



KSF Space NanoSatellite Ready to Fly Model & Our Perfect Life Cycle Services

www.ksf.space

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entity to whom they are addressed*



About KSF Space

- ✓ A not for profit foundation registered in the USA # 5605031, the KSF Space Foundation or (KSF Space) was initially founded to enable cost-efficient access to low earth orbit (LEO) with zero-environmental impact flying solutions.
- ✓ The foundation encourage universities to develop R&D missions using small satellites and micro-satellites, where small satellites become one of the most important role in developing future scientific space missions.
- ✓ The foundation steered by officers and members from major space agencies and industries like NASA,ESA,JAXA,SpaceX...etc.

More about KSF activities www.ksf.space





About KSF Space

The foundation steered by officers and members from major space agencies and industries like NASA, ESA, JAXA, SpaceX...etc





Our Core Units

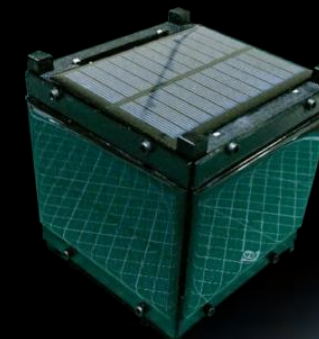


- World's 1st Satellite Professional Certification with over 1700 candidates

NEP
Certificate

CubeSat Kit

- In house fabricated cheapest satellite in small sat industry



JUPITER
Rocket

MNSAT
Conference

- IEEE Aerospace Int. Conference



- World's 1st NGO Rocket for testing satellites in suborbit

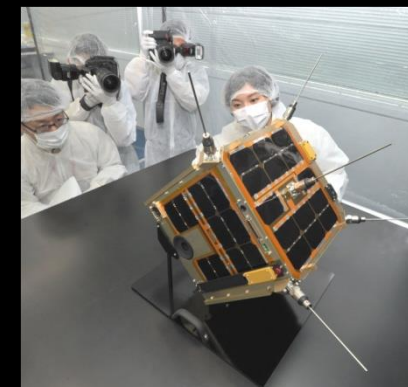




Small Satellite Fabrication Consulting Service

The international, technical committee at KSF Space Foundation (KSF), comprising of experienced professional engineers, researchers, scientists and subject matter experts, can assist and work with you on your next space mission (see members page).

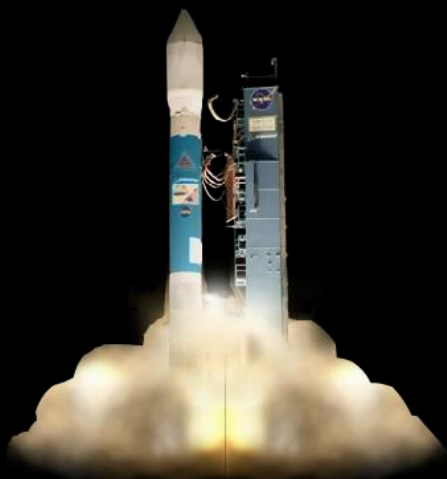
KSF currently holds numerous, signed agreements with key industry and academic stakeholders from across the nano-satellite community. KSF can assist your next space mission by matching the most suitable services in the market with your mission's needs. Contact us and let us know what your next space mission is all about, and we'll provide you with exemplar technical expertise.





Launch Service

At the KSF Space Foundation, we can source and manage ride share opportunities with a network of international launch providers. We can help institutions launch their own experiments; with affordable pricing below normal market rates from LEO 160 KM, 310 KM, 550 KM, 600 KM & 700 KM to 2000 KM above ISS and to GEO





KSF Space Reachable to ISS for R&D Experimentation

MEO + 2000 KM

700 KM

400 KM

LEO from 160 KM



ISS



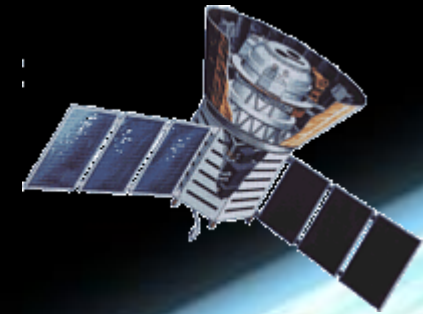
Affordable Services for Academic R&D Projects



Affordable Services for Academic R&D Projects

Affordable Services for Academic R&D Projects

- ✓ Building, integration, zero gravity testing environment and launch opportunities for Nanosatellite “CubeSat”
- ✓ Support your academic activities on building your own Ground Station for R&D and receive live signals & images from active on orbit weather and climate major satellites
- ✓ Provide support and training on building Ground Station to track current Nanosatellites or Cubesats on LEO orbit





Affordable Services for Academic R&D Projects



Experiments

KSF is currently offering access to near-space and LEO to GEO for research and scientific experiments in the fields of:

- ✓ Earth or Space observation
- ✓ Biological testing
- ✓ Satellite positioning detection
- ✓ Earth magnetic field measurement
- ✓ Radio Transmissions
- ✓ Atmospheric Science
- ✓ Technology experiment
- ✓ Ecological Sciences
- ✓ Testing of hardware and software of micro and nano-technology





"NEP" Nanosatellite Engineering Professional Certification

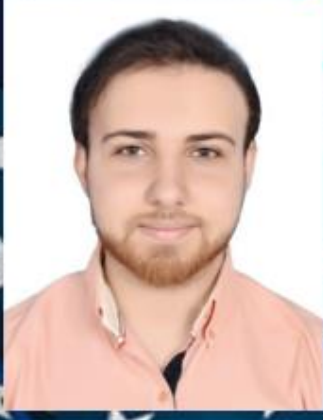
The NEP Certification pathway will address aerospace engineers and experts and will be recognized by major space companies, organizations, foundations and agencies. Some of the industries will work with KSF Space to review the content of the course material and accredit the certificate by recognizing NEP Certification as world's first and only nanosatellite engineering professional course.





**Over 1700 Candidates
became NEP
Certified by KSF Space**







Space Team
Maldives





MINISTRY OF DEFENCE
HUNGARY



NanoSatellite Engineering Professional

This is to certify that

JOHN MCLAREN

Has successfully completed all prescribed
requirement and is hereby designated as

NanoSatellite Engineering Professional

In testimony whereof, we have subscribed our
signature under the seal of the Foundation



Paul Magill

Chair, Board of Directors

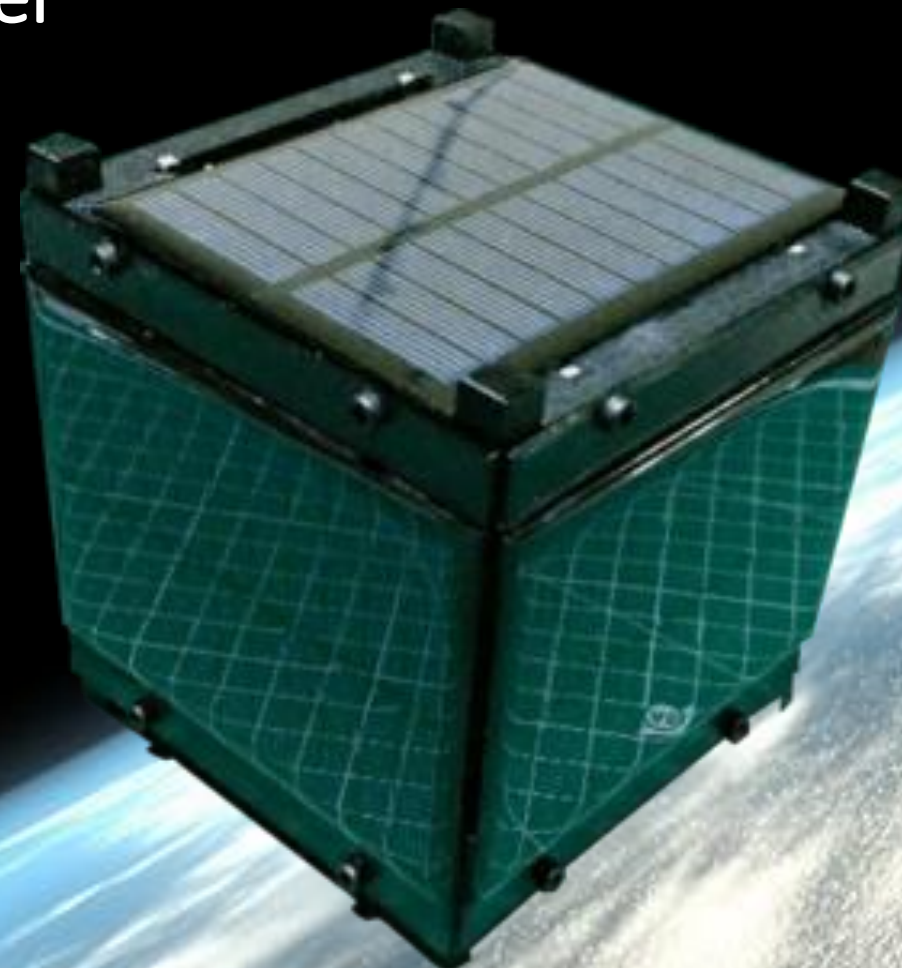
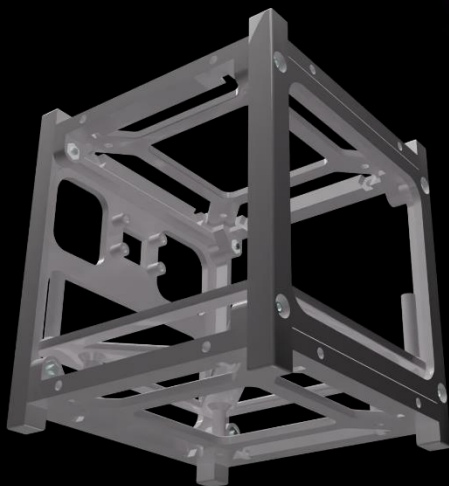
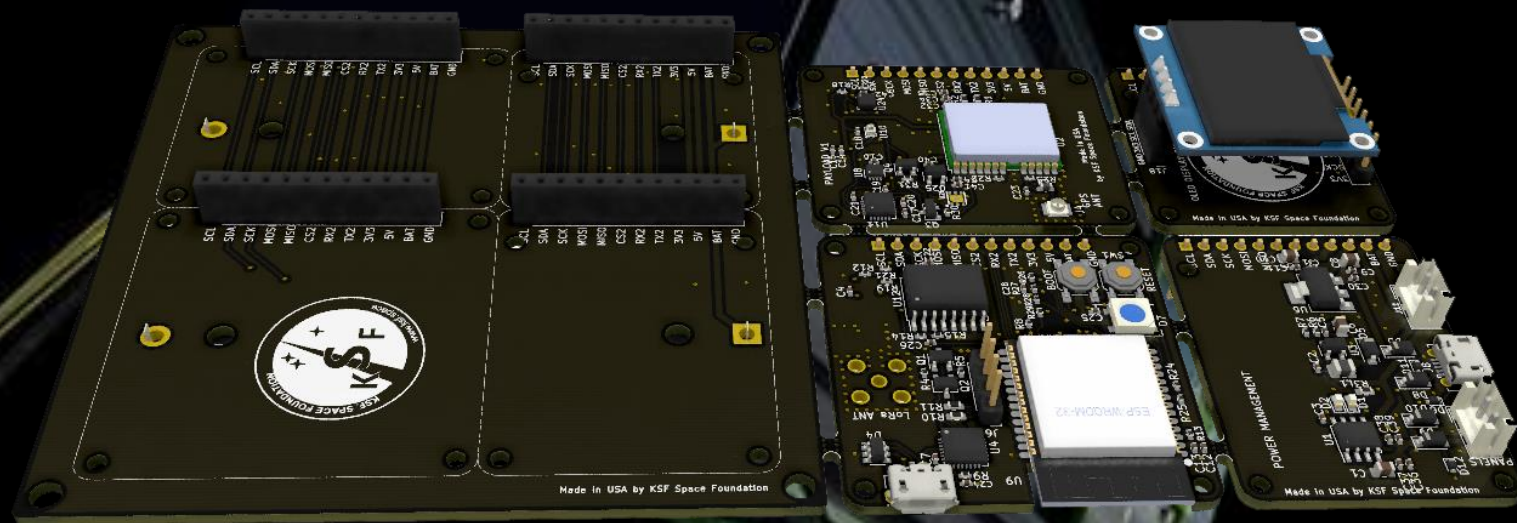
March 2017
Registration No. 36722N

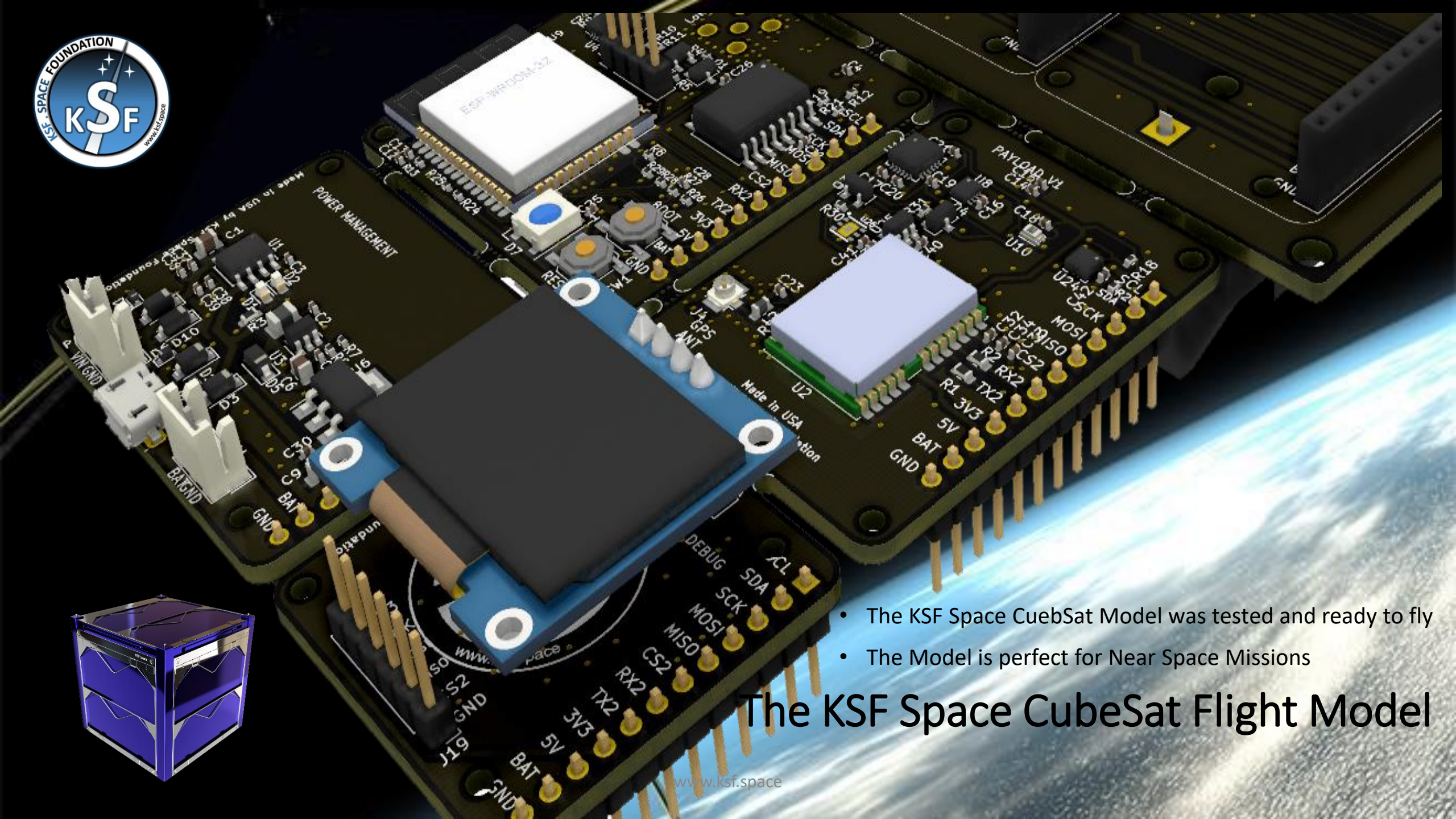
R. J. Magill

NEP OFFICER



The KSF Space CubeSat Flight Model





- The KSF Space CubeSat Model was tested and ready to fly
- The Model is perfect for Near Space Missions

The KSF Space CubeSat Flight Model



KSF SPACE READY TO FLY CUBESAT EDUCATION KIT



CubeSat Kit V. 1.0

SOLD





CubeSat Kit V. 2.0

Features (ED-FW-MD)

POWER BOARD

The power board has many features, such as a battery holder that holds two 18650 lithium batteries together, with a circuit to protect the battery from high currents and high and low voltage.

It also has a buck converter that does not consume a lot of current and has high efficiency. There is also a solar charger that can connect to 5 solar panels. There is a circuit to switch charging from solar energy to USB because it is faster.

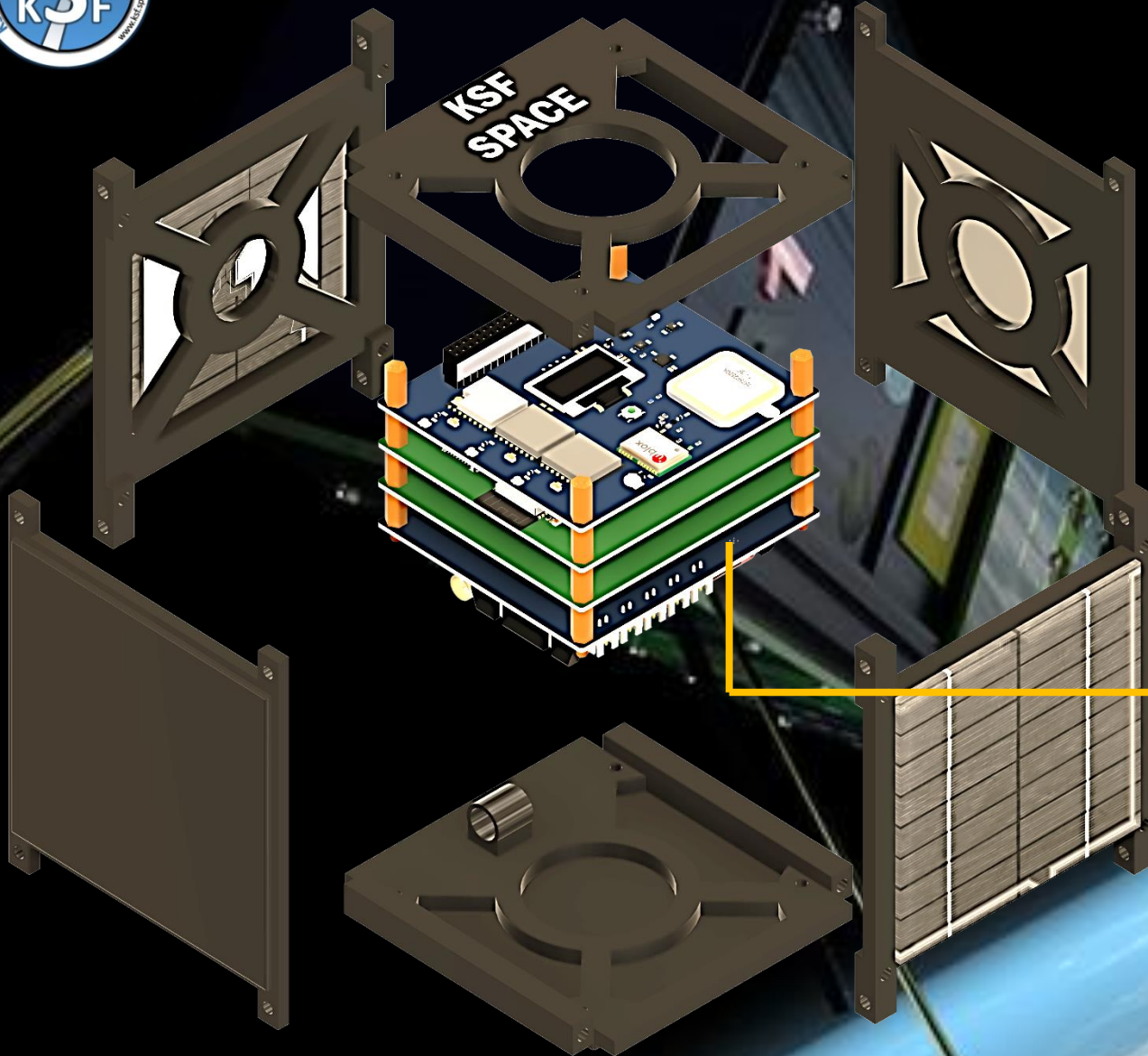


CubeSat Kit V. 2.0

Electronics Design (Sensors and Communication board)

The Sensors and Communication board has three LORA modules, each one with a different frequency that works on the country's available frequency and is controlled by three switches. It also has a GPS module/

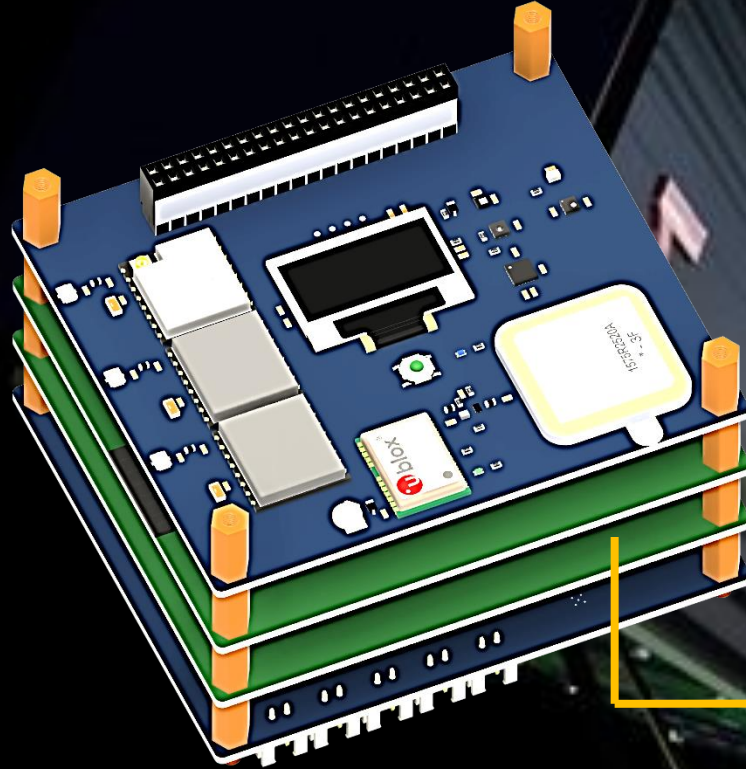
But with an RF amplifier and a SAW filter to operate the internal antenna at maximum power in order to determine the location with high accuracy and almost in Anywhere..





CubeSat Kit V. 2.0

The board has MPU6050 sensor module is complete 6-axis Motion Tracking Device. It combines 3-axis Gyroscope, 3-axis Accelerometer and Digital Motion Processor all in a small package. Also, it has the additional feature of on-chip Temperature sensor.

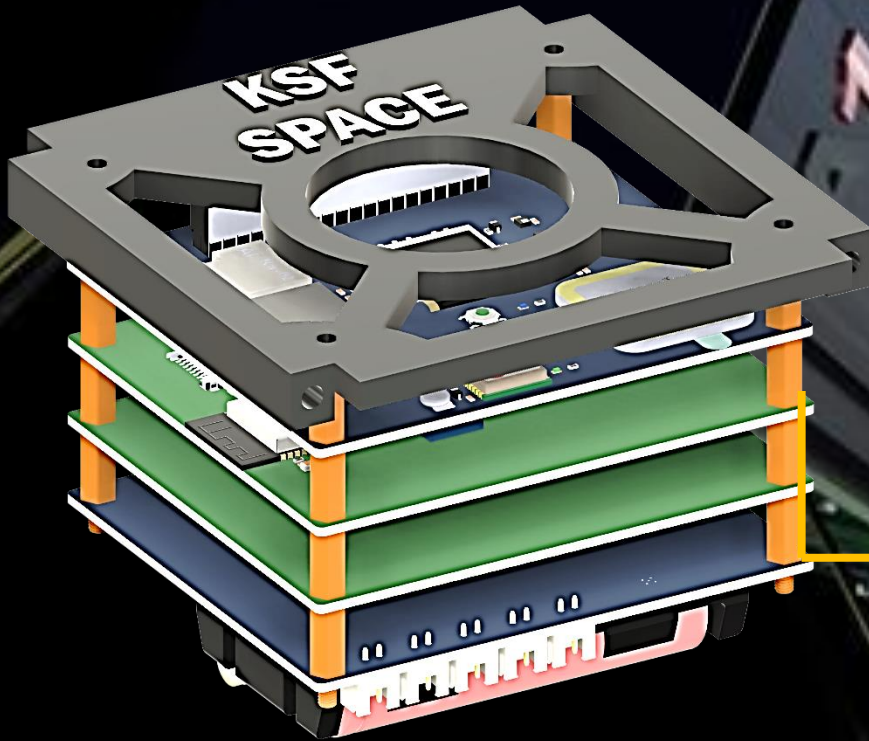


It has I2C bus interface to communicate with the microcontrollers. Also, the LPS22HB is an ultra-compact piezoresistive absolute pressure sensor which functions as a digital output barometer.



CubeSat Kit V. 2.0

The device comprises a sensing element and an IC interface which communicates through I2C. And also, SGP40 Air Quality Sensor. And SHT35A-DIS-B2.5kS which is Humidity and Temperature Sensor is highly efficient and accurate.



And the UV Radiation Sensor, and finally the OLED Display to display important data on it and know the frequency, time, date, sensor values, and if there is any problem with the sensors or in operation in general



CubeSat Kit V. 2.0

MCU BOARD

The MCU board has an ESP32 controller with integrated WIFI and BLE with 4 MB of memory. It also has a RTC with built-in crystal to prevent timing errors. It also has a SD CARD holder to store data on it. It has a USB DEBUGGER to upload or check the code and has 3 keys to control the frequency of LORA for each country in which the device is available so to be compatible with almost all countries.





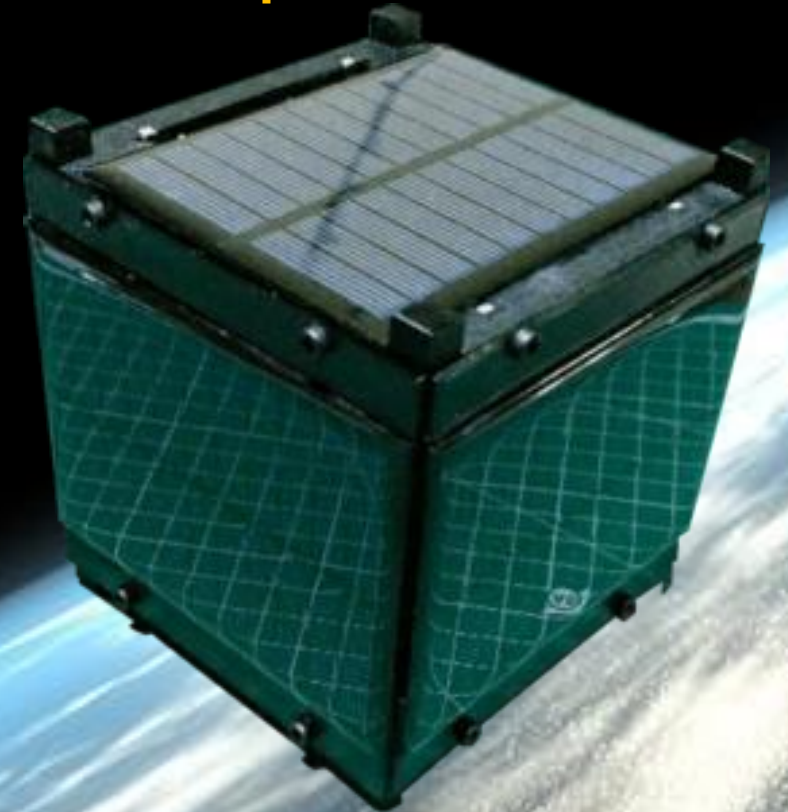
CubeSat Kit V. 2.0

Mechanical Design

- 3D model material: PLA+ or ABS.

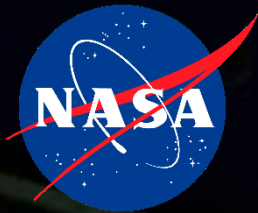
Capabilities:

- LORA (1): 433Mhz (410-525 MHz) Max output Power: 18 ± 1 dBm
- LORA (2): 868Mhz Max output power: 20 dBm
- LORA (3): 915Mhz Max output power: 20 dBm
- WIFI & BLE: 2.4Ghz
- GPS Receiver with RF Amplifier and SAW Filter + Internal Antenna
- Working with two batteries 3.7V (18650) – (Inside Battery protection)
- USB Type C Charger (2A) – Solar cell Charger





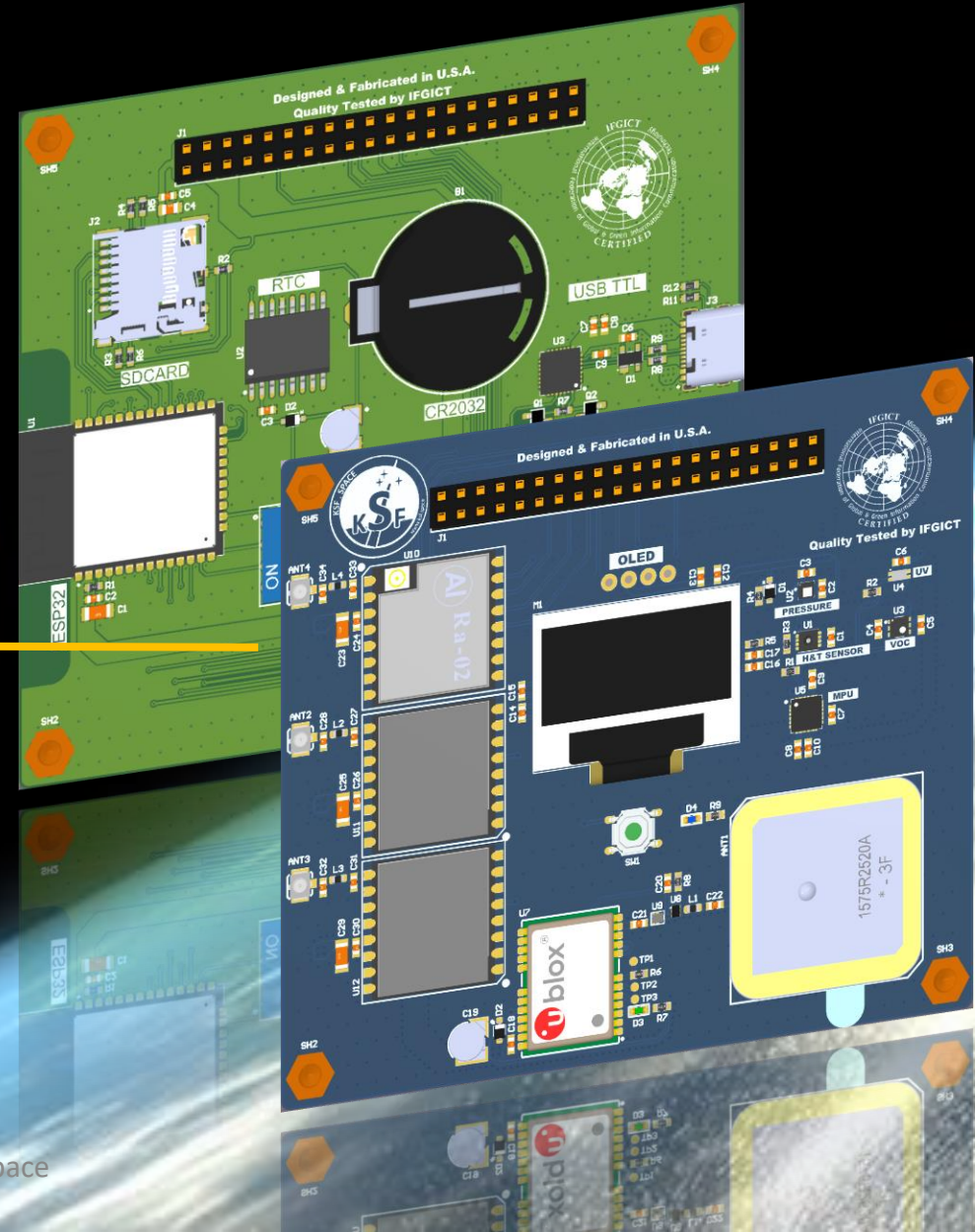
CubeSat Kit V. 2.0



Standards

Manufactured according to NASA and ESA space standards and materials

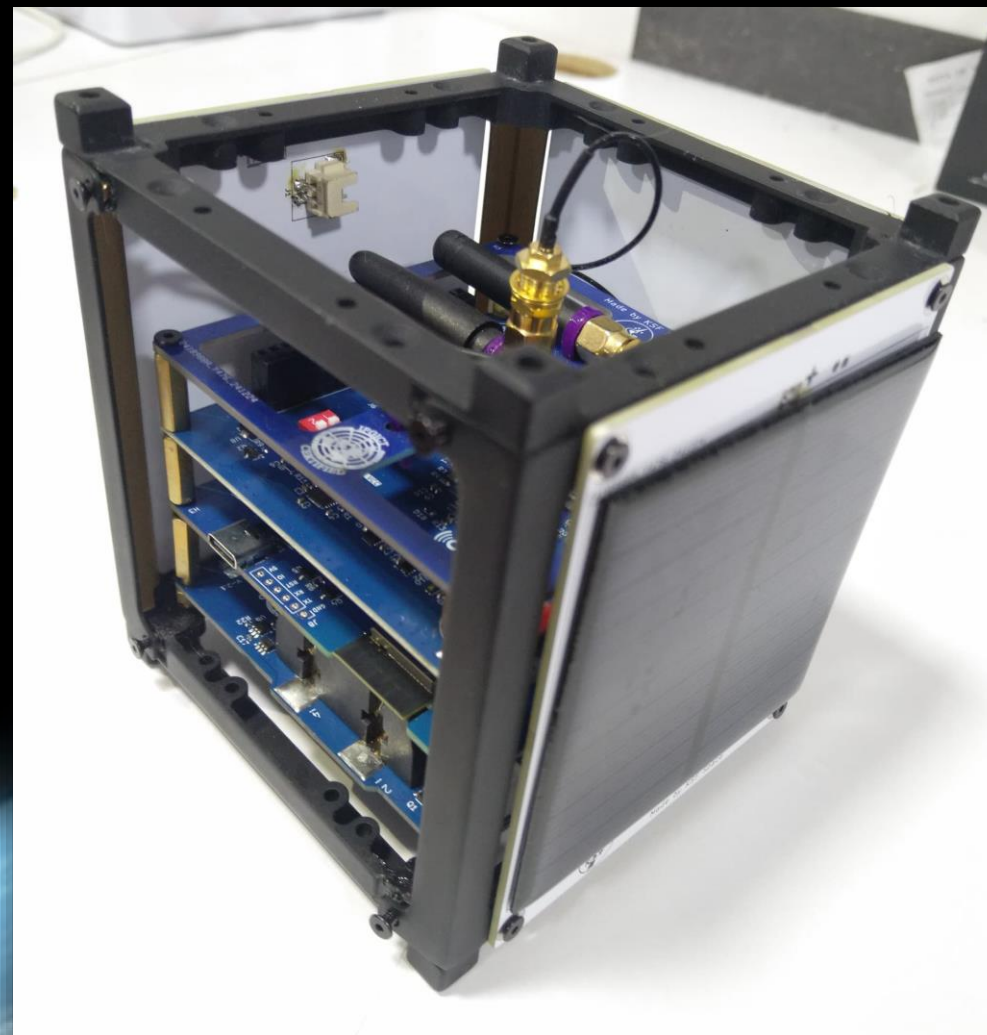
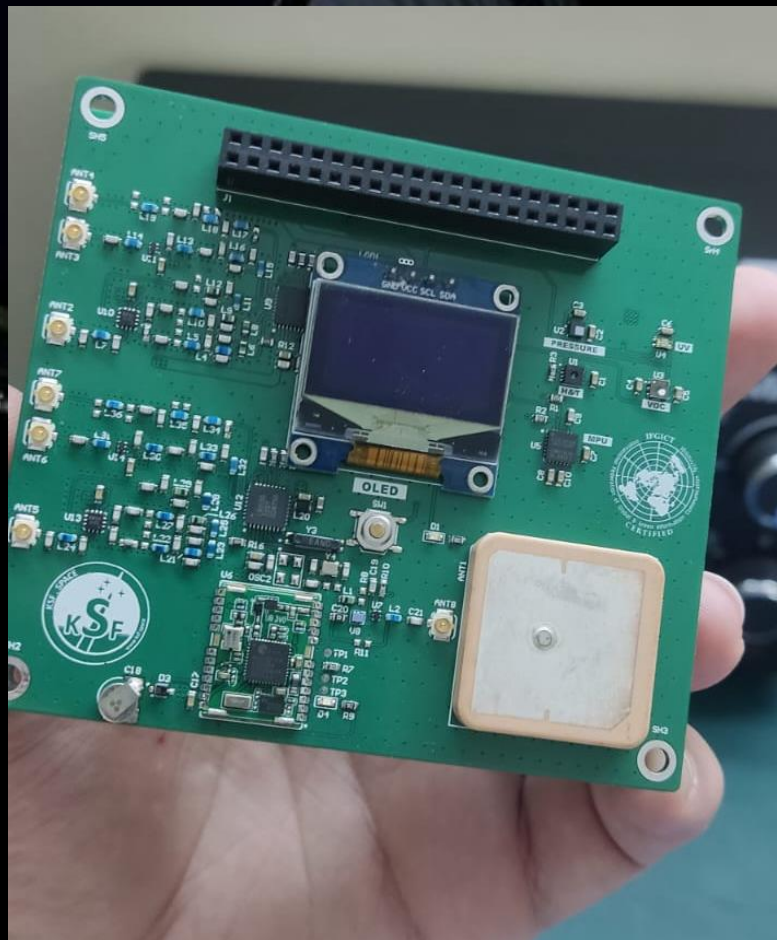
Compatible and compliant with standard deployers and CubeSat Standard





CubeSat Kit V. 2.0

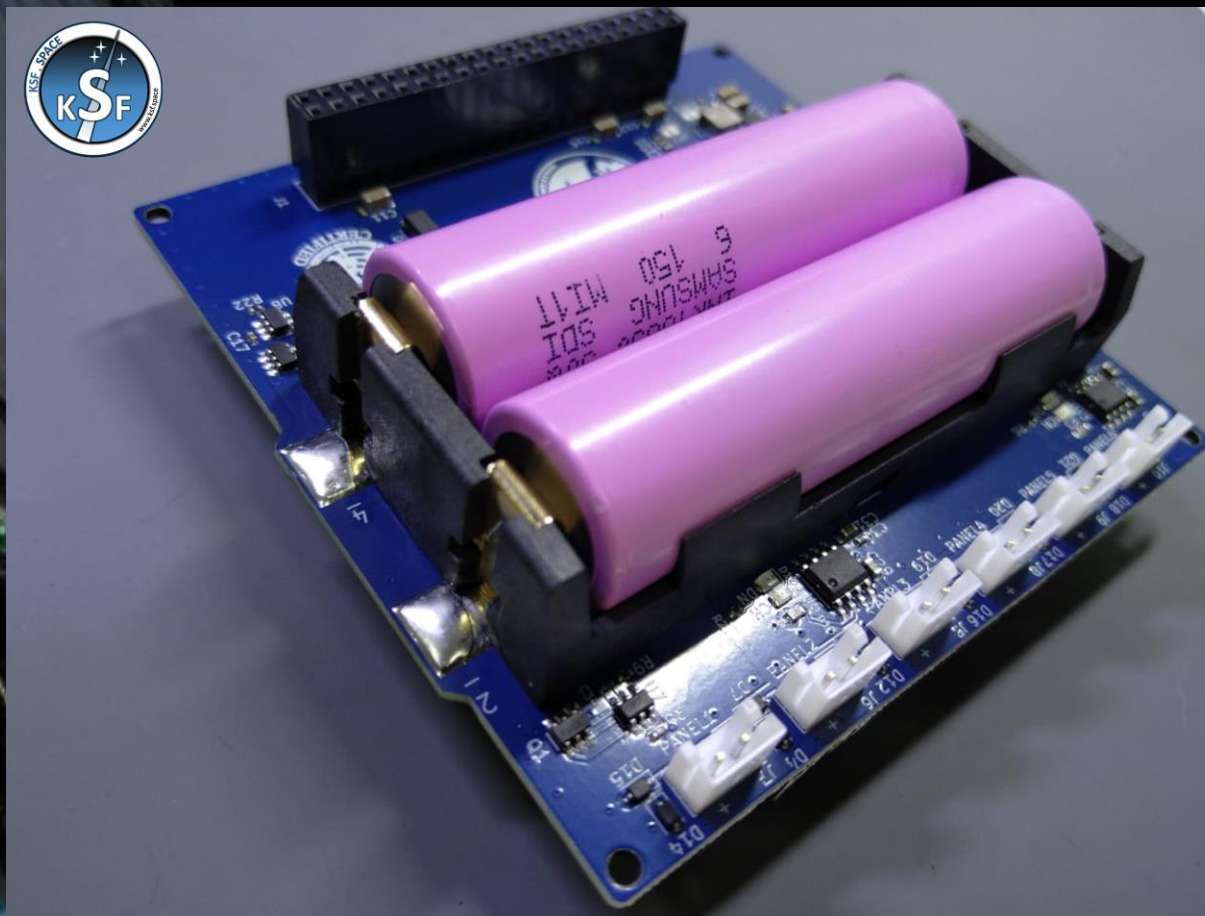
5 PCBs
Included





CubeSat Kit V. 2.0

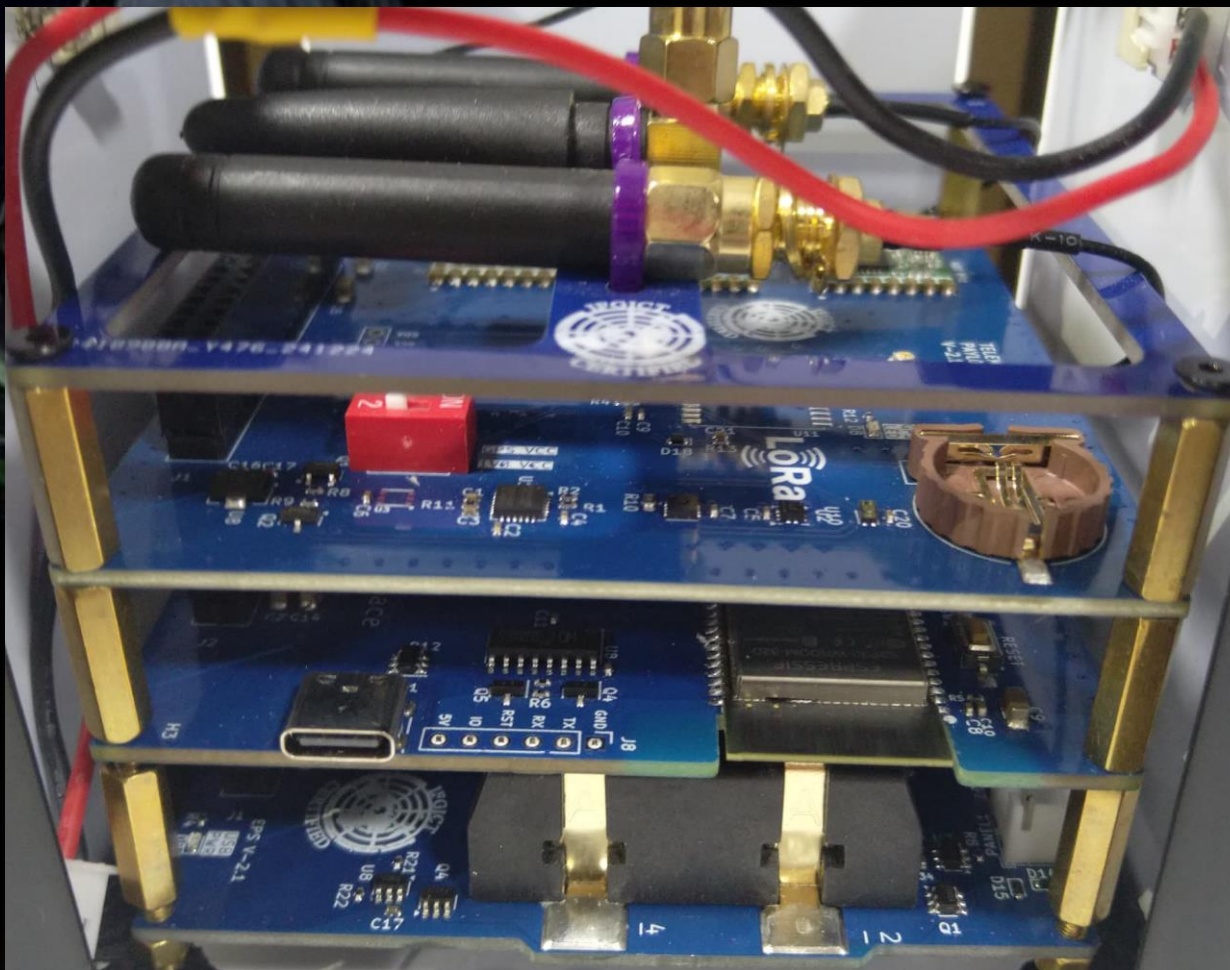
Internal
batteries
Included





CubeSat Kit V. 2.0

All power
cables
Included





CubeSat Kit V. 2.0

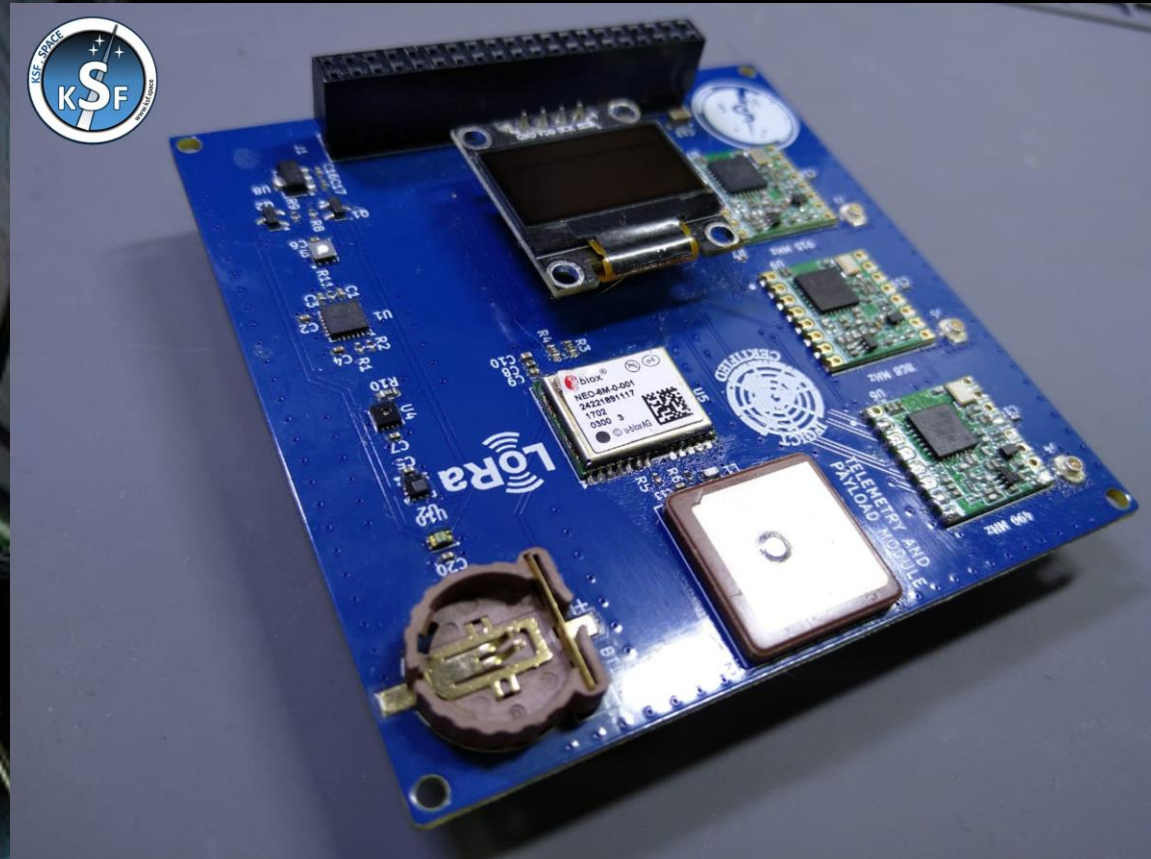
3 LORA
Antennas
Included





CubeSat Kit V. 2.0

Up to 3 LORA
Antennas
Frequencies





CubeSat Kit V. 2.0



6 Solar Panels

Screws & Cables
included





CubeSat Kit V. 2.0



All in One Package





CubeSat Kit V. 2.0

Firmware Design

- Programming language: Arduino C
- Coding environment: Arduino IDE

```
Blink | Arduino 1.8.5

Blink $

This example code is in the public domain.
http://www.arduino.cc/en/Tutorial/Blink
*/

// the setup function runs once when you press reset or power the board
void setup() {
  // initialize digital pin LED_BUILTIN as an output:
  pinMode(LED_BUILTIN, OUTPUT);
}

// the loop function runs over and over again forever
void loop() {$
  digitalWrite(LED_BUILTIN, HIGH); // turn the LED on (HIGH is the voltage level)
  delay(1000); // wait for a second
  digitalWrite(LED_BUILTIN, LOW); // turn the LED off by making the voltage LOW
  delay(1000); // wait for a second
}

32 Arduino/Genuino Uno on COM1
```




Over 1700 Candidates from
all over the world became
NEP Certified by KSF Space



MNSAT Conference

Register NOW
mnsat.org

In collaboration with

AESS IEEE Aerospace

International Conference on Micro-Nano Satellites
2-3 May, 2017, Morocco



SURREY
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Morocco Chapter



MNSAT - IEEE Conference



MNSAT - IEEE Conference





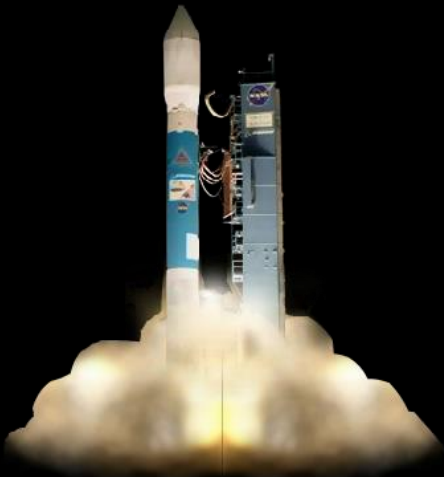
**Join Our
Next Space Mission
with ULA**

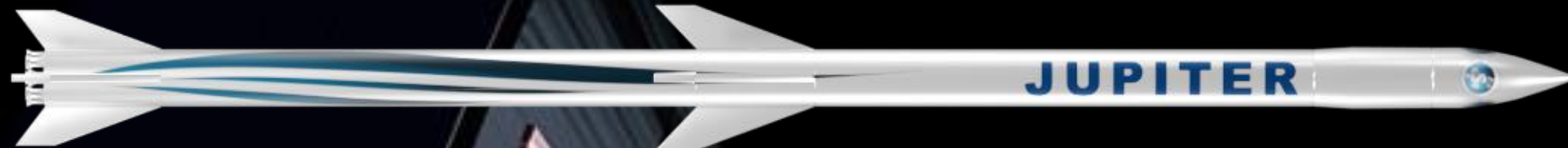
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Launch Service

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JUPITER 1
2022





Jupiter 1
2026



Jupiter 2
2028



Jupiter 3
230



KU THE UNIVERSITY OF
KANSAS



JUPITER workshop facility: 2120 Learned Hall, 1530 W 15th St, Lawrence, KS 66045, USA

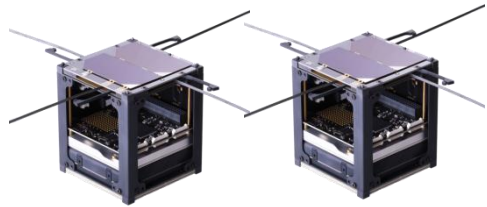
Awards Nomination Committee

- ✓ Based on history of R&D achievements
- ✓ International Recognition in Education Outreach
- ✓ Willing to give MORE

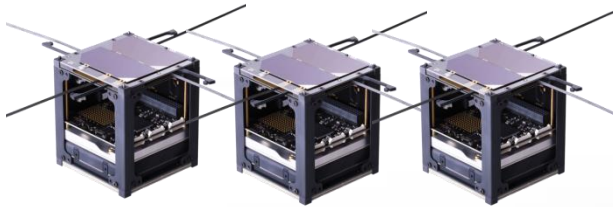




Nose
"Biology Experiment"



2nd Stage 2 Sats



1st Stage 3 Sats



World's Smallest 3D Printed Space Capsule

By
KSF Space
Launch to Near Space
Each Month
Join us NOW





- International references & space projects delivered by KSF Space Foundation

Country	Consulting by KSF Space	Training by KSF Space	NanoSatellite by KSF Space	Launch	Other
•USA	Yes	Yes	Yes	Yes	
•Maldives	Yes	Yes	Yes	Jupiter Rocket 2023	
•Kuwait	Yes	Yes	Yes 2 Satellites	Yes	
•Jordan	Yes	No	No	Yes	Biology in Space
•India	Yes	Yes	Yes	Yes	
•Hungary	Yes	Yes	Yes	Jupiter Rocket 2023	
•Morocco	Yes	Yes	Yes	Yes	
•Kenya	Yes	Yes	No	TBD	
•Vietnam	Yes	No	Ongoing	TBD	
•Brazil	Yes	Yes	Ongoing	TBD	
•Pakistan	Yes	Yes	Ongoing	TBD	
•Spain	Yes	No	No	No	
•Italy	Yes	No	No	No	
•UK	Yes	No	No	Yes	
•UNOOSA	Yes	No	No	No	
•Mexico	Yes	Yes	Yes	Yes	
•Poland	Yes	Yes	Yes	Yes	



Some of our Clients

W UNIVERSITY of WASHINGTON



MADRAS
UNIVERSITY



KUWAIT COLLEGE OF SCIENCE & TECHNOLOGY
كلية الكويت للعلوم والتكنولوجيا

Why become KSF Space Chapter

- ✓ Your organization/institute will be included in our official media and press release via KSF Space media and aerospace magazine partners in US & UK.
- ✓ Ability to participate in most KSF Space programs & activities.
- ✓ Plaque of Recognition by KSF Space Foundation
- ✓ Become regional training partner for NEP "NanoSat Engineering Professional" Certification in your country
- ✓ Participation in one of the AESS Technical Panels-learn while influencing future technical advancements and worldwide standards;

Why become KSF Space Chapter

- ✓ **Authorized to host and organize MNSAT Int. Conference with IEEE in your country / region including Int. workshops managed by KSF Space and NASA/ ESA**
- ✓ **Authorized to host and organize Space robotics and space craft competition in your country.**

Note: this program as KSF Space chapter is about to have EXCLUSIVE agreement for partnership (proposal shall be delivered upon request). Exclusive means no other universities or colleges in the country allowed to manage the above points.



KSF Space Brazil & India



KSF Space Chapters



KSF Space USA



KSF Space Mexico



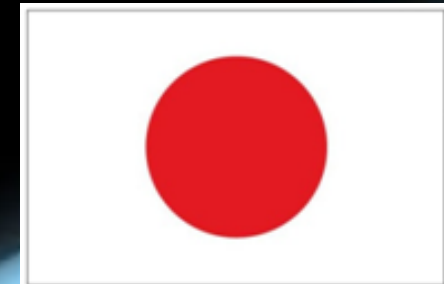
**KSF Space Morocco &
IEEE Aerospace Chapter 2019**



KSF Space UK



KSF Space Singapore



KSF Space Japan



KSF Space Brazil



KSF Space Italy



KSF Space INDIA





Reach out to us now!

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Jacob Wade



Lyndsay Castle



Erwin Te Beek



Dr. Mohammad
Essaidi



READY to join our next Space Mission !!

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