Notes

Calculations

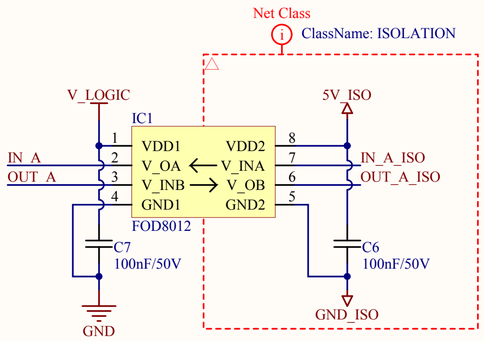
Important Note

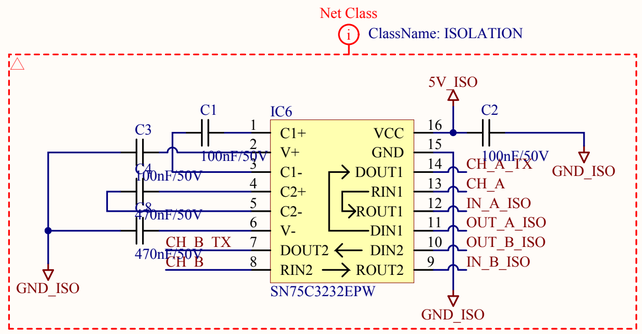
Software Note

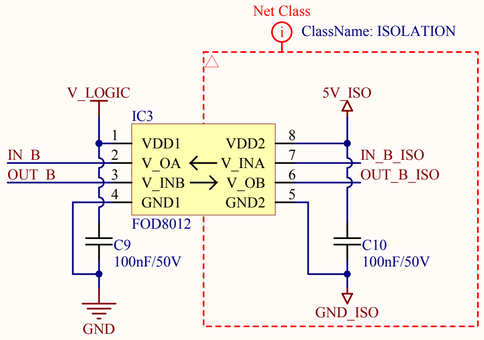
Mounting Note

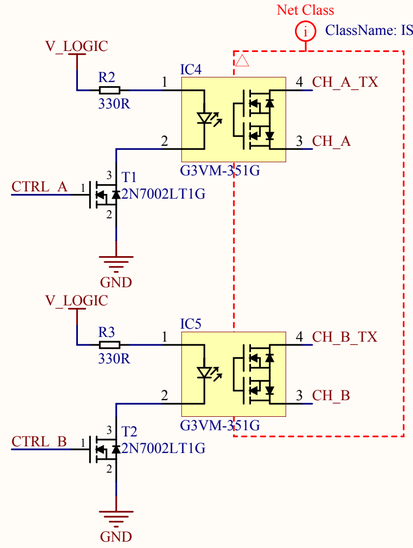
To fix

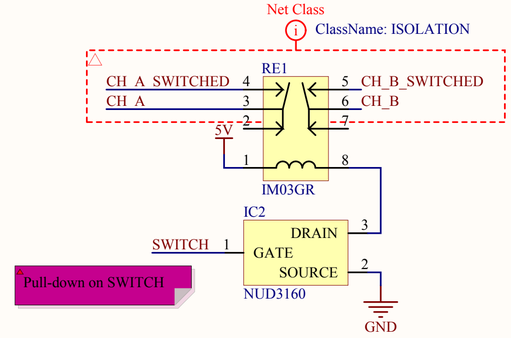
RS-232



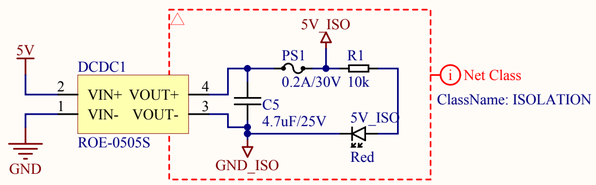








The capacitors are used for ESD protection. Together with the resistance in the cable (1 to 2 ohm) they create a RC low pass filter with cut-off frequency of 15979.5 MHz which should work fine for this situation.



Current Usage 5V_ISO:
FOD8012: 2x8 mA max = 16 mA
SN75C3232EPW: 1 mA supply
= 17 mA max

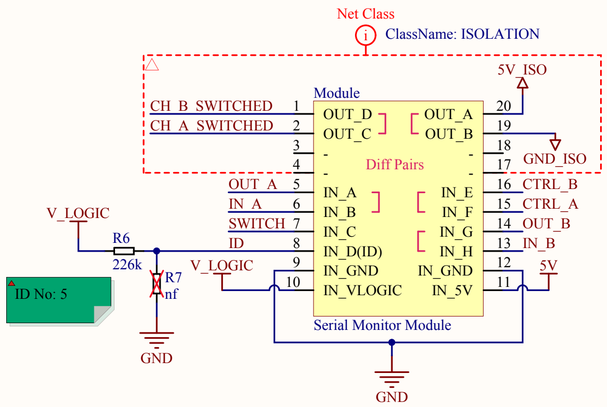
ROE-0505S 200mA out max
-> 200-17 = 183 mA left

Add load resistor on 5V_ISO to get better output voltage at standby

G3VM-315G V_forward: 1.15V typ.
Operating current: 5-7.5-25mA
Max current: 50mA
@5V_logic -> 11.67mA
@3.3V_logic -> 6.52mA

CTRL_A	CTRL_B	Mode
0	0	A in, B In
0	1	A in, B Out
1	0	A out, B in
1	1	A out, B out

The SSRs above will connect or disconnect the TX drivers from the output. This way we can choose if output A and B should be an output or input. (When set to output it will act as a loopback as the output is then connected to the input of the RS-232 driver IC)



Title: RS-232 Module		
Size: A3	Number: 1	Revision: Rev 1
Date: 9/12/2015	Time: 12:56:35 PM	Sheet 1 of 1
File: Serial Monitor RS-232 Module Schematic.SchDoc		