



# Build Your Own CubeSat

This kit allows you to build a CubeSat Simulator with some assembly.

Kit instructions: <https://cubesatsim.org/kit>

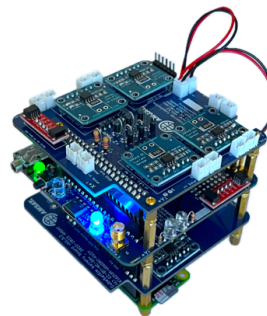
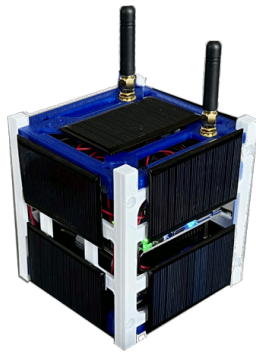
Discussion Forum on CubeSatSim on GitHub:  
<https://github.com/alanjohnston/CubeSatSim/discussions>

Operating Quick Start Guide: <https://cubesatsim.org/qsg>

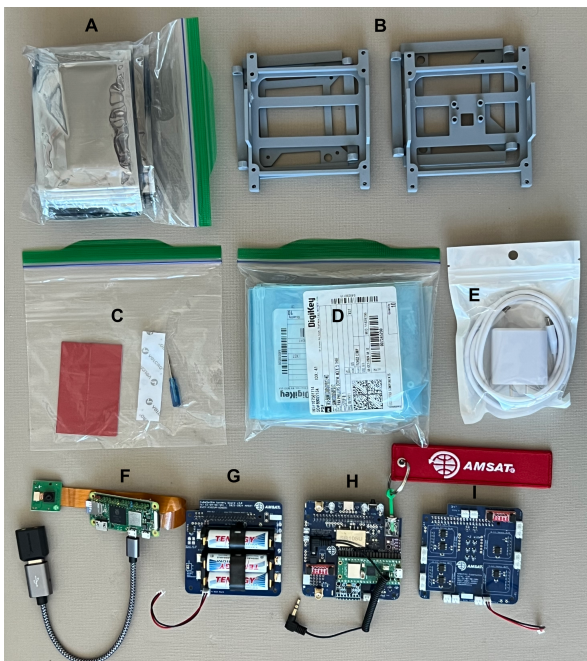
Kit videos: <https://cubesatsim.org/kit-videos>



Kit Instructions



## Kit contents



- A: Solar Panels (10x) with JST connectors
- B: Frame, 4 parts: top/bottom (2x), side, and side with camera
- C: Zip lock bag with: double stick tape for attaching solar panels to the frame, velcro, small Phillips screw driver for frame hardware
- D: Digikey parts containing standoffs, nylon screws and nuts, SMA coax and antennas, etc (see below for list)
- E: USB-C cable and power plug
- F: Raspberry Pi Zero 2 with programmed micro SD card plugged in and Pi Camera and USB OTG cable plugged in
- G: Fully assembled Battery board with JST jumper
- H: Fully assembled Main board (labeled STEM Payload Board) with fully programmed Raspberry Pi Pico W plugged in and JST jumper and USB sound card plugged in and AMSAT Remove Before Flight plug for RBF switch
- I: Fully assembled Solar board with JST jumper

Here are the Digikey parts (D)

Item	Description	Quantity
1	M3 nylon screws for frame	8
2	M3 nylon nuts for frame	8
3	M2 screws for mounting camera	4
4	M2 nuts for mounting camera	4
5	GPIO 20x2 stacking header	2
6	M2.5 11mm spacer	2
7	M2.5 6+6mm standoff	2
8	M2.5 18mm standoff	2
12	SMA coax	2
13	SMA 433 MHz antenna	2
	M2.5 screws	8
	M2.5 23+6mm standoff	8

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