

Voron Platform

Product brief

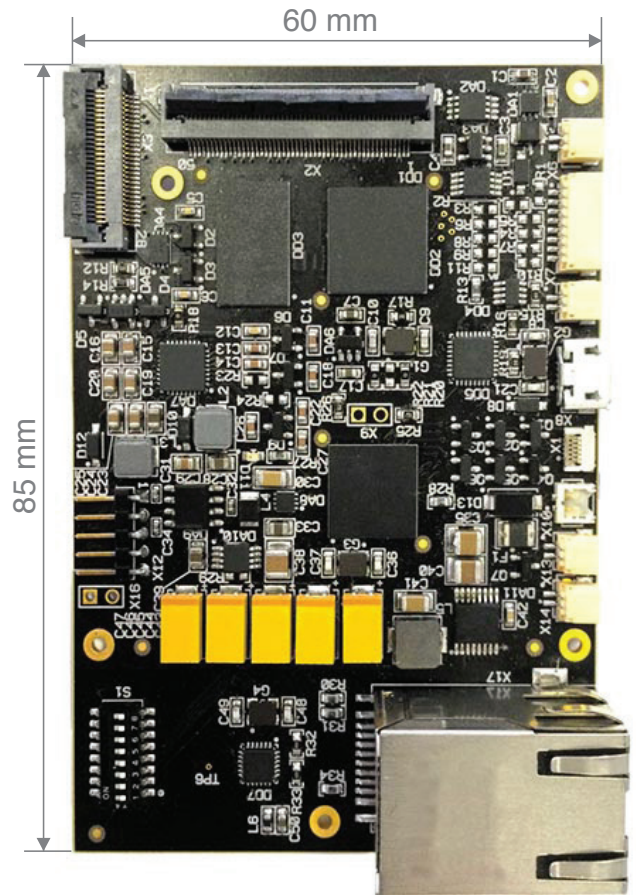
The Idea:

The Voron Platform is a multi interface single board controller for flexible 10.7" Plastic Logic display. It is dedicated to make the development based on plastic electronic paper displays as easy as never before.

The Voron Platform is the only one solution that enables you to quickly get a powerful platform for prototyping and development on Plastic Logic 10,7 EPD. Intelligent architecture allows for the creation of end device that is tailored exactly to your needs. TEN Electronics' electronic paper driving board is specifically designed for a wide range of DIY, consumer and industrial use-cases, and has been developed with hardware features that range from different power modes and multiple connectivity options.

This approach allows not only the development of a single-display device, but enables you to make a media-walls with literally infinite number of display units by joining two and more of Voron Platform together in a single stack as well. The software allows you to start your work straight "out of the box".

Our technical support is always on your disposal in case you would have any questions.



PHYSICAL

Form factor	Board with 10.7 " e-ink display
Dimensions	85 x 60 x 15 mm (85 x 60 x 4 mm without RJ45)
C/M/F	Black PCB with connectors
Connector	RJ45, FSMC, GPIO, Touch
Operating temperature	32 to 104°F (0 to 40°C)

Design overview:

Voron Platform is targeted for designers and engineers evaluating the introduction of seamless visual and network interface to everyday things, making them “connected” and responsive. The platform itself includes all inventory necessary to prototype and perform the final product within several days:

- Support of 10.7” Plastic Logic EPD
- Rich set of interfaces: Ethernet/USB/RS-485
- Touchscreen socket
- Software: LINUX (32/64/ARM), MacOSX, Android, Windows, Windows Embedded
- Powerful microcontroller Cortex M4
- Compact size single board assembly
- Size 85x60x5.5 mm (without ethernet connector)
- Customize-friendly
- Suitable for prototyping as well as using in final products
- Wide range of power supplies: DC 12..36V, or 5V USB
- JTAG interface

10.7” REFERENCE DISPLAY



The 10.7” Lectum display is an active-matrix EPD with gate and source drivers supporting 1280 x 960 pixels.

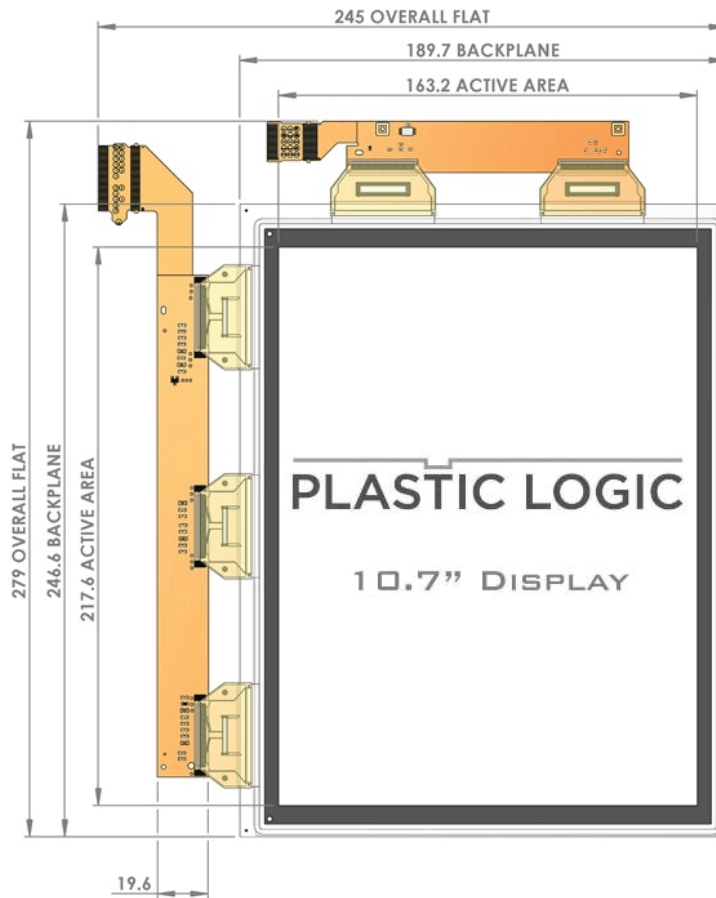
Key features

- Organic TFT active matrix incorporating industry leading, bi-stable electrophoretic display technology
- Five chip solution on double COF (chip-on-film); can be folded behind the display
- Thin, formable, robust, lightweight
- Ultra-wide viewing angle
- Ultra-low power – no continuous refresh cycles required
- External EPD controller as well as power management required
- Can be combined with third-party touch solutions
- Evaluation kits available for driving images



VORON

PLATFORM



Resolution	1280 x 960
Active area	217.6 x 163.2 mm (10.7" diagonal)
Pixel density	150 ppi
Bendability	typical 50 mm radius (except chip area)
Gray levels	up to 16
Refresh rate	< 900 ms (16 gray-level) - faster for mono updates
Surface	anti-glare / UV protection / hard-coat 2H
Weight	45 g (depending on final configuration)
Thickness	650 μ m
EPD controller	external
Operating conditions	0°C to 50°C 15 %rH to 85 %rH
Storage conditions	-25°C to 50°C 15 %rH to 85 %rH

