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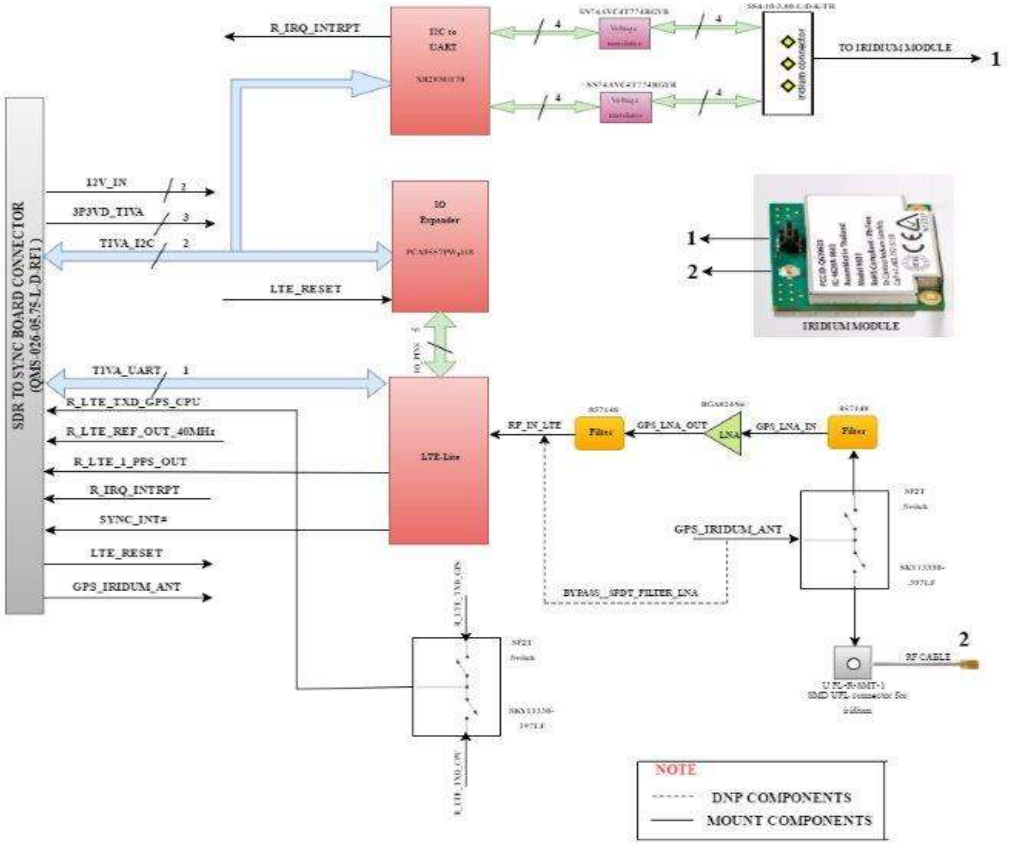
REVISION HISTORY			
DATE	VERSION	UPDATED BY	REMARKS
26 JAN 2016	1.00		REV A RELEASE
12 SEP 2016	2.0		LIFE-2 RELEASE
16 DEC 2016	3.0		LIFE-3 RELEASE

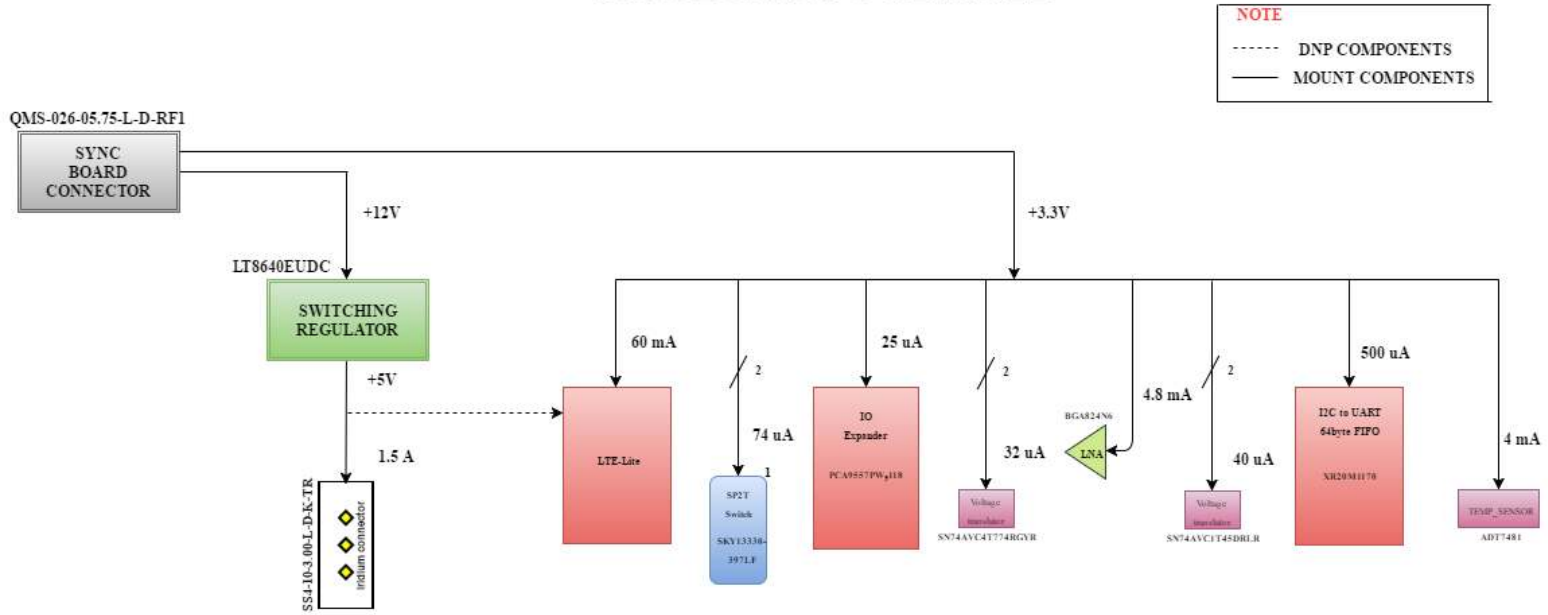
FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: INDEX	REV: Life-3	SHEET 1 OF 14

SYNC BOARD BLOCK DIAGRAM

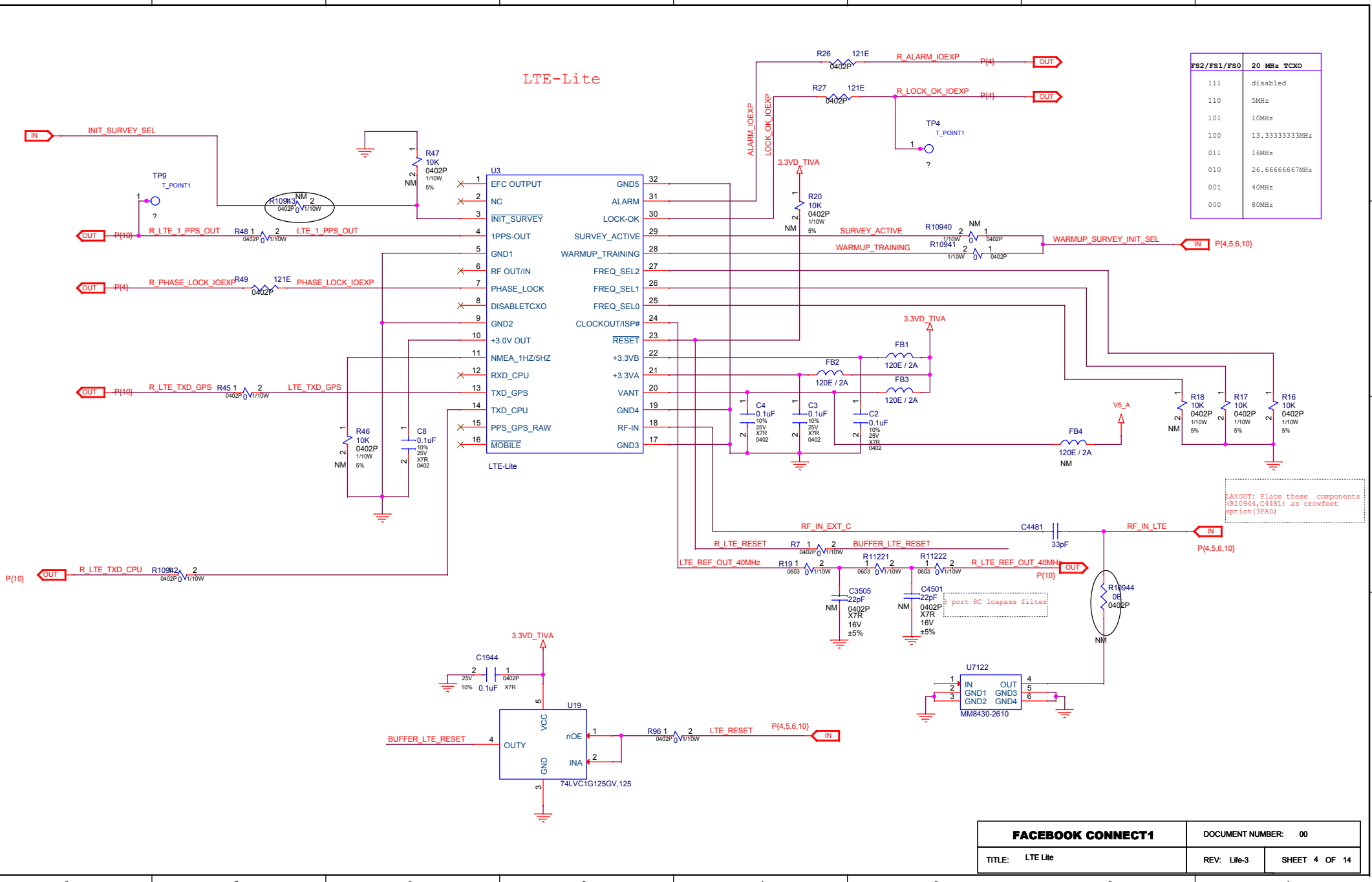


FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: BLOCK DIAGRAM	REV: Life-3	SHEET 2 OF 14

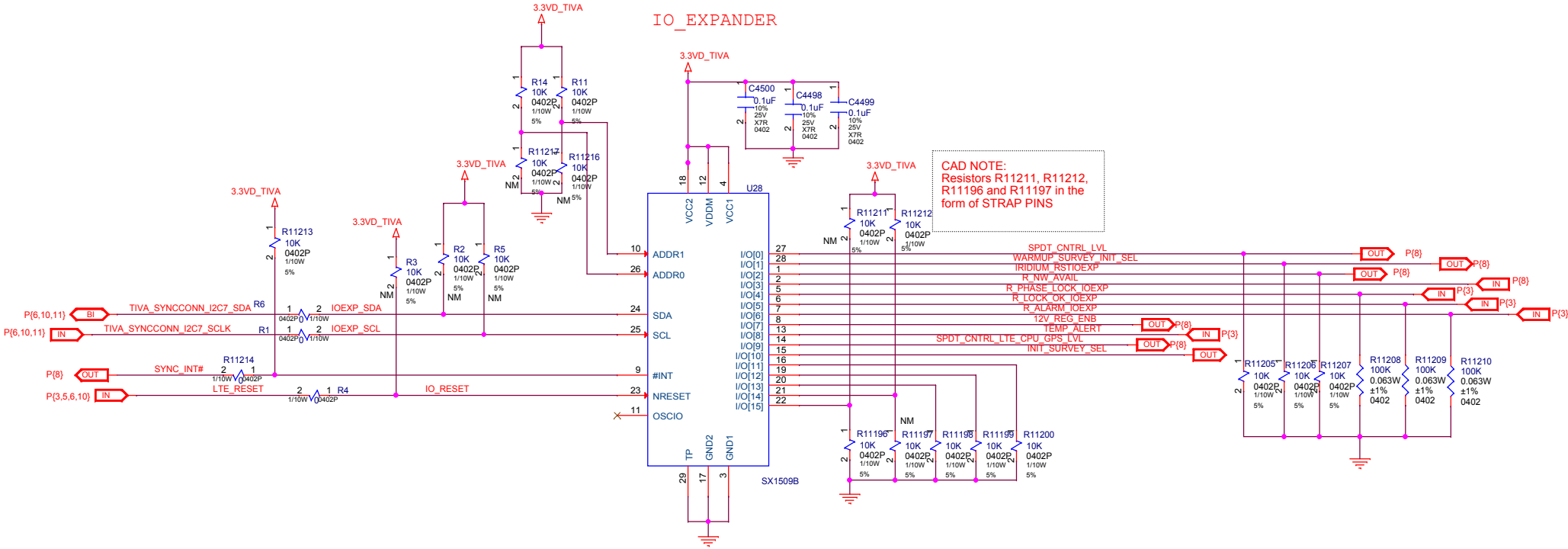
SYNC BOARD POWER TREE

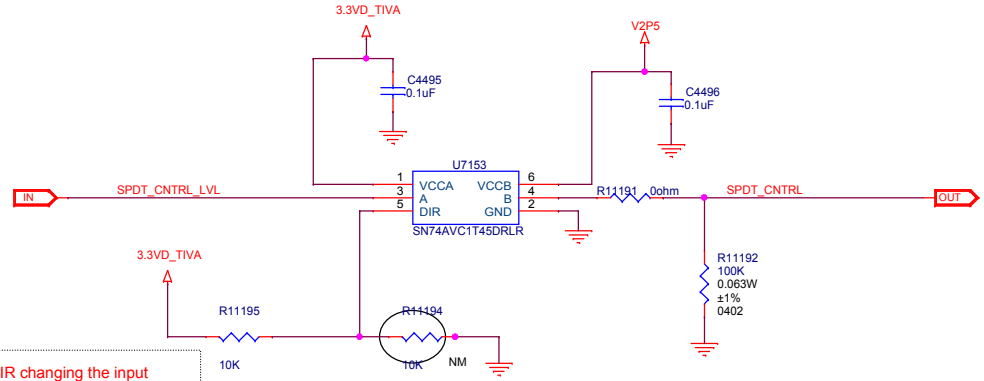


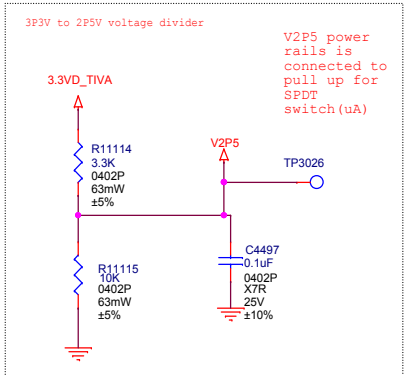
FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: BLOCK DIAGRAM	REV: Life-3	SHEET 3 OF 14


LTE-Lite
IN
INIT_SURVEY_SEL
TP9
T_POINT1
OUT
P{10}
R_LTE_1_PPS_OUT
LTE_1_PPS_OUT
P{4}
R_PHASE_LOCK_IOEXP
PHASE_LOCK_IOEXP
R_LTE_TXD_GPS
LTE_TXD_GPS
R_LTE_TXD_CPU
R47 10K 0402P 1/10W 5% NM
R46 10K 0402P 1/10W 5% NM
C8 0.1uF 10% 25V X7R 0402
R48 R49 121E 0402P
R45 R43 0 0402P 1/10W
U3
EFC OUTPUT
NC
INIT_SURVEY
1PPS-OUT
GND1
RF OUT/IN
PHASE_LOCK
DISABLETCXO
GND2
+3.0V OUT
NMEA_1HZ/5HZ
RXD_CPU
TXD_GPS
TXD_CPU
PPS_GPS_RAW
MOBILE
GND5
ALARM
LOCK-OK
SURVEY_ACTIVE
WARMUP_TRAINING
FREQ_SEL2
FREQ_SEL1
FREQ_SEL0
CLOCKOUT/ISP#
RESET
+3.3VB
+3.3VA
VANT
GND4
RF-IN
GND3
LTE-Lite
R26 121E 0402P R_ALARM_IOEXP
R27 121E 0402P R_LOCK_OK_IOEXP
ALARM_IOEXP
LOCK_OK_IOEXP
TP4
T_POINT1
3.3VD_TIVA
R20 10K 0402P 1/10W 5% NM
SURVEY_ACTIVE
WARMUP_TRAINING
R10940 R10941 0 0402P 1/10W
WARMUP_SURVEY_INIT_SEL
P{4,5,6,10}
FB1 120E / 2A
FB2 120E / 2A
FB3 120E / 2A
FB4 120E / 2A NM
C4 C3 C2 0.1uF 10% 25V X7R 0402
V5_A
R18 R17 R16 10K 0402P 1/10W 5% NM
LAYOUT: Place these components (R10944,C4481) as crowfeet option(3PAD)
RF_IN_EXT_C
C4481 33pF
RF_IN_LTE
R_LTE_RESET
R7 0 0402P 1/10W
BUFFER_LTE_RESET
LTE_REF_OUT_40MHz
R19 R11221 R11222 0 0603 1/10W
R_LTE_REF_OUT_40MHz
C3505 C4501 22pF 0402P X7R 16V ±5%
3 port RC loapass filter
R10944 0E 0402P NM
C1944 0.1uF 25V 10% X7R 0402P
U19
VCC
GND
nOE
INA
OUTY
74LVC1G125GV,125
R96 0 0402P 1/10W
LTE_RESET
U7122
IN
GND1
GND2
OUT
GND3
GND4
MM8430-2610
FS2/FS1/FS0 | 20 MHz TCXO
111 | disabled
110 | 5MHz
101 | 10MHz
100 | 13.33333333MHz
011 | 16MHz
010 | 26.66666667MHz
001 | 40MHz
000 | 80MHz
FACEBOOK CONNECT1
DOCUMENT NUMBER: 00
TITLE: LTE Lite
REV: Life-3
SHEET 4 OF 14

IO_EXPANDER

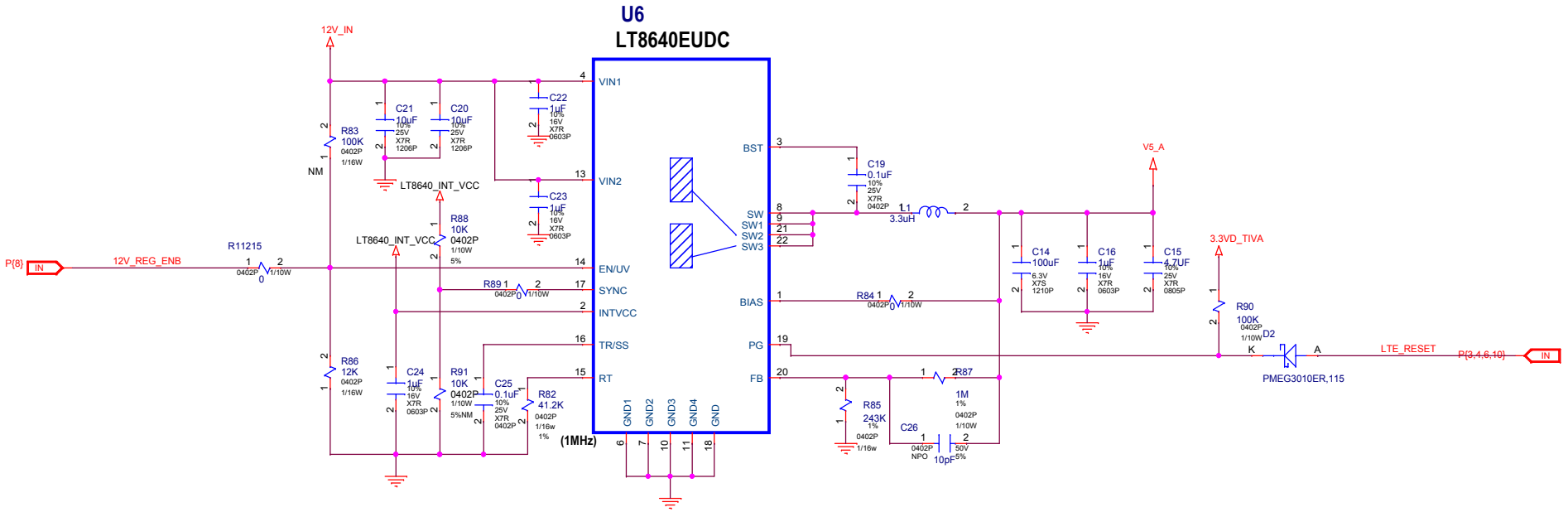






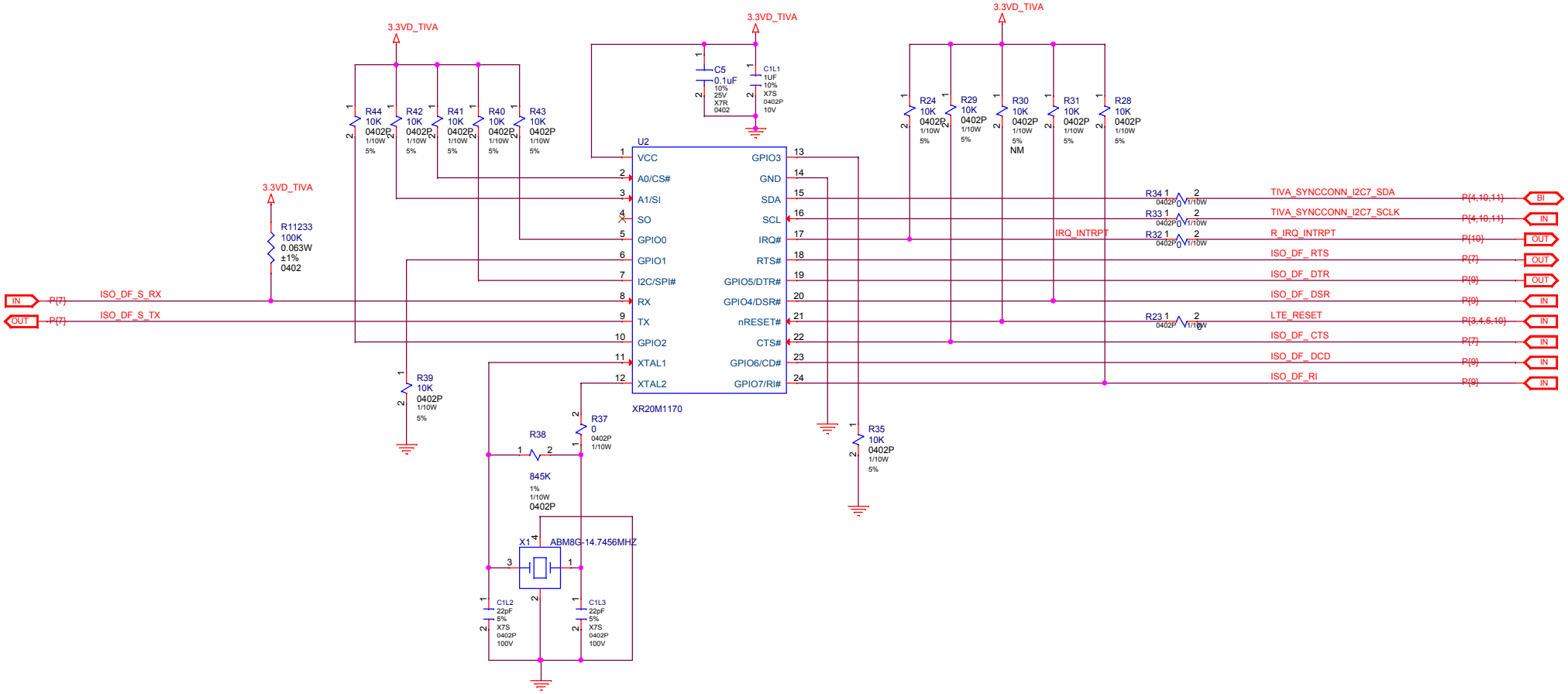
FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: IO Expander	REV: Life-3	SHEET 5 OF 14

12V_5V_REGULATOR



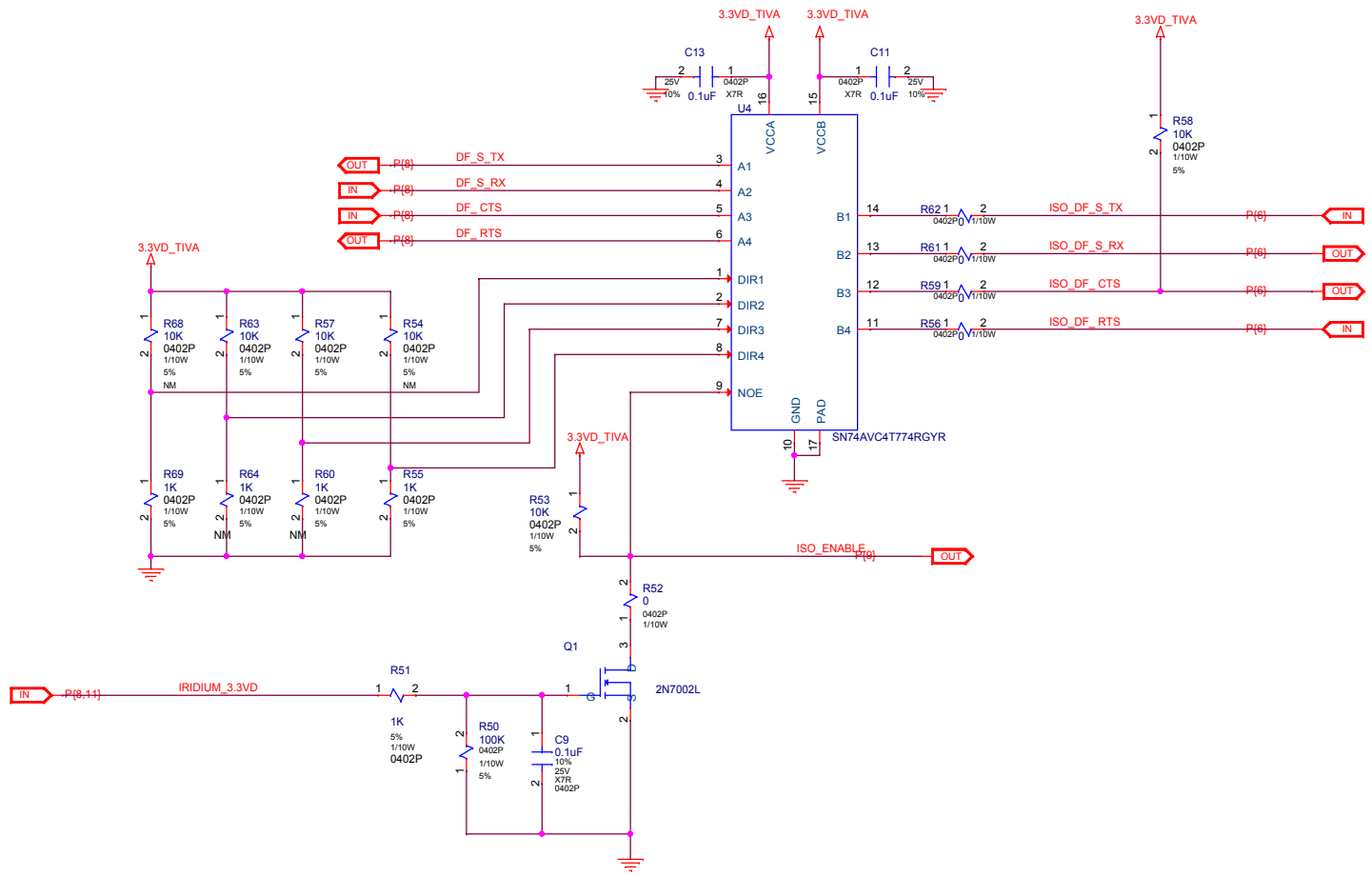
FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: 12V TO 5V DC DC CONVERTER	REV: Life-3	SHEET 6 OF 14

I2C to UART



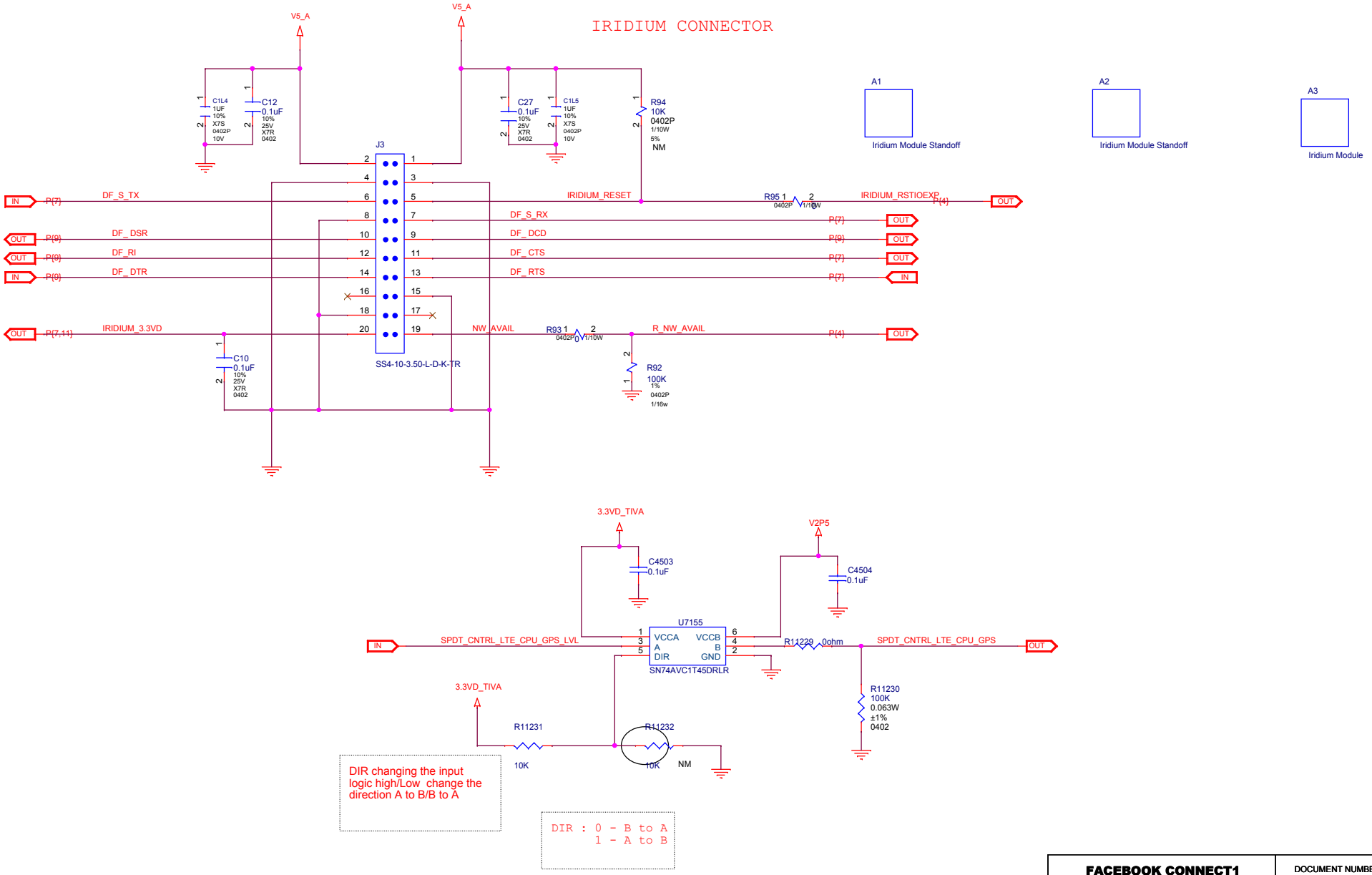
FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: I2C TO UART	REV: Life-3	SHEET 7 OF 14

VOLTAGE TRANSLATOR - 1



FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: UART ISOLATION	REV: Life-3	SHEET 8 OF 14

IRIDIUM CONNECTOR

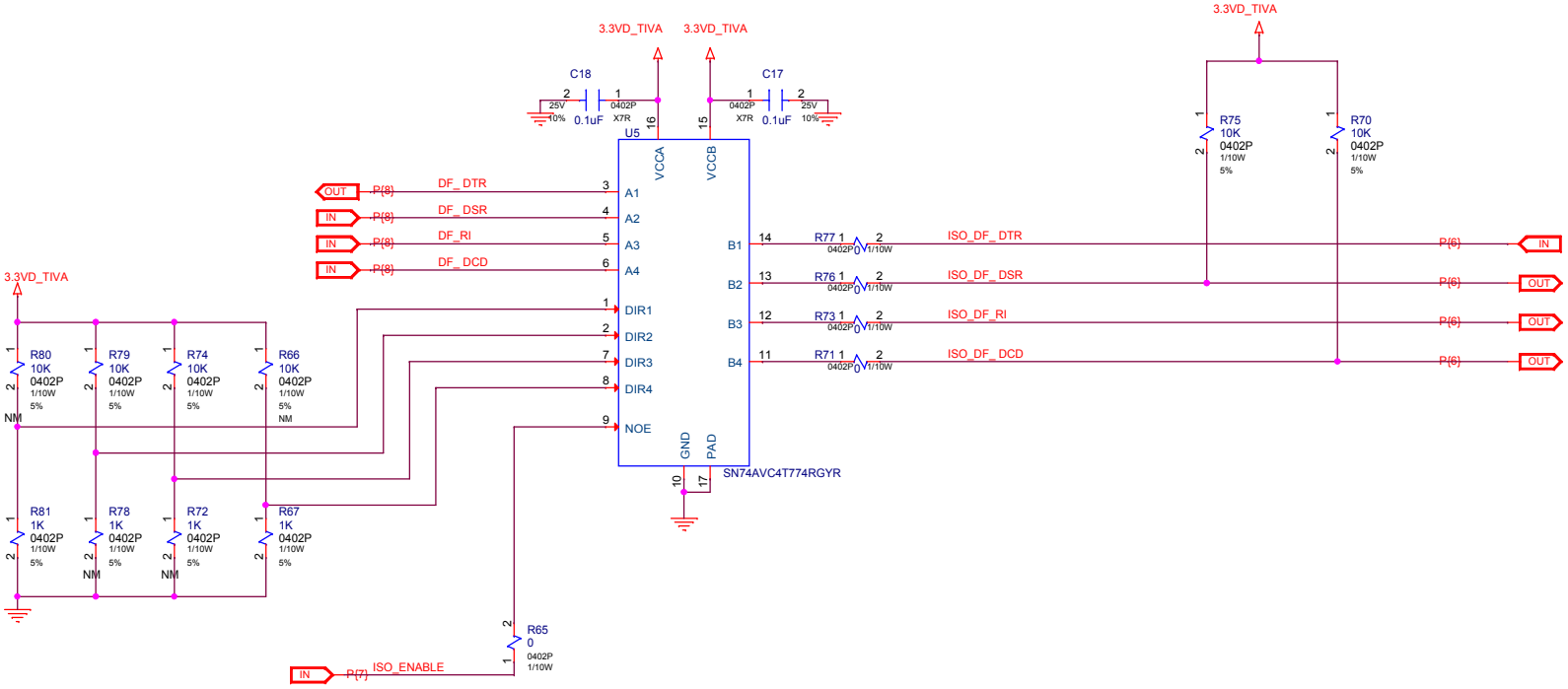


DIR changing the input logic high/Low change the direction A to B/B to A

DIR : 0 - B to A
1 - A to B

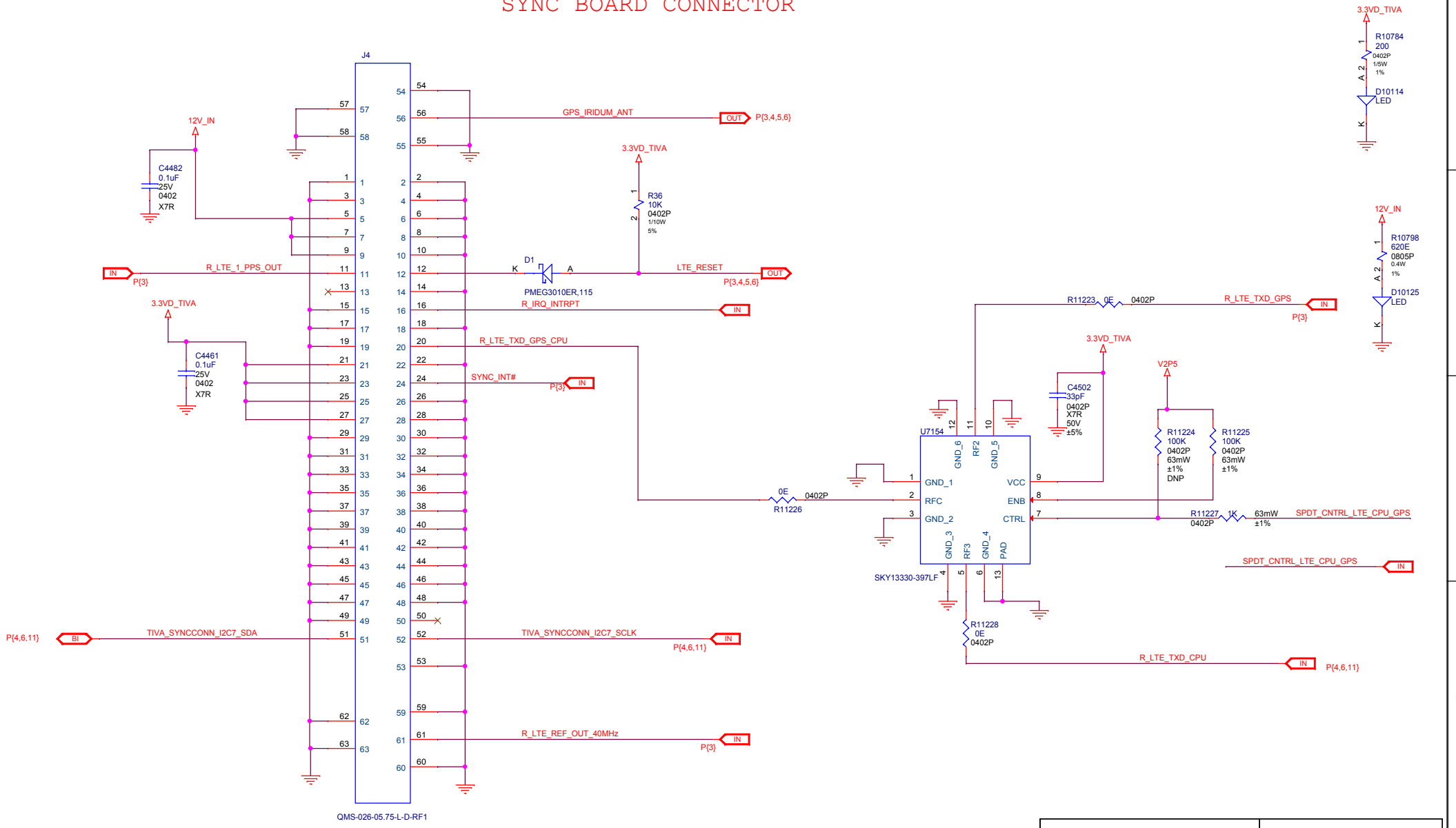
FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: IRIDIUM MOGILE	REV: Life-3	SHEET 9 OF 14

VOLTAGE TRANSLATOR - 2

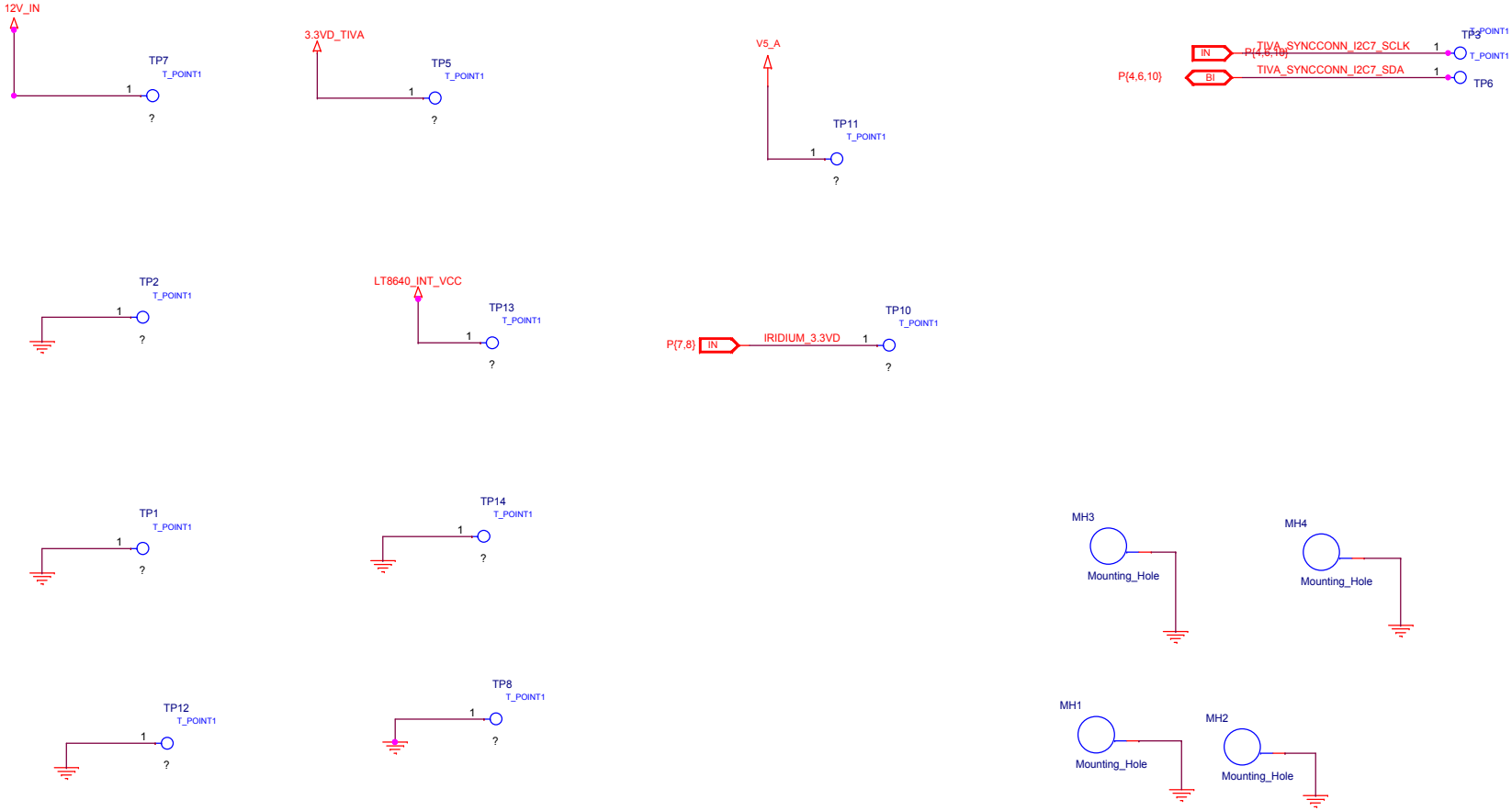


FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: UART ISOLATION	REV: Life-3	SHEET 10 OF 14

SYNC BOARD CONNECTOR

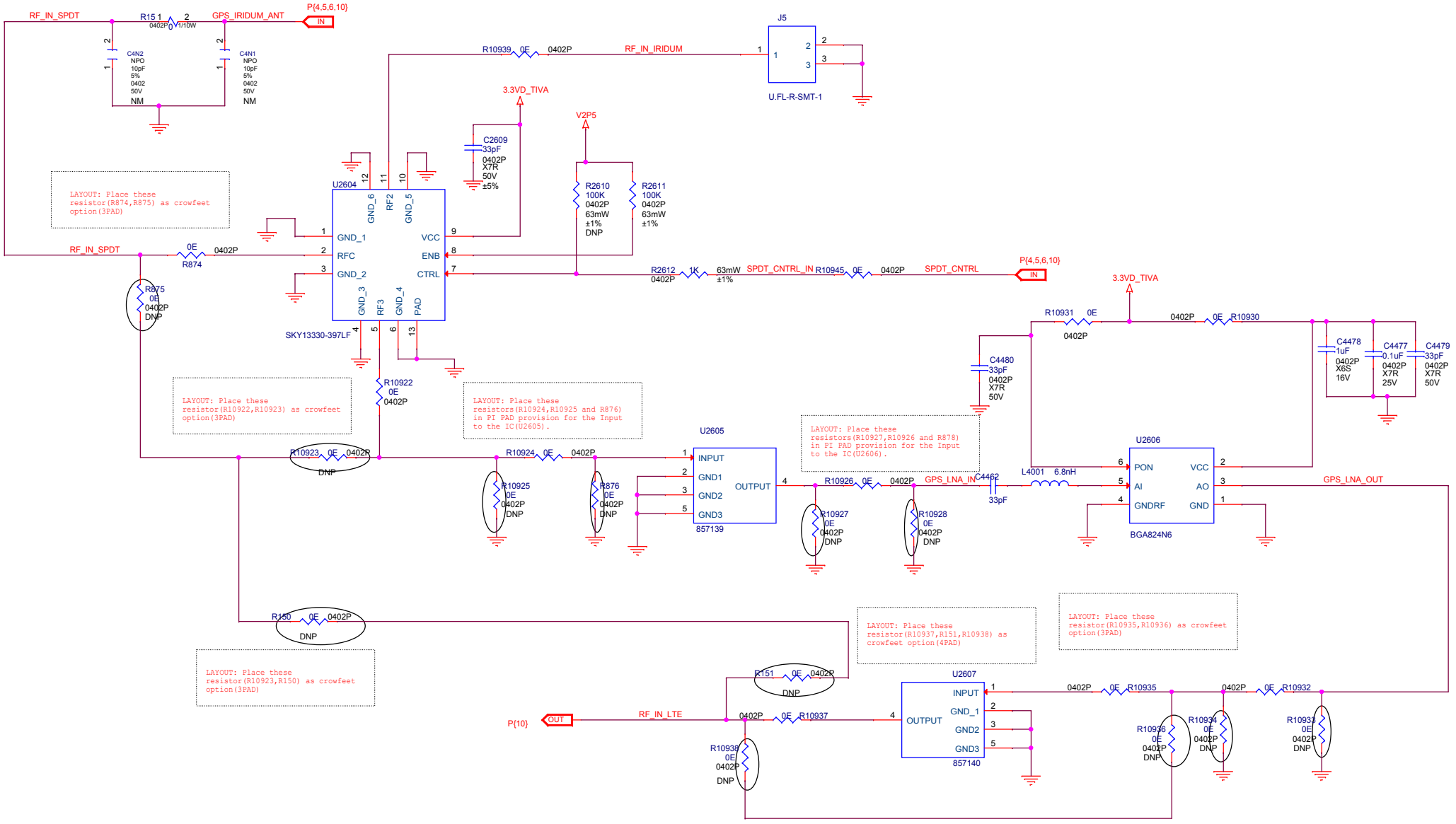


FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: SYNC CONNECTOR AND SP2T SWITCH	REV: Life-3	SHEET11 OF 14



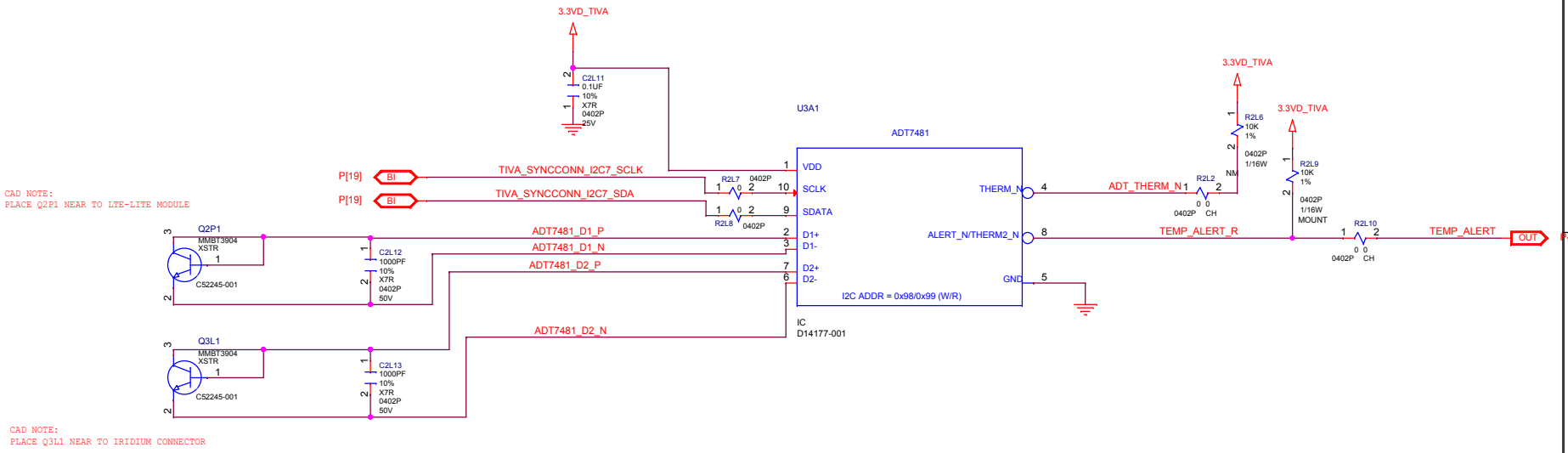
FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: TEST POINTS	REV: Life-3	SHEET 12 OF 14

RF_FRONT_END



FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: RF FRONT END	REV: Life-3	SHEET 13 OF 14

TEMPERATURE SENSOR



FACEBOOK CONNECT1	DOCUMENT NUMBER: 00	
TITLE: TEMP SENSOR	REV: Life-3	SHEET 14 OF 14