

PX4 Robotic Drone Vehicle/Flight Management Unit (VMU/FMU) - RDDRONE-FMUK66

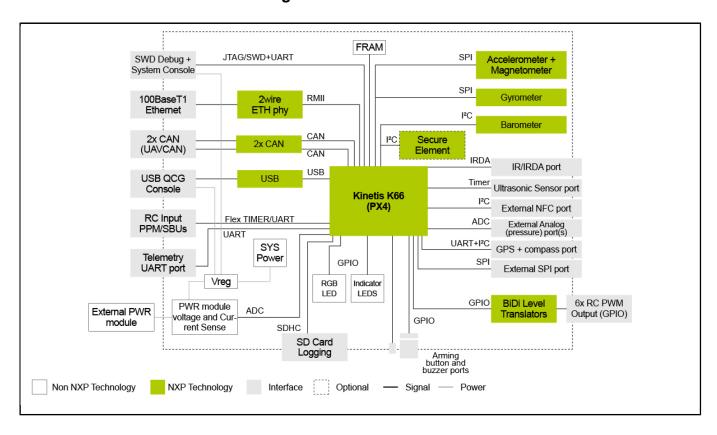
RDDRONE-FMUK66

Last Updated: Jun 11, 2025

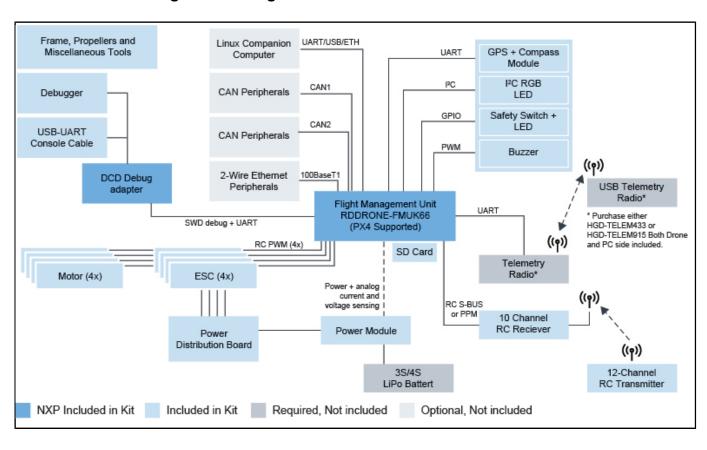
RDDRONE-FMUK66 vehicle/flight management unit reference design is the foundation for building industrial robotic drones, rovers, and other small autonomous vehicles. This reference design runs PX4, the standard for industrial-grade drones, and gives you freedom to develop your own robotic vehicle. Furthermore, the VMU/FMU is versatile and can run other open source or proprietary flight stacks.

It controls and directs the vehicle's navigation and real-time response to its environment. It is adaptable to many airframes and vehicle types, including ground and water-based robots. It performs sensor fusion, including GPS and other positioning inputs for autonomous navigation to mission way points. The open, extensible platform supports many additional sensors.

PX4 Robotic Drone FMU Block Diagram



FMU Reference Design Block Diagram



Note: The information on this document is subject to change without notice.	
www.nxp.com NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2025 NXP B.V.	-

View additional information for PX4 Robotic Drone Vehicle/Flight Management Unit (VMU/FMU) - RDDRONE-FMUK66.