

Projected Capacitive Specification  
XcalibuR Line (RTPC X line)

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## Touch Screen Sensor Specification (F/F Technology)

### Enviromental Specification

Specification	Value	Remarks
Operating Temperature	-20°C ~ 70°C	
Storage Temperature	-40°C ~ 80°C	
Operating Humidity	20% ~ 90%RH	
Storage Humidity	10% ~ 90%RH	

### Environmental test condition

Item	Specification	Remarks
High temperature storage	80°C, 240 hr	Max. wet Temp. is 38°C (No condensation) After leaving it on each conditions for 24 hr, it should operate in the environment.
Low temperature storage	-40°C, 240 hr	
High temperature high humidity storage	60°C, 90%RH, 240 hr	
Temperature Cycling	-40°C ~ +80°C (0.5hr each), 100 cycles	

### Mechanical Specification

Specification	Value
Operating Life (Finger input)	10 <sup>7</sup> times
Light Transmittance	86% Min. (JIS K-7105) with glass
Surface hardness	Depending by the Cover Lens Material Customer choose
FPC Peeling Force	5N Max

## Chip on Flat Specification (XcalibuR)

### USB/RS232/I2C Type Controller

Parameters	Features
Circuit Board Dimension	Refer to the specific drawings of each touch sensor
Channels of Panel	Based on Sensor Design
Input Voltage	3.5V~5.5V. Typical 5V.
Operating Temperature	-40 to 85 °C
Storage Temperature	-40 to 90 °C
Relative Humidity	95% at 60 °C, RH Non-condensing
Linearity(Note 1)	Single Line drawing accuracy : Up to 1pt +/- 1mm offset /10mm
	Single Touch (point) accuracy : Up to 1pt +/- 1mm
Interface	USB: 1.1 Full Speed
	RS232: No parity, 8 data bits, 1 stop bit, baud rate 19200bps
	I2C: 100K/400K Hz
Resolution	4096×4096 resolution
Power consumption(mA) COF1X (10.1"W up to 15.0")	Active Mode: <106mA
	Idle Mode : <64mA
	Sleep Mode : < 12mA
	(Operation Mode :Active Mode only)
Power consumption(mA) COF2X (15.6"W up to 21.5"W")	Active Mode: <115mA
	Idle Mode : <65mA
	Sleep Mode : < 12mA
	(Operation Mode :Active Mode only)
Report rate(points/sec) Note 2	> 100 Hz
Response time	Average < 25 ms

Note 1: Depending by Sensor design and other parameters, Refer to Windows 8 Logo regulation if need to follow min spec

Note 2: Report rate will vary by channel number, cover thickness, number of fingers and other parameters

## Chip on Flat Pinout (XcalibuR)

Interface	USB	I2C	UART
PIN 01	GND	GND	GND
PIN 02	D-	SDA	RX
PIN 03	D+	SCL	TX
PIN 04	VDD	VDD	VDD
PIN 05	NC	INT	NC
PIN 06	RST	RST	RST

**Number of Finger Input:** up to 10 Fingers