RockTouch

Projected Capacitive Specification

XcalibuR Line (RTPC X line)

Version 1.3

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Touch Screen Sensor Specification (F/F Technology)

Enviromental Specification

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

Environmental test condition

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

Mechanical Specification

Specification	Value
Operating Life (Finger input)	10^7 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 ℃
Storage Temperature	-40 to 90 ℃
Relative Humidity	95% at 60 ℃, 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