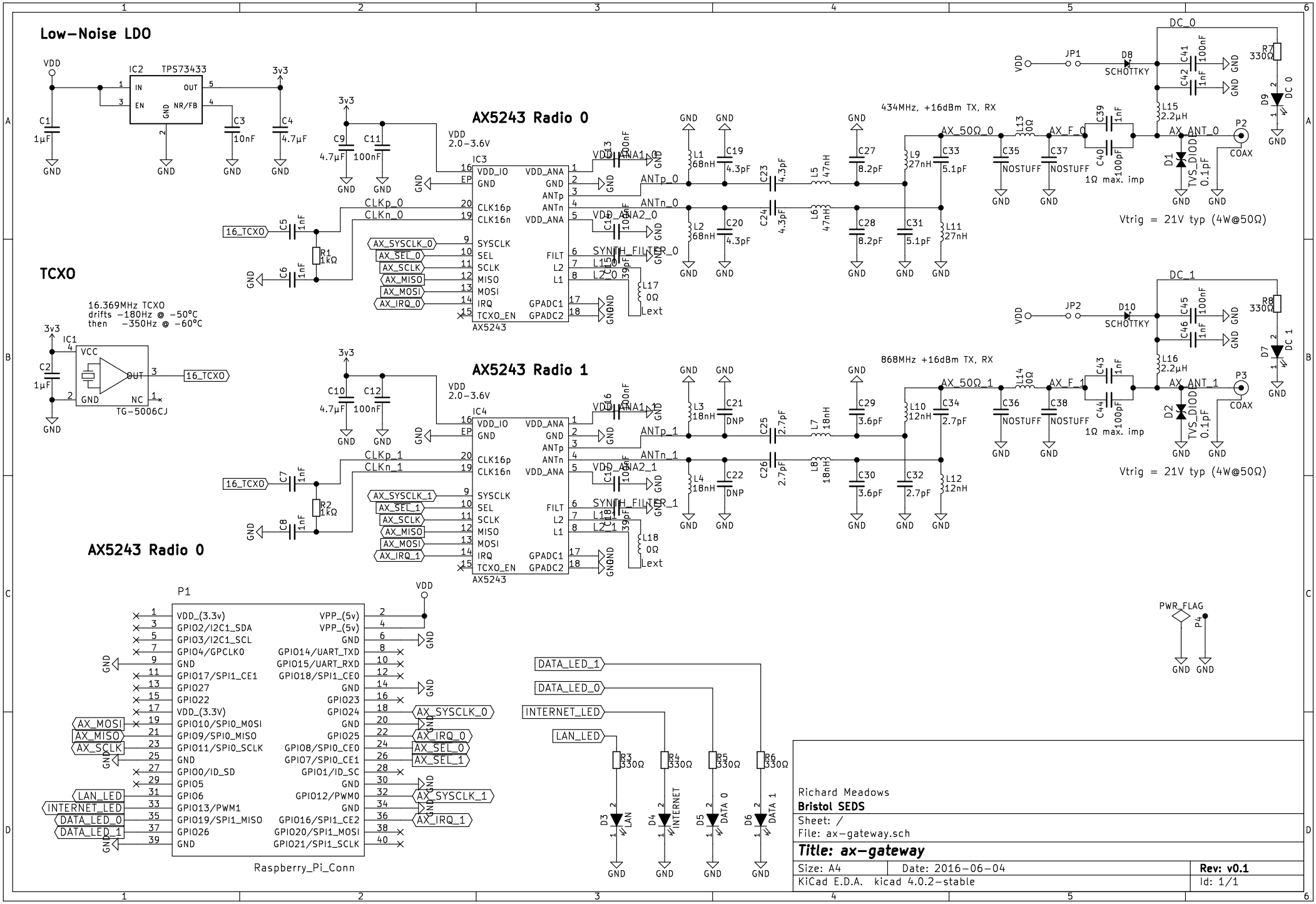
Low-Noise LDO
IC2 TPS73433
IN
OUT
EN
GND
NR/FB
C1 1µF
C3 10nF
C4 4.7µF
3v3
VDD
GND
AX5243 Radio 0
IC3
AX5243
VDD_IO
VDD_ANA
EP
CLK16p
CLK16n
SYSCLK
SEL
SCLK
MISO
MOSI
IRQ
TCXO_EN
FILT
GPADC1
GPADC2
ANTp
ANTn
CLKp_0
CLKn_0
AX_SYSCLK_0
AX_SEL_0
AX_SCLK
AX_MISO
AX_MOSI
AX_IRQ_0
SYNTH_FILTER_0
ANTp_0
ANTn_0
16_TCXO
C5 1nF
C6 1nF
R1 1kΩ
C9 4.7µF
C11 100nF
C13 100nF
C14 100nF
C15 39pF
L17 0Ω
Lext
L1 68nH
L2 68nH
C19 4.3pF
C20 4.3pF
C23 4.3pF
C24 4.3pF
L5 47nH
L6 47nH
C27 8.2pF
C28 8.2pF
L9 27nH
L11 27nH
C31 5.1pF
C33 5.1pF
434MHz, +16dBm TX, RX
AX_50Ω_0
L13 0Ω
AX_F_0
C35 NOSTUFF
C37 NOSTUFF
C39 1nF
C40 100pF
1Ω max. imp
AX_ANT_0
P2
COAX
D1 TVS_DIODE
0.1pF
Vtrig = 21V typ (4W@50Ω)
DC_0
JP1
D8 SCHOTTKY
C41 100nF
C42 1nF
R7 330Ω
D9
DC 0
L15 2.2µH
TCXO
16.369MHz TCXO
drifts −180Hz @ −50°C
then −350Hz @ −60°C
IC1
VCC
OUT
NC
TG-5006CJ
C2 1µF
AX5243 Radio 1
C10 4.7µF
C12 100nF
C16 100nF
C17 100nF
C18 100nF
C21 DNP
C22 DNP
C25 2.7pF
C26 2.7pF
L7 18nH
L8 18nH
C29 3.6pF
C30 3.6pF
L3 18nH
L4 18nH
L10 12nH
L12 12nH
C32 2.7pF
C34 2.7pF
868MHz, +16dBm TX, RX
AX_50Ω_1
L14 0Ω
AX_F_1
C36 NOSTUFF
C38 NOSTUFF
C43 1nF
C44 100pF
AX_ANT_1
P3
D2 TVS_DIODE
0.1pF
Vtrig = 21V typ (4W@50Ω)
DC_1
JP2
D10 SCHOTTKY
C45 100nF
C46 1nF
R8 330Ω
D7
DC 1
L16 2.2µH
C7 1nF
C8 1nF
R2 1kΩ
AX_SYSCLK_1
AX_SEL_1
AX_IRQ_1
SYNTH_FILTER_1
ANTp_1
ANTn_1
L18 0Ω
P1
Raspberry_Pi_Conn
VDD_(3.3v)
GPIO2/I2C1_SDA
GPIO3/I2C1_SCL
GPIO4/GPCLK0
GPIO17/SPI1_CE1
GPIO27
GPIO22
GPIO10/SPI0_MOSI
GPIO9/SPI0_MISO
GPIO11/SPI0_SCLK
GPIO0/ID_SD
GPIO5
GPIO6
GPIO13/PWM1
GPIO19/SPI1_MISO
GPIO26
VPP_(5v)
GPIO14/UART_TXD
GPIO15/UART_RXD
GPIO18/SPI1_CE0
GPIO23
GPIO24
GPIO25
GPIO8/SPI0_CE0
GPIO7/SPI0_CE1
GPIO1/ID_SC
GPIO12/PWM0
GPIO16/SPI1_CE2
GPIO20/SPI1_MOSI
GPIO21/SPI1_SCLK
LAN_LED
INTERNET_LED
DATA_LED_0
DATA_LED_1
R3 330Ω
R4 330Ω
R5 330Ω
R6 330Ω
D3 LAN
D4 INTERNET
D5 DATA 0
D6 DATA 1
PWR_FLAG
P4
Richard Meadows
Bristol SEDS
Sheet: /
File: ax-gateway.sch
Title: ax-gateway
Size: A4
Date: 2016-06-04
Rev: v0.1
KiCad E.D.A. kicad 4.0.2-stable
Id: 1/1