



VR Spark– Drone Code Edition

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What is demonstrated

- Virtual Robotix UAV VR Spark 350
- A Professional Drone compliant to EU and USA requirement for certification based on opensource APM Copter Firmware.
- The VR Spark 350 include two Boards. VRBrain 5.2 is Virtual Robotix Autopilot board the other could be VruBrain or an Embedded Linux board like Raspberry PI 2 . The second board is used as application processor.
- We develop our Android Ground Station VR Pad Station .
- During the initial stage of development is possible to use SIL Software in the loop simulator.
- The drone support all kind of advanced functionality for manual and outonomous flight.
- Is possible to connect the drone by mavlink towards radio link or usb. The application processor is connected to the drone by usb.
- With this kind of approach is possible to use the our drone platform as advanced R&D linux / android for custom project.
- In our template example is possible to trasmit realtime video by 4G connection with drone telemetry information from the drone to a remote worldwide Ground Station.

Hardware Information

- Inside our drone we use our Autopilot : VR Brain 5.2 and VR uBrain 5 , VR GPS 8 , VR Link , VR OSD
- As application processor we can connect a lot of Elinux processor like Raspberry PI , BeagleBoard or Smartphone.

What was improved



- With our SDK is possible to implement a lot of power full application based on solid hardware and stack.
- With our architecture is more simple to develop , debug and release a final product of service based on drone technology.
- More information about our product is available on our community : www.virtualrobotix.com
- Or on our website : www.virtualrobotix.it

Source code or detail technical information availability

- On our Github : <https://github.com/virtualrobotix> you can found the source code of Nuttx OS for VR Brain products , Our distribution of APM Copter , Plane and Rover , VR Pad Station , and our version of Mission Planner