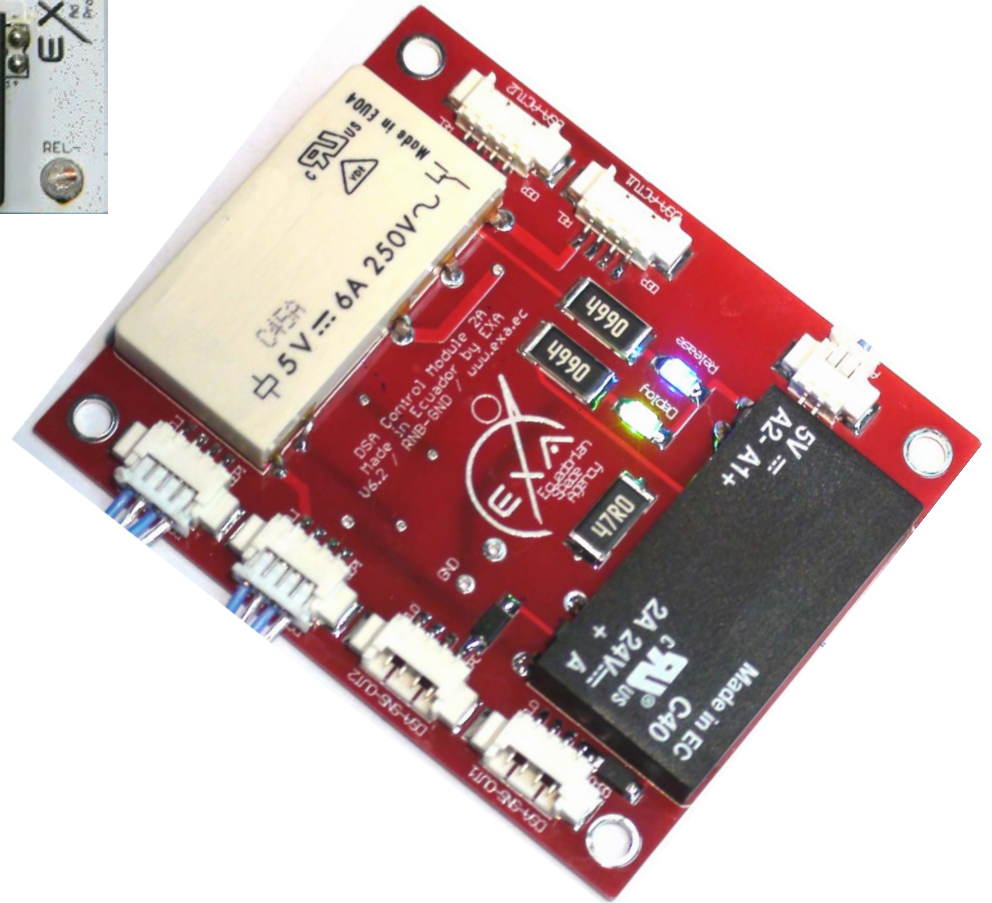
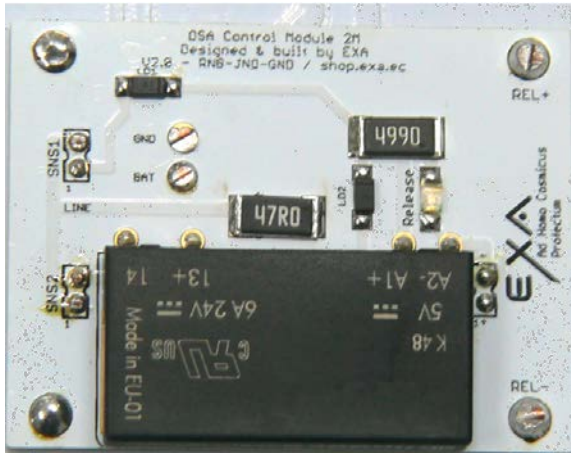


DSACTRL



**MICROSAT/CUBESAT DEPLOYABLES AND HDRM
AUTOMATED CONTROLLER FOR RELIABLE
DEPLOY/RELEASE OPERATIONS**



SUMMARY

DSACTRL is an HDRM and deployables manager that automates the release and deploys operations on a vast array of devices and HDRM techniques: from huge solar arrays to micro sized ones, hatches, antennas, booms and similar. It can manage MMA (memory metals) Pyro cutters, thermal knife, solenoids and motorized devices.

DSACTRL has positive TRL9 flight heritage since 2013 never failed once, not in orbit nor in the lab, this is due its robust design. DSACTRL will receive a 5V TTL signal as control and the raw battery input as power for deployables and will execute the release and deploy operations reporting to your OBC via TTL level dry contact sensors that you can receive on any GPIO entry with discrete values (0 or 5V). Once the operation is completed and both sensors report successful operation, DSACTRL will cut the signal input to prevent any battery power runaway, passivating the HDRMs and/or actuators and securing total system safety.

FEATURES

- Complete automation of the release/deploy operation
- Two versions available: single/double (2/4) actuators or quad/octo (4/8) actuators manager
- 100% success rate in orbit and in the lab
- Repeatability without any need to re-build
- Deploy and Release dry contact sensors guarantees zero-failure operation
- Super safety design impedes battery runaway

PERFORMANCE AND PRODUCT PROPERTIES

- **Weight (depends on configuration):** 16 to 31 grams
- **Dimensions (LxWxH):**
 - **Single/Double version:** 43.5mm x 33mm x 5.95mm
 - **Quad /Octo version:** 55mm x 45mm x 5.5mm
- **Control Signal: 3V3@0.15A or 5V@0.1A**

- **Actuator Power input:** 4V to 24V; 05A to 12A
- **Operating Temperature:** -100C to +150C

TESTING

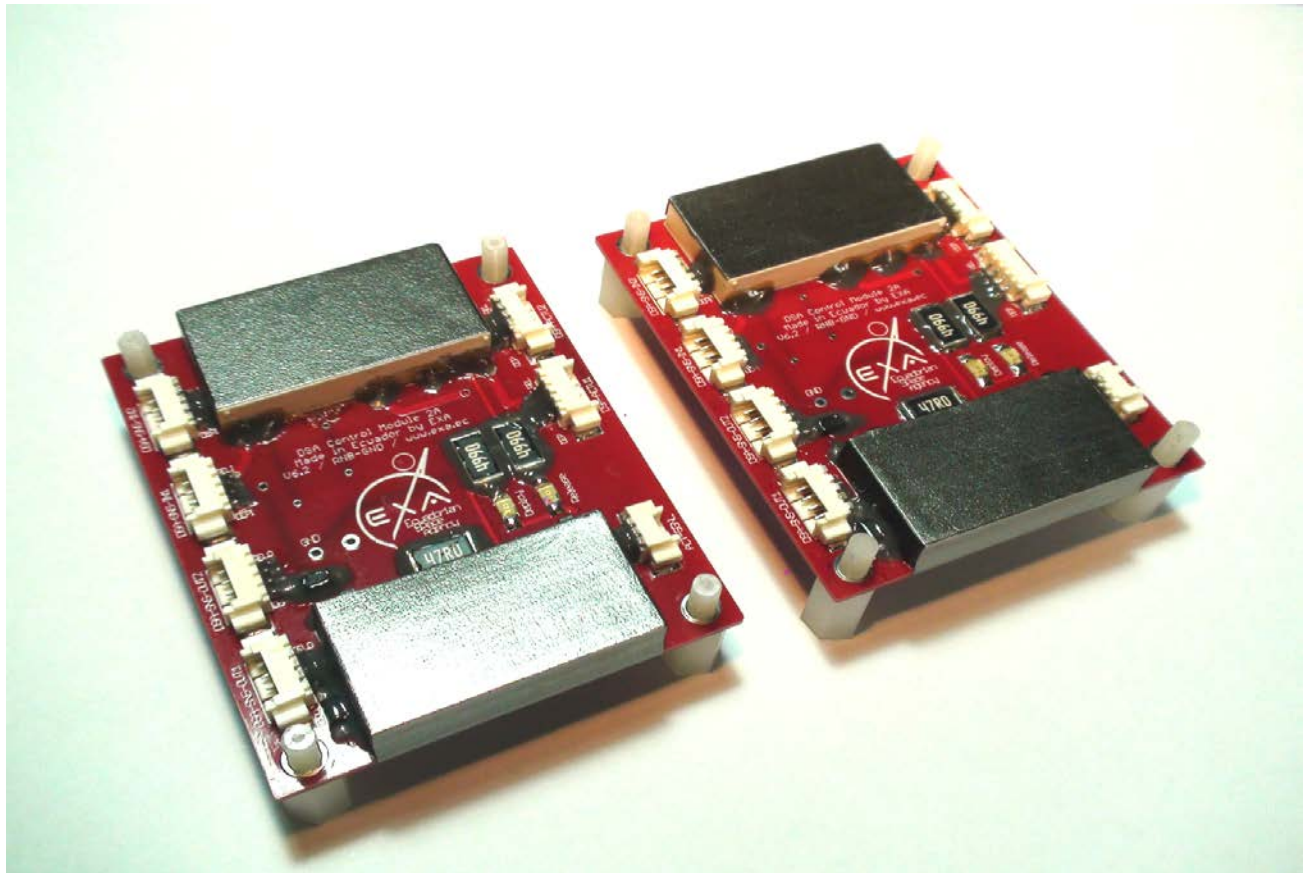
All devices are provided with tests reports regarding:

- Thermal Bake out (10E-5 mbar @ 50C for 72 hours)
- Full vibration test for Falcon 9, Falcon Heavy, Electron, Soyuz, Dnepr and Long March 2D

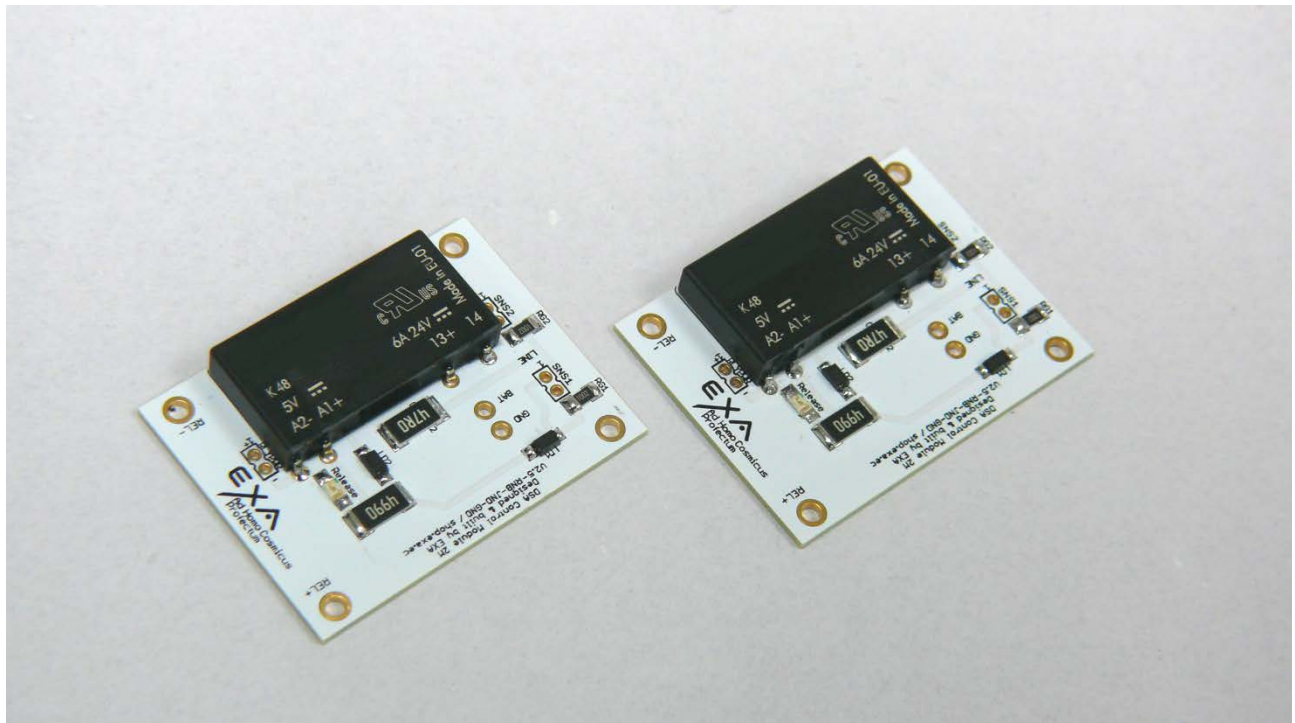
Test	QT	AT
Functional	✓	✓
Vibration		✓
Thermal Cycling		✓
Thermal Vacuum		✓
Repeatability (100 times)	✓	✓

AVAILABILITY AND LEAD TIME

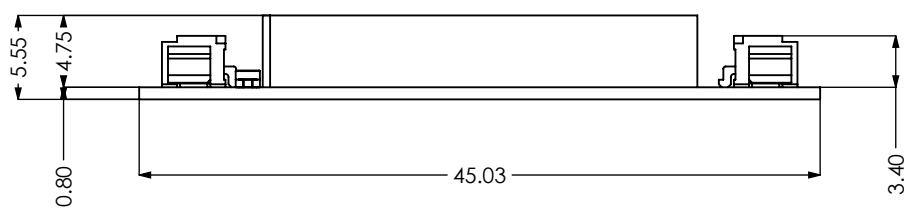
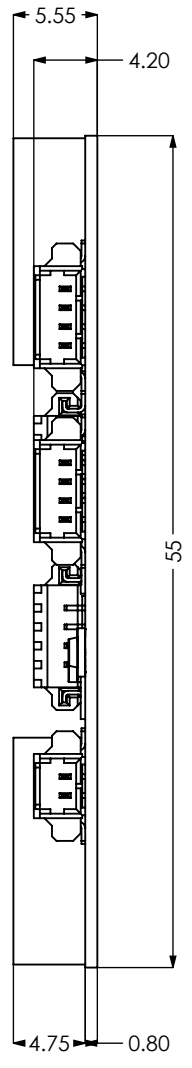
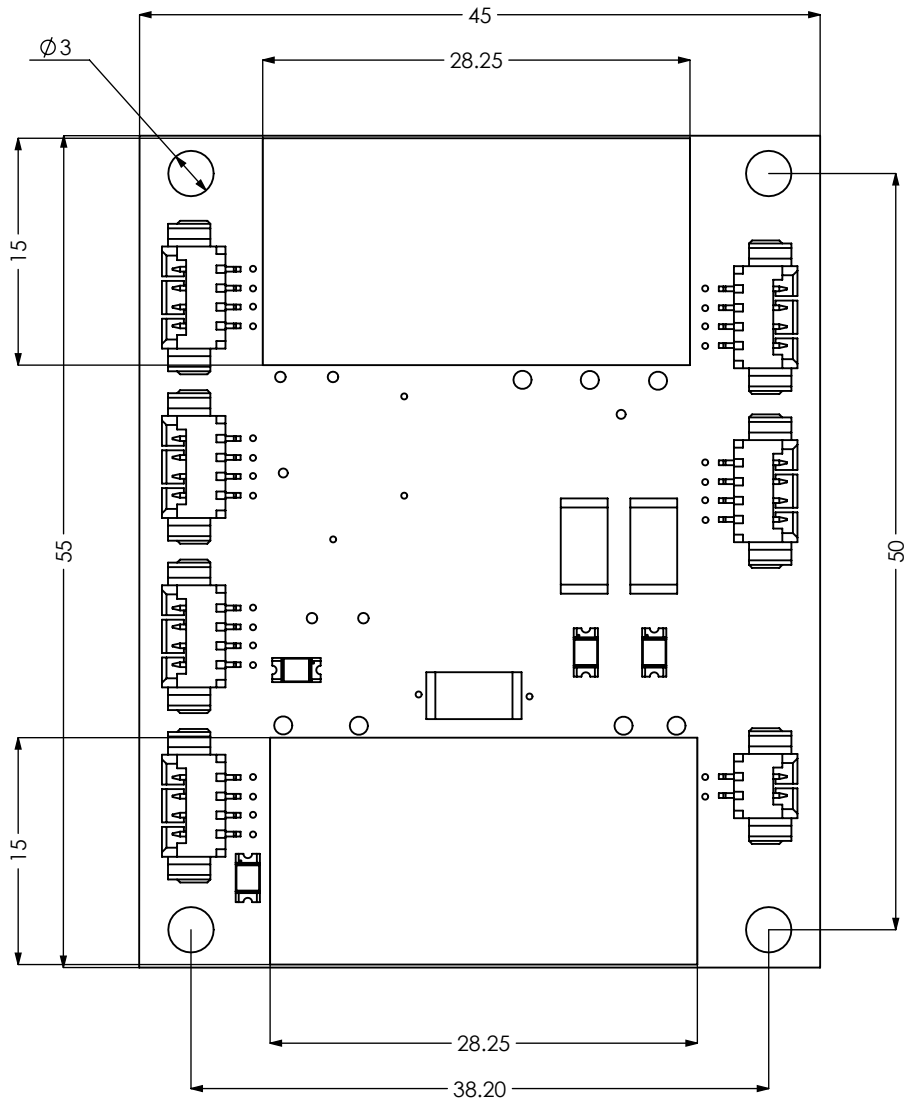
- **2 to 4 weeks**



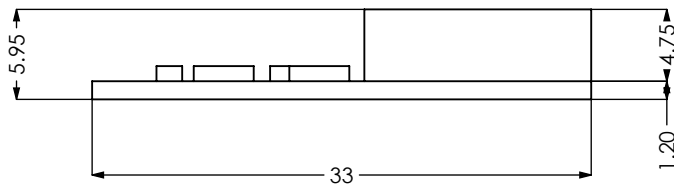
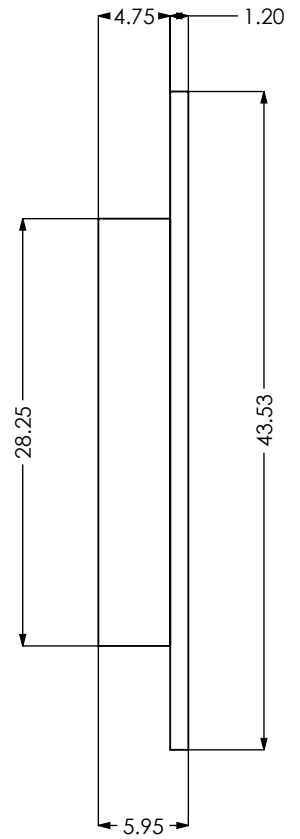
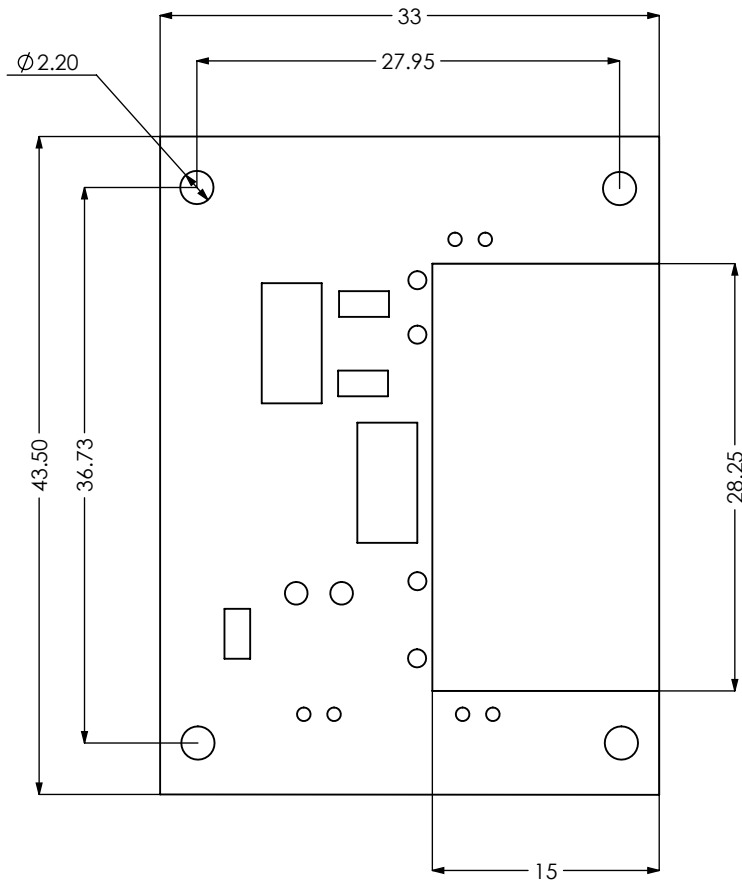
Quad/Octo version



Single/Dual version



	NAME	SIGNATURE	DATE		TITLE: ENVELOPE DIMENSIONS	
DRAWN	JND			MATERIAL:	EXA DSACTRL v1.0	A4
CHK'D	RNB					
APPV'D	RNB					
MFG	RNB					
Q.A	RNB				WEIGHT:	SCALE: 2:1



NAME	SIGNATURE	DATE		TITLE: ENVELOPE DIMENSIONS	
DRAWN	JND		MATERIAL:	EXA DSACTRL2M v2.0	
CHK'D	RNB				
APPV'D	RNB			A4	
MFG	RNB				
Q.A	RNB			WEIGHT:	SCALE: 2:1