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REVISIONS	
REV	DESCRIPTION
2	REFER TO DATABASE FOR DWG STATUS

MODES for SMA's:

OCXO or Network REF External REF GPS

Optional Ref Out

PPS In

Optional Ref Out



PPS IN SMA
1.8V FPGA Side
3.3V User Side
5V Tolerant

REF_OUT SMA

pg 2

REF_IN SMA

10MHz

pg 2

GPS_IN SMA

GPSDO

pg 2

3x Panel LED

pg 2

PPS, GPS_LOCK, REF_LOCK

DIR

Trigger I/O SMA

1.8V FPGA Side
3.3V User Side

pg 2

PPS IN SMA
1.8V FPGA Side
3.3V User Side
5V Tolerant

REF_OUT SMA

pg 2

REF_IN SMA

10MHz

pg 2

GPS_IN SMA

GPSDO

pg 2

LTE-LITE GPSDO

pg 2

Voltage Control MUX

pg 2

DAC

pg 2

OCXO

pg 2

SE REF MUX

pg 2

Reference Buffer

pg 2

Differential REF/Export MUX

I/O Board-Board

pg 2

Jitter Cleaner DPLL and APLL

2x I2C GPIO Expander

pg 2

ID EEPROM

pg 3

GLOBAL FIDUCIALS

NC_FD_1	FD3
NC_FD_2	FD2
NC_FD_3	FD1
NC_FD_4	FD6
NC_FD_5	FD4
NC_FD_6	FD5

TOOLING HOLES

NTP_NC_1	TL3
NTP_NC_2	TL2
NTP_NC_3	TL1

SHIELD HOLES

NTP_NC_4	MH1
NTP_NC_5	MH2
NTP_NC_6	MH3
NTP_NC_7	MH4
NTP_NC_8	MH5
NTP_NC_9	MH6
NTP_NC_10	MH7

DESIGN TEAM	
DRAWN	DATE
REVISED	DATE
CHECKED	
TECH	
ENGR	

		NI.COM AUSTIN, TEXAS	
TITLE SCHEMATIC DIAGRAM SCH,USRP CLOCKING AUXILIARY BOARD, LTE-LITE			
SIZE	CODE IDENT NO.	DRAWING NO.	REV
C	7U296	149862B-01	2
SCALE: NONE		SHEET 1 OF 5	

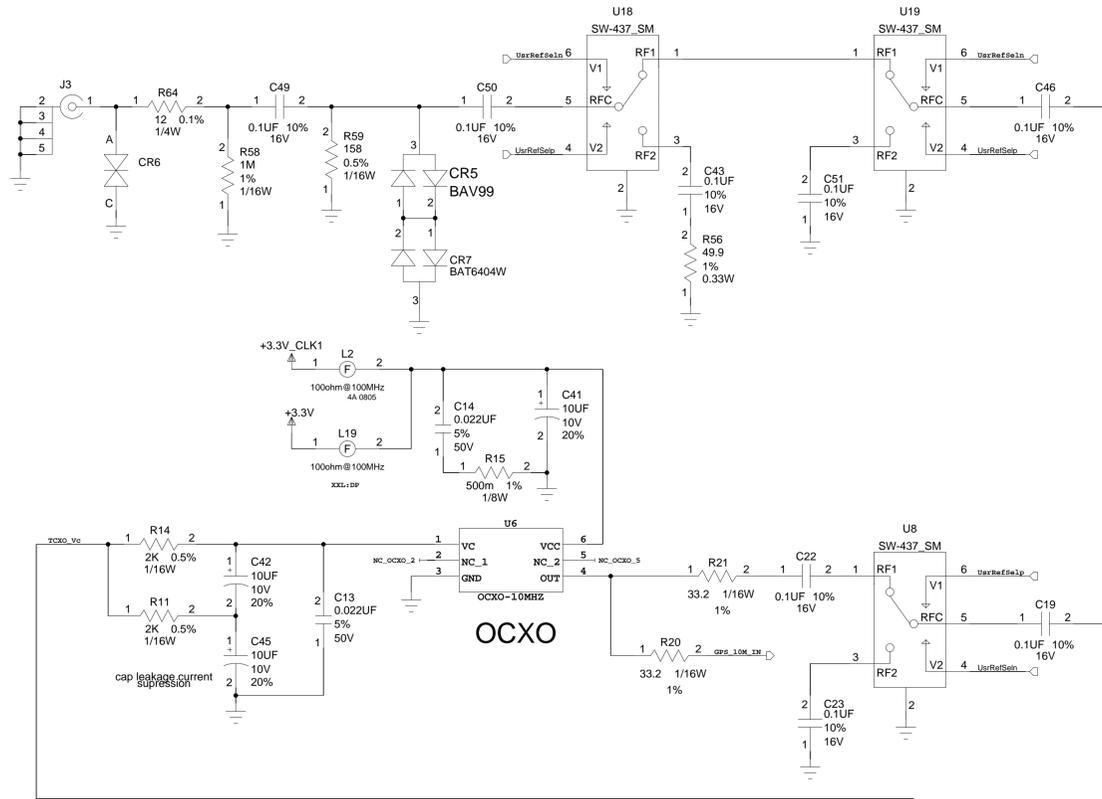
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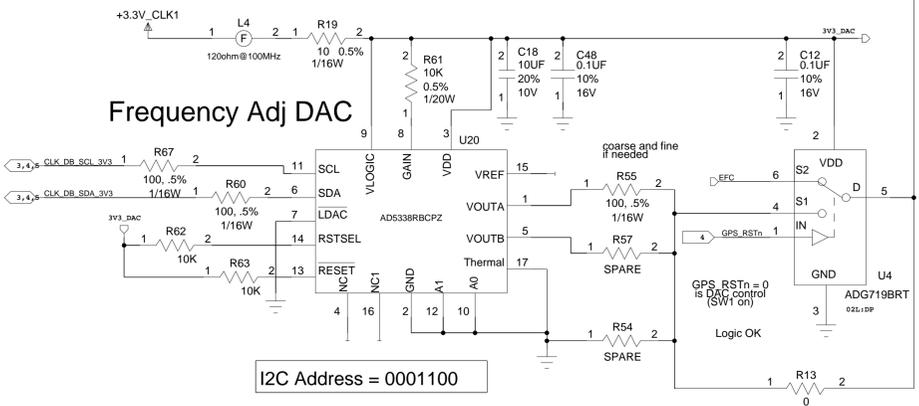
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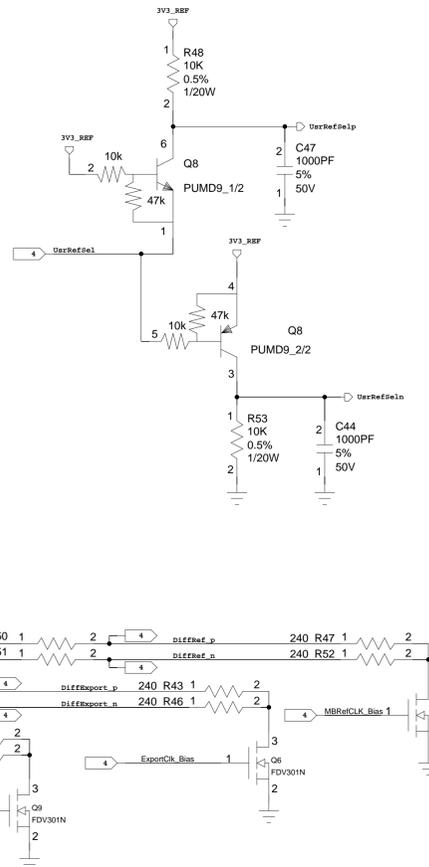
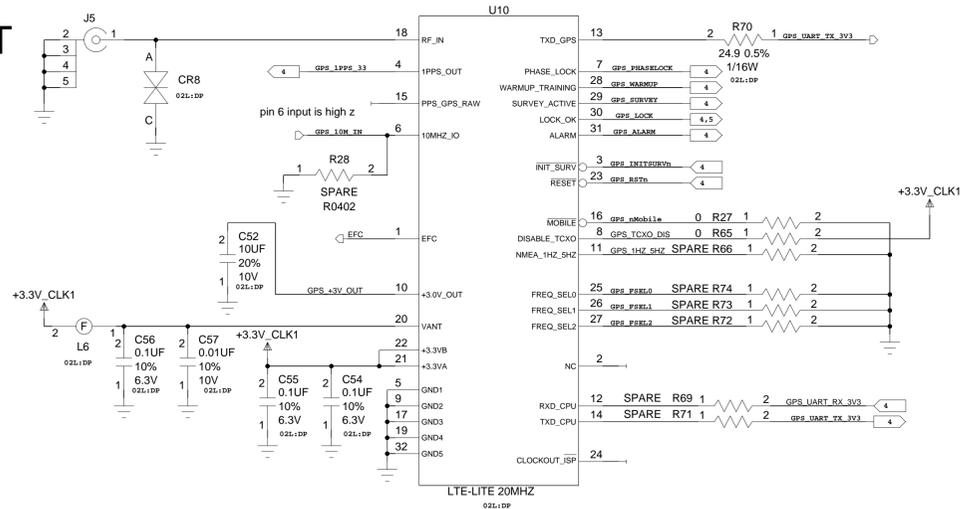
Ref In



Frequency Adj DAC



GPS ANT

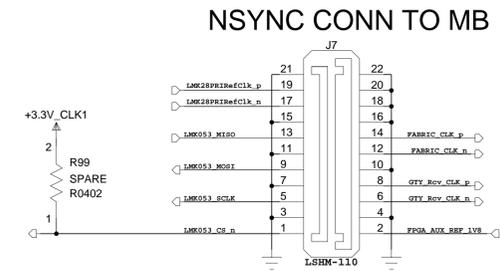
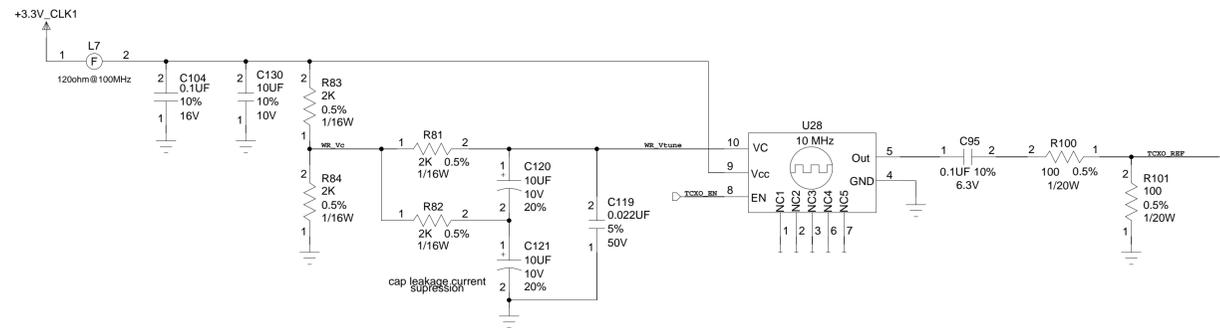
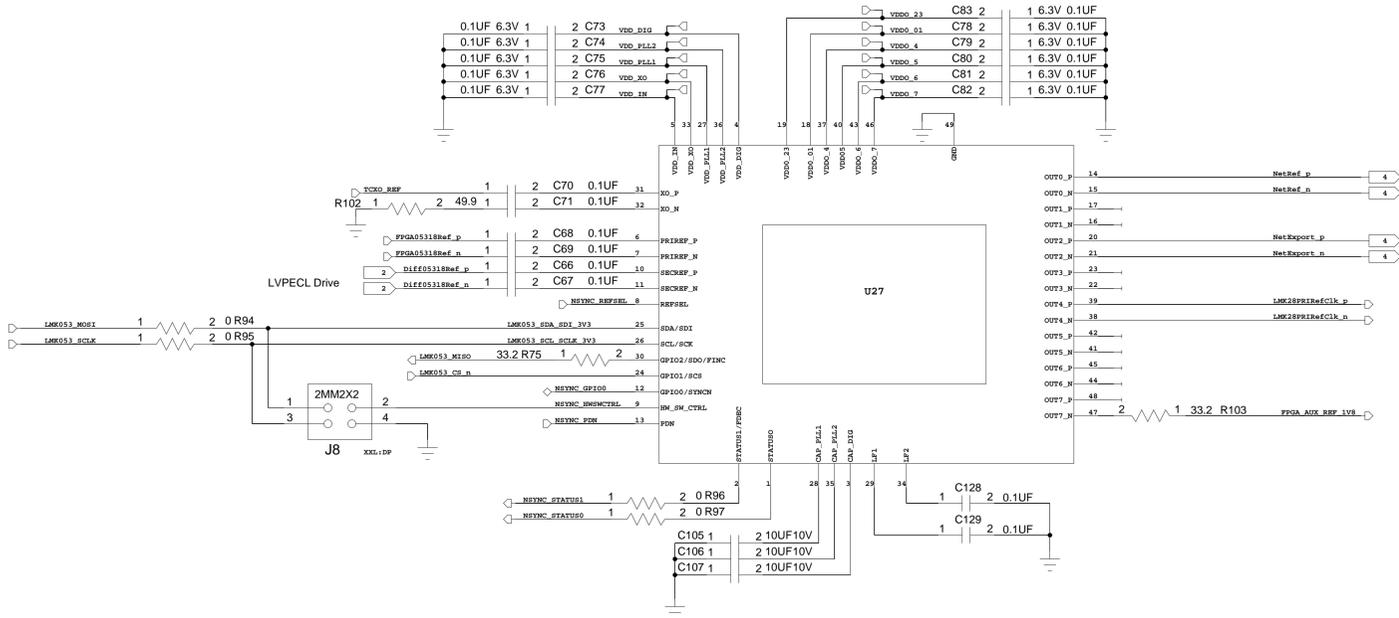
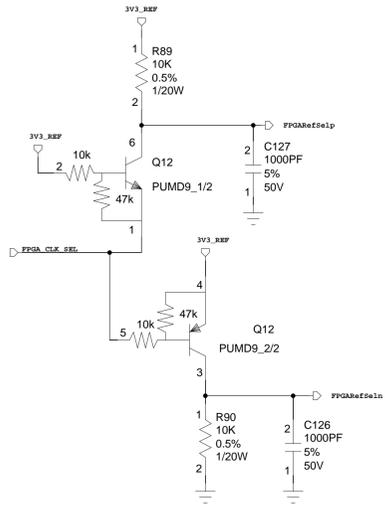
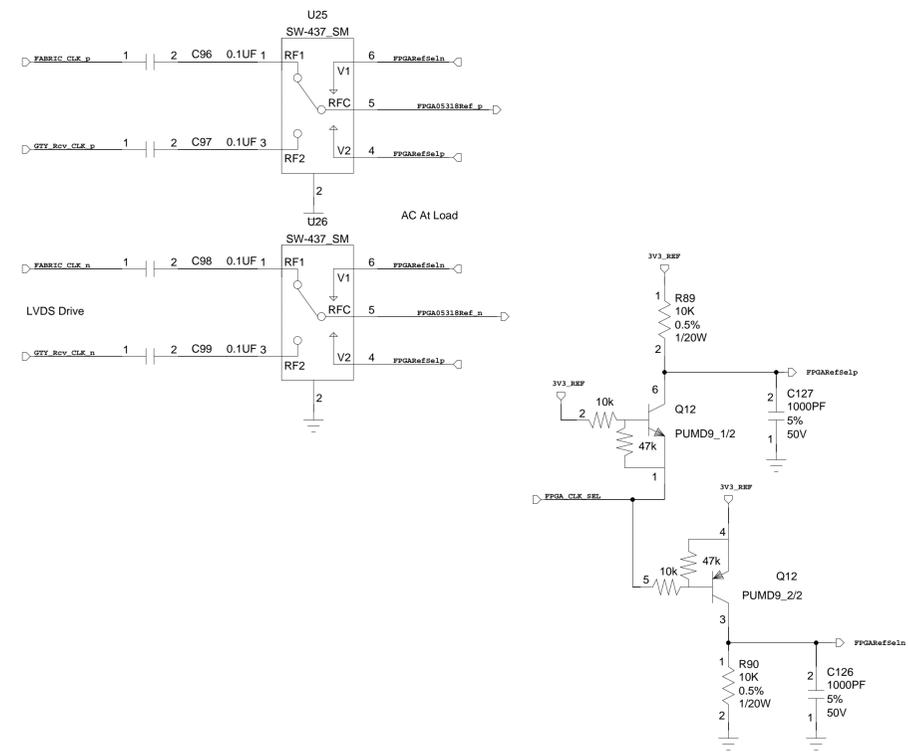
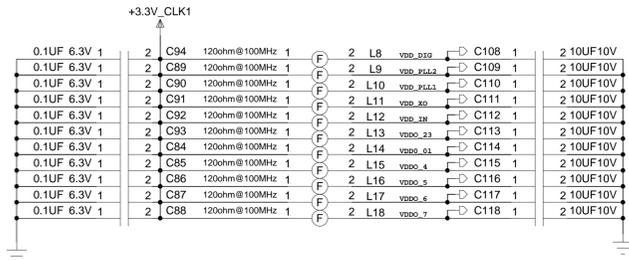


Internal/External Reference			
USRP X400 Sync Board			
SIZE	CODE IDENT NO.	DRAWING NO.	REV
C	7U296	149862B-01	2
SCALE: NONE		SHEET 2 OF 5	

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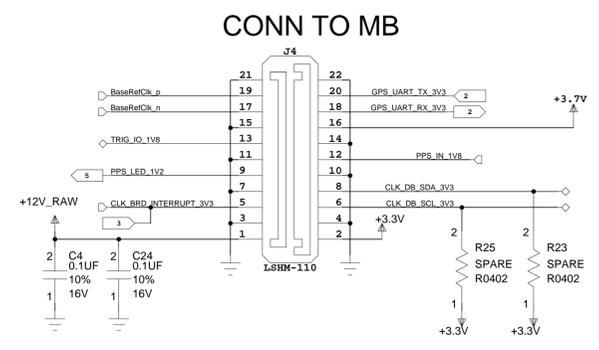
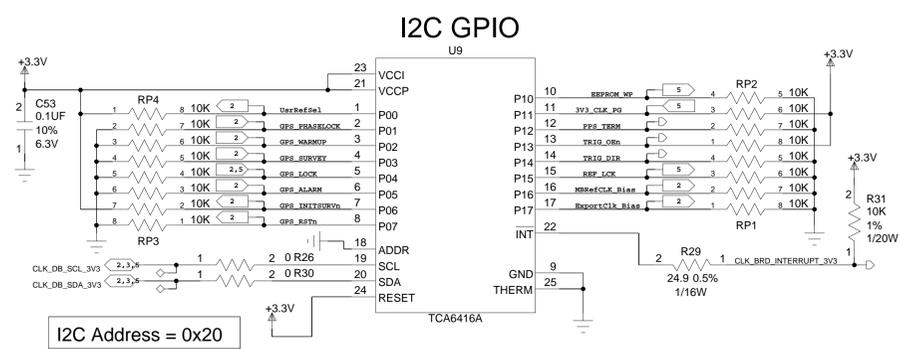
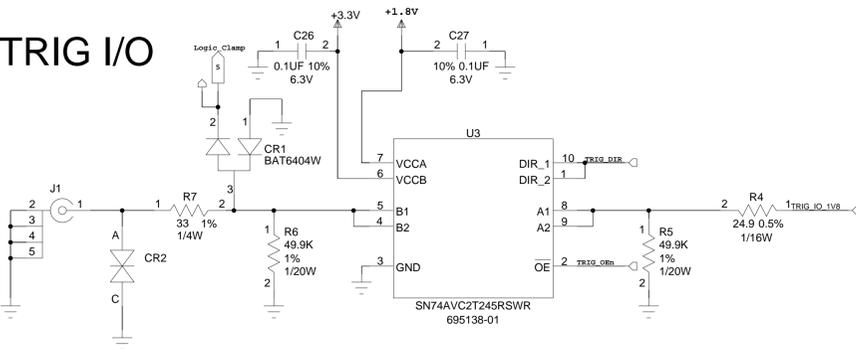
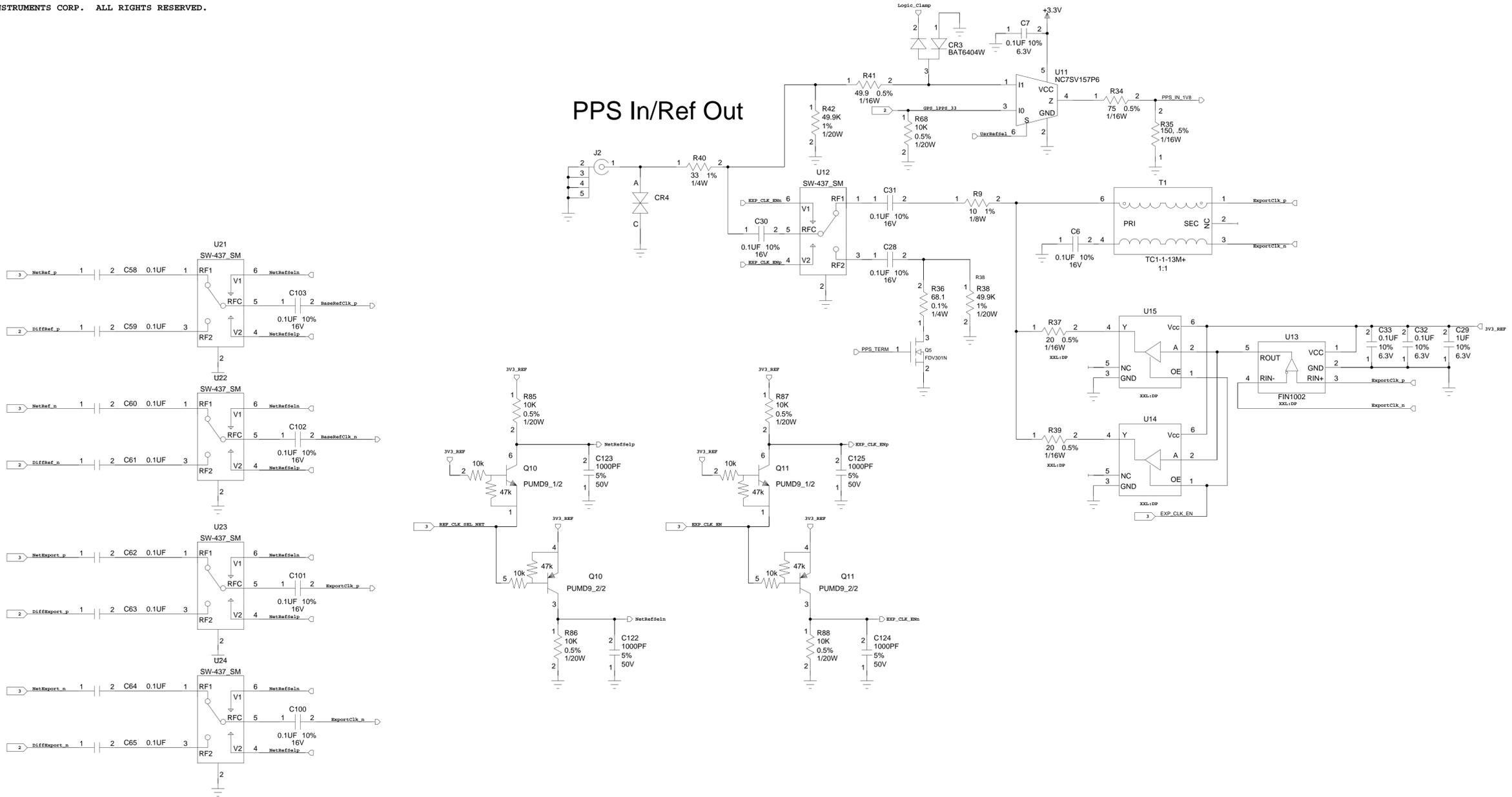


Network Sync			
USRP X400 Sync Board			
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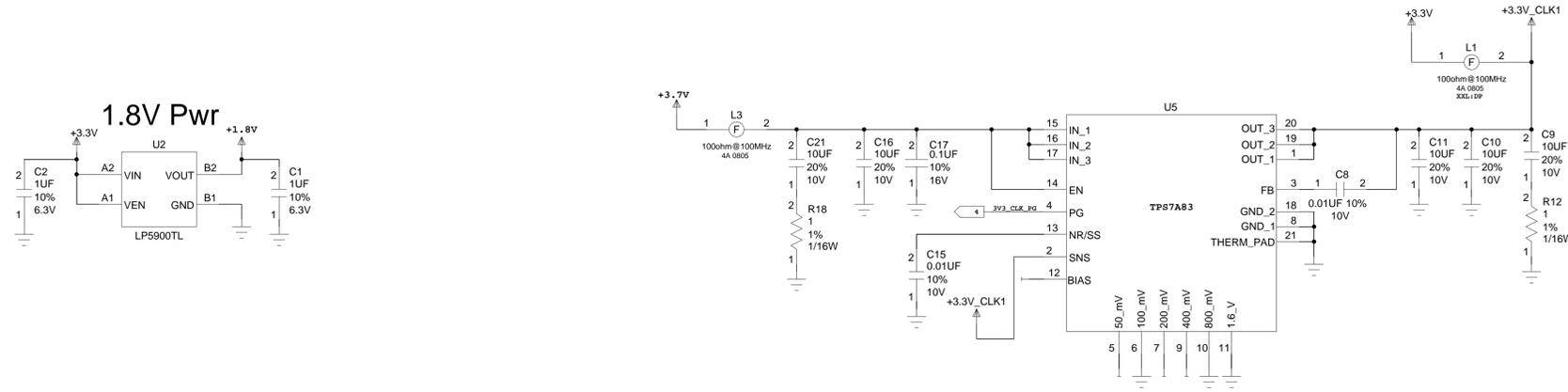


PPS - Trigger - MB Conn			
USRP X400 Sync Board			
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SCALE: NONE			SHEET 4 OF 5

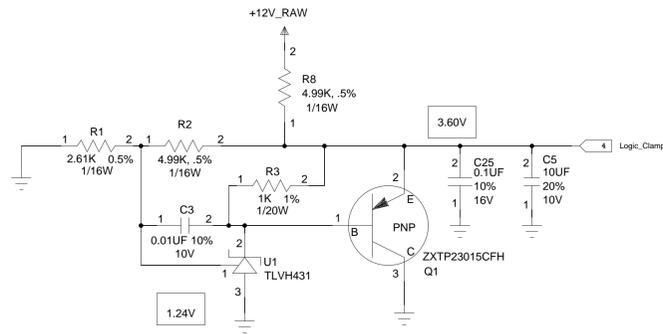
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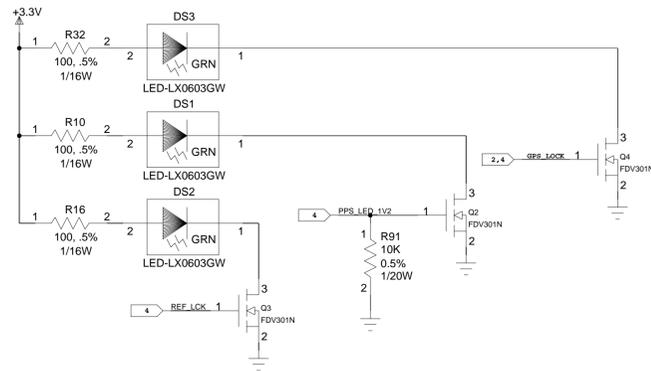
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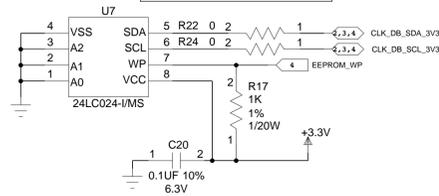
Input Protection



PPS and GPS/Ref Lock Indicators



ID EEPROM I2C Address = 0x50



Power - EEPROM - LEDs			
USRP X400 Sync Board			
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