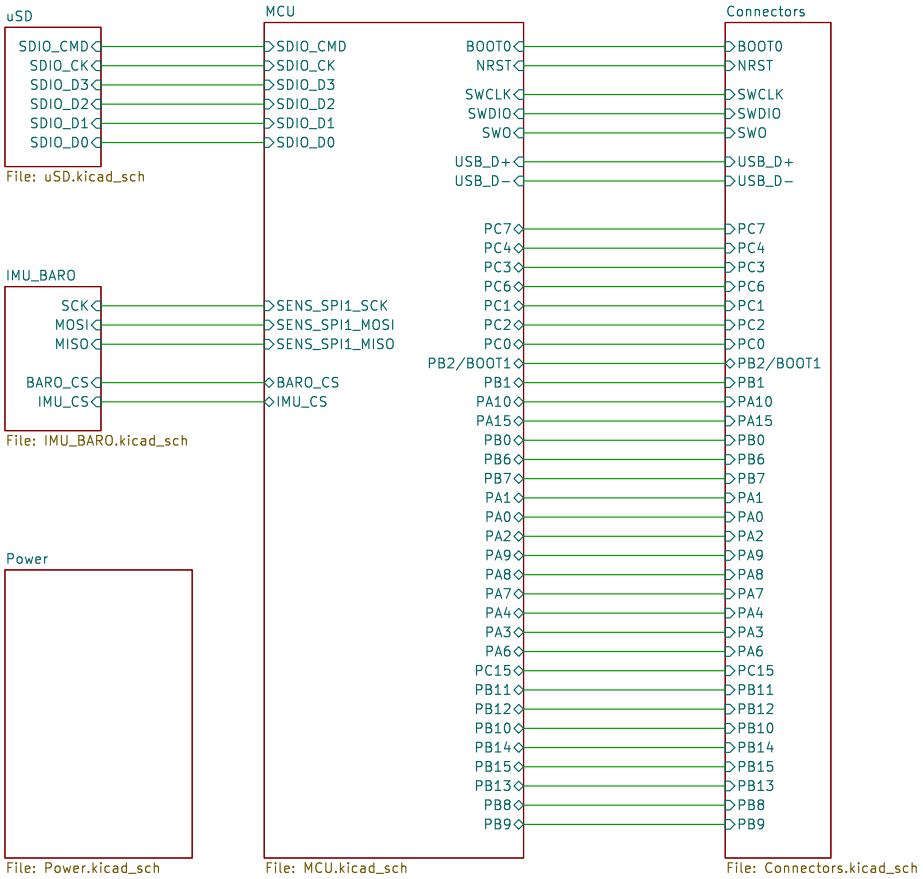
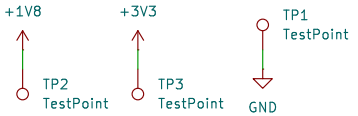


Autopilot Mainboard



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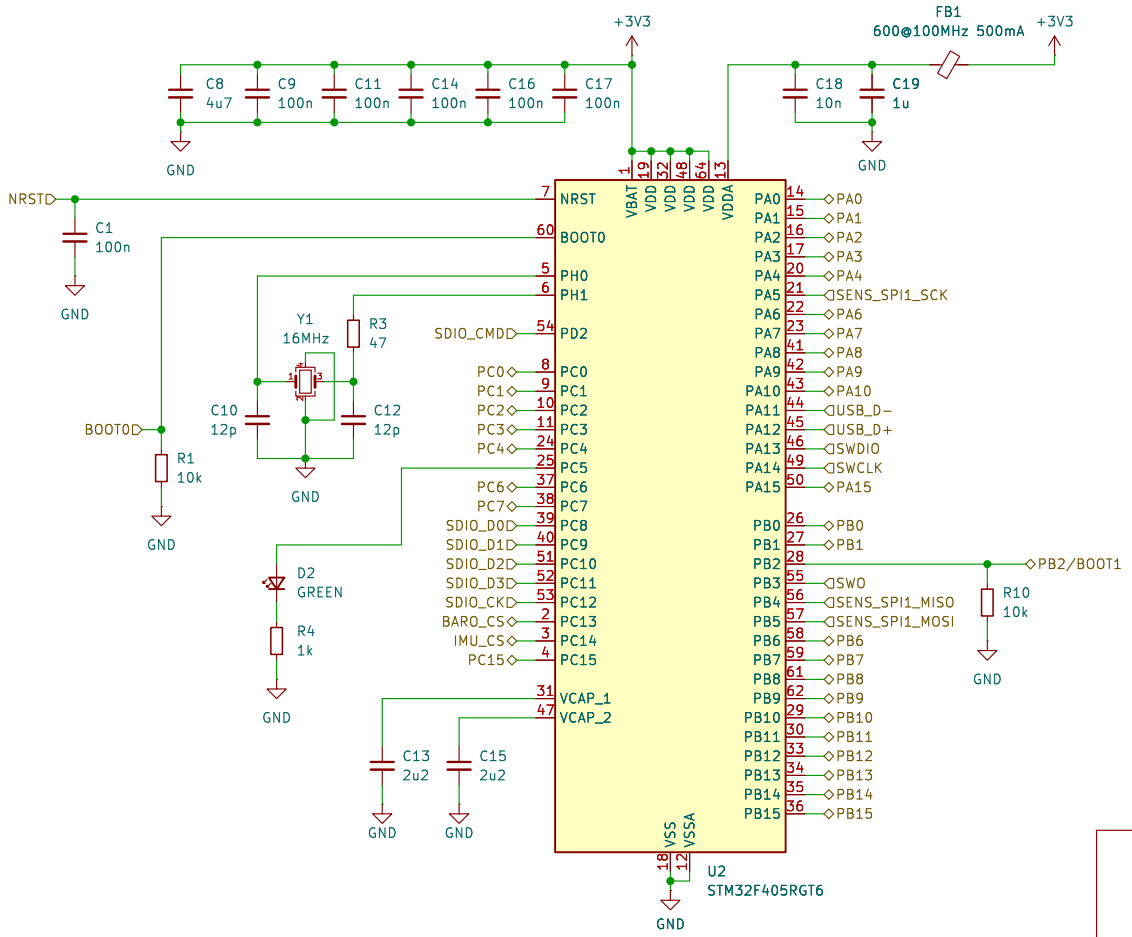
Size: A4	Date:	**Rev:**
KiCad E.D.A. 8.0.0		Id: 1/6

Microcontroller



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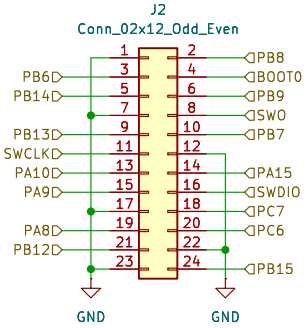
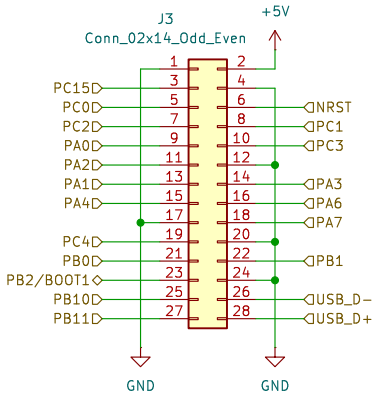
KiCad E.D.A. 8.0.0 | Id: 2/6

Connectors





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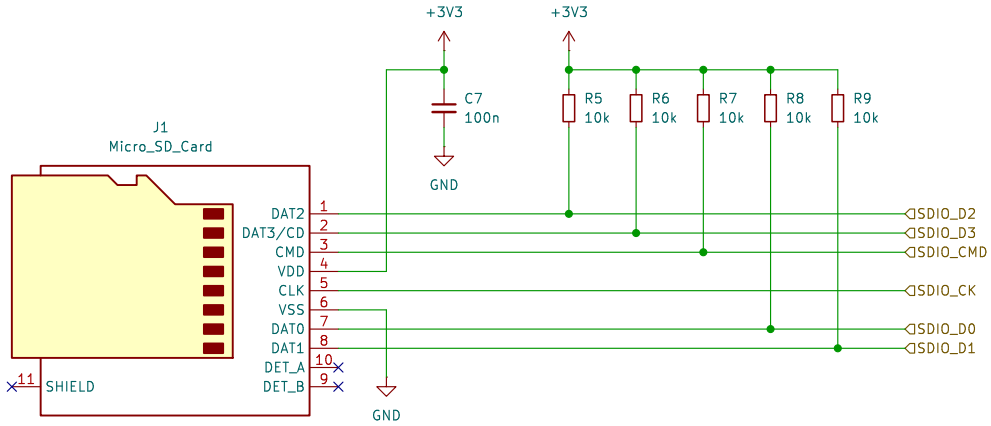
Micro SD Card



Sheet: /uSD/		
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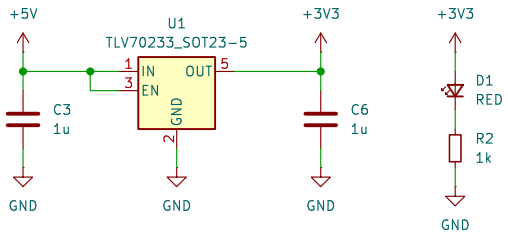
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. 8.0.0		Id: 4/6

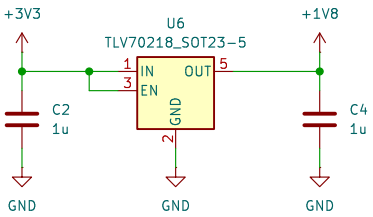
Power

5V to 3.3V for main power
300mA



Estimated current draw:
MCU 100mA
uSD 100mA
200mA max

3.3V to 1.8V for IMU
300mA



Sheet: /Power/ File: Power.kicad_sch		
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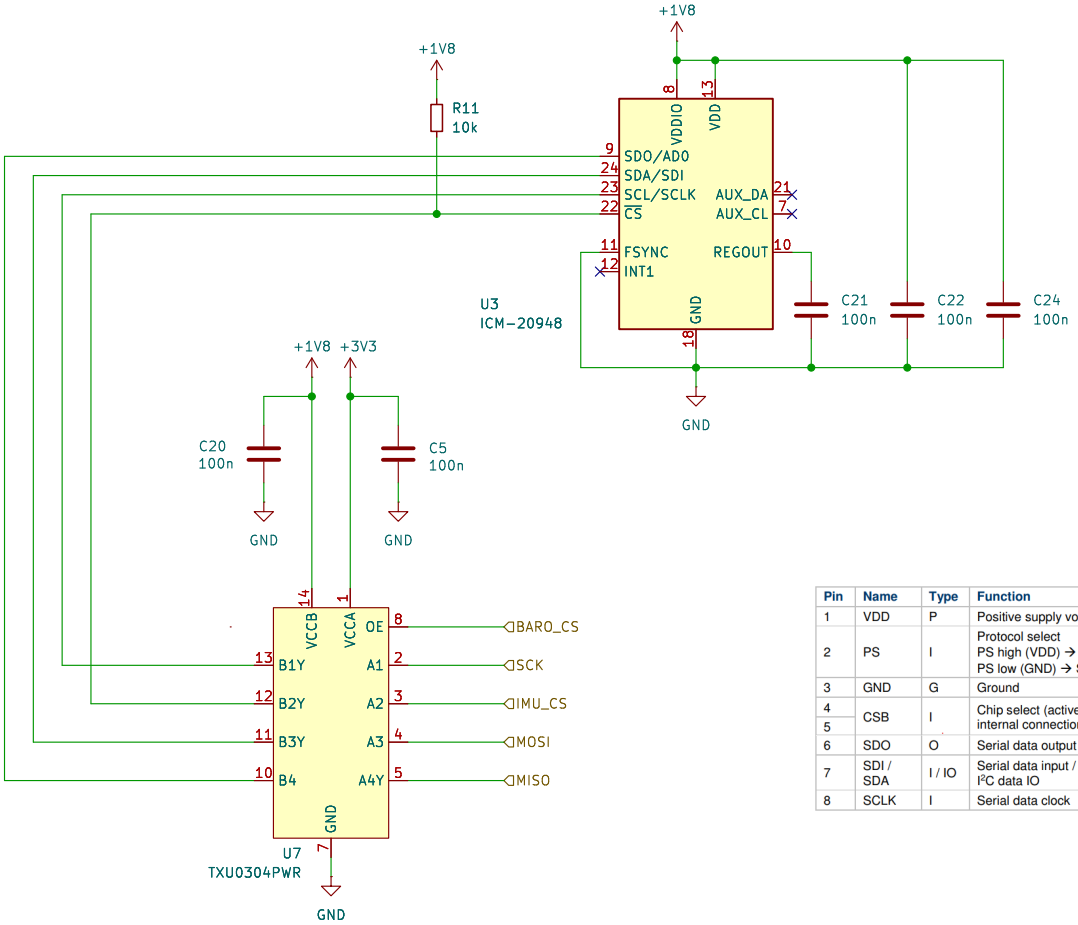
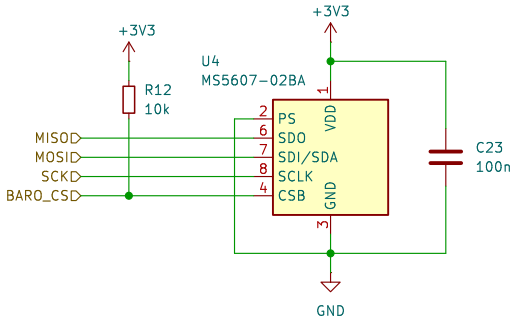
KiCad E.D.A. 8.0.0		Id: 5/6

Sensors



PIN NUMBER	PIN NAME	PIN DESCRIPTION
7	AUX_CL	I²C Master serial clock, for connecting to external sensors
8	VDDIO	Digital I/O supply voltage
9	AD0 / SDO	I²C Slave Address LSB (AD0); SPI serial data output (SDO)
10	REGOUT	Regulator filter capacitor connection
11	FSYNC	Frame synchronization digital input. Connect to GND if unused
12	INT1	Interrupt 1
13	VDD	Power supply voltage
18	GND	Power supply ground
19	RESV	Reserved. Do not connect.
20	RESV	Reserved. Connect to GND.
21	AUX_DA	I²C master serial data, for connecting to external sensors
22	nCS	Chip select (SPI mode only)
23	SCL / SCLK	I²C serial clock (SCL); SPI serial clock (SCLK)
24	SDA / SDI	I²C serial data (SDA); SPI serial data input (SDI)
1 – 6, 14 - 17	NC	Do not connect

Pin	Name	Type	Function
1	VDD	P	Positive supply voltage
2	PS	I	Protocol select PS high (VDD) → I²C PS low (GND) → SPI
3	GND	G	Ground
4 5	CSB	I	Chip select (active low), internal connection
6	SDO	O	Serial data output
7	SDI / SDA	I / IO	Serial data input / I²C data IO
8	SCLK	I	Serial data clock



When the barometer is enabled, BARO_CS is pulled low which sets the level shifter into high-Z state to prevent MISO conflict.

Sheet: /IMU_BARO/
File: IMU_BARO.kicad_sch

Title:

Size: A4	Date:	**Rev:**
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