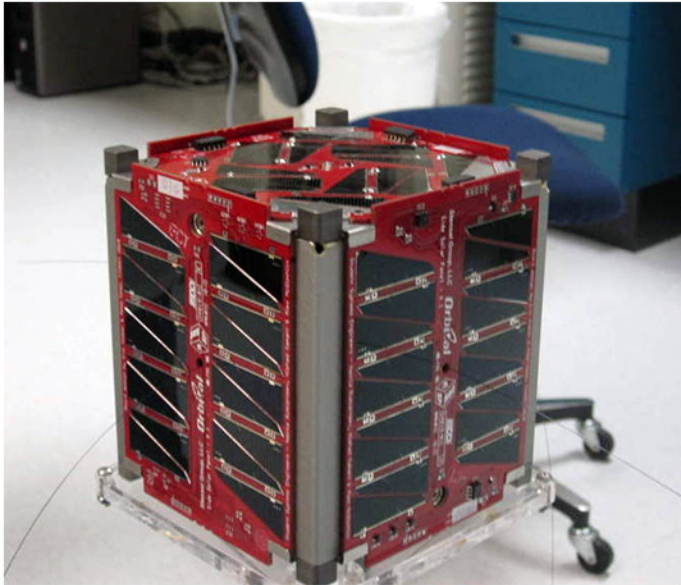




TJ3Sat is a joint project between the Thomas Jefferson High School for Science and Technology and industry partners to design and build a CubeSat to increase interest in aerospace technology, as part of NASA's Educational Launch of NanoSatellites (ELaNa) program.

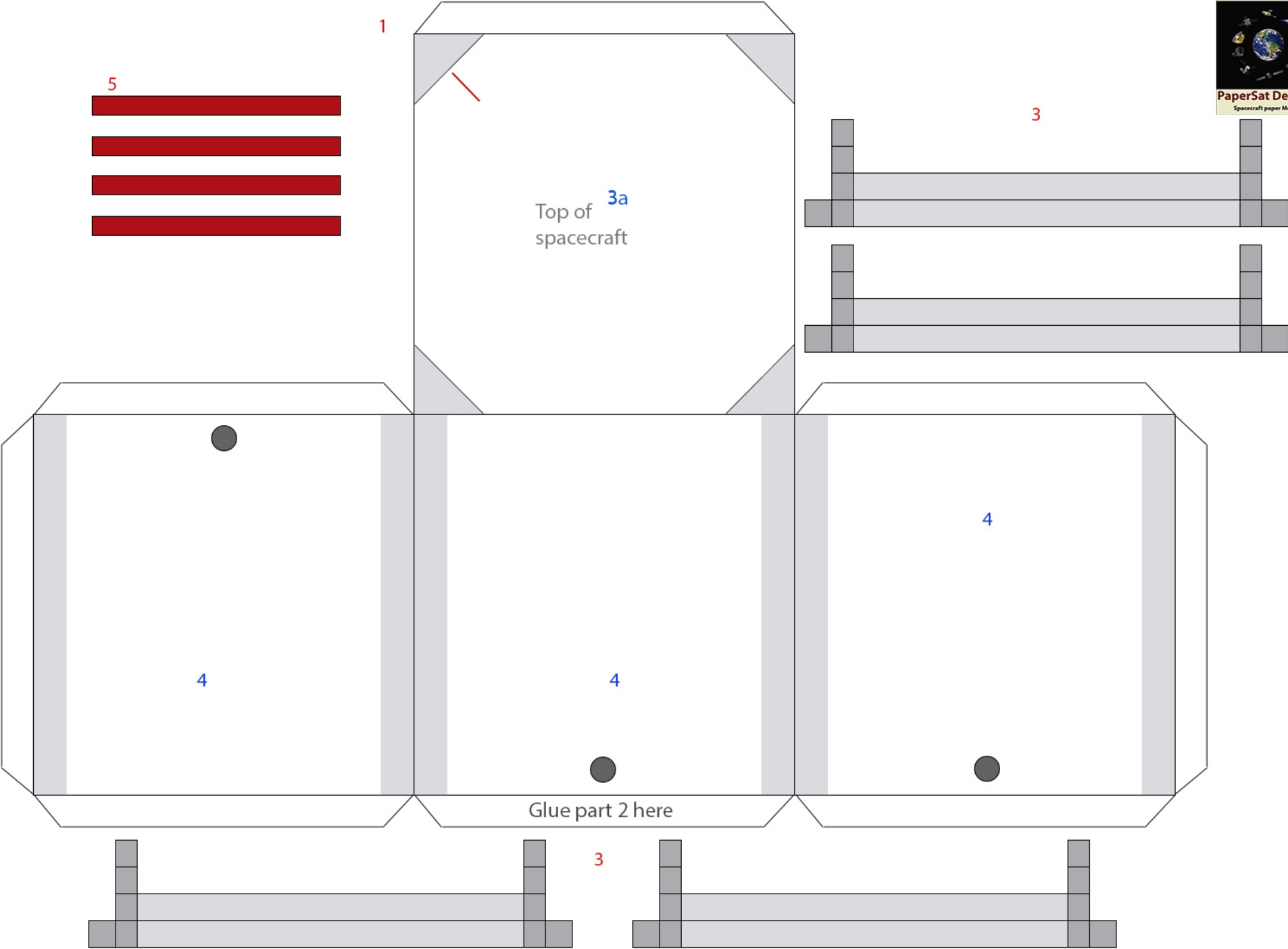
Its primary mission is to provide educational resources to other K-12 education institutions to foster interest in aerospace through the successful design and flight of a CubeSat. Our mission will be successful if it provides resources to other high schools so that they may also attempt to design and construct satellites, building upon what we have learned.

TJ3Sat became the first satellite in history built by high school students to be launched into orbit from NASA's Wallops Flight Facility on November 19th, 2013 on an Orbital Minotaur I rocket - the culmination of 7 years of work by more than 50 students.

Unfortunately, as of March 2014, communication was lost with TJ3Sat and It reentered the atmosphere on 16 September 2015.

Spacecraft Specifications

Launch Mass	0.89 kg (2.19 lbs)
Spacecraft Dimensions	10 x 10 x 11 cm (3.9 x 3.9 x 4.5 in)
Solar Arrays	Body mounted solar cells, < 3 W avg.
Stabilization	Uncontrolled
Uplink Frequency	145.980 MHz, 1200 bps AFSK
Downlink Frequency	437.320 MHz, 1200 bps AFSK
Transmitter Max Power	1 W
Mission Life	6 months (2-4 year orbit lifetime)
Orbit Parameters	500km, 40.5° inclination



3a
Top of
spacecraft

4

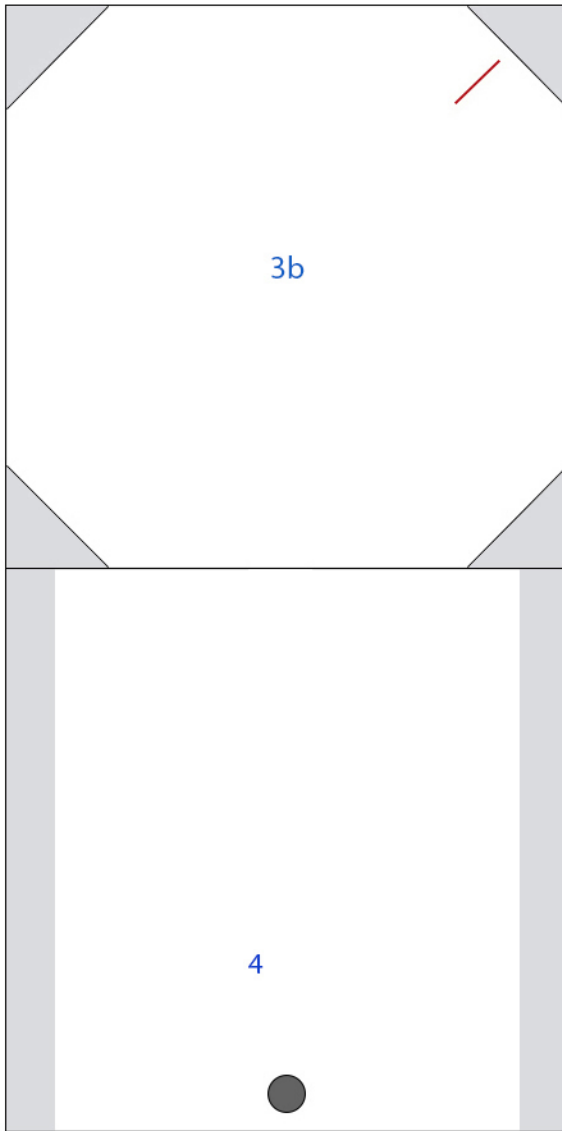
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4

Glue part 2 here

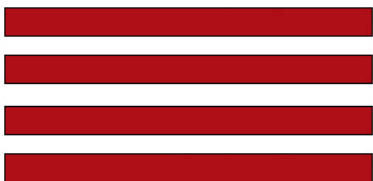
3

2

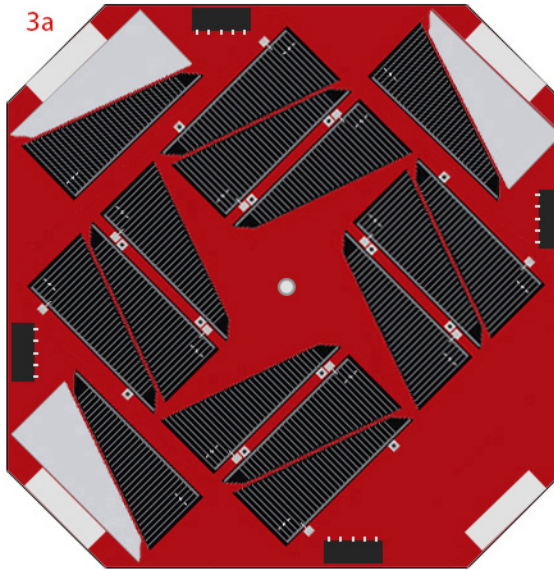


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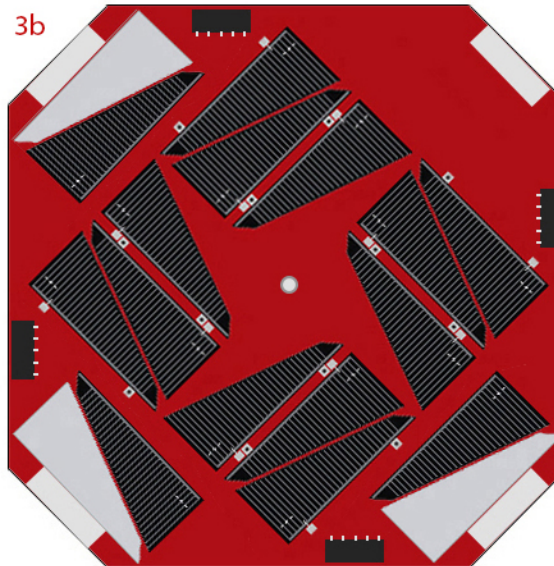
5



3a



3b



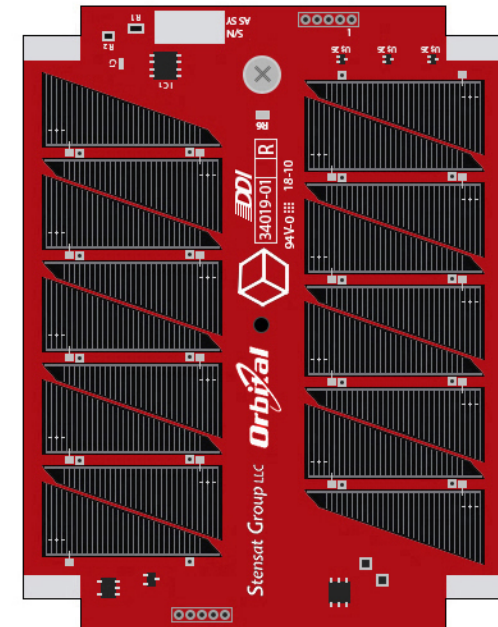
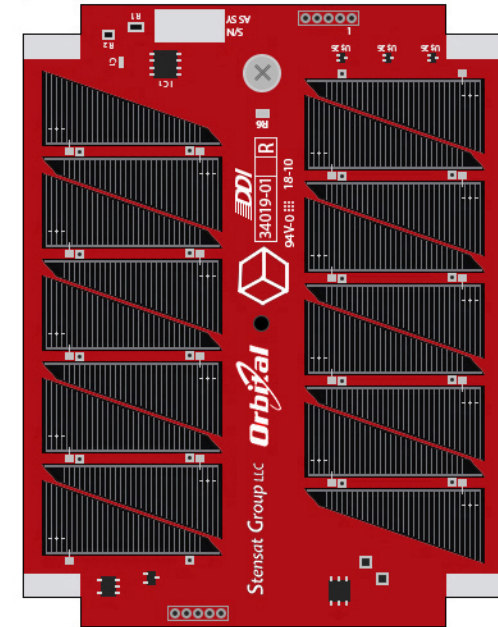
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Glue these to two layers of cardstock, color edges black.

Glue these to 2 layers of cardstock, color edges red.

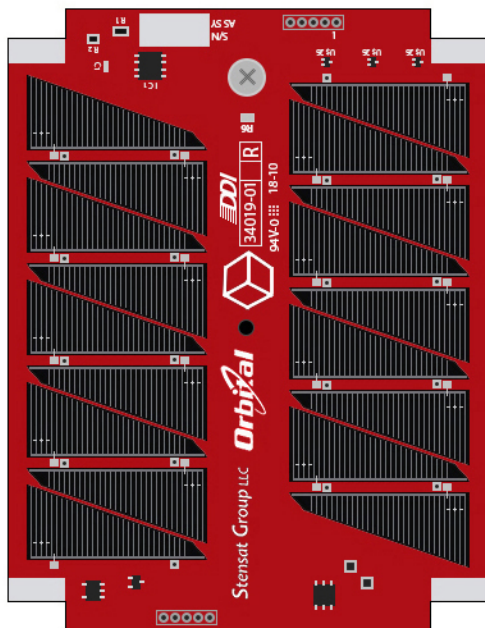
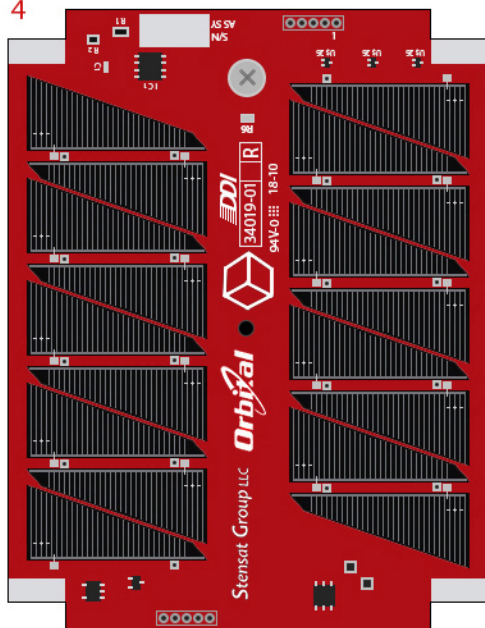
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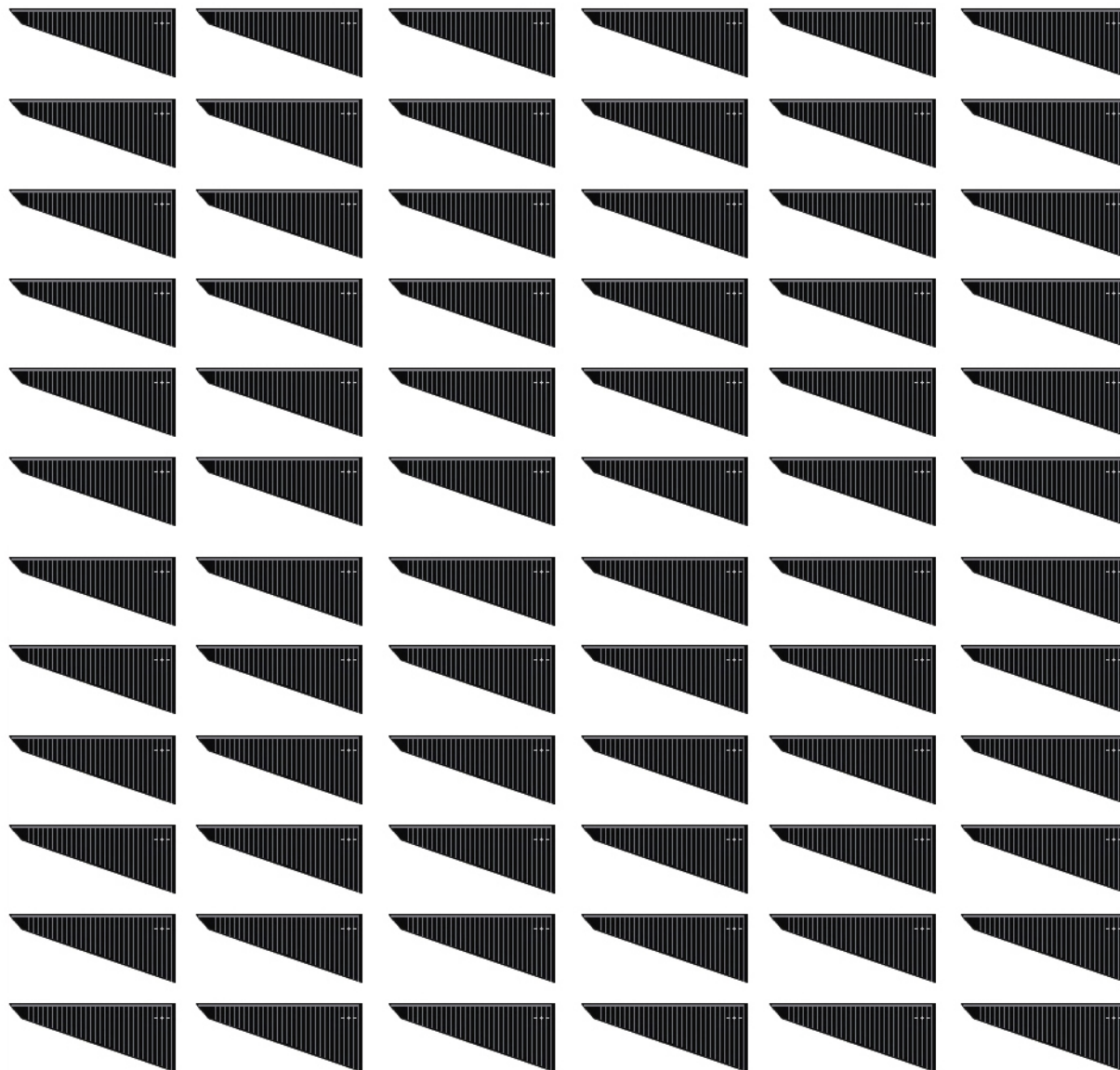
TJ3Sat

Glue these to two layers of cardstock,
color edges red.

4



Optional Detail parts, color edges black.



Optional Detail parts, color edges black.

