

# Mikromedia 7 Capacitive FPI with frame



PID: MIKROE-3834

## **Sound, connectivity & expandability**

A very popular WiFi module labeled as CC3100 enables WiFi connectivity. This module is the complete WiFi solution on a chip: it is a powerful WiFi network processor with the power management subsystem, offering the TCP/IP stack, powerful crypto engine with 256-bit AES support, WPA2 security, SmartConfig™ technology, and much more.

## **State of the art power supply, Display & Graphics controller**

A high-quality 7" TFT true-color display with a capacitive touch panel is the most distinctive feature of the Mikromedia 7. The display has a resolution of 800 by 480 pixels, and it can display up to 16.7M of colors (24-bit color depth). The display module is controlled by the SSD1963 graphics driver IC from Solomon Systech. This is a powerful graphics coprocessor, equipped with 1215KB of frame buffer memory. It also includes some advanced features such as the hardware accelerated display rotation, display mirroring, hardware windowing, dynamic backlight control, programmable color and brightness control, and more.

## **More connectivity**

The microSD card slot allows storing large amounts of data externally, on a microSD memory card. The microSD card detection circuit is also provided on the board.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system.  
ISO 14001: 2015 certification of environmental management system.  
OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).

Ethernet physical layer is provided by the LAN8720A, an RMII 10/100 Ethernet PHY IC from Microchip. This IC has many useful features, including flexPWR® technology with a flexible power management architecture and a support for various low-power modes, compliance with ISO 802-3/IEEE and IEEE802.3/802.3u frame formats, loop-back modes support, auto-negotiation, automatic polarity detection and correction, and so on.

The host MCU is equipped with the USB peripheral module, allowing simple USB connectivity.

The RTC peripheral utilizes a separate power supply source, typically a battery. To allow continuous tracking of time, mikromedia 7 is equipped with a button cell battery that maintains RTC functionality even if the main power supply is off.

## Specifications

Type	mikromedia 7
Architecture	ARM (32-bit)
Display size	7"
Resolution	800x480px
Graphic controller	SSD1963
Touch Screen	Capacitive
Silicon Vendor	NXP,STM,Texas Instruments
MCU Socket	MCU card 8th gen
mikroBUS No.	5
Frame Type	Metal Frame
Features	WiFi,Batt. Chg. when OFF,USB Type C,USB Host,SD Card,RF,ON/OFF switch,MP3,External DC source,ETH,Buzzer,Battery Powered,Battery for RTC,Accel
Display type	mikromedia

## Downloads

[Mikromedia 7 CAPACITIVE FPI Schematic](#)

[Mikromedia 7 CAPACITIVE FPI Manual](#)

[Mikromedia 7 CAPACITIVE FPI 2D and 3D files](#)

[Mikromedia 7 CAPACITIVE FPI example on libstock](#)

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