

CX-1000

Touch Screen Controller



Revision 1.0 Overview

Features:

- **Multi-Touch Input, 10-point simultaneous**
- **Accurate Touch, 12-bit data reporting**
- **Rapid Touch Response, 16 ms standard**
- **Low Power Consumption, 22mA with Touch**
- **Compatible with Glass and Film Sensors, ITO and Mesh**
- **Tunable Firmware Configurations for noise filtering and LCD frequency tuning**
- **Interface Options, USB/I2C/Serial**
- **No Drivers or Calibration Required**
- **Available in Rigid PCB Type or COF (Chip-on-Flex) Type**

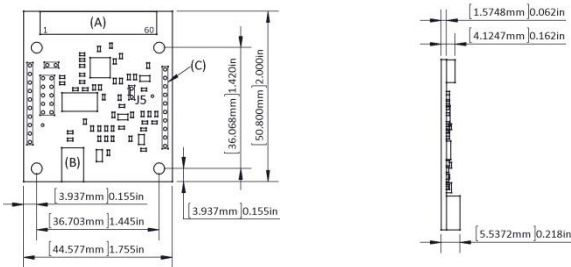
The Clarus Vision CX-1000 controller is designed for small screen applications where maintaining touch performance and precision are vital. The low power design of the CX-1000 controller is ideal for mobile devices, networked industrial control systems, EMI sensitive applications, etc. The CX-1000 is a versatile touch controller solution with a variety of available customization options and configurations to provide system builders flexibility in their designs. The small form factor allows for easy integration into mechanical assemblies and the CX-1000 is also available as COF type, not shown. The CX-1000 is guaranteed to be the most reliable controller available.

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CX-1000 Touch Screen Controller Specification

Mechanical

Screen Size	2.8" – 10.1" (diagonal inch)
Panel Type	ITO or Metal Mesh Type Sensors, Up to 2.5 mm panel thickness (Glass/ Film)
Construction	Rigid FR4 PCB, or COF PCB
Dimensions	50.80 mm x 44.58 mm x 5.54 mm *Note: COF controller type not shown due to design flexibility.
Connectors	(A) Flexible Tail Connector (60-pin 0.5mm pitch double-sided contact), (B) USB-Mini Connector, (C) I ² C Header Pins *Note: Either I ² C or USB connection populated, not both.



Electrical

Technology	Projected Capacitive Multi-Touch, up to 4-points (simultaneous)
Input Method	Finger, Glove, Passive Stylus
Linear Accuracy	< ± 1.0% (x/y direction)
Touch Resolution	2048 x 2048 (size independent)
Response Time	16 ms (standard), 8 ms (maximum)
Scan Rate	125 Hz, 150 Hz maximum (single touch)
Operating Current	22mA (with active touch), 11mA (idle state)
Power	+5V DC Input, Internal +3.3V DC
EMI Compliance	*Current design not tested, but can be tuned to pass standard compliance testing.
Communication	USB 2.0, I ² C 400Hz, USB-HID (Windows 7/8) 12-bit data transfer
Software	No touch calibration required. No software drivers required. (USB-HID) EMI and noise filtering through firmware. Custom drivers and protocol development available.

Environmental

Temperature	Operating: -25 °C – 70 °C Storage: -40 °C – 85 °C
Humidity	Operating: No condensing at 90% RH at 60 °C Storage: Non-condensing at 90% RH at 25 °C
ESD	**Current design not tested, but can be tuned to pass standard compliance testing.

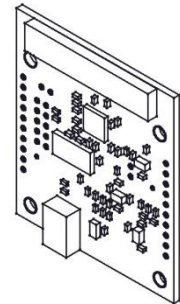
Reliability

Touch Lifetime	More than 1 million touches.
Warranty	Standard 1 year limited warranty, optional extended warranty.

Projected Capacitive Touch System CV-SERIES

CX-1000

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Contact Us:

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