

DroneCore.Suite 1.2

- DroneCore.Pilot – top control board
- Drone autopilot solution integrating
 - Nvidia Jetson nano/Xavier NX
 - Flight controller unit The Cube
 - Power electronics
- Rich connectivity
- Optimized for use on drones
- Redundant power supply options
 - 12 - 30V
 - 5V power supply
- Dimensions 115x80x45mm
- Weight 244g (incl. The Cube, Jetson Xavier NX, heatsink, power module)
- Software: Jetpack 4.6.1 for Jetson Xavier NX and Jetson Nano (customized for the board), proprietary ROS based flight stack, Node JS based user interface, ready to use for autonomous flights, further software under development, full support for different CSI and USB cameras (IMX477, OV9281, Flir Hadron, Intel Realsense)



- **Jetson connections:**
 - PCI Express (M2, Key E connector)
 - PCI Express (M2, Key M connector) for NVMe SSD
 - 4 USB 3.0 (3pcs ZIF connectors - reductions available, 1 USB Type C)
 - USB 2.0. on JST GH connector
 - Gigabit Ethernet (ZIF connector, reductions available)
 - 6 CSI (22 pin)
 - 4 GPIO
 - UAV CAN, UART, I2C, SPI
 - IMU BMI088 and barometer BMP388 on board
 - USB 2.0 for debugging
 - Micro SD card
 - Video output connector (micro HDMI)
 - Fan
- **Cube Connections**
 - PPM input
 - PWM output (7 + 7 lines)
 - 2x CAN
 - 4x UART
 - 2x I2C
 - Buzzer
 - Power sensor input
 - ADC input
 - Buzzer
- **DroneCore.Power** (bottom power board)
 - 4 x FOC UAVCAN ESCs – 40A peak / 20A permanent
 - power sensor, SMBUS,
 - LED Driver for 4x WS2812B strips