C1
100nF

+5V

C2
100nF

U2
LM1117-3.3
3 VI GND VO 2
1

+3V3

U4
MAX3232
16
RS232 TO TTL CONVERTER

C3
100n
1 C1+   VCC
3 C1-   C2+ 4
              C2- 5   C4
                          100n
            VS+ 2   C6
                                100n
            VS- 6   GND

                                C5
                                100n
                                      GND

J1
xNAV650_J1   xNAV650 INPUT

NMEA_RS232_TX 4 NMEA_TX RS232

PPS 12 PPS

SIGNAL_GND 11

PPS BUFFER
U3A
74LVC2G34 (dual buffer)
1 1A VCC 1Y
3 2A   2Y
   GND

T1in 11 T1IN   T1OUT 14 TX1
      10 T2IN   T2OUT 7   RTS1
      12 R1OUT   R1IN 13 RX1
       9 R2OUT   R2IN 8   CTS1
         LOGIC GND RS232

R1OUT TTL 5V

R2
100R

R1
100R

U1
LM7805_TO220
3 VO
1 VI GND 2

C7
10uF

BT1
12V
+

GND

15

U5
Ouster OS1
GND 7
3 MULTIPURPOSE_IO
2 SYNC_PULSE_IN
VCC_24 1

DE9_Pins
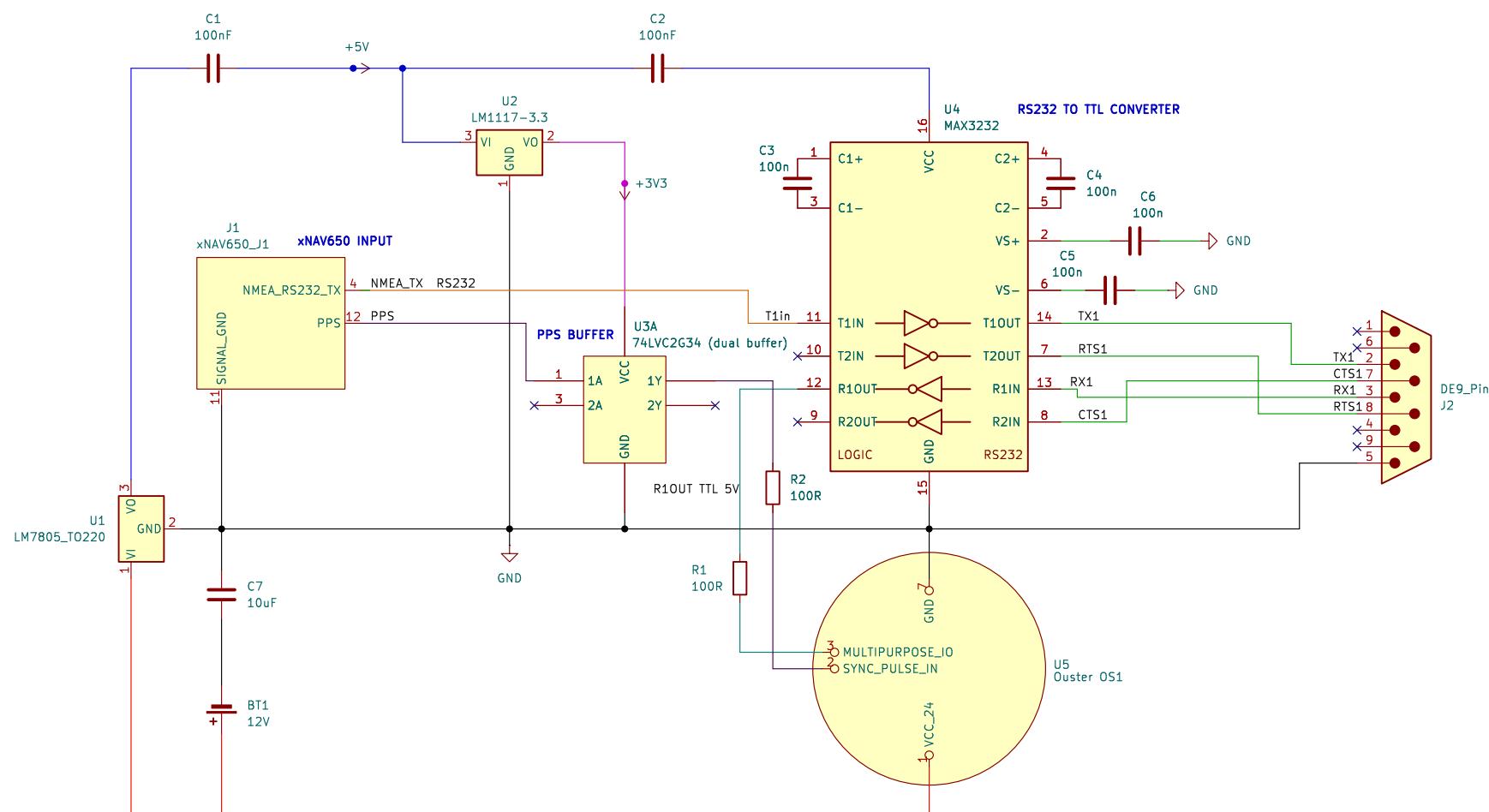J2
1
6
TX1 2
CTS1 7
RX1 3
RTS1 8
4
9
5

TX1
RTS1
RX1
CTS1

Vladyslav Hirchuk — git: SoloScriptSage

Sheet: /
File: xnav650.kicad_sch
Title: xNAV650-OS1-128
Size: A4   Date: 2025-11-13   Rev: 1.0
KiCad E.D.A. 9.0.2   Id: 1/1

SOLOSCRIPTSAGE