

HARDWARE DEVELOPMENT KIT

Seeeduino XIAO - Arduino Micro controller - SAMD21 Cortex M0+ HDK V1.0

SKU102010328

Version	Content	Release Date
1.0	Eagle Files(SCH) PCB Design Factory firmware Test Fixture Testing firmware SOP(standard operating procedure) NPI(New Product Introduction) report	2020.6.11

1 . Product Brief Introduction

Seeeduino XIAO is the smallest Arduino compatible board in Seeeduino Family. It is an Arduino micro-controller that is embedded with the SAMD21 microchip. The interfaces of Seeeduino XIAO is rich enough in such a tiny Dev Board as well. [For more product details.](#)



2 . PCB Design

- [\[PDF\] Seeeduino XIAO Schematic](#)
- [\[ZIP\] Seeeduino KiCAD Libraries](#)
- [\[LBR\] Seeeduino Eagle Libraries](#)
- [\[XLSX\] BOM](#)
- [\[DXF\] Dimension in DXF \(Top and Bottom\)](#)
- [\[ZIP\] Factory firmware](#)

3 . [Test Plan](#)

4 . [SOP\(standard operating procedure\)](#)

5 . [NPI\(New Product Introduction\) report](#)

Seed Manufacturing

From quotation to manufacture, we are here to help you quickly turn your prototype into mass production. We know projects are often time critical. To help you understand the process and timeline of our services we have this sample guide below. Each project is a unique case. Adding extensive functionality or requiring numerous certification to be met may increase the development time. The time frame provided are for typical projects we accept. Click the image below to learn more about our service!



CUSTOMIZATION SERVICE

MECHANICAL/ENCLOSURE CUSTOMIZATION

- Design for Manufacturing
- Mechanical Design (2D, 3D design file and CMF)
- Molding design
- Different technology support: Injection Molding/Over molding /Die pressing/ Vacuum casting/ Silicon molding
- Mock up verifying
- Various materials: Plastic/Aluminum/Rubber/Silicon, etc

HARDWARE CUSTOMIZATION

- Extend on board functionality
- Upgrade onboard memory unit
- Sensor, Actuator, and Connector Integration
- Schematic Design
- PCB Layout Customization
- Creating BOMs and sourcing
- Expansions: Cape, Shield, Hats

PACKAGING

Seed has significant experience in ensuring your product arrives safely to the end user as well as helping to design product information pamphlets. Some of the services we provide include:

- Customized Packaging Design
- Graphic Design for Box, Guide books, Manuals, etc.

TESTING

Seed designs test jigs for 100% functional testing during the production, and also provide the reliability testing to ensure boards are electrically sound and properly assembled.

The following tests have been requested:

- Functionality Testing
- Thermal shock Chamber(-55/+125°C)
- High Temperature storage Chamber
- Humidity Chamber (RH% from 20% to 95%)
- Ionic Contamination
- Strain gage
- Dye and Pry
- Cross Section
- Pull and Shear test

CERTIFICATION

Getting products certified quickly takes experience. Seed has certified dozens of products to date. And also Seed has strategic partnership with the professional certification agency provides professional test certification such as below common certifications:

- FCC
- CE
- TELEC
- RoHS

SOFTWARE CUSTOMIZATION

- Hardware drivers
- Linux Kernel Customization
- Firmware and image design

Seeed has been practicing agile manufacturing for years and have supported hundreds of projects as they scale. The Shenzhen technology ecosystem is the best supply chain to produce IoT devices of any quantity. Based on open source hardware designs, Seeed can share the supply chain with customers minimizing overhead in sourcing, quality control, delivery, etc. We hired the best talent in the electronics industry and built a strong engineering infrastructure ready to ramp up and produce quality results.

About Seeed Fusion

Seeed Fusion specializes in affordable but professional PCB manufacture and full turnkey PCB Assembly services to fit any budget. With over 10 years of experience in full-scale paper-to-product manufacturing, worldwide sourcing and supply chain management, Seeed Fusion takes the hassle out of realizing your design. Seeed Fusion PCBA service offers an unrivalled instant online quotation platform that obtains live pricing from the likes of DigiKey and Mouser, just upload the formatted BOM file for a full quotation in seconds. Plus, by choosing all parts from the Open Parts Libraries (OPL), a catalogue of over 150,000 parts local parts, you can reduce the PCBA production time to just 7 working days. The service is also packed with value-added services and options, including the signature Design for Assembly (DFA) review, whereby Seeed's own electronic engineers provide their expertise to help you avoid costly pitfalls that could make or break a project. Click the image below to learn more!

