

Flightcomputer

Arduino Due (3.3V)
Vin = 7V - 12V
Vout = 3.3V @ 800mA

Serial 1 (pin 18-19)
Serial 2 (pin 16-17)
Serial 3 (pin 14-15)

requirements:
1 x I²C
2 x Serial UART
1 x Serial proprietary
1 x SPI

note:
the I²C bus can be
shared by all sensors
using I²C

I²C

Inertial One (3.3V)
Accelerometer (BMA-150, 0x38),
Gyroscope (ITG-3200, 0x68),
Magnetometer (AK8975, 0x0c)

I²C

Inertial Two (3.3V)
Accelerometer (KXTF9-126, 0x0f),
Gyroscope (IMU-3000, 0x68),
Magnetometer (HMC5883L, 0x1e)

Serial (TTL, UART)

PMB-648 (3.3V - 5V)
GPS

I²C or SPI

MS5607 (3.3V - 6.5V)
Altimeter & Thermometer (MS5607, 0xec-0xef)

Serial (proprietary)

SHT11 (2.4V - 5.5V)
Temperature & Humidity (SHT11)

SPI

Parallax SD card adapter (3.3V)
or
Parallax microSD card adapter (3.3V)

DI/O (card inserted)

Serial (TTL, UART)

XBee-Pro 868 (3V - 3.6V @ 500mA)
power 1mW (0 dBm) to 315mW (+25 dBm)

1 x I²C
2 x Serial UART
1 x Serial proprietary
1 x SPI
1 x digital I/O