BUDAPESTI MŰSZAKI ÉS GAZDASÁGTUDOMÁNYI EGYETEM
Villamosmérnöki és Informatikai Kar
Szélessávú Hírközlés és Villamosságtan Tanszék

PocketQube Class Student Satellites in Hungary

"The Smallest Operational Satellites in the World with scientific on-board payload."

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https://gnd.bme.hu

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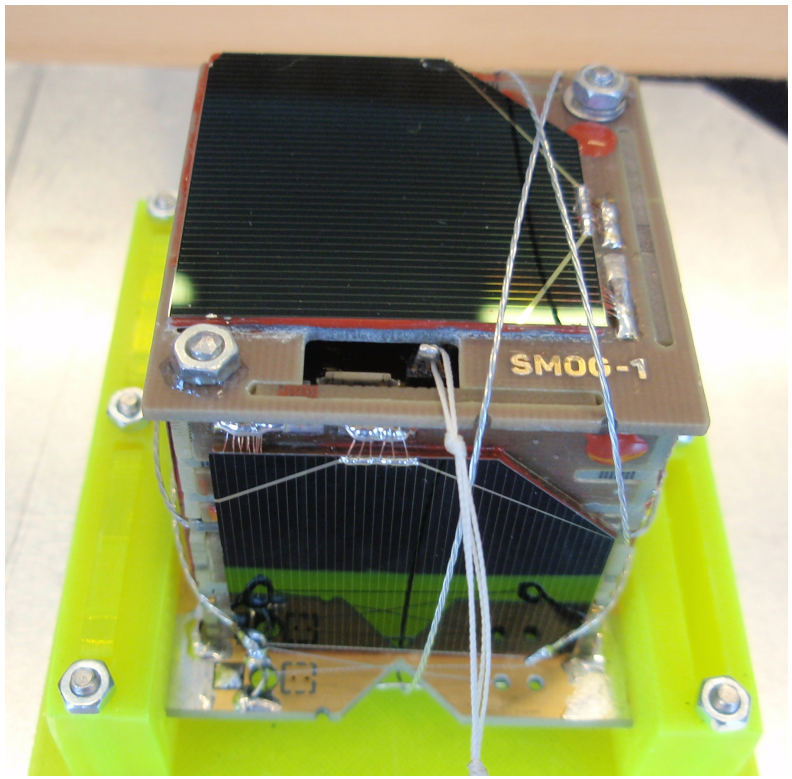
SMOG-1 & SMOG-P

1. DVB-T band Spectrum Monitor.
2. Measurement of Total Ionising Dose.
3. Application of hysteresis material to decrease orbit lifetime.

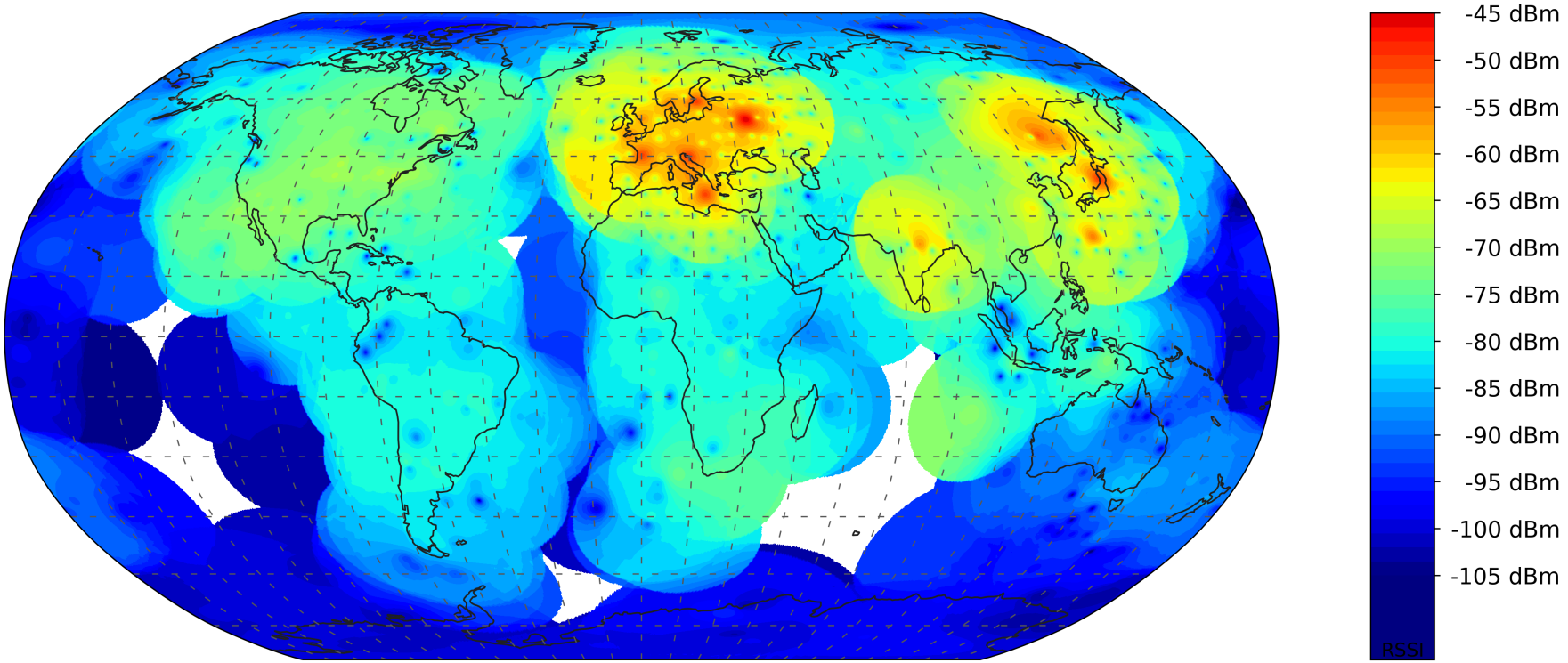
Single-point failure tolerant, cold-redundant on-board satellite sub-systems with local intelligence.

- 50 x 50 x 50 mm
- 183 g mass
- $-40... + 80C$ temp. range
- $20g$ acc. load

- 06.12.2019, Electron - SMOG-P
- 22.03.2021, Soyuz - SMOG-1



Global DVB-T Band Electromagnetic Pollution Map



Donát Takács, Boldizsár Markotics - BME VIK TDK 2020

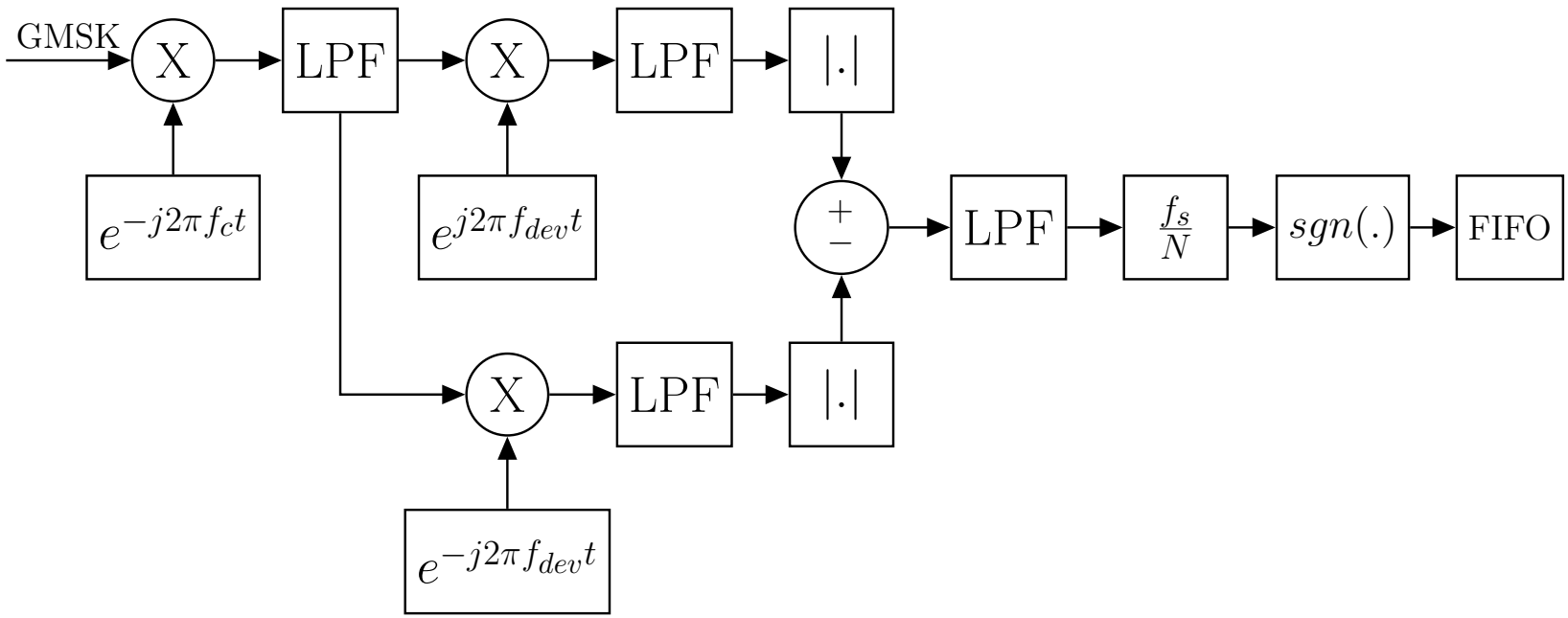
This is a source code here.

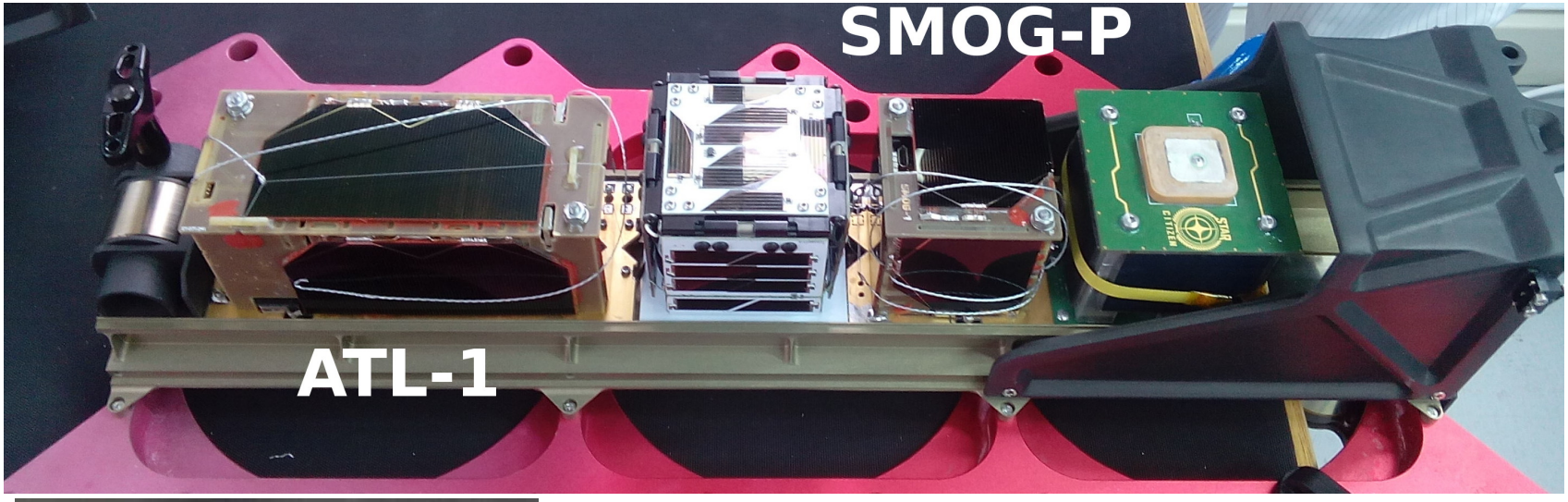
```
1000 #include <stdio.h>
     int main(int argc, char **argv)
1002 {
       while(1){
1004     break;
       }
1006   return 0;
     }
```

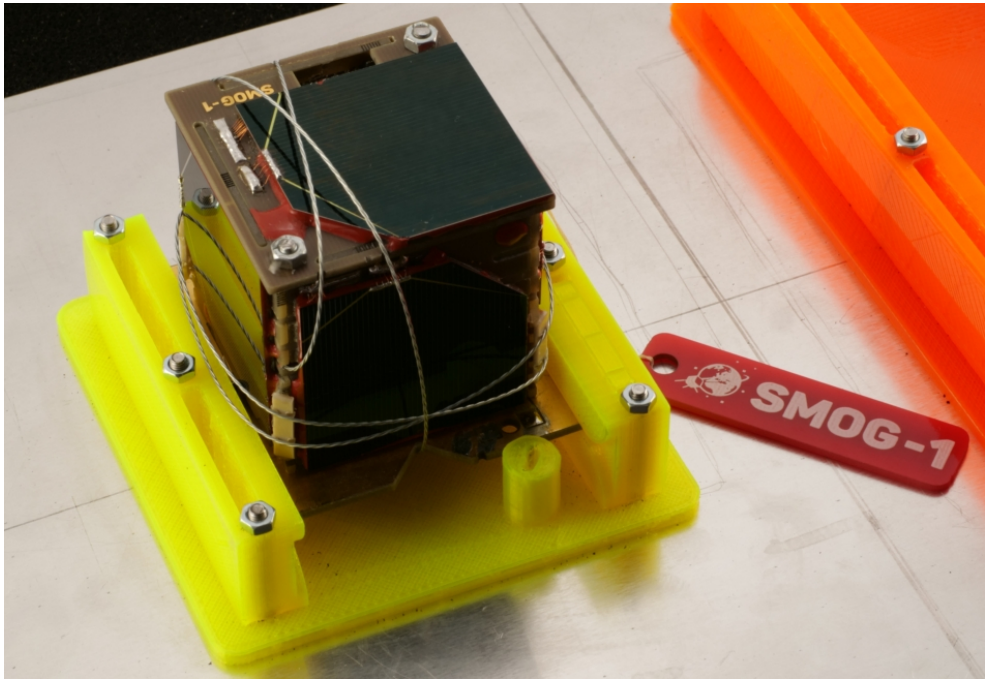
while1.c

This is a block scheme here.

Compile *gmsk_dem.tex* file, then include *gmsk_dem.pdf*.







Operated: Masat-1, SMOG-P, ATL-1; operational: SMOG-1