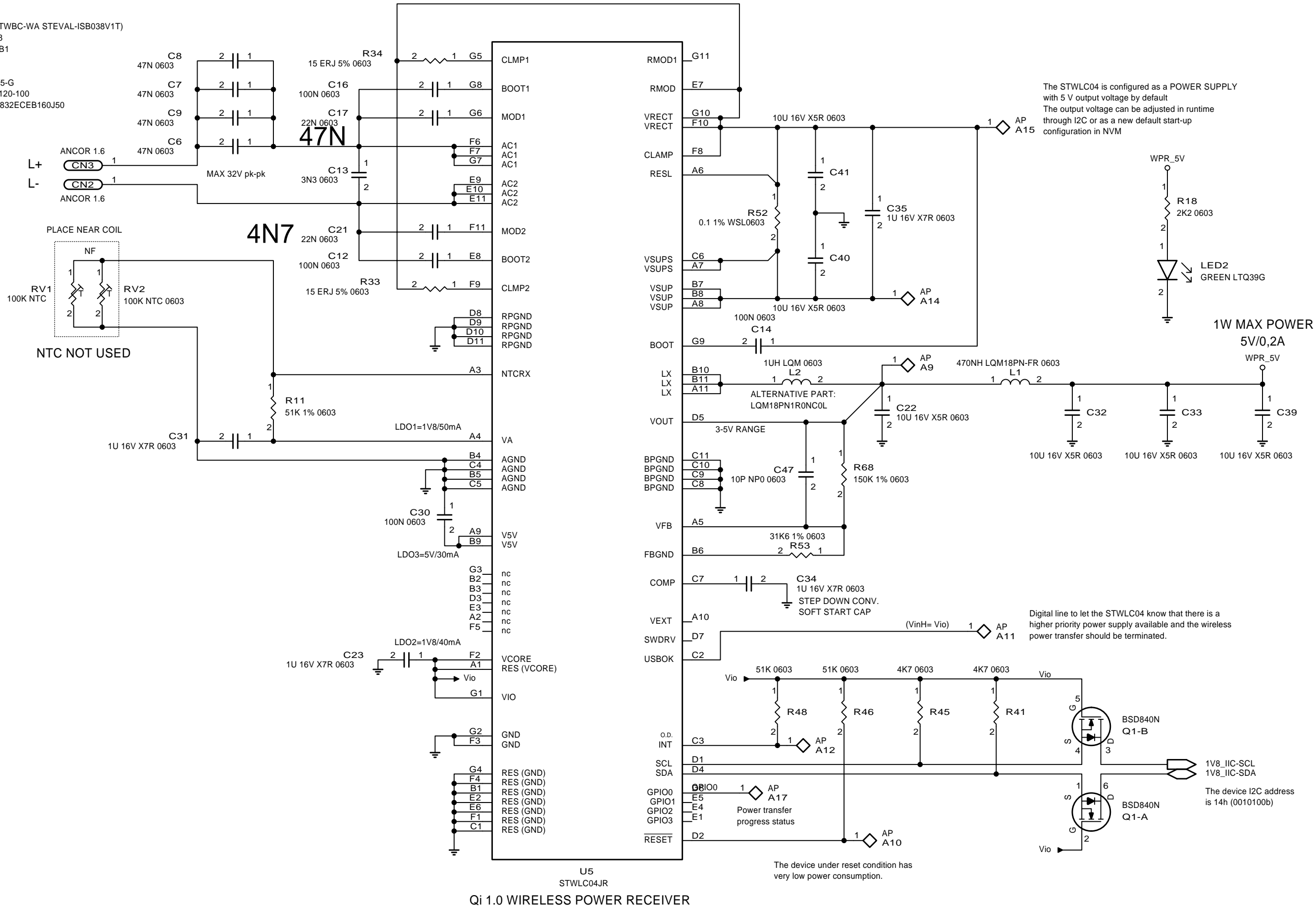


NOTE
The Rx coil and Tx coil windings must at least overlap partially for reasonable coupling results. The maximum Z distance on which the Rx can be attached is between 10 and 20% of diameter of the receiver coils. At 50%, the coupling is very weak and highly inefficient.

RECEIVER COIL PART NUMBER:
FOR 20mm COIL ON TRANSMITTER SIDE (STWBC-WA STEVAL-ISB038V1T)
CIRCLE DIA 10 13uH WURTH 760308101208
CIRCLE DIA 11 18uH TDK WR111118-36F5-B1

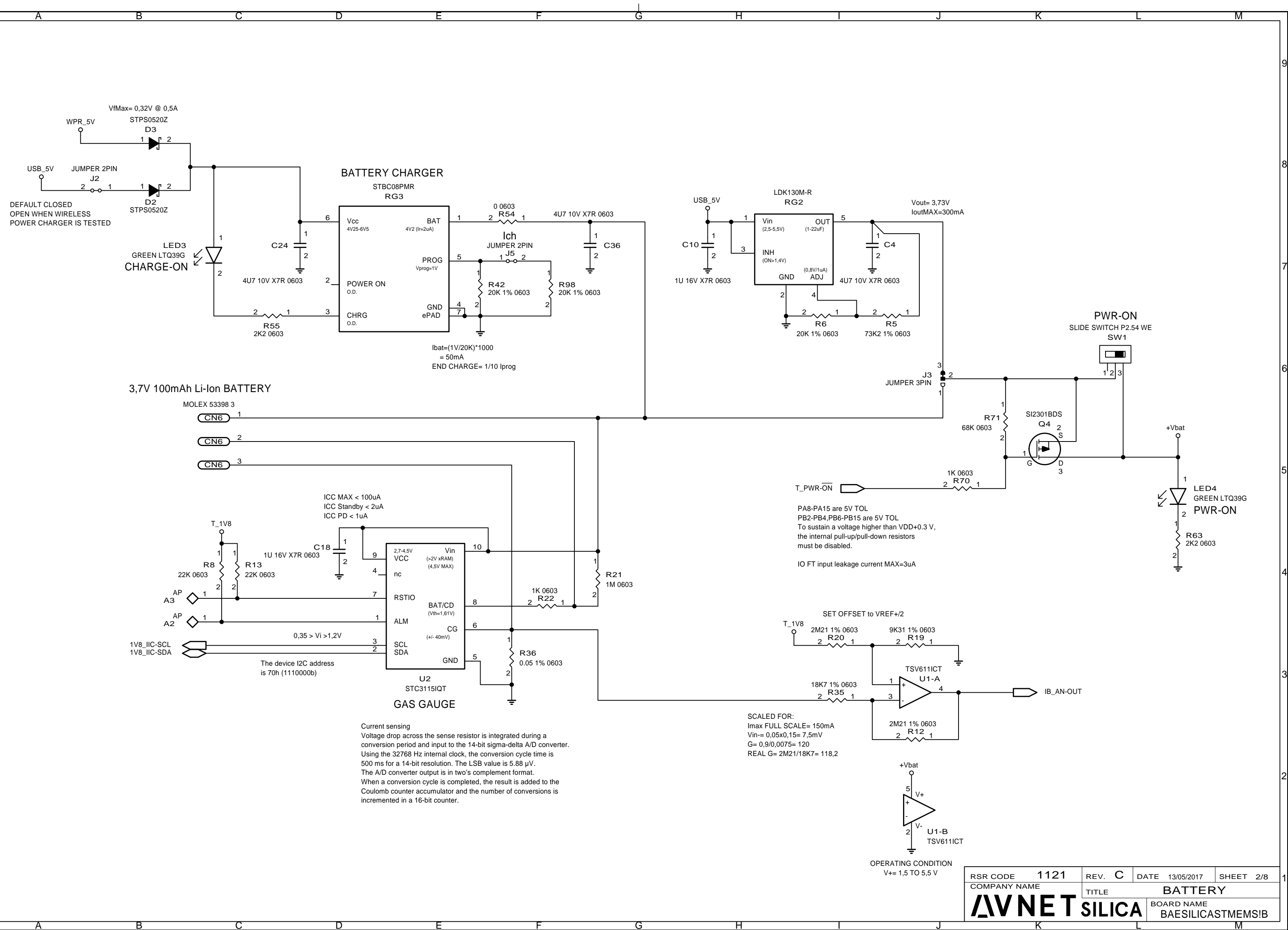
FOR COMMERCIAL CHARGER DEVICES
SQUARE 30x30 12.3uH TDK WR303050-15F5-G
SQUARE 41x41 12.5uH LAIRD SWC4242KB120-100
RECTANGLE 32x48 16.2uH VISHAY IWAS-4832ECEB160J50

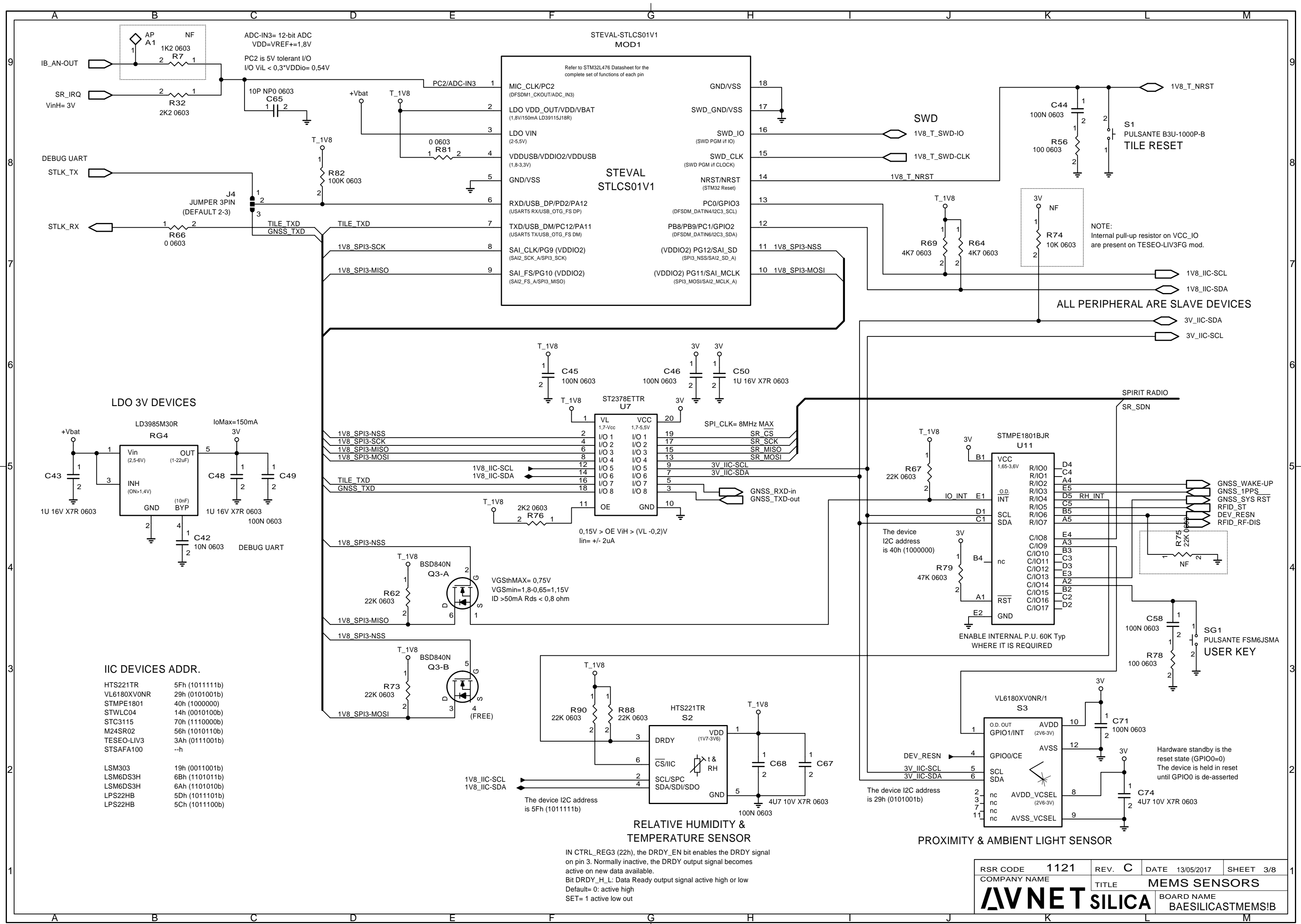
CMOD1,CMOD2
The asymmetrical value of these caps helps to couple with the STWBC-WA transmitter.



Qi 1.0 WIRELESS POWER RECEIVER

RSR CODE	1121	REV.	C	DATE	13/05/2017	SHEET	1/8
COMPANY NAME	TITLE			WIRELESS PWR RX			
AVNET SILICA		BOARD NAME		BAESILICASTMEMSIB			





LDO 3V DEVICES

IIC DEVICES ADDR.

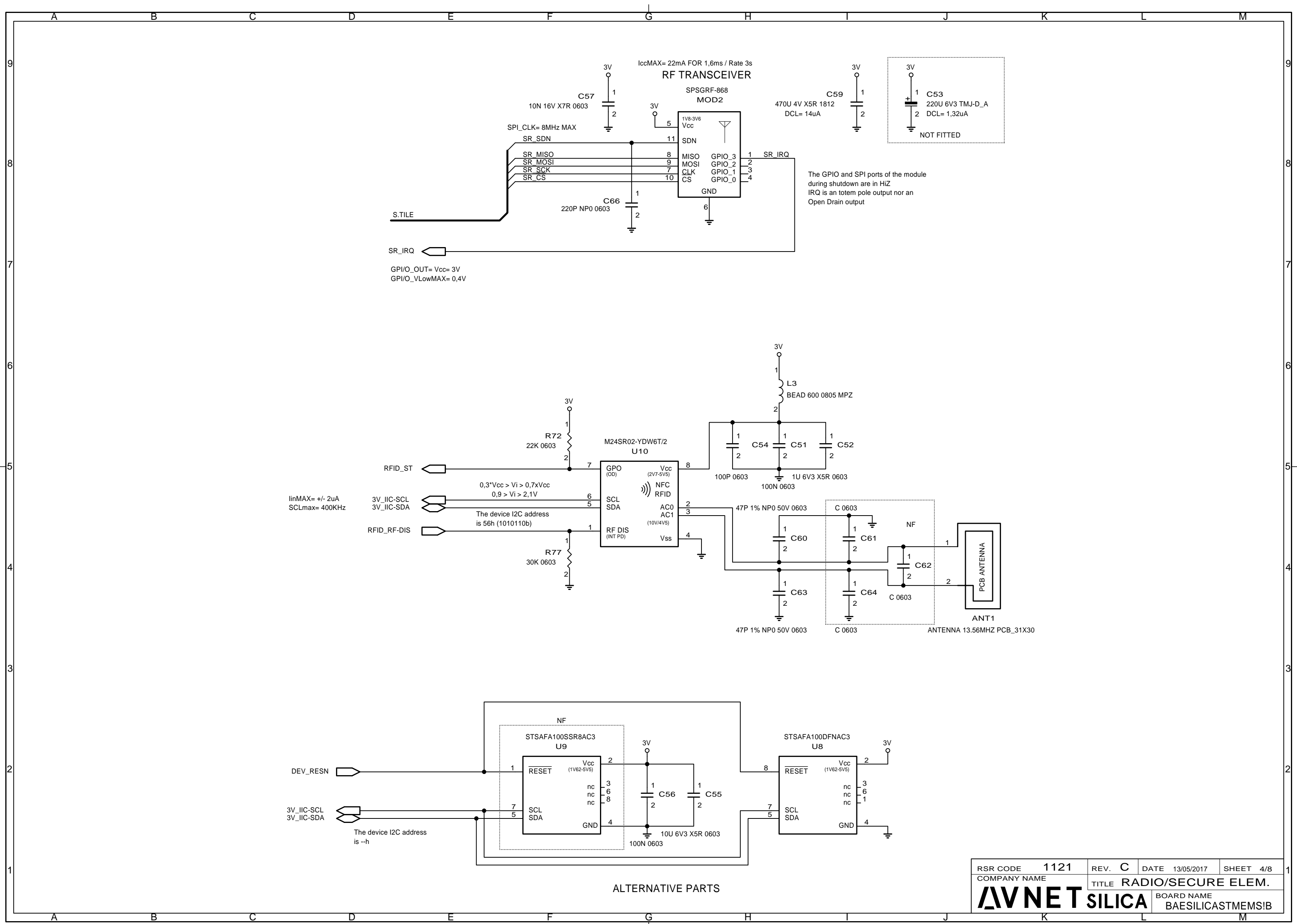
HTS221TR	5Fh (1011111b)
VL6180XV0NR	29h (0101001b)
STMPE1801	40h (1000000b)
STWLC04	14h (0010100b)
STC3115	70h (1110000b)
M24SR02	56h (1010110b)
TESEO-LIV3	3Ah (0111001b)
STSAFA100	--h
LSM303	19h (0011001b)
LSM6DS3H	6Bh (1101011b)
LSM6DS3H	6Ah (1101010b)
LPS22HB	5Dh (1011101b)
LPS22HB	5Ch (1011100b)

RELATIVE HUMIDITY & TEMPERATURE SENSOR

IN CTRL_REG3 (22h), the DRDY_EN bit enables the DRDY signal on pin 3. Normally inactive, the DRDY output signal becomes active on new data available.
Bit DRDY_H_L: Data Ready output signal active high or low
Default= 0: active high
SET= 1 active low out

PROXIMITY & AMBIENT LIGHT SENSOR

RSR CODE	1121	REV.	C	DATE	13/05/2017	SHEET	3/8
COMPANY NAME	MEMS SENSORS						
AVNET SILICA				BOARD NAME BAESILICASTMEMS!B			



The GPIO and SPI ports of the module during shutdown are in HiZ
IRQ is an totem pole output nor an Open Drain output

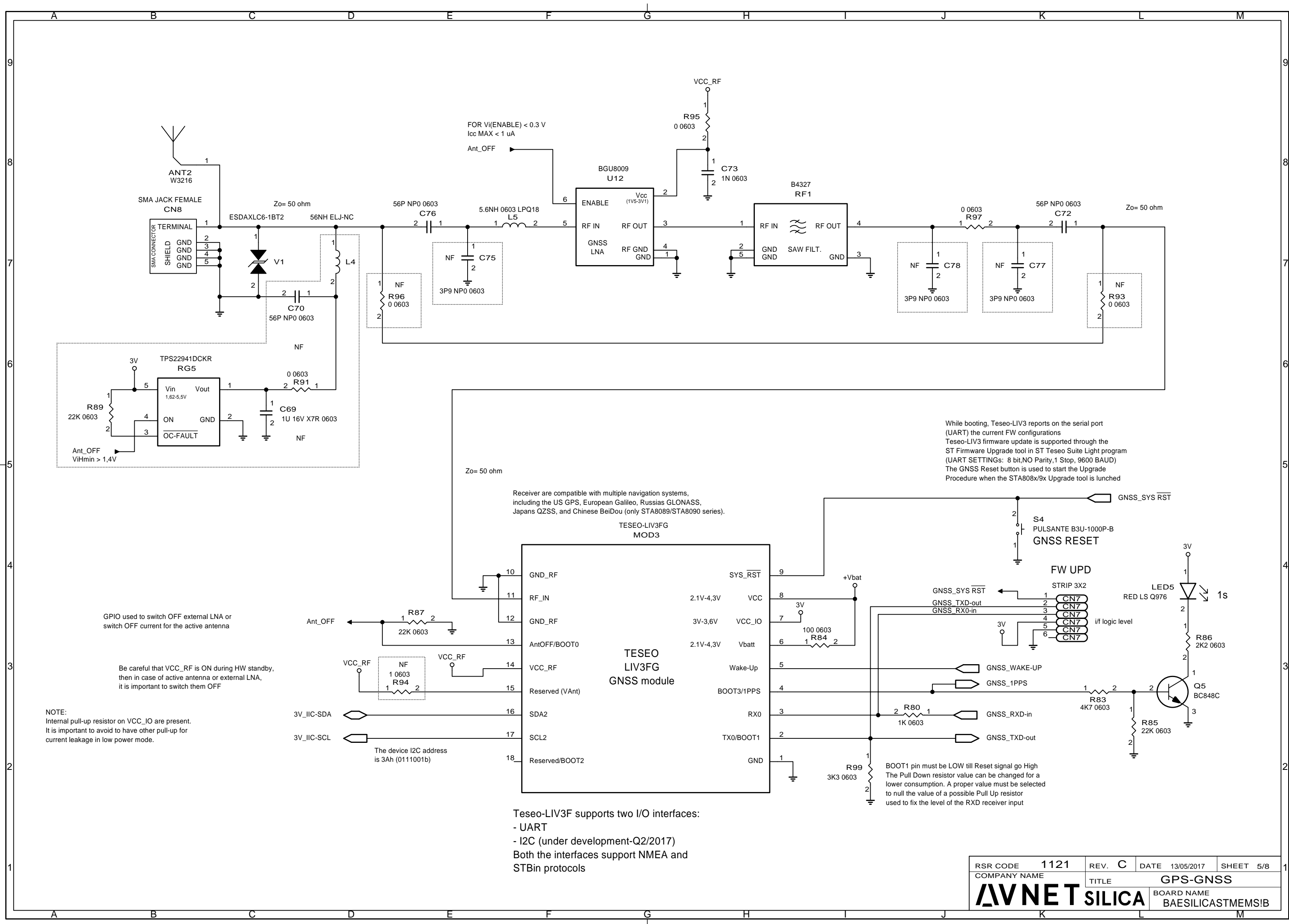
IinMAX= +/- 2uA
SCLmax= 400KHz

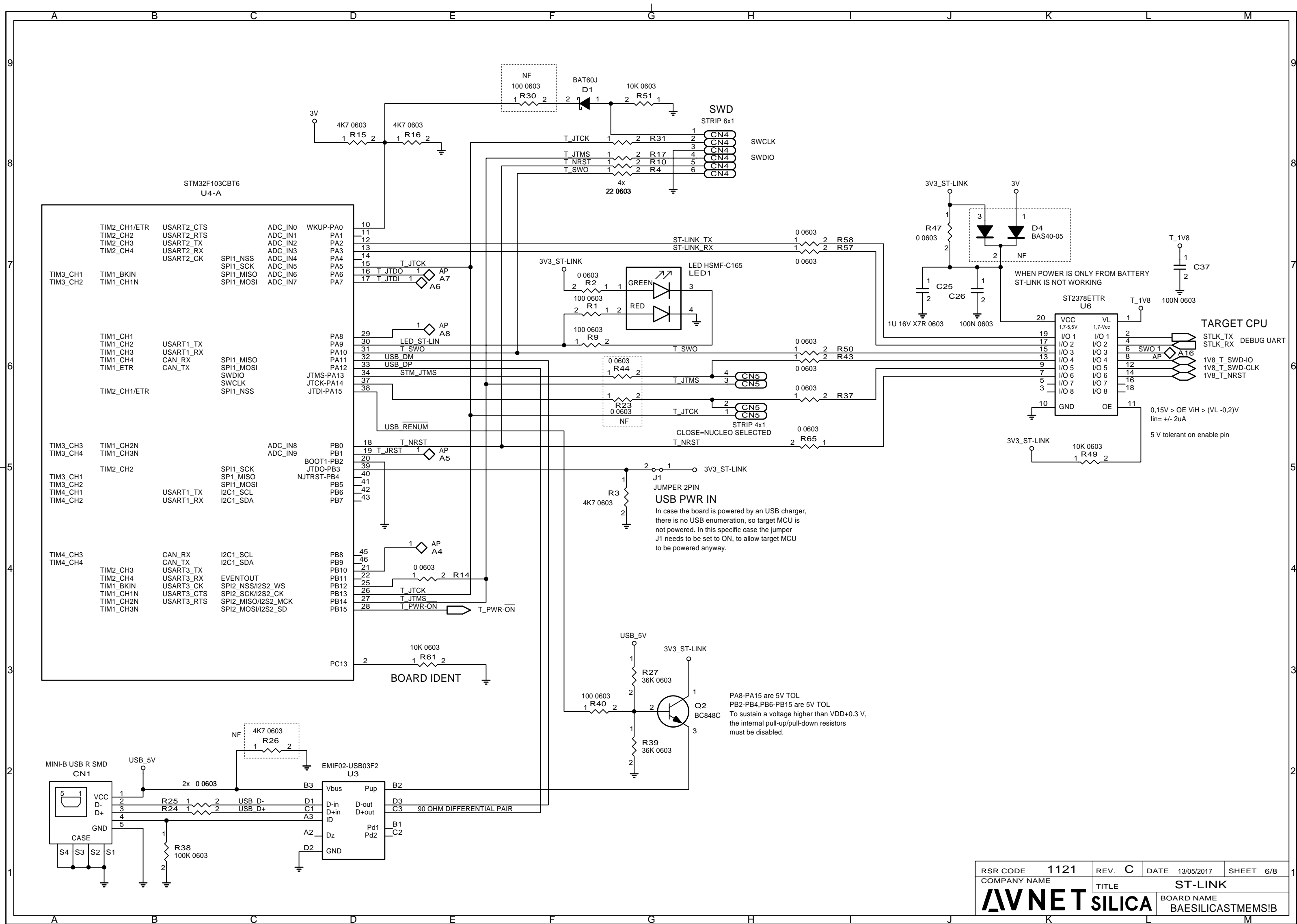
0,3*Vcc > Vi > 0,7*Vcc
0,9 > Vi > 2,1V
The device I2C address is 56h (1010110b)

The device I2C address is --h

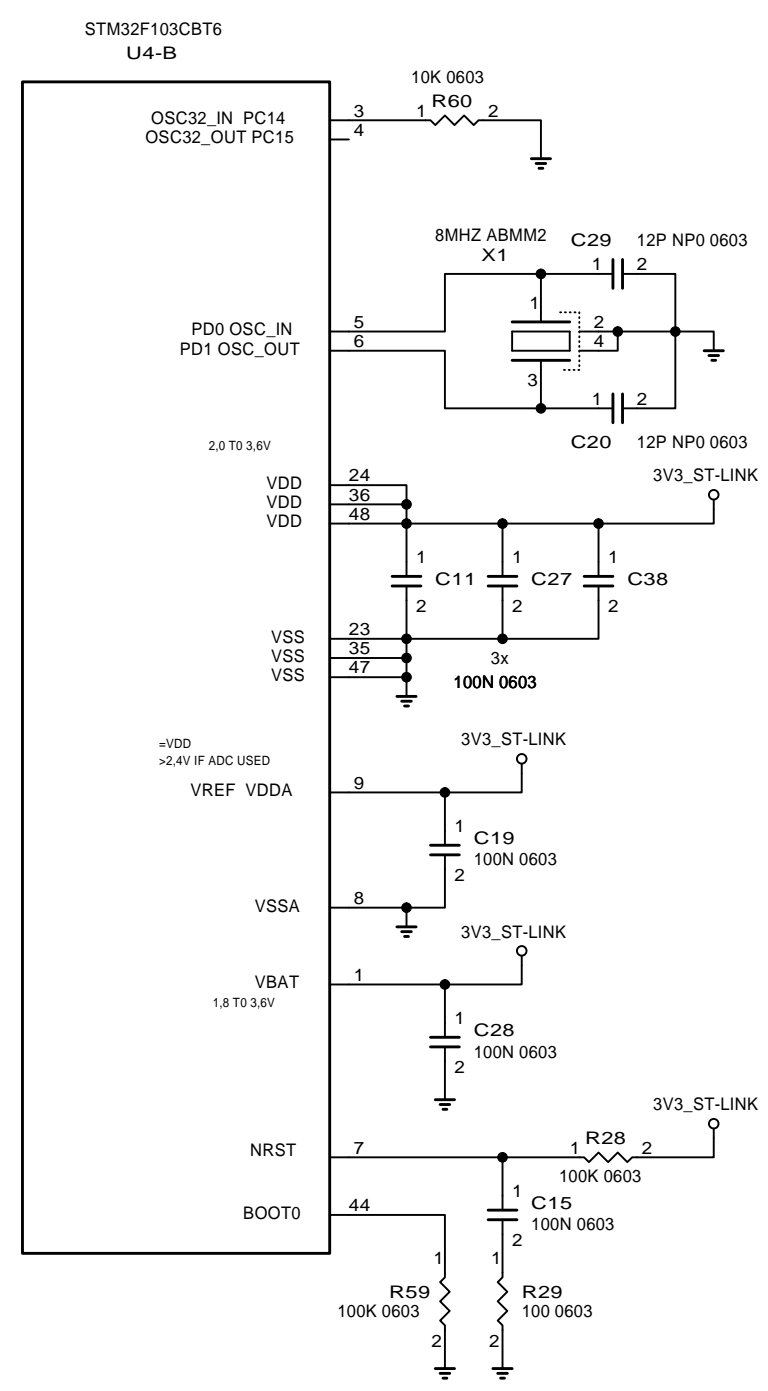
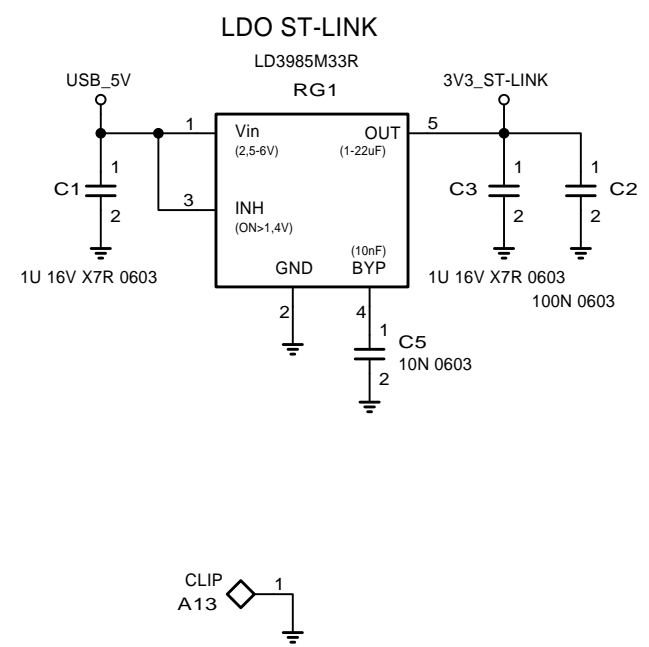
ALTERNATIVE PARTS

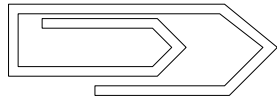
RSR CODE	1121	REV.	C	DATE	13/05/2017	SHEET	4/8
COMPANY NAME		TITLE RADIO/SECURE ELEM.					
AVNET SILICA		BOARD NAME BAESILICASTMEMS!B					





RSR CODE	1121	REV.	C	DATE	13/05/2017	SHEET	6/8
COMPANY NAME		ST-LINK					
AVNET SILICA		TITLE					
		BOARD NAME					
		BAESILICASTMEMS1B					





HISTORY OF HARDWARE VERSIONS AND CHANGES

REVISION	DATE	DESCRIPTION / CHANGES	SIGNATURE
-	05/12/2016	PROTOTYPE REVISION	ANGELO S.
B	26/01/2017	/B REVISION - TEST FOR PRODUCTION WIRELESS CHARGER: ADDED A11 USBOK TEST PAD ADC_IN3 SCALED FOR 150mA FULL SCALE ADDED SG1 USER KEY UPDATE TESEO-LIV3 GNSS SCHEMA	ANGELO S.
C	13/05/2017	Jumper Ich to increase battery charger current IRQ signal of Spirit module routed to Tile module, analog input changed as a Non Fitted option Changed connession of LED2 as wireless power voltage indicator Correct pin number of Reset signal for STSAFA secure element in DFN case Add Pull Down resistor for BOOT1 pin of Teseo LIV3 GNSS Logo Avnet Silica updated to new graphics	ANGELO S.