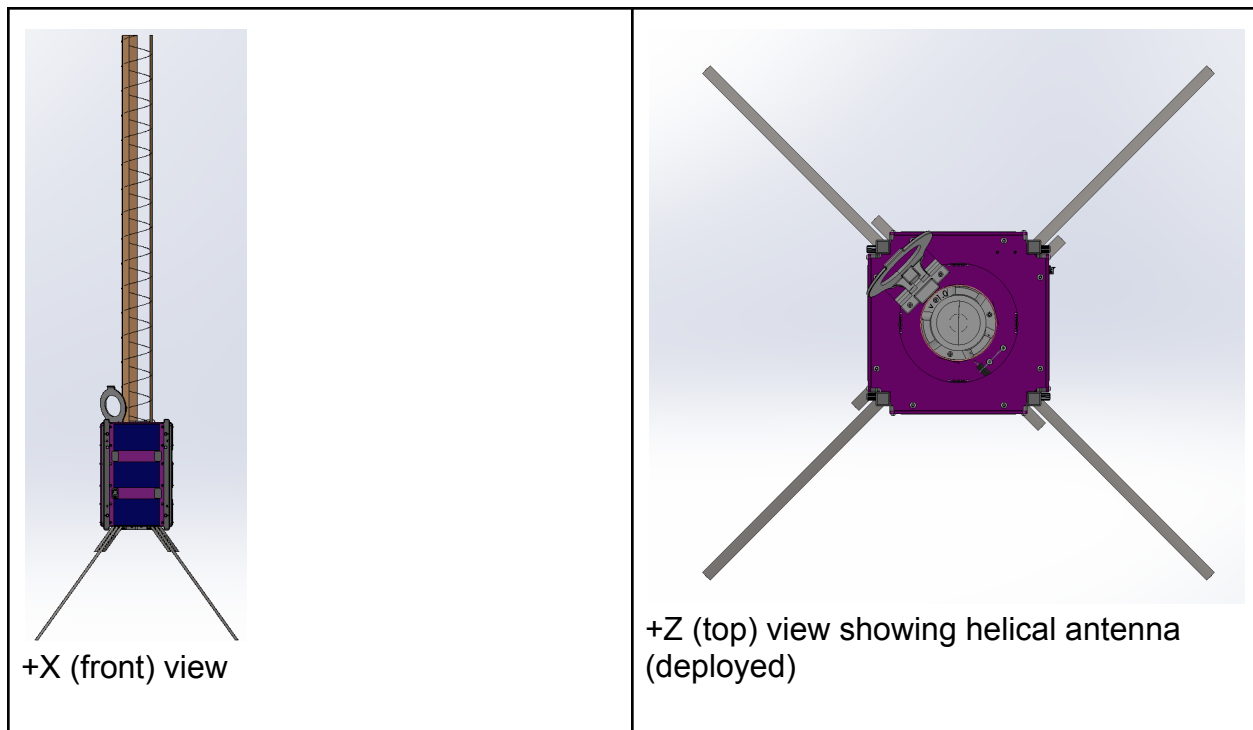


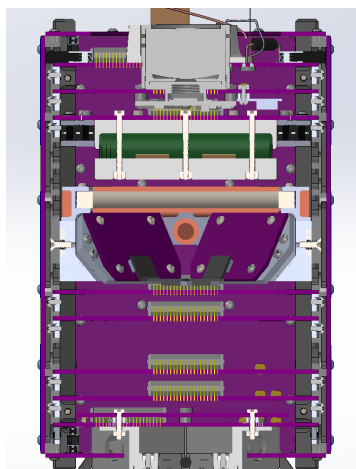
OreSat0.5 Structure

2021-12-19

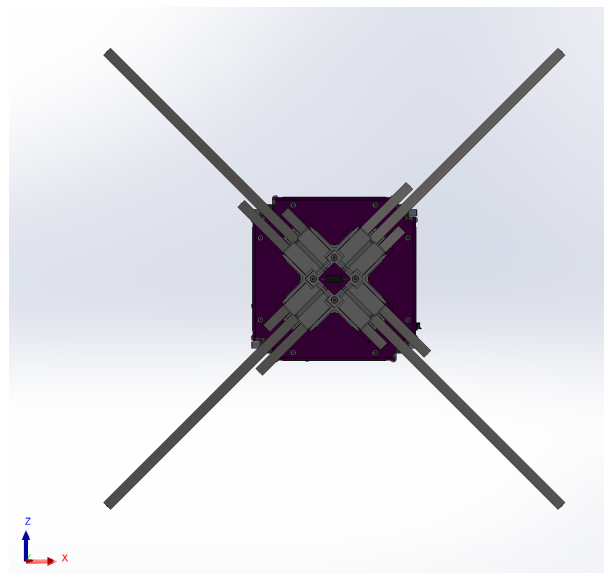
OreSat0 is a 2U CubeSat that meets the requirements of the CubeSat Developers Specification (CDS) Rev 13. The frames hold 8 independent printed circuit board "cards". Solar panels are attached on the four outer sides of the frames.

A deployable tri-band (UHF, L band, and L1 band) turnstile antenna is mounted on the -Z face, made of four individual tri-band antenna elements at an angle of 15 degrees from the -Z face and with a length of 220 mm each. A helical antenna mounted to the +Z face with a diameter of 40 mm and an approximate deployed length of 608 mm with 15 turns. For more information, please see <https://github.com/oresat/oresat-structure>



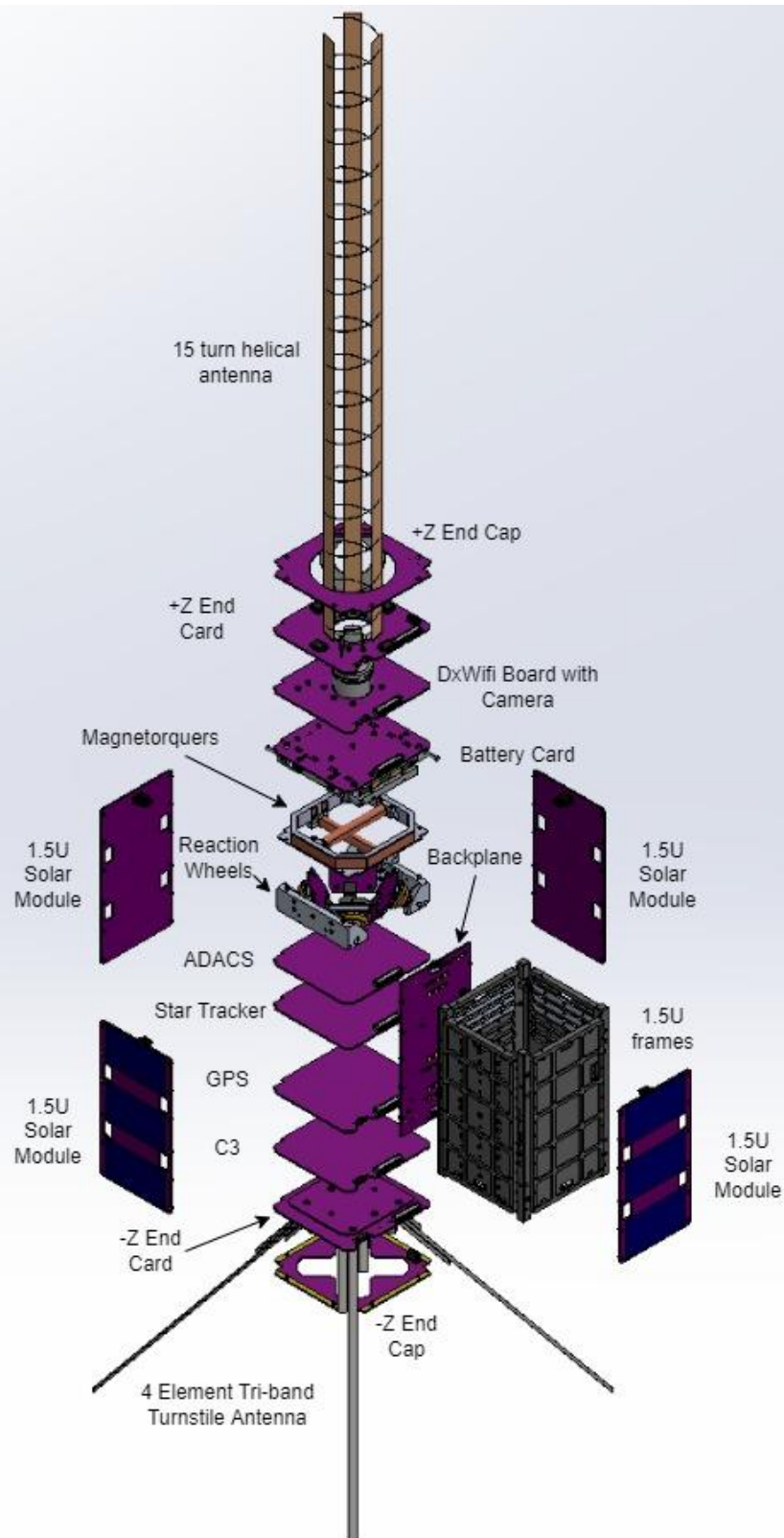


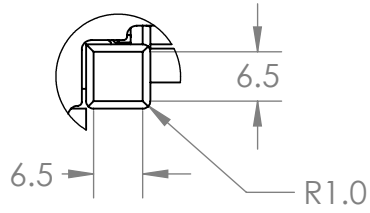
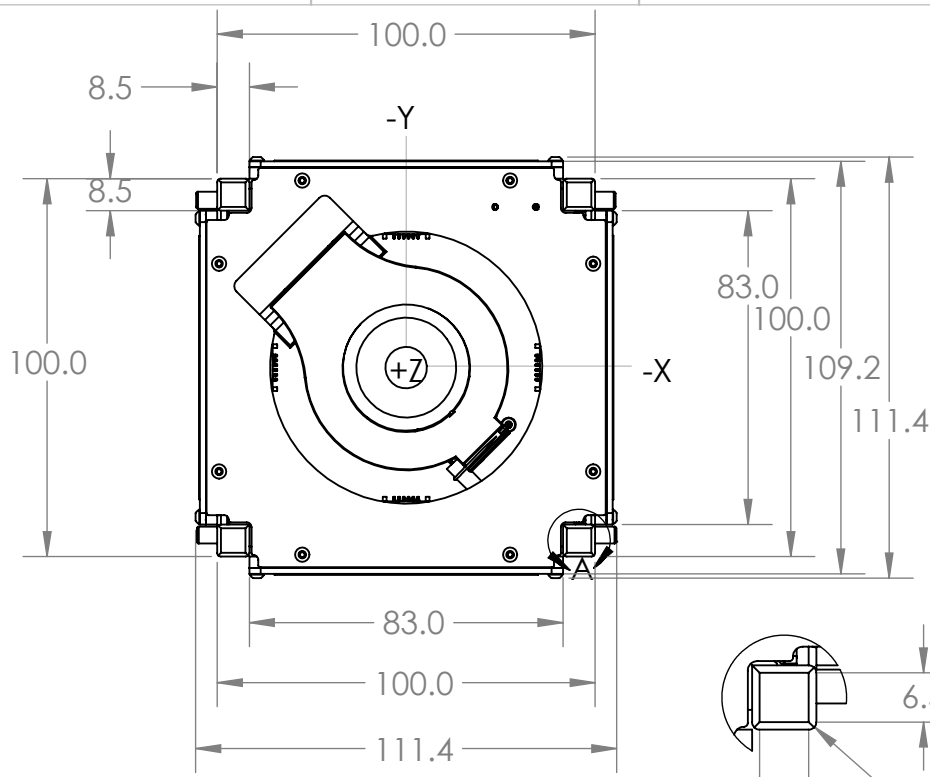
+x (front) view showing card and backplane



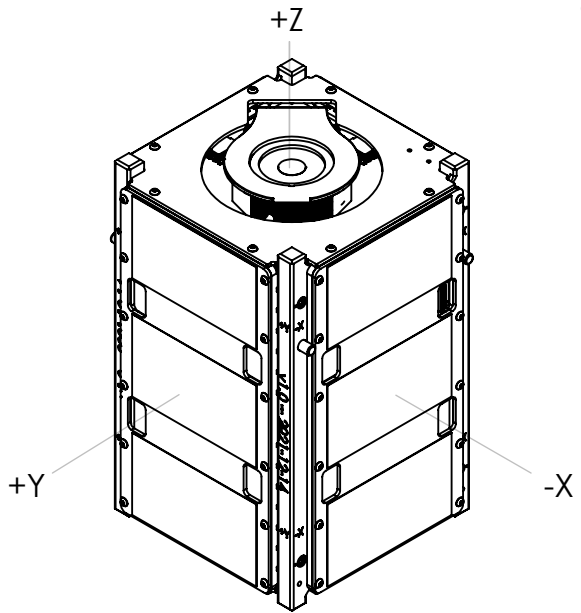
-Z (bottom) view showing triband antenna

Exploded View

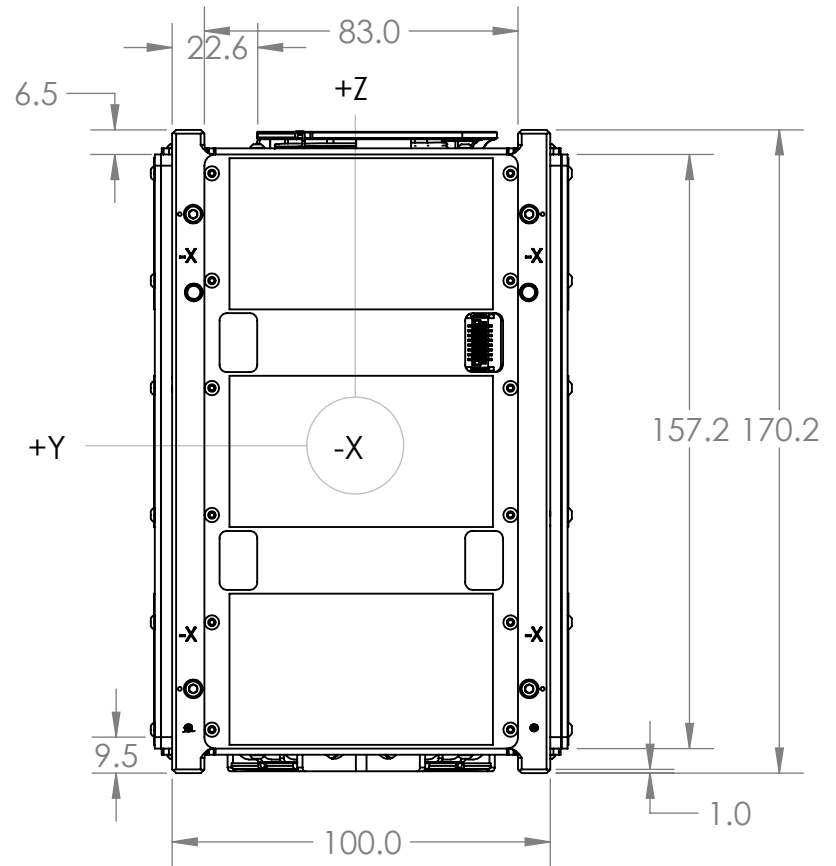




DETAIL A
SCALE 1 : 1



SCALE 1 : 3



REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	12/20/2021	EL

ANODIZATION	UNLESS OTHERWISE SPECIFIED	DRAWN BY	EMMA LEVY	12/20/2021
MATERIAL	NA	CHECKED		12/20/2021
FINISH		ENG APPR.		
WEIGHT		MFG APPR.		

DECIMAL	ANGULAR
.X ± 0.1	.X ± 0.1
.XX ± 0.01	.XX ± 0.01
.XXX ± 0.005	

INTERPRET PER ASME Y14.5-2018	
DO NOT SCALE DRAWING	

ORESAT0.5 V1.0 2021-12-14		DWG. NO. 1.5UAssemblyLicense	
UNITS MM	REVISION A	FORMAT A	SCALE 1:2
PAGE 1/1			

