DR-12 RS-232 or USB Analog Resistive Touch Screen Controller Board



Off-the-shelf solutions that offer high performance, low cost decoding.

An ideal choice for applications that require a simple and versatile interface solution. The DR-12 touch screen controller is designed to provide high performance, low cost decoding for all of our 4, 5, and 8-wire analog resistive touch screens.

Benefits of DR-12 Controller Boards

- High performance, low cost decoding
- Auto-detect and configuration
- Supports RS232 and USB communications
- Supports a wide variety of FPC connections

Automatic Detection and Configuration

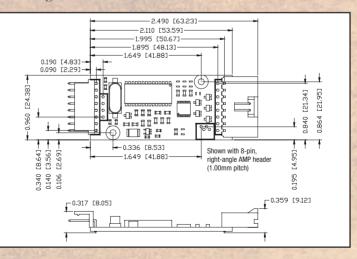
The auto-detect features of this controller enable it to detect and configure itself for either serial or USB communications along with sensing and configuring itself for any of our 4, 5, or 8-wire touch screens. The DR-12 firmware will dynamically determine the best possible sample rate for the touch application or it can be configured for a fixed 100 pts/sec. The firmware also increases performance and ensures writing or touch stability for all of our resistive touch screens.

Broad Application Support

The DR-12 supports a wide variety of touch panel tail configurations. The controller board can be populated with the appropriate header to facilitate a direct connection, thus eliminating the need for any jumpers between the controller and the touch panel. In addition, our driver support for the DR-12 helps to simplify controller and touch panel integration into most systems while also supporting dual monitor/touch panel requirements.

Embedded Solutions

For embedded applications, Gunze's "Chip and Driver" solutions are true "Single Chip" solutions. Our solutions support RS-232 and USB communications for all our 4, 5, or 8-wire analog resistive touch screens and include all Gunze device drivers and technical support. All Gunze USA products and associated device drivers are supported in-house by Gunze engineers.



Learn more about other Gunze **USA touch panel solutions**

Along with touch controller boards and chips, Gunze USA provides film-glass, tough, and LCD integrated touch panels. Configurations in 4-wire, 5-wire and 8-wire are available in custom designs, as well as in a a range of cost-effective standard models. To learn more about Gunze USA touch panel solutions, call 512-990-3400 or visit www.gunzeusa.com

About Gunze USA

Gunze is one of the world leaders in resistive touch panel manufacturing. Gunze USA is a division of Gunze Limited, Japan, a multibillion-dollar company and the largest manufacturer of resistive touch panels in the world, employing over 8,000 people who work together to achieve international leadership through innovation.

Gunze USA works with OEMs and system integrators to design both standard and custom touch panel solutions. In addition, the company manufactures a wide variety of standard panels and total interface solutions for consumer electronics, industrial, automotive, medical, mobile, and POS/retail kiosk applications.



Electrical Specifications:

Resolution: Touch Screen Driver Support:

Input Current (typ) Suspend Current (typ)

4 and 8 wire, RS-232: NoTouch/Touch: 22/29 mA Peak 4 and 8 wire USB: NoTouch/Touch: 21/28 mA Peak 5 wire RS-232: NoTouch/Touch: 21/45 mA Peak 5 wire USB: NoTouch/Touch: 21/44 mA Peak

RS-232: 240 µA Peak USB: 330 µA Peak Communications: Auto-detect: RS-232 or USB communication PWB Size: 2.11" x .96". Overall dimension will vary based on connector options

Connector Types Touch Screen Side:

Clock Frequency: 4 MHz Static Protection: 15 kV

4, 5 or 8-position, .100" rt. angle Amp: 103635-X 8 position flat flex LIF-1mm or 1.25mm 5 position flat flex LIF-1mm 4 position flat flex LIF-1mm Custom connectors available per request. Com Side: 8-pos, .100" rt. angle, friction lock Amp: 640457-8 Sample Rate: Dynamic: 40 - 125 pts/sec or fixed > 100pts/sec. Baud Rate: 9600 default, 2400 & 19.2k user configurable Data Output: 4-Byte RS-232 and USB Power: 5.0 Vdc + /-0.25 or from USB portEnvironmental: Storage: -40 °C – 85 °C, Operating: 0 °C – 70 °C

2113 Wells Branch Parkway, #5400 Austin, TX 78728 www.gunzeusa.com

Touch Screens: Auto-detect all analog resistive 4, 5 or 8-wire 12-bit (4096 x 4096)

Resistance: 25 - 2500 ohms lead to lead WindowsTM XP & Vista. Others available upon request.