XCD Component

Application Recommendations

- Auto Focus/Zoom Modules
- Shutter & Aperture Control
- Filter Changers
- Pan and Tilt Modules
- OEM Stages

Product Description

Nanomotion’s XCD drive & control is a miniature closed loop servo control with the smallest hardware for operating piezo ceramic servo motors. The XCD provides complete servo control for Security market applications with a built in motor driver.

The XCD component is provided on a chip level and can be integrated into user electronics with the addition of a motor power stage. The component level product will accept single ended or differential encoder input (motor size dependent) and is programmed via an IIC interface and our NanoCommander user software.
**TECHNICAL SPECIFICATIONS**

**Mechanical:**
- Dimensions: 12mm x 12mm
- Height: 1.2 mm

**Functional:**
- Motors supported: All Nanomotion motors
- Drive mode: AB5, AB1
- Support AQB sensor (Single ended 5V/3.3V)
- Communication: IIC, SPI (slave, master), UART (LVTTL)
- Limit switch: left limit, right limit
- Emergency (optional)
- 2 x input TTL (5V/3.3V)
- 2 x input/output LV TTL (3.3V)
- 3 x Analog input: NTC, Joystick, Potentiometer
- (Vin range: 0V to 3.3V)
- 2 x Analog output (pwm)

**ELECTRICAL**
- Main power: 5V

**ENVIRONMENTAL**
- Operating Temperature: -40°C to 85°C

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