

CANSAT KIT

Date: Dec 1st 2011

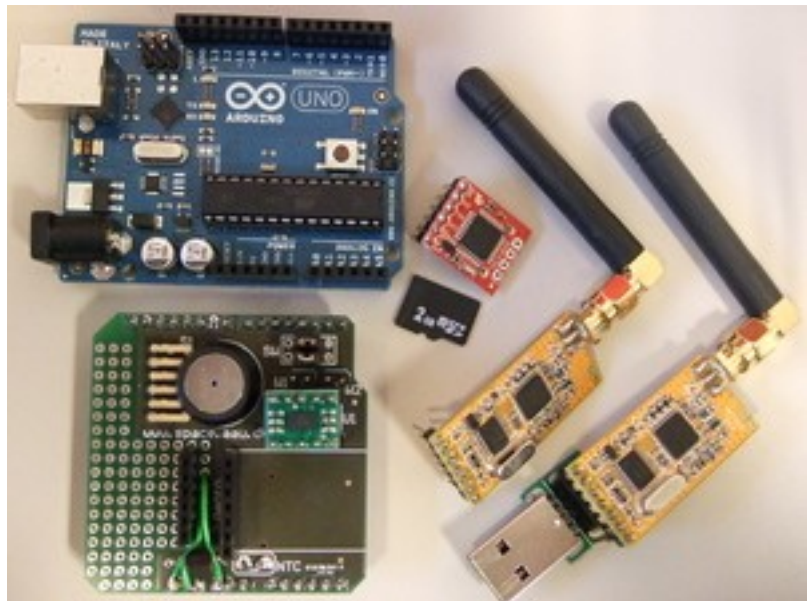
Our ref: JDN

AAU Satlab has deisgned a small cansat kit based on a standard Arduino and a our own shield.

More information can be found at <http://www.control.aau.dk/~jdn/edu/cansat-kit>: Homepage is of Dec 1st still in danish but an english version will be available before Jan 1st 2012.

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CANSAT KIT

Components:

standard Arduino with standard shield interface

Shield: AAU cansat

Sensors: presssure mpx4115a
 temperature LM35
 acceleration MMA7361L

Com: apc220 UHF tx/rx radio. Up to 1km range in free air with standard small antennas

Datalogger openlogger (tx/rx based), uses sdcard

shield:

sensor	port
temperature	0
pressure	1
accelerometer x axis	2
accelerometer y axis	3
accelerometer z axis	4
radio	RX RX0
radio	TX TX0
openlogger	in parallel with radio

A Small but 100% working program

Samplerate 2 Hz

```
void setup()
{
    Serial.begin(9600);
}

int value;

void loop()
{
    delay(500);
    value = analogRead(0);
    Serial.print(value); Serial.print(" , ");
    value = analogRead(1);
    Serial.print(value); Serial.print(" , ");
    value = analogRead(2);
    Serial.print(value); Serial.print(" , ");
    value = analogRead(3);
    Serial.print(value); Serial.print(" , ");
    value = analogRead(4);
    Serial.print(value); Serial.print(" , ");
    Serial.println();
}
```

Add information

Price estimate:

radio €33 - includes radio for PC. Does not include "high gain" antenna

pressure €20

accelerometer €20

temperature €3

shield – €5

Arduinio uno €15

AAU cansat shield

AAU cansat frame

