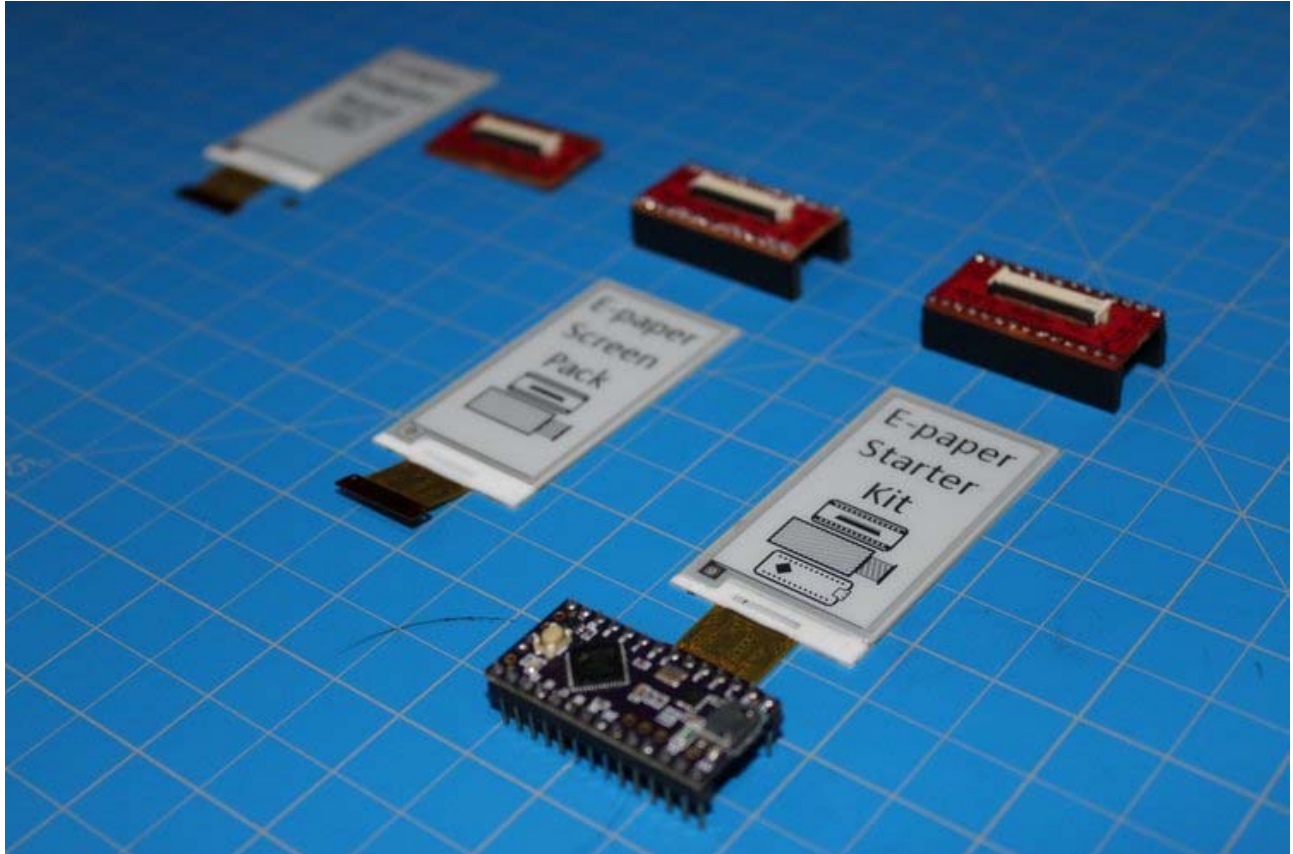
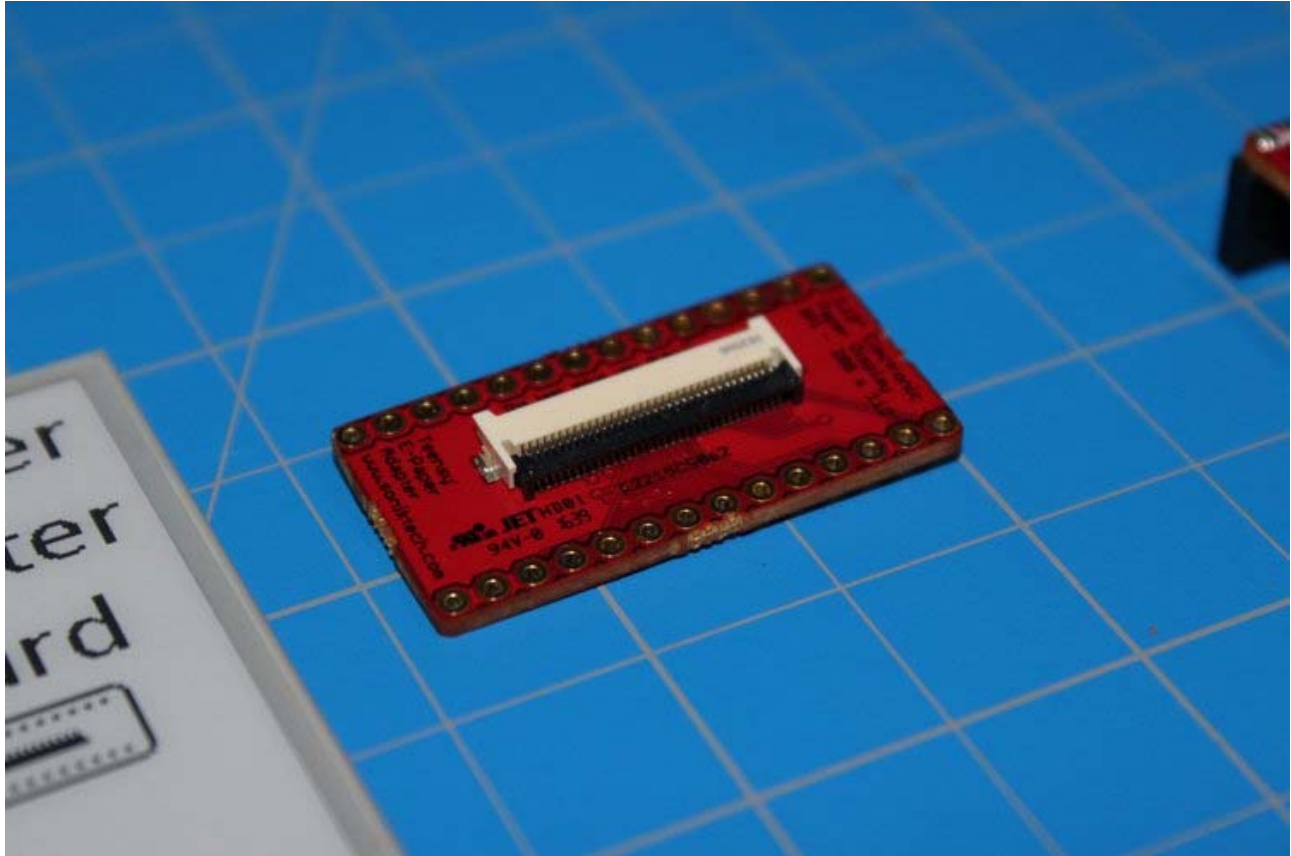


Low cost, no power, and easy to use: E-paper is here!



The E-paper Shield Kit makes it easy for you to have fun playing with E-paper, no electronics experience required!



You can start writing text and drawing pictures to the screen in minutes!

## E-paper in Your Next Project

Do you have a great idea that needs a screen which requires zero power to maintain an image? Are you looking to add an interesting display to your next project? Want to prototype a low-cost, persistent screen that can be read in direct sunlight? You may have seen E-paper in e-book readers and dynamic store displays for some time now. Because of its complex driving circuitry, it has remained out of reach for hobbyists until now. Recent advances in E-paper technology have made it easier for the beginner to take advantage of E-paper's unique properties:

- No power needed to maintain an image
- Crisp, detailed text and pictures
- No backlight required
- Fully sunlight readable

Now anyone can try out their next idea by using the E-paper Shield Kit: an easy to use starter pack that is familiar for hobbyists and welcoming to newcomers.

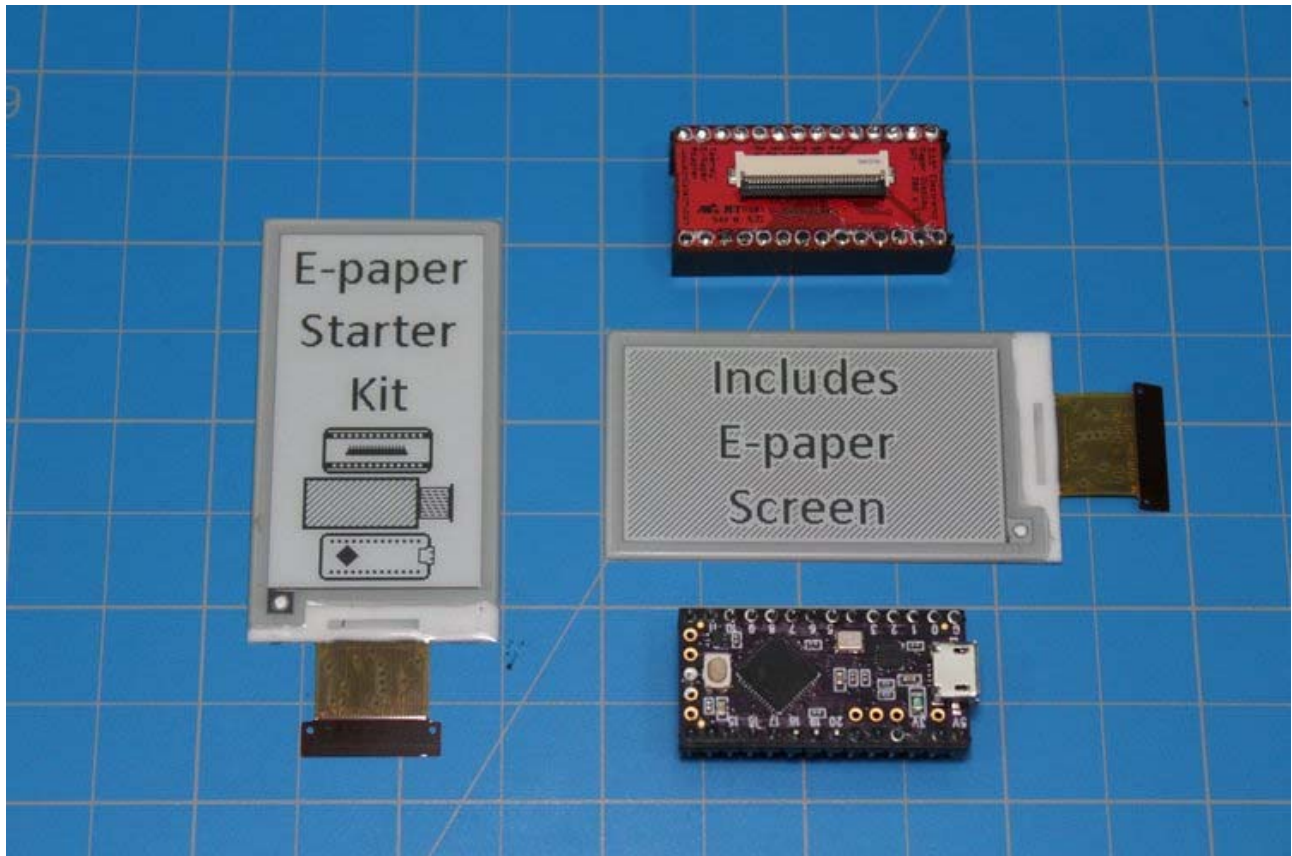
Working with an E-paper manufacturer's engineering team, I have designed an E-paper adapter board that anyone can use to easily draw on E-paper. Now I'd like to share it with the world!

My adapter board was designed with the popular, easy-to-use Teensy microcontroller in mind, though it is also compatible with any other microcontroller that uses the common SPI protocol. Since e-paper displays work best when they know the ambient temperature, I've included a digital thermometer on the adapter board that communicates with the Teensy (or any other microcontroller) via an I2C interface.

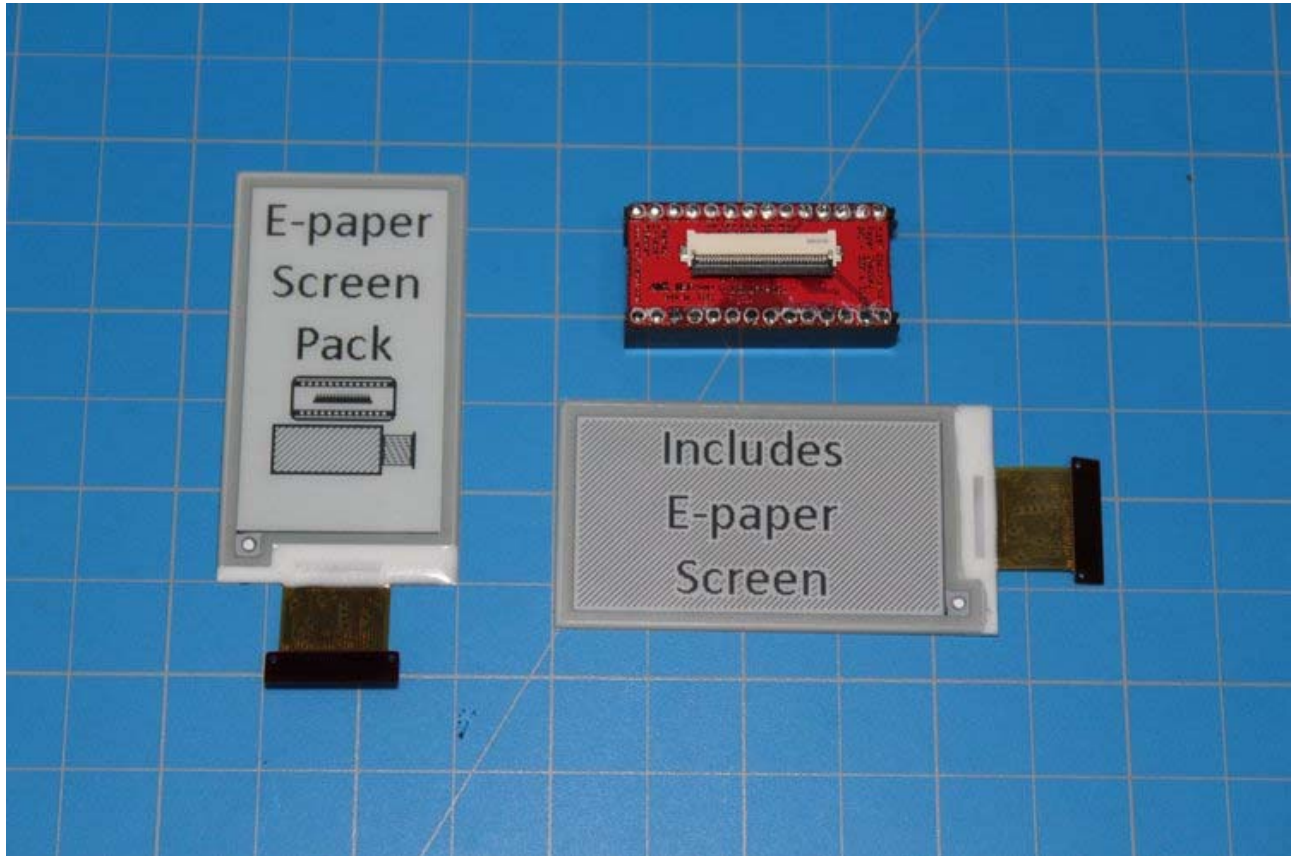
With your pledge, you will receive a kit containing all the parts you need to get started using E-paper for your prototypes, designs, and installations. Wondering if E-paper is right for you? Send me a message here on Crowd Supply, or at [jarek@soniktech.com](mailto:jarek@soniktech.com), and I'll do my best to answer any questions you have!

## Pledge Levels

There are three pledge levels for this campaign:

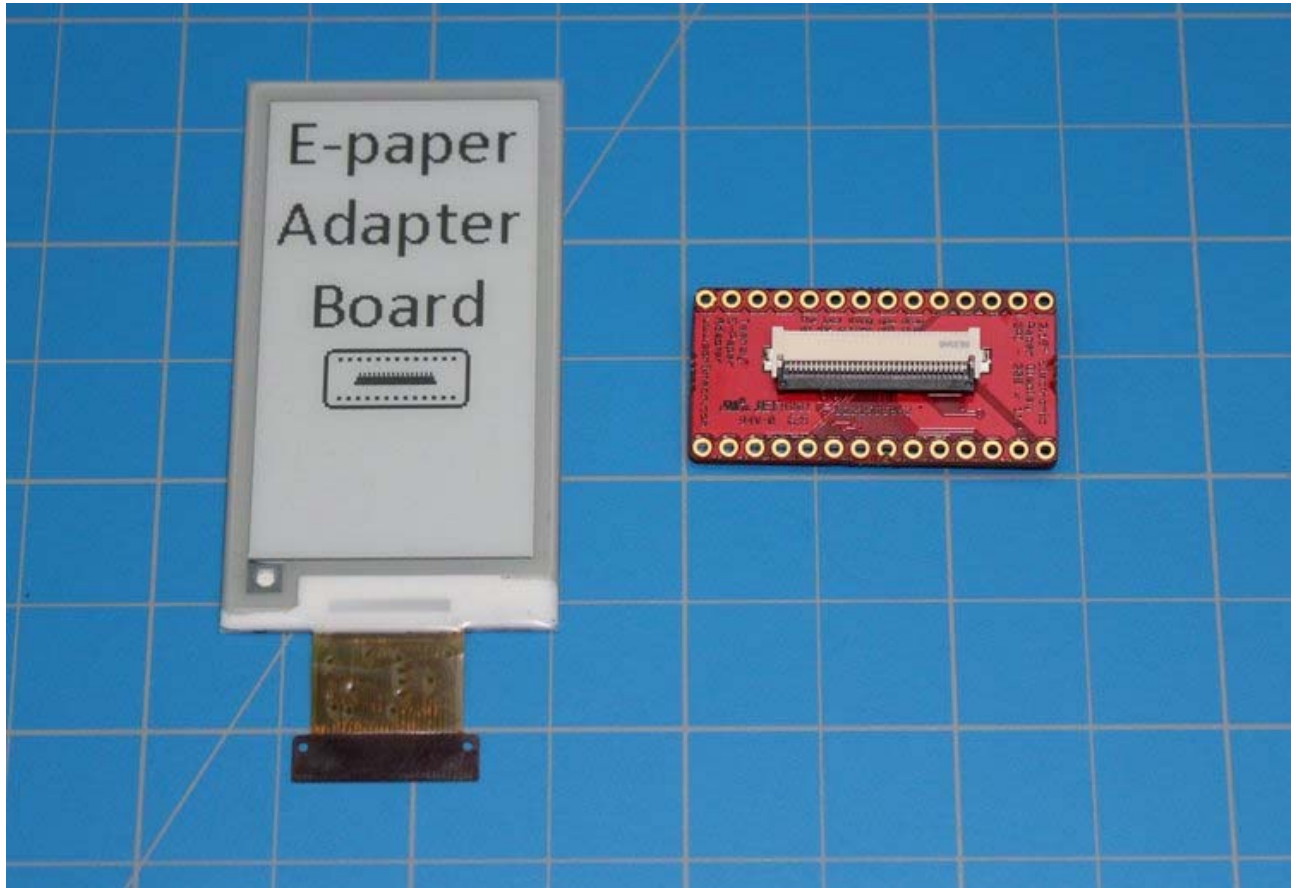


- **The Full Kit:** Everything you need to start using E-paper within minutes of receiving it! Comes with the E-paper adapter, E-paper Screen, and a Teensy-LC.



- **The Adapter Pack** If you already have your own Teensy or other 3.3 V microcontroller, this pack is for you. Comes with the E-paper adapter and an E-paper Screen.





- **The E-paper Adapter:** If you are looking to integrate the E-paper board into an existing solution, you can purchase just the board by itself. Comes with just the E-paper adapter.

## Updates

While the boards are being fabricated, I will be sending out weekly updates of the manufacturing process, as well as demo code and examples of things you can do with your new screen when it arrives. I will also include valuable feedback and tips from beta unit testers.

## Specifications

This E-paper Adapter supports the E2215CS062 E-paper screen from Pervasive Displays:

- Resolution: 208 x 112 pixels
- Screen Size: 48 mm x 26 mm
- Communication Protocol: SPI
- Voltage: 3.3 V

- On-board thermometer with I2C interface
- No backlight required, fully sunlight-readable
- E-paper Adapter board contoured to fit Teensy-LC module ( 18 mm x 36 mm )

## Manufacturing Plan

The first batch of boards has been completed and validated, and some have been on tour with OSHPark to various Maker Faires and Conventions. I am working closely with Crowd Supply's partner MacroFab to streamline the assembly and fulfillment process: the kits will roll right off the assembly line and into an envelope with your name on it, without ever leaving the building.

## Risks & Challenges

The biggest challenge for this campaign will be coordinating the supply chain to ensure all components arrive on time. Once the campaign is complete, we are on a strict schedule to make sure the first batch of boards leaves for your door promptly. To ensure the lowest possible chance of delays, I am consolidating all production and fulfillment to only US-based assembly houses. By controlling the entire design and manufacturing process, I am able to add suppliers quickly to meet unexpected demand.

The E-paper Adapter board is proudly open-source! Please visit <https://hackaday.io> to learn more technical details about the project.

Thank you for your interest! If you would like to ask me questions or show off what you have made with your kit, I would love to hear from you. You can reach out to me through Crowd Supply or at [jarek@soniktech.com](mailto:jarek@soniktech.com).

