

Robotics Development Kit

Product datasheet

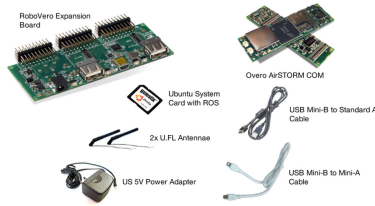
KIT0038

USD299.00

Robotics Development Kit

With a RoboVero featuring a standalone ARM® Cortex™ -M3 driven LPC1769 microcontroller and a Wifi/Bluetooth-enabled Overo AirSTORM computer-on-module running Ubuntu with Robot Operating System (ROS), the Gumstix Robotics Development Kit makes it quick and easy to get started on your robotics project.

Featuring many header pins and the ability to drive the microcontroller independently via a HubCommander™ interface, the Robotics Development Kit is ideal for motor control applications.



Product Features

Robotics	
Accelerometer	Accelerometer Magnetometer
Controller Area Network (CAN)	For use in applications employing the CAN serial communication physical layer in accordance with the ISO 11898 standard.
Gyroscope	3-Axis Angular Rate Sensor
Magnetometer	ST LSM303DLH 3-Axis Magnetometer
Motor Control	header pins for GPIO/CAN/I2C/SPI/UART/PWM and analog signals
General	
Access Point Mode	Yes
Communications	
Bluetooth	Included
WiFi	802.11b/g/n
Inter-board connector	
Board-To-Board Connector	2 x 70-pin AVX connectors
Camera	
Camera Connector	27-Pin (OMAP ISP)
Mechanical	
Length	118.2 mm L
Width	67.2 mm W
Weight	BRD30019 @ 32.2g
Memory	
Flash Memory (NAND)	512
Usb	
HubCommander™ interface	Included
USB Device	Included
USB Host	Included
Processor	
Performance	Up to 2,000 Dhrystone MIPS
Processor	Texas Instruments Sitara AM3703
Processor Architecture	ARM Cortex-A8
Processor Base Clock	1 GHz (Recommended @ 800MHz)
Processor Cores	Single Core
Processor Max Clock	1 GHz
Temperature	Built with components rated $0 < T < 70C$

Kit Includes:

- RoboVero expansion board
- Overo AirSTORM-Y COM
- 5V Power adapter
- USB mini-B cable
- USB OTG cable
- Ubuntu system microSD card

Other connector

- 1 × USB Mini-B to Standard-A Cable
- 1 × USB On-the-Go Cable (Mini-B to Mini-A)

Mating connector

- 1 × U.FL Connector
- 1 × Hirose 27-Pin Camera Connector (Overo COMs)
- 1 × 70-Pin AVX Connector (Male Overo COMs)
- 2 × 70-Pin AVX Connectors (Female Overo Expansion)

What's included

- 1 × Overo AirSTORM-P
- 1 × RoboVero
- 1 × 5V, 3.5A Power Adapter
- 1 × Overo System Card (Ubuntu 8GB)

Key component

- 1 × U.FL Antenna with Collar
- 1 × microSD Card Slot
- 1 × Texas Instruments TPS65950 Power Management
- 1 × W2CBW0015 Wifi+Bluetooth Module
- 1 × Micron 512MB DDR LPDRAM & 512MB NAND Flash Memory
- 1 × Texas Instruments AM3703 Applications Processor
- 1 × Texas Instruments SN65HVD232 CAN Transceiver
- 1 × Texas Instruments TPS62111 Step-Down Converter
- 1 × ST LSM303DLH 3-Axis Accelerometer & Magnetometer
- 1 × ST L3G4200D 3-Axis Gyroscope
- 1 × NXP LPC1769 Microcontroller

Product links

- [Geppetto@Workspace](#)