



Using Fusion touch displays, OEMs/ODMs can quickly design cutting edge touch products with less cost and development risk.

- Entertainment Systems
- Control Systems
- Kiosks
- Telepresence Systems
- Vending Machines
- POS Terminals
- White Goods

## Fusion Multi-Touch Displays

### Projected Capacitive Sensor and Cover Glass

The core of the Fusion touch display is a glass projected capacitive touch sensor, optically bonded to a clear cover glass in a state-of-the-art manufacturing facility. This provides best-in-class optical properties, touch accuracy, durability and industrial design flexibility.

### Integrated Multi-Touch Controller



Fusion touch displays include an integrated touch controller system mounted directly on the flex tail (Chip on Flex). The Fusion controller runs Touch Revolution's proprietary firmware, capable of tracking at least two unambiguous touch points with a high report rate.

### Integrated LCD

Each Fusion touch display includes an integrated LCD mechanically bonded to the touch sensor to create a single, easy-to-integrate module with high cosmetic quality. The Fusion touch firmware has been tuned to the LCD to ensure easy integration as a drop-in component.

### Benefits of Projected Capacitive Touch Technology

Touch Revolution's Fusion displays offer a host of benefits over traditional touch sensor designs. In addition to improved optical transmittance, durable design, and integrated touch controllers; projective capacitive Fusion displays allow designers an out-of-the box experience with intuitive gesture capability, improved industrial design and a touch interface that is instantly recognizable by consumers.

# Specifications

| MODEL                             | Fusion 4              | Fusion 7               | Fusion 10              |
|-----------------------------------|-----------------------|------------------------|------------------------|
| Screen Size                       | 4.3"                  | 7"                     | 10.1"                  |
| LCD Resolution                    | 480 x 272             | 800 x 480              | 1024 x 600             |
| Active Area (mm)                  | 95.04 x 53.86         | 152.40 x 91.44         | 222.72 x 125.28        |
| Touch Resolution (points)         | 950 x 550             | 1500 x 900             | 2300 x 1350            |
| Cover Glass Thickness (mm)        | 1.1                   | 1.0                    | 1.1                    |
| Touch Interface Supply Voltage    | 3.3V                  | 3.3V                   | 5.0V                   |
| LCD Pixel Pitch (H x V mm)        | 0.198 x 0.198         | 0.1905 x 0.1905        | 0.2175 x 0.2088        |
| LCD Interface                     | TTL Interface         | TTL Interface          | 1-channel LVDS         |
| LCD Light Output (cd/m2 - nits)   | 500                   | 350                    | 200                    |
| Contrast Ratio                    | 600:1                 | 400:1                  | 500:1                  |
| Viewing Angle (H x V)             | 150/130               | 140/130                | 90/50                  |
| Backlight Life                    | >10,000 hours         | >10,000 hours          | >10,000 hours          |
| Power Consumption (LCD/Backlight) | 0.9/0.924 W           | 0.86/1.98 W            | 0.65/1.53 W            |
| Operating Temperature (°C)        | -20 to +60            | -20 to +60             | 0 to +50               |
| Storage Temperature (°C)          | -30 to +70            | -30 to +70             | -20 to +60             |
| Relative Humidity (%)             | 0 ~ 90                | 0 ~ 90                 | 0 ~ 90                 |
| Module Dimensions (mm)            | 120.38 x 79.20 x 5.23 | 179.96 x 119.00 x 7.50 | 249.12 x 151.70 x 7.65 |
| Weight (g)                        | 78.1                  | 210.5                  | 356                    |
| Part Number                       | F04B-0101             | F07A-0102              | F10A-0102              |

## COMMON SPECIFICATIONS

|                          |                                                       |                   |                                        |
|--------------------------|-------------------------------------------------------|-------------------|----------------------------------------|
| Touch Technology         | Projected Capacitive                                  | Touch Linearity   | 1 mm center, 2 mm within 5 mm of edges |
| Touch Input Type         | Min 7 mm diameter finger or conductive stylus         | Touch Report Rate | 80–100 interrupts/sec. (single touch)  |
| Activation Force         | No pressure required                                  | Touch Controller  | Integrated on FPC (CoF)                |
| Multi-Touch              | At least two unambiguous points with 15 mm separation | Touch Interface   | I2C (USB 2.0 Optional)                 |
| Touch Panel Construction | Glass sensor plus cover glass optically bonded        | Touch Software    | Reference Driver for Linux, Android    |
| Cover Glass Hardness     | >9H                                                   | Touch Connector   | 6 pin ZIF                              |
| Optical Transmittance    | >89%                                                  |                   |                                        |

## CUSTOMIZATION OPTIONS\*

|                    |                                                         |                      |                              |
|--------------------|---------------------------------------------------------|----------------------|------------------------------|
| Cover Glass ID     | Dimensions, thickness and artwork                       | Flex Tail Dimensions | Custom dimensions and shapes |
| Cover Glass Type   | Chem strengthened glass, other non-conductive materials | LCD                  | Alternative LCD Integration  |
| Surface Treatments | Anti-glare, anti-fingerprint                            |                      |                              |

\* MOQ and custom pricing apply for customized products