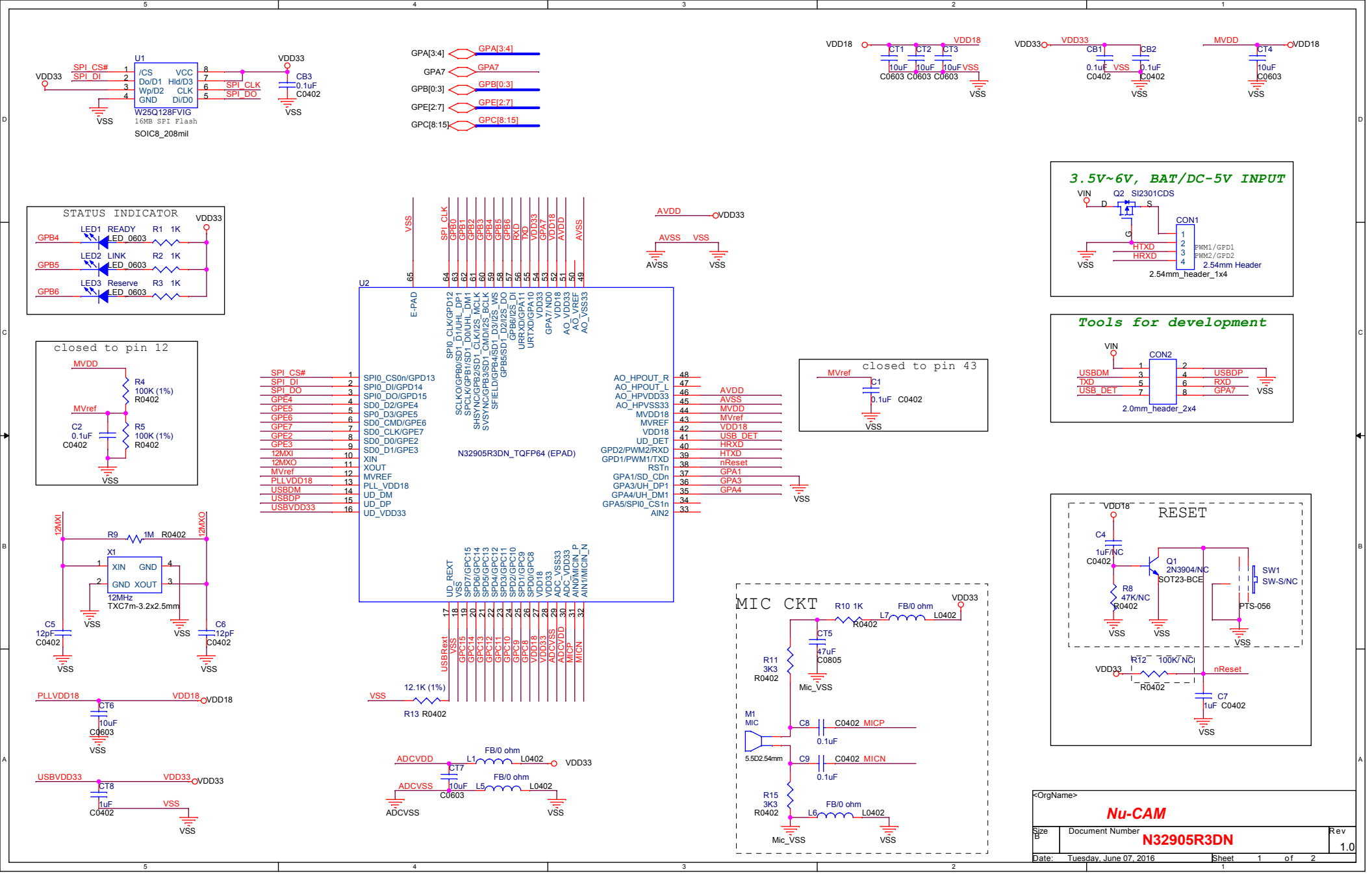
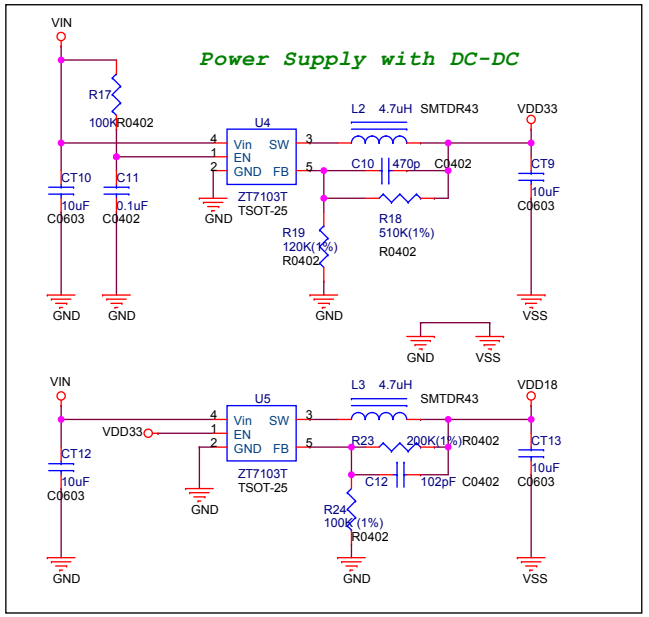
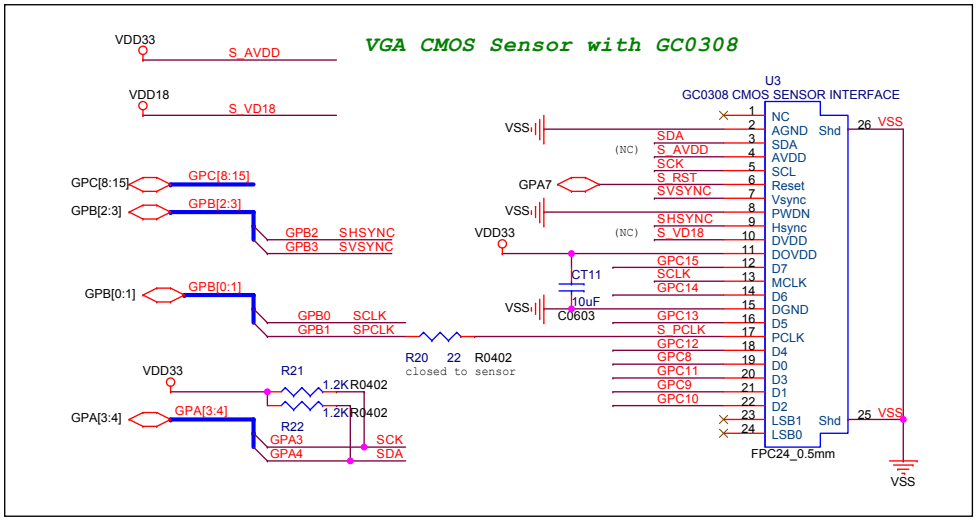
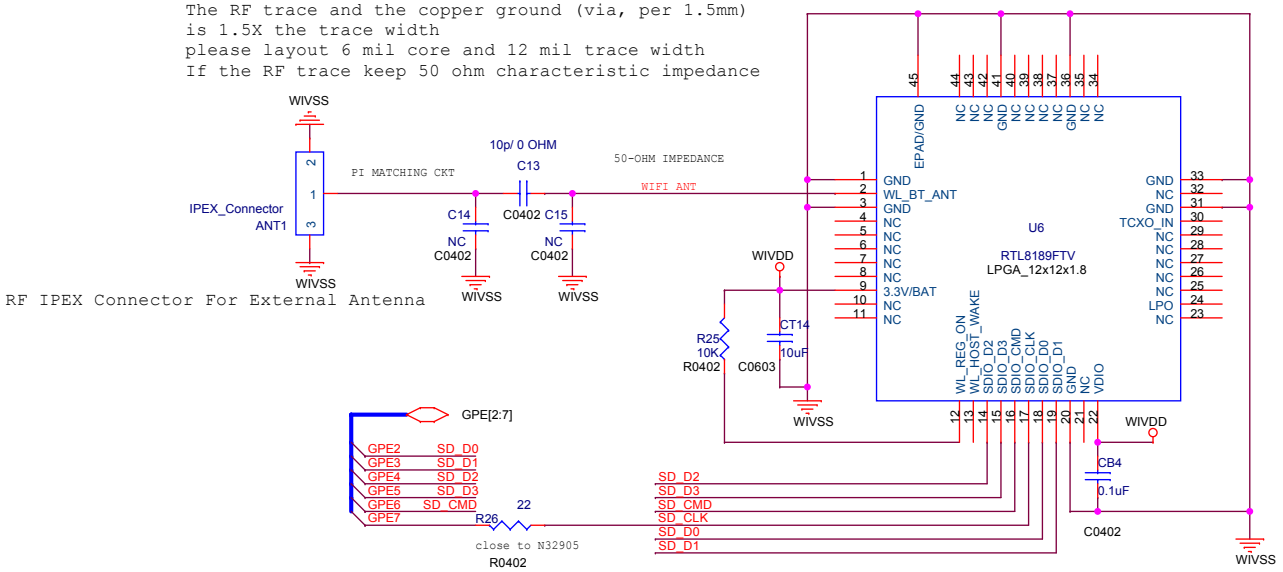

U1
SPI_CS#
SPI_DI
/CS
Do/D1
Wp/D2
GND
VCC
Hld/D3
CLK
Di/D0
W25Q128FVIG
16MB SPI Flash
SOIC8_208mil
VDD33
VSS
SPI_CLK
SPI_DO
CB3
0.1uF
C0402
GPA[3:4]
GPA7
GPB[0:3]
GPE[2:7]
GPC[8:15]
VDD18
CT1
CT2
CT3
10uF
C0603
VSS
CB1
CB2
0.1uF
C0402
MVDD
CT4
10uF
C0603
STATUS INDICATOR
LED1 READY
LED2 LINK
LED3 Reserve
LED_0603
R1 1K
R2 1K
R3 1K
GPB4
GPB5
GPB6
3.5V~6V, BAT/DC-5V INPUT
VIN
Q2 SI2301CDS
D
S
G
CON1
HTXD
HRXD
PWM1/GPD1
PWM2/GPD2
2.54mm Header
2.54mm_header_1x4
Tools for development
CON2
USBDM
TXD
USB_DET
USBDP
RXD
GPA7
2.0mm_header_2x4
closed to pin 12
R4
100K (1%)
R0402
R5
100K (1%)
R0402
MVref
C2
0.1uF
C0402
U2
E-PAD
AVDD
AVSS
SPI_CS#
SPI_DI
SPI_DO
GPE4
GPE5
GPE6
GPE7
GPE2
GPE3
12MXI
12MXO
MVref
PLLVDD18
USBDM
USBDP
USBVDD33
SPI0_CS0n/GPD13
SPI0_DI/GPD14
SPI0_DO/GPD15
SD0_D2/GPE4
SD0_D3/GPE5
SD0_CMD/GPE6
SD0_CLK/GPE7
SD0_D0/GPE2
SD0_D1/GPE3
XIN
XOUT
MVREF
PLL_VDD18
UD_DM
UD_DP
UD_VDD33
N32905R3DN_TQFP64 (EPAD)
AO_HPOUT_R
AO_HPOUT_L
AO_HPVDD33
AO_HPVSS33
MVDD18
MVREF
VDD18
UD_DET
GPD2/PWM2/RXD
GPD1/PWM1/TXD
RSTn
GPA1/SD_CDn
GPA3/UH_DP1
GPA4/UH_DM1
GPA5/SPI0_CS1n
AIN2
USB_DET
HRXD
HTXD
nReset
GPA1
GPA3
GPA4
closed to pin 43
MVref
C1
0.1uF
C0402
RESET
C4
1uF/NC
C0402
Q1
2N3904/NC
SOT23-BCE
R8
47K/NC
R0402
SW1
SW-S/NC
PTS-056
R12
100K/NC
R0402
nReset
C7
1uF
C0402
MIC CKT
R10 1K
R0402
FB/0 ohm
L7
L0402
CT5
47uF
C0805
Mic_VSS
R11
3K3
R0402
M1
MIC
5.5D2.54mm
C8
C0402
MICP
0.1uF
C9
C0402
MICN
0.1uF
R15
3K3
R0402
L6
L0402
R9
1M
R0402
X1
XIN
GND
XOUT
12MHz
TXC7m-3.2x2.5mm
C5
12pF
C0402
C6
12pF
C0402
CT6
10uF
C0603
CT7
10uF
C0603
L1
L5
CT8
1uF
C0402
R13 R0402
12.1K (1%)
ADCVDD
ADCVSS
USBRext
UD_REXT
GPC15
GPC14
GPC13
GPC12
GPC11
GPC10
GPC9
GPC8
SPD7/GPC15
SPD6/GPC14
SPD5/GPC13
SPD4/GPC12
SPD3/GPC11
SPD2/GPC10
SPD1/GPC9
SPD0/GPC8
ADC_VSS33
ADC_VDD33
AIN0/MICIN_P
AIN1/MICIN_N
MICP
MICN
<OrgName>
Nu-CAM
Size
B
Document Number
N32905R3DN
Rev
1.0
Date: Tuesday, June 07, 2016
Sheet 1 of 2





SDIO WiFi with RTL8189FTV module

The RF trace and the copper ground (via, per 1.5mm)
is 1.5X the trace width
please layout 6 mil core and 12 mil trace width
If the RF trace keep 50 ohm characteristic impedance



RF IPEX Connector For External Antenna

<OrgName>			
Nu-CAM			
B			
Size	Document Number		Rev
	Power+WiFi+ CMOS sensor		1.0
Date:	Thursday, June 16, 2016	Sheet 2 of 2	