

# 4.3" Lite 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 G2C1L-P includes projected capacitive touch. G2C1L modules offer input/ output (I/O) options including one RS-232 serial port and 10/100 Ethernet. Each module is small enough to fit in a 2U high rack enclosure. Onboard flash memory is used for program and data storage. A "captive" Micro SD card socket (not the push-pull type that can become dislodged during shipping) 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	G2C1L-P
		Reduced feature 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 "Application" Async Serial Port, **RS232 Console Port**
- 128 MB DDR2 DRAM
- 128 MB NAND Flash
- Micro SD Flash Card Socket
- Projected Capacitive Touchscreen Interface
- **Backlight Brightness Control**

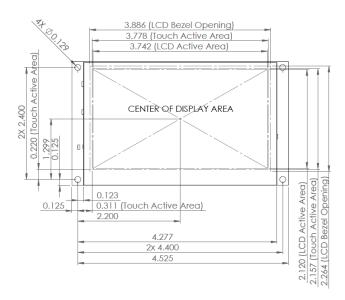
#### **Software Features**

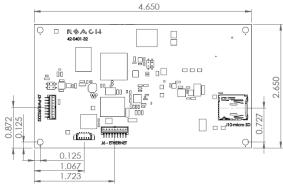
- Linux Kernel 2.6.35 with Qt 4.8.4 and OtCreator IDE 2.8.0
- Production quality Web Server (lighttpd) with CGI, PHP support
- Samba File Server for easy file access from Windows
- UBIFS NAND Flash file system for speed and reliability
- SSH Server
- Interfaces for QML Applications: Serial, Ethernet, and CAN
- Custom Linux Kernel Build Supported and Maintained by Reach. Contact us for for your specific requirements.

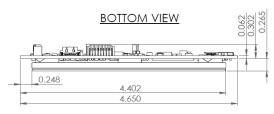


4.3" G2C1L-P Display Module, back view

## **Mechanical Specifications**







Mechanical Specifications, 3D Mechanical Views, 2D DXF Mechanical Drawings, 3D Step Files can be found for each Display Module at <a href="mailto:reachtech.com/51-0401-44/">reachtech.com/51-0401-44/</a>.

### **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
- 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 endosure (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" Lite (Model G2C1L-P) Display Module with Projected Capacitive Touch	51-0401-44	Contact Reach Sales (503-675-6464 sales@reachtech.com) for volume pricing.

Order at reachtech.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/Consule
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 <a href="reachtech.com/products/touchscreen-display-modules/">reachtech.com/products/touchscreen-display-modules/</a> support/accessories/.

Custom versions are available to volume customers; please contact Reach Sales (<a href="mailto:sales@reachtech.com">sales@reachtech.com</a> or 503-675-6464) for more information.