

Group n.	Project n.	Platform	Attitude parameters	Mandatory sensor	Actuators
1	365	cubesat 12U	Euler angles	gyroscopes	constant thrust jets
2	373	cubesat 12U	Euler angles	Sun sensor	control moment gyroscopes
3	467	microsat (10-100 kg)	quaternions	Sun sensor	3 magnetic coils, 1 reaction wheel
4	529	microsat (10-100 kg)	Euler angles	horizon sensor	3 magnetic coils
5	648	minisat (100-500 kg)	Euler angles	Sun sensor	3 magnetic coils, 1 inertia wheel
6	216	cubesat 6U	quaternions	horizon sensor	3 magnetic coils, 1 inertia wheel
7	77	cubesat 3U	quaternions	horizon sensor	constant thrust jets
8	748	large satellite (over 500 kg)	quaternions	horizon sensor	3 reaction wheels
9	560	minisat (100-500 kg)	direction cosines	star sensor	4 reaction wheels
10	280	cubesat 12U	direction cosines	Sun sensor	3 reaction wheels
11	338	cubesat 12U	quaternions	star sensor	constant thrust jets
12	585	minisat (100-500 kg)	direction cosines	magnetic field sensor	3 magnetic coils, 1 inertia wheel
13	650	minisat (100-500 kg)	Euler angles	star sensor	4 reaction wheels
14	670	minisat (100-500 kg)	Euler angles	magnetic field sensor	control moment gyroscopes
15	211	cubesat 6U	quaternions	horizon sensor	control moment gyroscopes
16	666	minisat (100-500 kg)	Euler angles	horizon sensor	3 magnetic coils, 1 inertia wheel
17	485	microsat (10-100 kg)	quaternions	horizon sensor	3 magnetic coils, 1 reaction wheel
18	727	large satellite (over 500 kg)	quaternions	gyroscopes	3 magnetic coils
19	640	minisat (100-500 kg)	Euler angles	Sun sensor	3 reaction wheels
20	740	large satellite (over 500 kg)	quaternions	star sensor	4 reaction wheels
21	570	minisat (100-500 kg)	direction cosines	horizon sensor	1 inertia wheel, 2 reaction wheels
22	517	microsat (10-100 kg)	Euler angles	star sensor	control moment gyroscopes
23	235	cubesat 6U	Euler angles	Sun sensor	3 reaction wheels
24	60	cubesat 3U	quaternions	Sun sensor	variable thrust jets
25	442	microsat (10-100 kg)	direction cosines	magnetic field sensor	3 reaction wheels
26	217	cubesat 6U	quaternions	magnetic field sensor	3 reaction wheels
27	378	cubesat 12U	Euler angles	Sun sensor	3 magnetic coils, 1 inertia wheel
28	219	cubesat 6U	quaternions	magnetic field sensor	1 inertia wheel, 2 reaction wheels
29	616	minisat (100-500 kg)	quaternions	horizon sensor	control moment gyroscopes
30	113	cubesat 3U	Euler angles	star sensor	constant thrust jets
31	214	cubesat 6U	quaternions	horizon sensor	3 magnetic coils
32	254	cubesat 6U	Euler angles	horizon sensor	4 reaction wheels
33	171	cubesat 6U	direction cosines	horizon sensor	3 magnetic coils, 1 inertia wheel
34	487	microsat (10-100 kg)	quaternions	magnetic field sensor	3 reaction wheels
35	249	cubesat 6U	Euler angles	star sensor	variable thrust jets
36	147	cubesat 6U	direction cosines	Sun sensor	1 inertia wheel, 2 reaction wheels
37	292	cubesat 12U	direction cosines	star sensor	control moment gyroscopes
38	150	cubesat 6U	direction cosines	Sun sensor	variable thrust jets
39	435	microsat (10-100 kg)	direction cosines	horizon sensor	1 inertia wheel, 2 reaction wheels
40	163	cubesat 6U	direction cosines	horizon sensor	3 reaction wheels

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41	743	large satellite (over 500 kg)	quaternions	star sensor	constant thrust jets
42	547	minisat (100-500 kg)	direction cosines	gyroscopes	3 magnetic coils
43	469	microsat (10-100 kg)	quaternions	star sensor	3 reaction wheels
44	74	cubesat 3U	quaternions	horizon sensor	4 reaction wheels
45	623	minisat (100-500 kg)	quaternions	magnetic field sensor	4 reaction wheels
46	78	cubesat 3U	quaternions	horizon sensor	variable thrust jets
47	381	cubesat 12U	Euler angles	star sensor	1 inertia wheel, 2 reaction wheels
48	72	cubesat 3U	quaternions	star sensor	3 magnetic coils, 1 inertia wheel
49	441	microsat (10-100 kg)	direction cosines	horizon sensor	3 magnetic coils, 1 inertia wheel
50	62	cubesat 3U	quaternions	Sun sensor	3 magnetic coils, 1 reaction wheel
51	499	microsat (10-100 kg)	Euler angles	gyroscopes	control moment gyroscopes
52	70	cubesat 3U	quaternions	star sensor	3 magnetic coils
53	229	cubesat 6U	Euler angles	gyroscopes	control moment gyroscopes
54	129	cubesat 3U	Euler angles	magnetic field sensor	1 inertia wheel, 2 reaction wheels
55	394	cubesat 12U	Euler angles	horizon sensor	3 magnetic coils
56	266	cubesat 6U	Euler angles	magnetic field sensor	constant thrust jets
57	544	minisat (100-500 kg)	direction cosines	gyroscopes	control moment gyroscopes
58	232	cubesat 6U	Euler angles	gyroscopes	3 magnetic coils
59	242	cubesat 6U	Euler angles	Sun sensor	3 magnetic coils, 1 reaction wheel
60	107	cubesat 3U	Euler angles	Sun sensor	3 magnetic coils, 1 reaction wheel
61	134	cubesat 3U	Euler angles	magnetic field sensor	3 magnetic coils, 1 reaction wheel
62	504	microsat (10-100 kg)	Euler angles	gyroscopes	3 magnetic coils, 1 inertia wheel
63	384	cubesat 12U	Euler angles	star sensor	variable thrust jets
64	424	microsat (10-100 kg)	direction cosines	star sensor	3 reaction wheels
65	471	microsat (10-100 kg)	quaternions	star sensor	1 inertia wheel, 2 reaction wheels