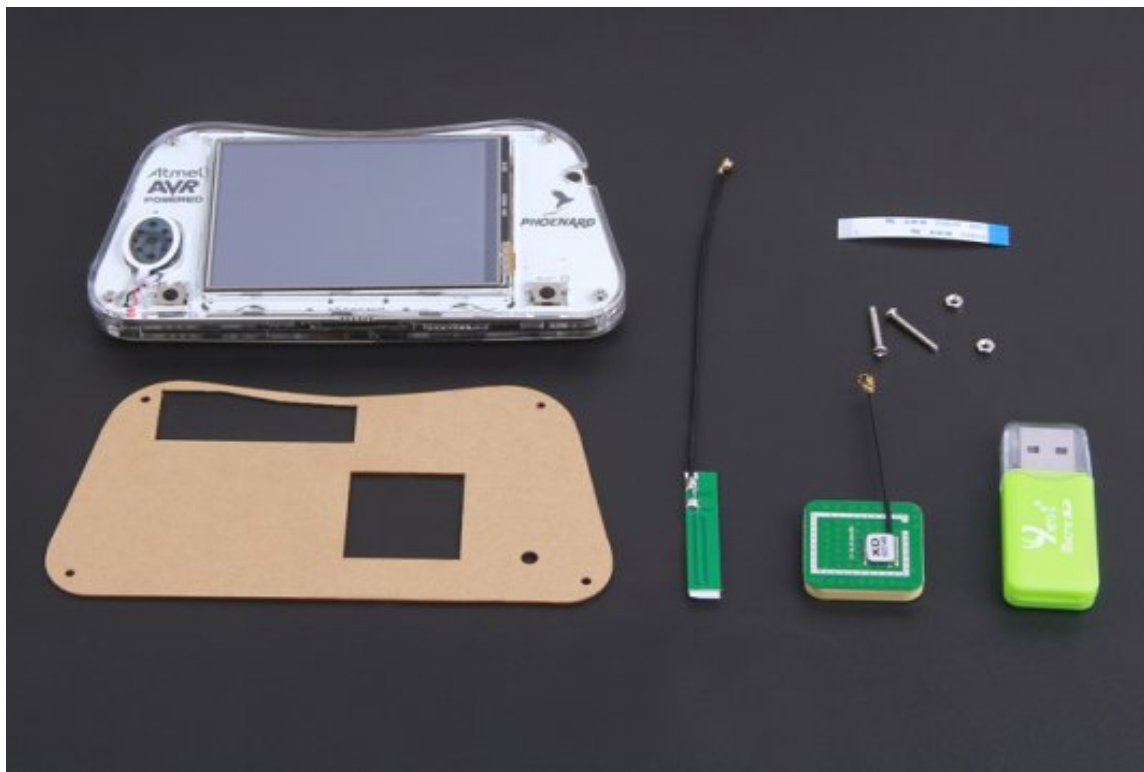


Phoenard

SKU: 102990193



Description

Phoenard is a programmable controller and development board with full Arduino programming support. Use the Phoenard to control robots, machines, lights, wearables and more, making use of the onboard wireless communication (GSM, WiFi, Bluetooth) and motion sensors.

The 16-bit color LCD touchscreen can be used to display user interfaces, for which we provide a full-fledged Arduino library. Display and control buttons, sliders, gauges, graphs and more with very little programming experience required. Design your own widgets and visuals for experienced users. Build interactive solutions to everyday projects!

Multiple Arduino programs, called sketches, can be stored on the Micro-SD card of the device. The installed on-board software and firmware enables multi-sketch operation. Switch between all your sketches in the home menu while away from the computer.

Your electronics projects can be docked to the bottom 30-pin connector, which exposes basic design needs such as digital pins, 6 analog input pins, 3v3 power and I2C/SPI/Serial digital interfaces. The connector doubles as a standard docking connector providing audio to the right pins, allowing the device to play music when docked on a docking music station.

Features

Safe operating conditions

Temperature: -10 ~ 60 degrees celcius

Humidity: 20% - 90%

Power

Battery: 1050 mAh Li-Ion

Charging: 5V 0.5A USB

Main board voltage: 3v3

Processor and memory

Name: AVR Atmega2560

Firmware: Custom firmware 'phoenboot'

Type: Single-core 8-bit RISC

Speed: 16 Mhz

Flash memory: 256Kb

RAM: 8Kb

EEPROM: 4Kb
Interfaces: Serial UART, I2C, SPI
External SPI-RAM: 32Kb
Micro-SD: FAT16 and FAT32 ready

Screen

Name: ILI9325
Size: 2.8 inch
Resolution: 320x240 pixels
Color: 16-bit color
Interface: 8-bit parallel bus interface
Touchscreen: resistive

Wireless

WiFi: ESP8266 module
Bluetooth: HM-11 module
SIM908 module: GSM, GPRS and GPS in one package
Sim card: standard size

Sensors

MPU6050: 3-axis accelerometer and gyro
HMC5883L: 3-axis magnetometer
BMP180: barometer and temperature
SELECT button: tactile input

Media controller

Name: VS1053b
Media: MP3/ACC/AAC+/WAV/AMR/MIDI
Control: SPI (Audio) and Serial (MIDI only)
Output: 3.5mm Audio jack and bottom connector

A starters guide together with documentation and software examples is available on our website:

[Getting started](#)

[Software documentation](#)

[Forums](#)