

## 7" G2H2 Resistive

Part Number: 51-0406-401

This module makes integration easy. Each unit comes with an LCD, controller board, backlight driver, and touch screen, integrated and ready to go. The module form factor is designed to ensure long-term product availability. Powered by the G2H2 controller it features:

- A wide range of input/output (I/O) ports including one RS-232 serial port, one RS485, two USB 2.0 host ports, a CAN interface, 10/100 Ethernet, I2C, a CMOS serial port, and GPIO.
- NXP i.MX 6Solo, 1.0 GHz Processor including hardware video decoder and 3D graphics engine. 512 MB DDR3 DRAM. 512 MB NAND Flash / 16 MB NOR Flash. microSD Flash Card Socket. Audio Codec with 1 Watt Audio Amplifier and Speaker.
- An industrial panel with resistive touchscreen.
- Designed for long-term availability with a 10+ year processor life and a multi-sourced, industry standard LCD form factor.

Download mechanical drawings, panel specifications, controller and software reference manuals, and more at [reachtech.com/products/touchscreen-display-modules/7-modules/51-0406-401/](http://reachtech.com/products/touchscreen-display-modules/7-modules/51-0406-401/).



### G2H2 Controller

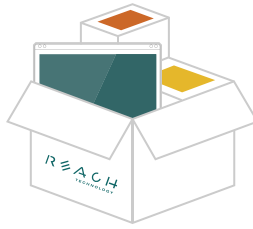
- CPU: NXP i.MX 6Solo, 1.0 GHz Processor including hardware video decoder and 3D graphics engine.
- Storage Capacity:
  - 512 MB DDR3 DRAM.
  - 512 MB NAND Flash / 16 MB NOR Flash.
  - microSD Flash Card Socket.
- I/O Interface:
  - 10/100/1000 Mbps Base-T Ethernet: Features low profile Molex Pico-SPOX Connector (24 AWG Compatible).
  - One RS232 and one 3.3V CMOS Serial Port. One RS485.
  - One USB 2.0 (High Speed) Host Port.
  - One USB 2.0 (High Speed) On-The-Go (OTG) Host Port.
  - One I2C Port.
  - One CAN Bus with Transceiver.
  - 8-bit GPIO Port 5V Tolerant.
  - Contact us for additional I/O options.
- Audio: Codec with 1 Watt Audio Amplifier and Speaker.

### Software Features

- Linux Kernel 3.10.17 with Qt 5.3.2 and QtCreator IDE 3.2.2
- Samba File Server for easy file access from Windows
- UBIFS NAND Flash file system for speed and reliability
- USB Hotplug for module Host Ports
- OpenSSH Server
- Ships with Serial Interface for QML Applications. See Application Notes to convert to Ethernet or CAN connection.
- Custom Linux Kernel Build Supported and Maintained by Reach Technology. Contact us for your specific requirements.

## Start with a Development Kit

Development Kits include everything you need to create a prototype quickly. When you are ready, move smoothly into production with off-the-shelf display modules that offer 5-7 years availability as a minimum. Order Part Number [52-0406-401](#) which includes module, cables, sample images, sample code, power supply, and technical support. Call 503-675-6464, or email [sales@reachtech.com](mailto:sales@reachtech.com) for more information or to order.



Find kit accessories at [reachtech.com/products/touchscreen-display-modules/support/accessories/](http://reachtech.com/products/touchscreen-display-modules/support/accessories/).

## LCD Display

- Display Type: 7" Diagonal TFT Color LCD
- Resolution: 800 x 480 WVGA, 18-bit Color
- Orientation: Landscape
- Luminance (with touch): Typical 400 (cd/m<sup>2</sup>)
- Viewing Angles: 65/65 left/right, 55/65 up/down
- Backlight: LED
- Manufacturer: Evervision

## Touchscreen

- Type: 4-Wire Analog Resistive
- Touch Driver: Standard Linux Driver
- Durability: Over One Million Touches

## Dimensions

- 6.56" W x 4.87" H x 0.88" D

## Environmental/Regulatory

- Operating Temperature: 0 to 70° C; the LCD temperature range primarily limits this
- Storage Temperature: -30 to 80° C
- Humidity: Max 90%RH at 60° C; No Condensation
- RoHS 2 Compliant: Yes

## Power Requirements

- Power Supply Voltage: +5VDC (5.15V for 5V USB Host Port Power Out)
- Power Consumption: Max 970mA during boot with no devices attached.

Reach Technology, part of Novanta, reserves the right to make changes in design or specification at any time and without notice.