ADEFS-I

Nano Satellite Platforms

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Main Problems.

- Temperature.
- Radiation.
- Radio Transmitter.

Steps applied in the present work

- ADEFS-I.
- IOT.
- Use Case Study.
- Implementation 1 , 2 , 3.
- Conclusion.
- The Future.

ADEFS-I

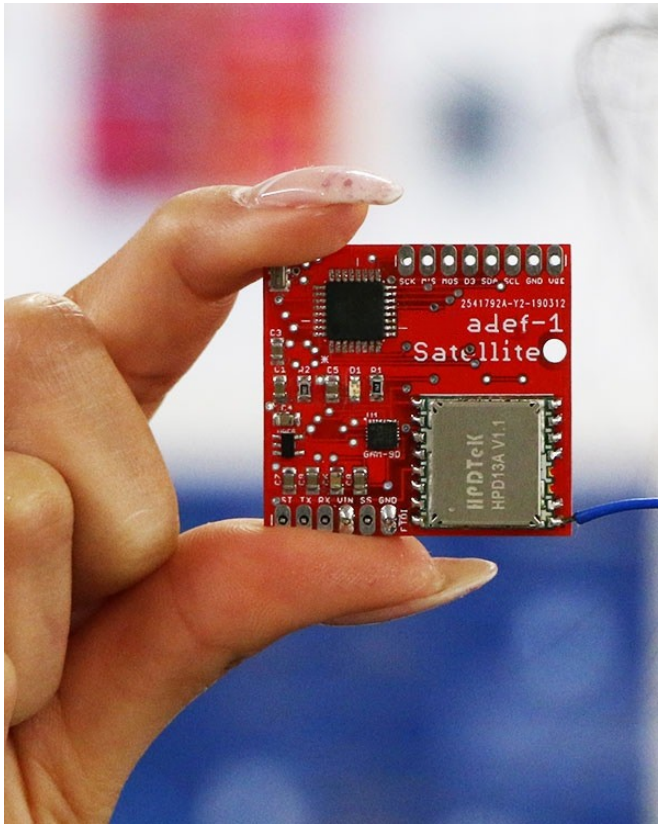


Fig. 1 ADEFS-I

I O T (Internet Of Things)

The spread of IoT technologies in various industries, such as agriculture and mining, reveals problematic data transfer in geographically remote locations due to lack of network infrastructure. Various technologies such as LPWAN, (Low Power Wide Area Network), offer extended communication ranges, satellite networks are the only option available to transmit IoT data to a central server point.

Use Case Study

CubeSat Solutions...

Implementation - 1

ADEFS-I is a Nano satellite project, focused on presenting the theoretical bases for development. Completely built by yourself.

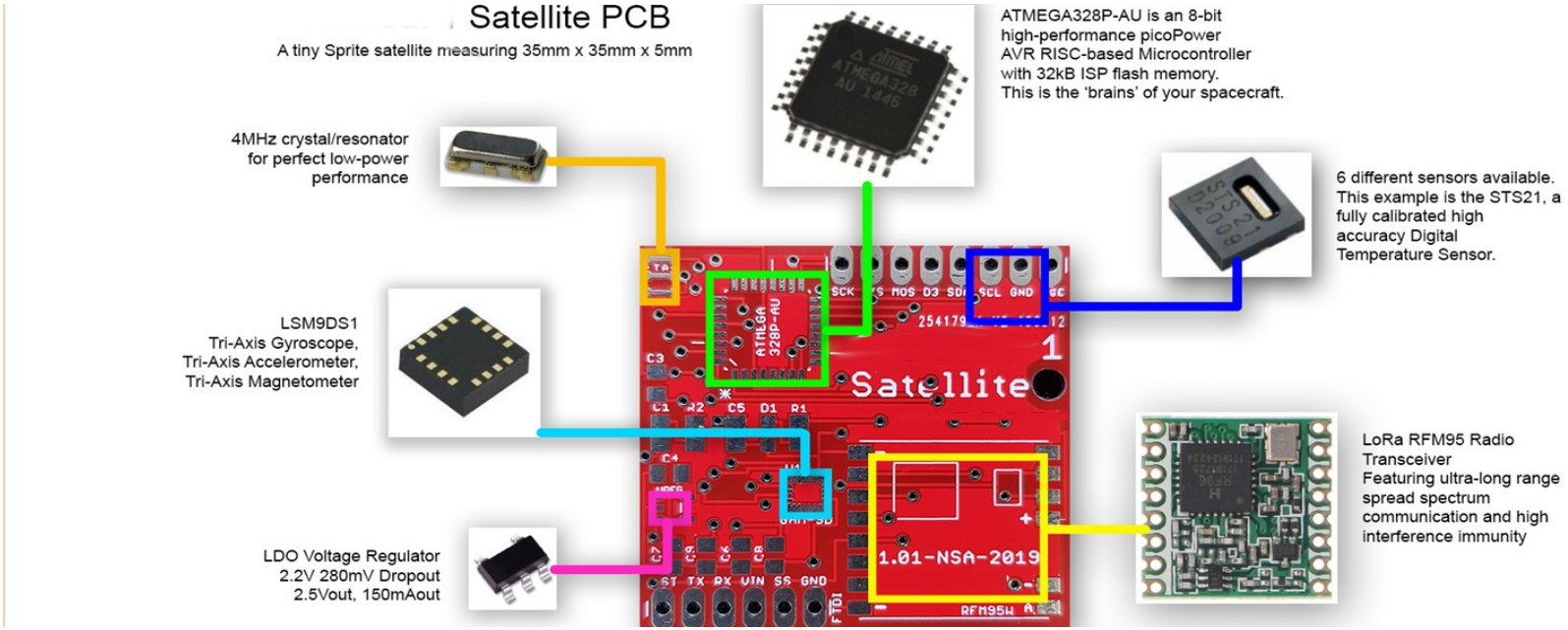


Fig. 2 Main Board

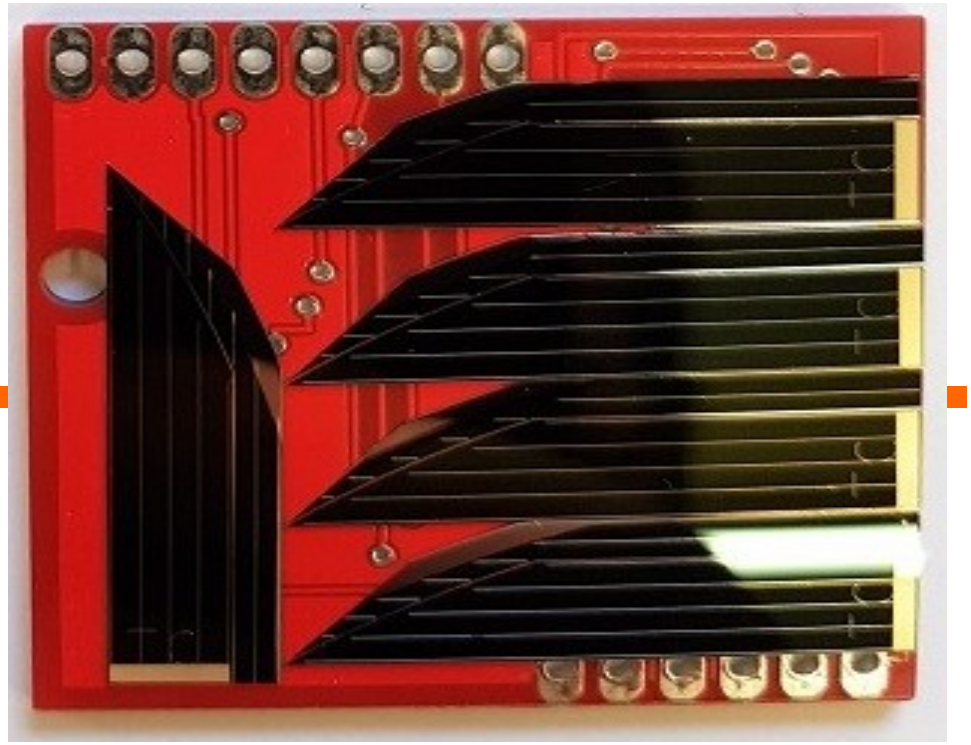
Implementación - 2

Experimental tests by phases of technologies for the launch, and the use of Nano satellite with different modifications, will confirm the technical feasibility of the project, with given weight and dimension characteristics, such as the correction of structural and technological solutions.

Thus, as the design methods and circuits used, to ensure durability against radiation.

Implementation - 3

Fig. 3
Solar Panel



Conclusion

One possible implementation of a Nanosatellite with an ultra-low-power, battery-operated, long-life, and long-range transceiver demonstrates the feasibility of low-cost, long-life devices connected to an M2M network, based on a bi-directional satellite of low orbit, in an IOT network.

Launch with Forecast to February / March 2021.

The Future

Fig. 4 Dashboard from the Base Station

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Thank You !!!

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Contact

== All CODES in https://github.com/splash2018