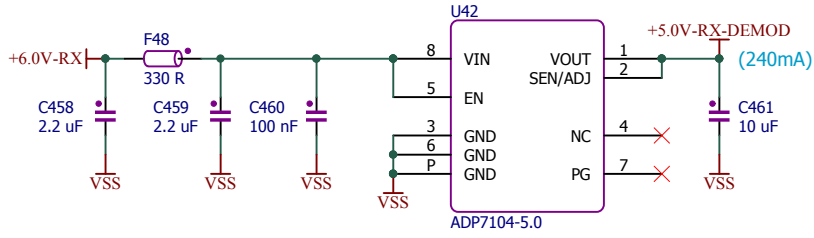
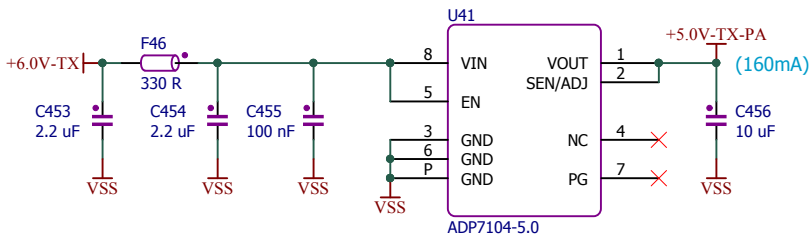
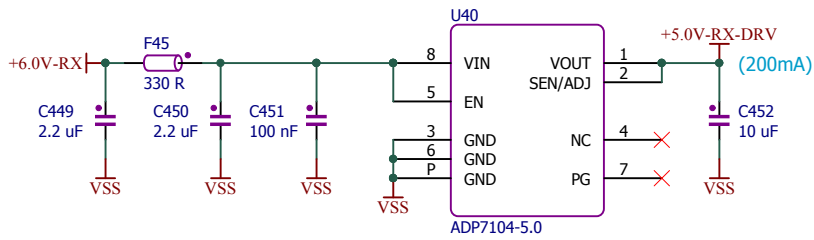
B

A

This document contains confidential and proprietary information which is the property of National Instruments Corporation. This proprietary information is supplied to the possessor pursuant to the possessor's agreement to do the following:

1. to maintain this document in confidence;
2. not to reproduce, publish or copy it in whole or in part without written permission; and
3. not to use this document as a basis for the manufacture or sale of goods without written permission.

(C) Copyright 2014 National Instruments Corporation. All rights reserved



Power Supply				
UBX USRP DAUGHTERBOARD, 10MHz-6GHz				
SIZE	DOC CODE	DRAWING PROJECT NO		REV
C	610-	158278B-01		1
FILE NAME	13_PowerSupply.SchDoc		DATE	SHEET
			9/8/2015	13 OF 13