

4.3" Standard Display Module with Projected Capacitive Touch



4.3" Display Modules are ultra compact and combine a multi-function processor board and a 4.3-inch WQVGA (480 x 272) TFT color LCD. Model G2C1-P includes projected capacitive touch. Modules offer a wide range of input/output (I/O) options including one RS-232 serial port, two high speed 422/485 ports, two USB 2.0 host ports, a CAN interface, 10/100 Ethernet, I2C, a CMOS serial port, and GPIO. WiFi is supported via a USB dongle for maximum flexibility. Each module is small enough to fit in a 2U high rack enclosure. Modules have an audio beeper and battery-backed real-time clock. Onboard flash memory is used for program and data storage. A Micro SD card socket is provided for additional storage. All I/O connectors provide significant locking tabs for reliable operation in industrial applications. 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
4.3" Wide	G2C1-P Full featured version of G2C1 with projected capacitive touch.

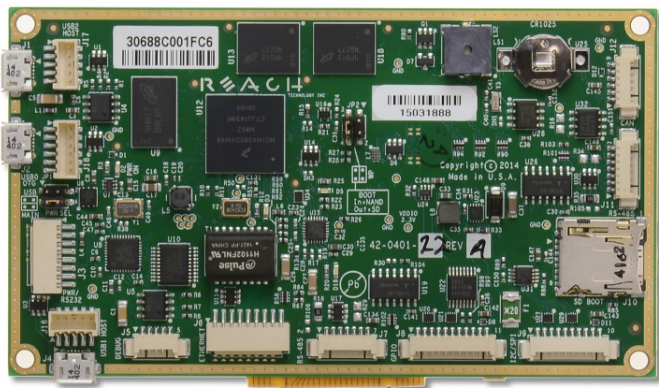
Hardware Features

- WQVGA (480 x 272) LCD with LED Backlight
- NXP i.MX28 454Mhz Processor
- 10/100 Mbps Base-T Ethernet
- RS232, 422/485 (2), 3.3V CMOS Serial Ports
- Two USB 2.0 (High Speed) Host Ports
- One USB 2.0 (High Speed) OTG Port
- One I2C Port
- One CAN Port
- 8-bit GPIO Port 5-V Tolerant
- 128 MB DDR2 DRAM Onboard
- 256 MB NAND Flash Onboard
- Battery Backed, Low Current (10 year) Real Time Clock
- Micro SD Flash Card Socket
- Audio Beeper with Frequency and Volume Control
- Projected Capacitive Touchscreen Interface
- Backlight Brightness Control

Software Features

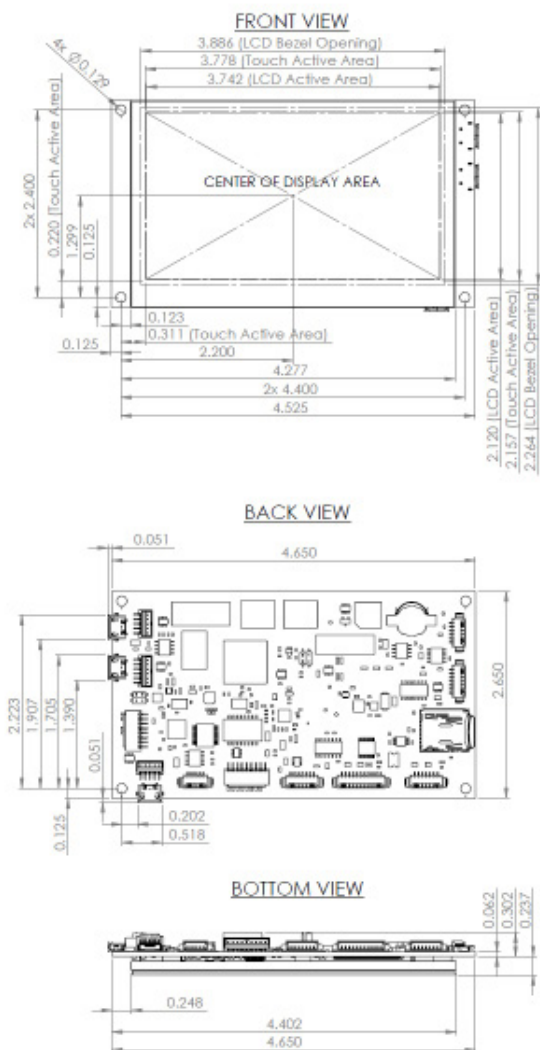
- Linux Kernel 2.6.35 with Qt 4.8.4 and QtCreator IDE 2.8.0
- Samba File Server for easy file access from Windows
- UBIFS NAND Flash file system for speed and reliability
- USB Hotplug for module Host Ports
- SSH Server
- Interfaces for QML Applications: Serial, Ethernet*, and CAN*
- Custom Linux Kernel Build Supported and Maintained by Reach. [Contact us](#) for your specific requirements.

* [See App Notes for details.](#)



4.3" G2C1-P Display Module, back view

Mechanical Specifications



Mechanical Specifications, 3D Mechanical Views, 2D DXF Mechanical Drawings, 3D Step Files can be found at <https://www.linuxtouchscreen.com/support/product-specific-documentation/51-0401-32/>.

Specifications

LCD

- Display Type: 4.3" Diagonal TFT Color LCD
- Resolution: 480 x 272 WQVGA, Full 24-bit Color
- Dot Pitch: 0.198mm x 0.198mm
- Luminance (with touchscreen): Typical 400 (cd/m²)
- Viewing Angles: 70/70 left/right, 50/70 up/down
- Viewing Direction: 6 o'clock
- Brightness: Software Controlled
- Backlight: White LED, On-board Driver

Projected Capacitive Touchscreen

- Type: Glass/Glass
- Controller: Included
- Multi-touch: Hardware Supported; Software Contact Reach
- Cover (Décor) Glass: Optional; Contact Reach

Ethernet Interface

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

Mechanical

- Dimensions: 4.65" W x 2.65" H x 0.522" D
- Weight: 120 Grams

Power Requirements

- Power Supply Voltage: +5VDC (5.15V for 5V USB Host Port Power Out)
- Power Consumption: Max 650mA/5VDC

Environmental/Regulatory

- Operating Temperature: -20 to 70° C
- Storage Temperature: -30 to 80° C
- Humidity: Max 90%RH at 60° C; No Condensation
- EMI and ESD Test Results Available: Contact Reach.
- Passes FCC Class B Emissions without an enclosure (8-layer fully shielded PCB).
- Survives 27KV ESD (in enclosure) to pass strict gaming commission standards.
- Thermal, Mechanical, Vibration: Contact Reach
- RoHS 2 Compliant: Yes

Ordering Information

Product	Part Number	Price
4.3" Standard (Model G2C1-P) Display Module with Projected Capacitive Touch	51-0401-32	Contact Reach Sales (408-754-4176, sales@reachtech.com) for volume pricing.
Development Kit	52-0401-32	\$449

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

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

Accessories

Part Number	Description
23-0144-10	Cable, GPIO, 11pin PicoBlade, 10 in. Flying Lead
23-0145-10	Cable, RS485/RS22, 7pin PicoBlade , 10in. Flying Lead
23-0146-10	Cable, CAN 6pin PicoBlade, 10 in. Flying Lead
23-0147-10	Cable, Power/Serial, 8pin Pico-SPOX, 10 in. Flying Lead
23-0148-12	Cable, Ethernet (Shielded), RJ-45 plug to 9pin Pico-SPOX, 12 in.
23-0149-10	Cable, I2C, 10pin PicoBlade, 10 in. Flying Lead
23-0151-03	Cable, Micro USB to USB "A" Female (Use to connect USB devices with standard "A" type male plugs.)
23-0160-18	Cable, Y-type, 5V Power 2.5mm I.D. Barrel Female – 8pin Pico-SPOX – DB9 RS232
23-0161-72	Cable, USB RS232 to 5pin PicoBlade, 72 in. Debug/Console
30-0008-01	Power Supply; 5 Volt, 2.5A, 2.5mm
37-0008-01	USB to RS232-Db9 Male Adapter with Cable
37-0012-01	Cat5e Inline Female / Female Ethernet Coupler
37-0013-01	USB to a WiFi 802.11b/g/n Adapter

See pictures of accessories and order online at linuxtouchscreen.com/products/accessories/.

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