7.5" Monochrome eInk / ePaper Display with 800x480 Pixels, SPI interface, Support XIAO/Arduino/STM32

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104990861

The 7.5 inch E-paper Display offer a high-quality, low-power solution for a wide range of applications. The model features a 800x480 resolution, black and white display with a diagonal size of 7.5 inches. With a fast refresh rate and excellent contrast, this display is ideal for e-readers, smart wearables, and other portable devices.

USD $35.00

10+: $34.50

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Description

Documents

ECCN/HTS

Description

Features

- **Exceptional Readability:** The display's reflective properties ensure effortless legibility of text and images in different lighting environments.
- **Ultra-Low Power Usage:** E-paper only consumes power during updates, leading to prolonged battery life and efficient energy use.
- **Wide Viewing Angles:** Greater than 170 degrees, unaffected by light direction.
- **Flexibility and Portability:** Allowing bending and curling for versatile applications.
- **Eye-Friendly and Heat-free:** Eliminate glare, providing a comfortable viewing experience while remaining cool without generating heat.

The 7.5 inch E-paper Display with an 800x480 pixel active area and 1-bit white/black full display capabilities. It features high contrast, high reflectance, ultra-wide viewing angle, ultra-low power consumption, and pure reflective mode. The display is bi-stable, operates in commercial temperature range, and has landscape and portrait modes. It is available in COG package IC thickness 280um and has an on-chip display RAM and waveform stored in On-chip OTP. The display also has a serial peripheral interface available, on-chip oscillator, and on-chip booster and regulator control for generating VCOM, Gate, and source driving voltage.

What is an E-Paper?

E-Paper, short for Electronic Paper, is a type of display technology that aims to mimic the appearance of traditional paper and ink. It's designed to provide high contrast and readability in various lighting conditions, including direct sunlight, without the need for a backlight. E-Paper displays use tiny microcapsules containing charged particles suspended in a liquid to produce images. When an electric field is applied, the particles move to the top or bottom of the microcapsules, resulting in different shades or colors being visible to the viewer. E-Paper is often used in e-readers, electronic shelf labels, smartwatches, and other devices where energy efficiency and readability are essential.

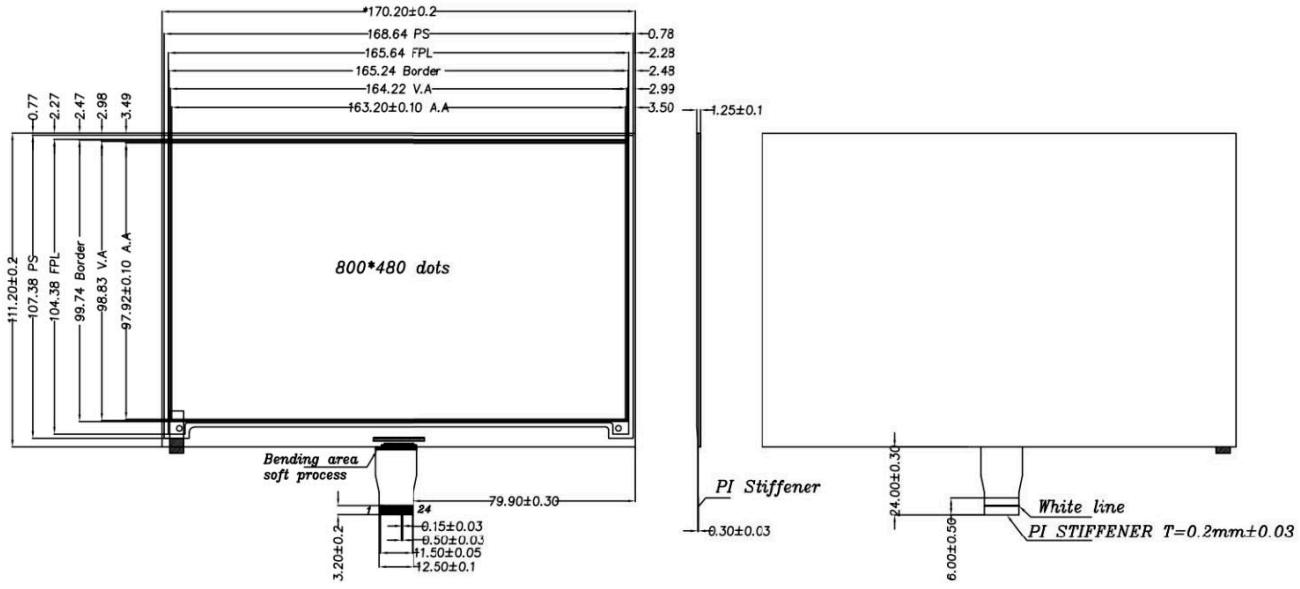
Advantages Over Traditional Displays

E-Paper displays offer advantages over traditional displays, including better readability like paper, visibility in sunlight, low energy consumption, thin design, wide viewing angles, and longer battery life. They are ideal for portable devices and environments where glare and power efficiency matter.

Specification

Parameters	Details
Model No.	GDEY075T7
Type	Dot Matrix
Size	7.5 inch
Active Area(mm)	163.2 x 97.72
Resolution	800 x 480 pixels
Pixel Pitch(mm)	0.204 x 0.204
Display Color	Black, White
Grayscale	4
Partial Refresh Time	0.34s

Full Refresh Time	3.5s
Interface	SPI
Connector	24 Pin PFC, 0.5mm Pitch
Viewing Angle	>170°
Operating Voltage	3.3V
Operating Temperature	0-50°C
Driver Mode	Support XIAO/STM32/Arduino/Micropython
Drawing	Support GUI Drawing
Power Consumption	26.4mW (typ.)
Standby Consumption	0.0165mW
Outline Dimension(mm)	170.2 x 111.2 x1.25
Weight	3.2g



Applications

- Reading equipment
- Mobile device
- Electronic tags and price tags
- Smart Wearables
- Electronic Shelf Labels
- Smart Card

Part List

7.5 Monochrome ePaper Display ×1

FAQ

ePaper Display FAQ

Precautions for E-paper Display

ECCN/HTS

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