OVERVIEW

Summary

A smart display solution, **mikromedia HMI 5" UXW** has a **800x480px** color display with a capacitive touch panel and decorative white bezel on the front, and a powerful **FT900Q** 32-bit MCU with additional essential circuitry on the back - making it a standalone but cost-effective solution suitable for industrial applications.

MCU

mikromedia HMI boards are driven by FTDI Chip's FT900Q with their proprietary **32-bit RISC core** with industry-leading performance. With execution from shadow memory, the MCU can achieve speeds of **3.1 DMIPS/MHz at 100 MHz**. FT900Q has 256KB of Flash memory, a small part of which is taken by the **built-in bootloader**.

Additional circuitry

The concept of mikromedia HMI is to keep only the essential components that simplify its integration into a final product, whilst keeping overall costs down.

The board integrates a **microSD card** for expanding storage capacity, a **haptic feedback motor**, small **audio speaker**, and a **micro USB connector**. A connector for interfacing the MCU with external electronics, along with a separate connector for FT900Q's **parallel camera interface**.

Display

mikromedia for HMI 5" UXW has a high-quality **Riverdi display** with **16.7M color depth** and **550 NIT brigtness**. The display is driven by a FT812 graphic controller. A **mounting frame** surrounding the screen simplifies integration.

KEY FEATURES

- **Size:** 5"
- **Resolution:** 800x480
- **Brightness:** 510
- **MCU:** FT900Q

    Speed: 100MHz; 310 DMIPS

    Memory: 256 KB Flash

    Peripherals include: 2xCAN, 2xSPI, 2xI2C, I2S, UART
- **Graphic controller:** FT813
- **Touchscreen:** Capacitive
- **Interface:** Main connector, Camera connector, Micro USB
- **Storage:** 8MB Flash + MicroSD card slot
- **Audio speaker**
- **Haptic feedback engine**
- **Decorative white bezel**

COMPARISON CHART

See how **mikromedia HMI 4.3" UXW** compares with the rest of the product line.

Product Name	Size	Resolution	Touch Panel	Luminosity	Active Area	Graphics Controller	Haptic Feedback	Dot Pitch (mm2)
mikromedia HMI 3.5"	3.5"	320 x 240	None	540	70.08 x 52.56	FT812	No	0.73 x 0.219
mikromedia HMI 3.5" Res	3.5"	320 x 240	Resistive	450	70.08 x 52.56	FT812	No	0.73 x 0.219
mikromedia HMI 3.5" Cap	3.5"	320 x 240	Capacitive	480	70.08 x 52.56	FT813	No	0.73 x 0.219
mikromedia HMI 4.3"	4.3"	480 x 272	None	550	95.04 x 53.86	FT812	Yes	0.066 x 0.198
mikromedia HMI 4.3" Res	4.3"	480 x 272	Resistive	440	95.04 x 53.86	FT812	Yes	0.066 x 0.198
mikromedia HMI 4.3" Cap	4.3"	480 x 272	Capacitive	500	95.04 x,53.86	FT813	Yes	0.066 x 0.198
mikromedia HMI 4.3" UXB	4.3"	480 x 272	Capacitive, UX Black	500	95.04 x 53.86	FT813	Yes	0.066 x 0.198
mikromedia HMI 4.3" UXW	4.3"	480 x 272	Capacitive, UX White	500	95.04 x 53.86	FT813	Yes	0.066 x 0.198
mikromedia HMI 5"	5.0"	800 x 480	None	600	118.00 x 64.80	FT812	Yes	0.045 x 0.135
mikromedia HMI 5" Res	5.0"	800 x 480	Resistive	480	118.00 x 64.80	FT812	Yes	0.045 x 0.135
mikromedia HMI 5" Cap	5.0"	800 x 480	Capacitive	510	118.00 x 64.80	FT813	Yes	0.045 x 0.135
mikromedia HMI 5" UXB	5.0"	800 x 480	Capacitive, UX Black	510	118.00 x 64.80	FT813	Yes	0.045 x 0.135
mikromedia HMI 5" UXW	5.0"	800 x 480	Capacitive, UX White	510	118.00 x 64.80	FT813	Yes	0.045 x 0.135
mikromedia HMI 7"	7.0"	800 x 480	None	400	154.08 x 85.92	FT812	Yes	0.045 x 0.135
mikromedia HMI 7" Res	7.0"	800 x 480	Resistive	320	154.08 x 85.92	FT812	Yes	0.045 x 0.135
mikromedia HMI 7" Cap	7.0"	800 x 480	Capacitive	350	154.08 x 85.92	FT813	Yes	0.045 x 0.135

| mikromedia HMI 7" UXB | 7.0" | 800 x 480 | Capacitive UX Black | 350 | 154.08 x 85.92 | FT813 | Yes | 0.045 x 0.135 |
| mikromedia HMI 7" UXW | 7.0" | 800 x 480 | Capacitive UX White | 350 | 154.08 x 85.92 | FT813 | Yes | 0.045 x 0.135 |