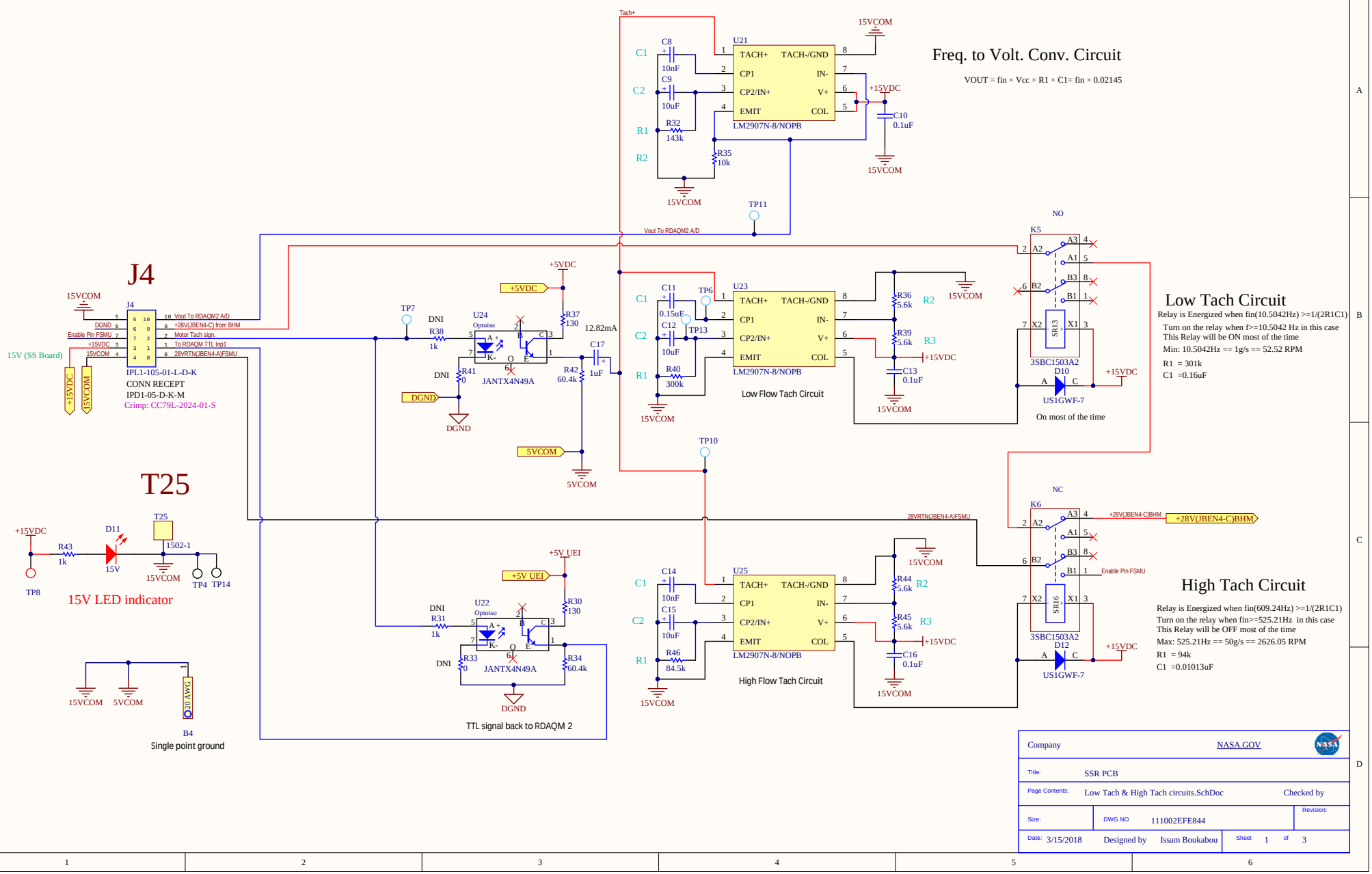
Freq. to Volt. Conv. Circuit
VOUT = fin × Vcc × R1 × C1= fin × 0.02145
Tach+
15VCOM
U21
TACH+
TACH-/GND
CP1
IN-
CP2/IN+
V+
EMIT
COL
LM2907N-8/NOPB
C8
10nF
C9
10uF
R32
143k
R35
10k
C10
0.1uF
+15VDC
TP11
Vout To RDAQM2 A/D
J4
15V (SS Board)
IPL1-105-01-L-D-K
CONN RECEPT
IPD1-05-D-K-M
Crimp: CC79L-2024-01-S
Vout To RDAQM2 A/D
+28V(JBEN4-C) from BHM
Motor Tach sign
To RDAQM TTL Inp1
28VRTN(JBEN4-A)FSMU
Enable Pin FSMU
+15VDC
15VCOM
+5VDC
TP7
DNI
R38
1k
U24
Optoiso
JANTX4N49A
R41
0
R37
130
12.82mA
C17
1uF
R42
60.4k
DGND
5VCOM
U23
C11
0.15uF
C12
10uF
TP6
TP13
R40
300k
R36
5.6k
R39
5.6k
R2
R3
C13
0.1uF
Low Flow Tach Circuit
K5
NO
3SBC1503A2
SR13
D10
US1GWF-7
On most of the time
Low Tach Circuit
Relay is Energized when fin(10.5042Hz) >=1/(2R1C1)
Turn on the relay when f>=10.5042 Hz in this case
This Relay will be ON most of the time
Min: 10.5042Hz == 1g/s == 52.52 RPM
R1 = 301k
C1 =0.16uF
T25
TP8
D11
15V
R43
1k
1502-1
TP4
TP14
15V LED indicator
TP10
28VRTN(JBEN4-A)FSMU
+5V UEI
U22
R31
1k
R30
130
R33
0
R34
60.4k
TTL signal back to RDAQM 2
U25
C14
10nF
C15
10uF
R46
84.5k
R44
5.6k
R45
5.6k
C16
0.1uF
High Flow Tach Circuit
K6
NC
+28V(JBEN4-C)BHM
Enable Pin FSMU
SR16
D12
High Tach Circuit
Relay is Energized when fin(609.24Hz) >=1/(2R1C1)
Turn on the relay when fin>=525.21Hz in this case
This Relay will be OFF most of the time
Max: 525.21Hz == 50g/s == 2626.05 RPM
R1 = 94k
C1 =0.01013uF
20 AWG
B4
Single point ground
Company
NASA.GOV
Title:
SSR PCB
Page Contents:
Low Tach & High Tach circuits.SchDoc
Checked by
Size:
DWG NO
111002EFE844
Revision:
Date:
3/15/2018
Designed by
Issam Boukabou
Sheet
1
of
3