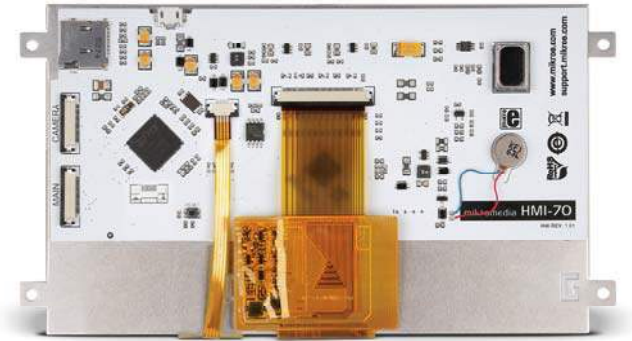




OVERVIEW

- Summary** A smart display solution, **mikromedia HMI 7" Res** has a **800x480px** color display with a resistive touch panel 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" Res has a high-quality **Riverdi display** with **16.7M color depth** and **550 NIT brightness**. The display is driven by a **FT812 graphic controller**. A **mounting frame** surrounding the screen simplifies integration.



KEY FEATURES

- **Size:** 7"
- **Resolution:** 800x480
- **Brightness:** 320
- **MCU:** FT900Q
 - Speed:** 100MHz; 310 DMIPS
 - Memory:** 256 KB Flash
 - Peripherals include:** 2xCAN, 2xSPI, 2xI2C, I2S, UART
- **Graphic controller:** FT812
- **Touchscreen:** Resistive
- **Interface:** Main connector, Camera connector, Micro USB
- **Storage:** 8MB Flash + MicroSD card slot
- **Audio speaker**
- **Haptic feedback engine**
- **Mounting frame**



COMPARISON CHART

See how **mikromedia HMI 5"** 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 |