

ModalAl® accelerates development of smaller, smarter and safer drones with SWAP-optimized Blue UAS Framework autopilots built in the U.S.A.

From home and business security to retail and government applications, our highly-integrated Al-powered autopilots empower a variety of industries to utilize aerial and ground autonomous navigations systems. We offer plug-and-play computing platforms, integrated autopilots and accessories to accelerate our customers toward autonomy.

VOXL® 2 Product Brief

VOXL 2, powered by Qualcomm[®] Flight[™] RB5 technology, elevates the DIU's Blue UAS Framework with advancements in autonomy, artificial intelligence, and 5G. VOXL 2 combines a premium-tier companion computer and flight controller into a single SWAP-optimized PCB to enable smaller, smarter, and safer drones and robots.





Autonomy

Smaller, smarter processing power than ever before

- 16g, 70x36mm SWaP-optimized for GPS-denied Navigation, Obstacle Avoidance
- Powered by Qualcomm QRB5165: 8 cores up to 3.091GHz, 8GB LPDDR5
- Abundance of perception capabilities including seven MIPI image sensor inputs which can include up to three stereo image sensor pairs, 8K30, PMD ToF
- Pre-integrated payloads include an EO/IR gimbal, FLIR Lepton® and Boson®
- Open-source software: Open CV, ROS2, Docker, PX4 integrated flight controller
- Integrated flight controller on DSP with TDK® ICM-42688 IMU and ICP-10111 Barometer



Artificial Intelligence

Innovative AI that accelerates autonomy in any robotic vehicle

- The QRB5165's Qualcomm AI Engine pushes 15 TOPS of AI performance with industry leading power consumption
- Onboard QRB5165: Hexagon Tensor Accelerator, GPU, DSP, NPU
- Perception models such as object segmentation and depth from mono
- GPU-accelerated TensorFlow Lite



5G

High-speed, low-latency connectivity

- LTE or 5G Modem for Cellular Carrier-based or private networks
- Microhard and Doodle Labs Helix
- Long-range Wi-Fi Link Add-On





VOXL[®] 2 Blue Arch 2.0 Development Drone



