

Artemis Development Kit

DEV-16828

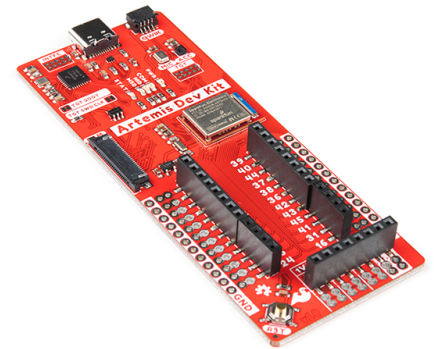
Product Overview

06-28-2022

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

SparkFun Artemis Development Kit is the latest development kit from the artemis family of products, and it allows access to more software development features. Recommended software used to program the development kit is the Arduino IDE, Arm® Mbed™ OS (studio and CLI), and AmbiqSDK. An updated USB interface (MKL26Z128VFM4 Arm® Cortex®-M0+ MCU, from NXP) enables the development kit to act as a mass storage device, human interface device, and communication port.



This kit features a LIS2DH12TR MEMS accelerometer, a digital MEMS microphone, and an edge camera connector. The edge camera connector is used for the Himax CMOS imaging camera to experiment with always-on voice commands and image recognition with TensorFlow and machine learning. The development kit pins are broken out to 0.1" spaced female headers and two rows of breakout pins with a .08" pitch spacing to clip on IC hooks.

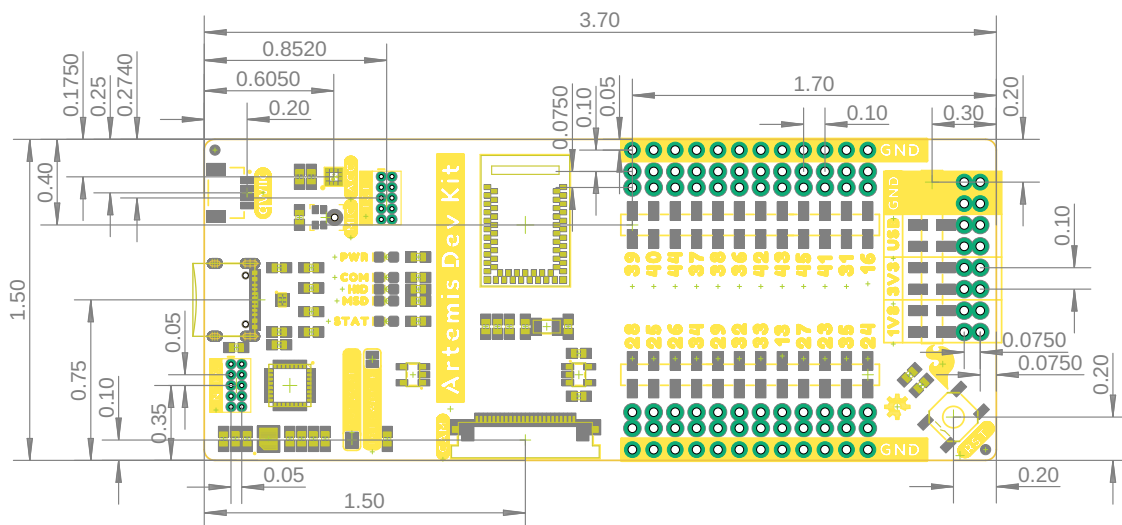
Features

- Compatible with Arduino, Mbed™ OS, and AmbiqSDK development programs
- Power:
 - 5V provided through USB-C™ connector
 - 1.8V, 3.3V, and 5V available on power header
- Interface chip (MKL26VFM4® Cortex®-M0+MCU):
 - Drag and drop programming
 - SWD interface
 - JTAG programming PTH
- Artemis module:
 - Apollo 3ARM® Cortex®-M4F MCU
 - BLE 5.0 with FCC certification
 - 24 breakout I/O pins
 - Eight 14-bit ADC pins
 - Eighteen 16-bit PWM pins
 - Two independent UART ports
 - Three peripheral I²C/SPI buses JTAG programming PTH
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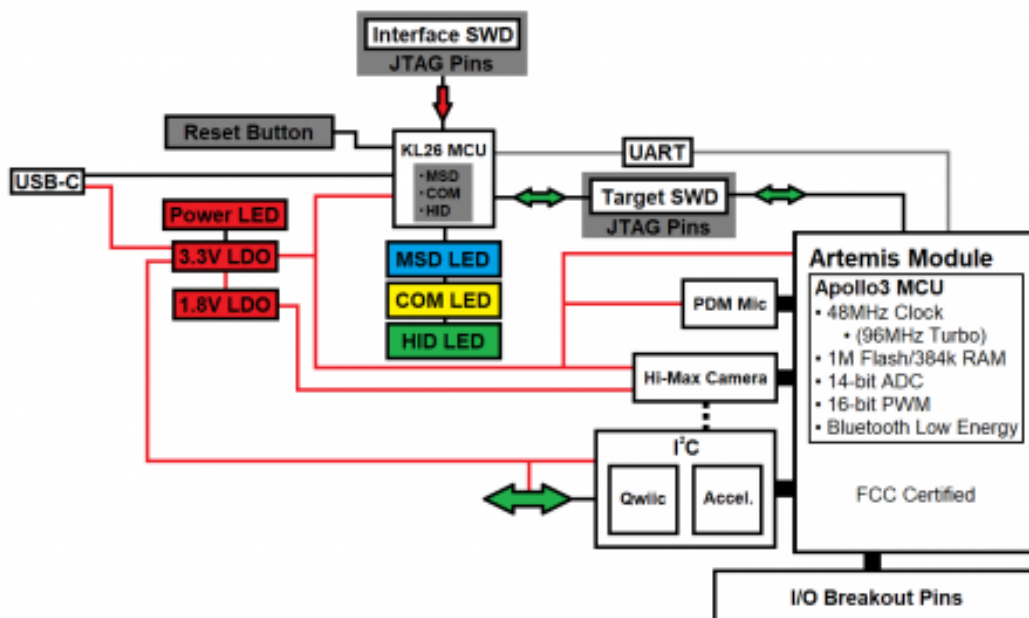
Features

- Sensors:
 - 3-axis accelerometer (LIS2DH12)
 - PDM microphone (SPH0641LM4H-1)
 - Camera connector (for the Himax HMO1B0 camera)
- Qwiic connector:
 - On primary I²C bus

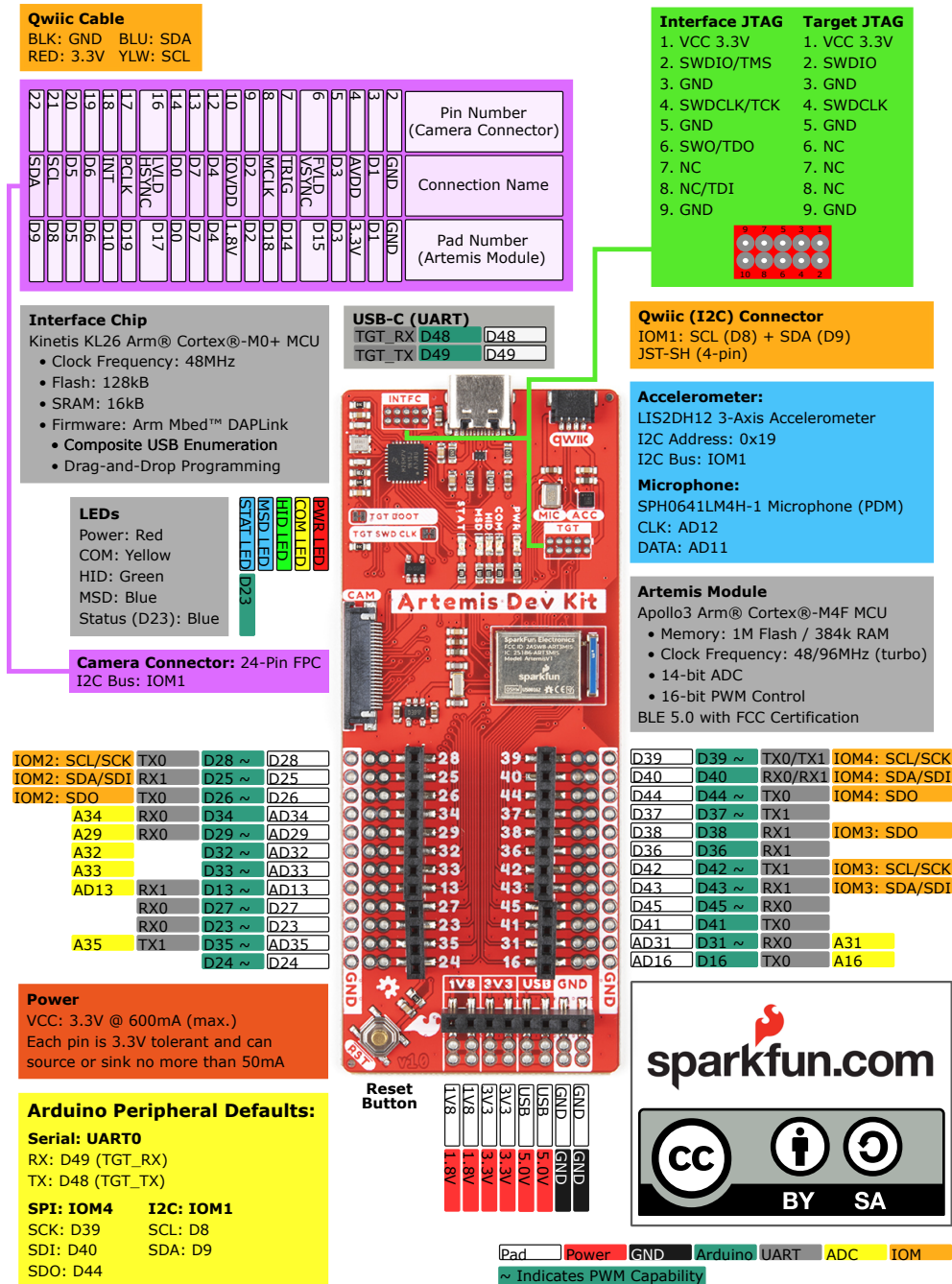
Board Dimensions



Functional Block Diagram



Graphical Overview



Mouser Part Number

[View Part](#)

To learn more, visit

<https://www.mouser.com/new/sparkfun/sparkfun-kit-16828-artemis-development-kit/>