sparkfun

pcDuino Acadia - Dev Board

DEV-13610 🏞



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Description: The pcDuino Acadia is a high performance, cost effective mini PC platform that runs full-featured operating systems such as Ubuntu and Android. The Acadia has been equipped with more on-board storage and a much more powerful quad core processor than its other pcduino family members. In addition to running Linux and Android, this pcDuino has support for programming languages such as C, C++, Java, Python, Arduino, and more. You can even use your favorite Arduino shields for added hardware capability. The pcDuino Acadia has an impressive set of features including an IR receiver, SATA host, USB-OTG, LVDS LCD interface, MIPI camera interface, 3.5mm audio output, battery header, Ethernet, and more. If you're looking for the 'kitchen sink' of development boards, look no further.

The pcDuino acts much like a computer, needing only a 5v (2A) power supply, keyboard, mouse and display to get running. You can even use the USB-OTG to connect remotely. Connect it to your network with the Ethernet jack so you can log data, run a web server, or control devices remotely. The more powerful pcDuino uses a quad core 1.2GHz Freescale processor which makes it one of the most powerful single board computers on the market.

An API has been developed for the pcDuino Acadia that allows the user to access all of the functions that you would expect using simple Arduino-style language.

Dimensions: 120mm X 65mm

Features:

- CPU: Freescale i.MX6 SoC 1.2GHz ARM Cortex A9 Quad Core
- GPU: OpenGL/ES 2.0 3D Accelerator, OpenVG 1.1 Mali 400 Dual Core
- 1GB DRAM
- Onboard Storage: microSD card (TF) slot for up to 128GB
- · Arduino-Style Peripheral Headers
- · HDMI Video Output with HDCP Support
- · SATA Host Socket
- IR Receiver
- · Li-Poly Battery Connector
- · LVDS LCD Interface
- MIPI & CSI Camera Interface
- · Audio Out:
 - 3.5mm Analog Audio
 - Dedicated WM8962 Audio CODEC from Wolfson
- · USB:
 - USB Host
 - USB OTG
- Ubuntu 12.04 and Android ICS 4.4 Supported
- 0.1" Spaced GPIO Headers
- RJ45 Ethernet Connection
- Power Requirements: 2A @ 5VDC
- API to access the following interfaces:
 - UART
 - · ADC
 - PWM
 - GPIO
 - I2C
 - SPI
- · Program in:
 - · C, C++ with GNU tool chain
 - Java with Android SDK
 - Python