

5.7" Display Module with Resistive Touch



Powered by the G2H2 controller, this general-purpose module incorporates a 5.7" VGA industrial panel with an integrated touchscreen designed for applications that demand long-term availability. With an NXP i.MX 6Solo core processor, the module offers a wealth of I/O interfaces for connecting to other sections of a medical or industrial product including: 10/100/1000 Mbps Base-T Ethernet, RS232, high-speed USB 2.0 host port, and high-speed USB 2.0 On-The-Go Host/Device Port. It can be powered by an input of 5VDC. ESD and EMC test results are provided to ease regulatory compliance testing. Like all Reach products, these modules are designed for long-term availability with a 10+ year processor life and a multi-sourced, industry standard LCD form factor.

| Size | Model |
|------|---|
| 5.7" | G2H2-5R |
| Wide | Base I/O version of G2H2 with 5.7" resistive touch. |

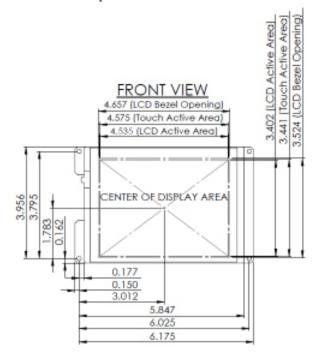
Hardware Features

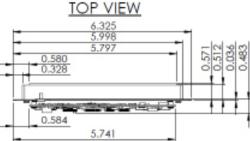
- VGA (640 x 480) LCD with LED Backlight
- NXP i.MX 6Solo, 1.0 Ghz Processor with hardware video decoder and 3D graphics engine
- 10/100/1000 Mbps Base-T Ethernet, features low profile Molex Pico-SPOX Connector (24 AWG Compatible)
- RS232 and 3.3V CMOS Serial Ports
- One USB 2.0 (High Speed) Host Port
- One USB 2.0 (High Speed) OTG Host/Device Port
- 8-bit GPIO Port 5-V Tolerant
- Dedicated Linux Console Port
- 512 MB DDR3 DRAM Onboard
- 512 MB NAND Flash / 16 MB NOR Flash
- microSD Flash Card Socket
- Resistive Touchscreen
- Backlight Brightness Control
- Onboard Beeper
- Contact us for additional I/O options such as RS485, 3.3 V CMOS, I2C, CAN, Audio Codec with 1 Watt Audio Amplifier and Onboard Speaker, and Real Time Clock.

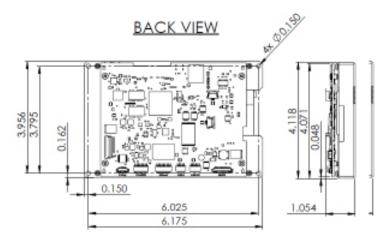
Software Features

- Linux Kernel 3.10.17 with Qt 5.3.2 and QtCreator IDE 3.2.2
- Production quality Web Server (lighttpd) with CGI, PHP support
- 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
- Interfaces for QML Applications: Serial and Ethernet
- Custom Linux Kernel Build Supported and Maintained by Reach. <u>Contact us</u> for your specific requirements.

Mechanical Specifications







Mechanical Specifications, 3D Mechanical Views, 2D DXF Mechanical Drawings, 3D Step Files can be found for each Display Module at <u>LinuxTouchscreen.com/products/production-modules/5-7-modules/</u>.

Specifications

LCD

- Display Type: 5.7" Diagonal TFT Color LCD
- Resolution: 640 x 480 VGA, 18-bit Color
- Dot Pitch: 0.180mm x 0.180mm
- Luminance, with touchscreen: Typical 620 (cd/m²)
- Viewing Angles: 65/65 left/right, 60/70 up/down
- Viewing Direction: 6 o'clock
- Software controlled brightness
- Backlight: White LED, min 40,000 hours

Resistive Touchscreen

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

Ethernet Interface

- MAC / PHY: On-board
- Type: 10/100 Base-T
- Interface: Low Profile Molex Pico-SPOX (24AWG Compatible Crimps)

Mechanical

- Dimensions: 6.325" W x 4.118" H x 1.054" D
- Weight: 442 Grams

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

Environmental/Regulatory

- Operating Temperature: 0 to 70° C;
 Contact us for extended temperature.
- Storage Temperature: -30 to 80° C
- Humidity: Max 90%RH at 60° C; No Condensation
- EMI and ESD Test Results Available
- Passes FCC Class B Emissions without an enclosure (8 layer fully shielded PCB)
- Thermal, Mechanical, Vibration: See Reliability Test section in panel specification.
- RoHS 2 Compliant: Yes

Ordering Information

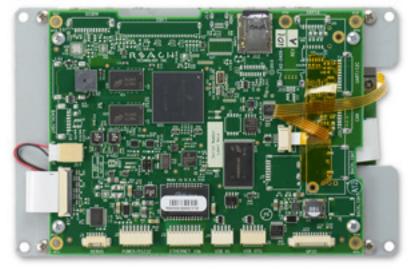
| Product | Part Number | Price |
|---|-------------|---|
| 5.7" (Model G2H2-5R) Display Module with Resistive Touch | 51-0406-181 | Contact Reach Sales (408-754-4176, sales@reachtech.com) for volume pricing. |
| Development Kit | 52-0406-181 | \$419 |

To get started order a Development Kit which comes with all the hardware, software, and full support.

Order at <u>LinuxTouchscreen.com</u>, call Reach Sales at 408-754-4176, or email <u>sales@reachtech.com</u>.

Accessories

| Part Number | Description |
|-------------|--|
| 23-0144-10 | Cable, GPIO, 11pin PicoBlade, Flying Lead |
| 23-0146-10 | Cable, 6pin PicoBlade, 10 in. Flying Lead |
| 23-0147-10 | Cable, Power/Serial, 8pin Pico-SPOX, 10 in. Flying Lead |
| 23-0148-12 | Cable, Ethernet, RJ-45 plug into 9pin Pico-SPOX |
| 23-0149-10 | Cable, 10pin PicoBlade, 10 in. Flying Lead |
| 23-0160-18 | Cable, G2C/G2H, Power/RS232 Y |
| 23-0161-72 | Cable, G2C/G2H, USB RS232 to 5pin PicoBlade |
| 23-0166-12 | Cable, Pico-SPOX 5pin USB Type A Receptacle 12in |
| 23-0167-12 | Cable, Pico-SPOX 6pin USB Type 2.0 Type A Receptacle |
| 23-0172-12 | Cable, Audio, G2H2 to CUI Headphone Jack |
| 30-0008-01 | Power Supply; 5 Volt, 2.5A, 2.5mm |
| 37-0008-01 | USB to RS232 Adapter with cable |
| 37-0010-01 | Flash microSD Flash Card, 4GB, Class 4 |
| 37-0011-01 | USB 2.0 Flash Memory Card Reader/Writer |
| 37-0012-01 | Cat5e Inline Female / Female Ethernet Coupler |
| 37-0014-01 | USB WiFi, Panda Ultra 802.11n 802.11b/g compatible Adapter |



5.7" G2H2-5R Display Module, back view

Custom versions are available to volume customers; please contact Reach Sales (<u>sales@reachtech.com</u> or 408-754-4176) for more information.