

ATMXT2952TD_JTPCBA02

Projected Capacitive Touchscreen Controller

ATMXT2952TD_JTPCBA02 is a projected capacitive (PCAP) touch screen controller that powered by Microchip's high performance MCU ATMXT2952TD. By integrating the advantages of self and mutual capacitance sensing technology, built-in high driving voltage transceiver and a powerful MCU, this controller incorporate most desired features to boost the noise immunity, and support high demand applications in most categories.



Features

- USB, I2C and RS232 interface
- Support advanced water resistance
- Support glove
- Support 10 mm glass (or 5 mm PMMA)
- Support passive stylus
- Support DITO, G/F, G/F/F, G/G, and Metal Mesh sensor
- Comprehensive driver support
- maXTouch studio tool support
- RoHS compliant



OS Support Matrix

OS	Version	Interfaces
	Windows 10 / Windows 8 / Windows 7 /	
Windows	Windows 2000 / Windows XP	USB/I2C/RS232
	(I2C interface: need additional system configuration)	A
Win CE	Win Embedded Compact 2013 / Win Embedded Compact 7	USB/RS232
Linux	CentOS, Debian, Fedora, Gentoo, Mandrake (Mandriva),	
	Meego, Red Hat, Slackware, SuSE (OpenSuSE), Ubuntu	
	(Xubuntu) and Yellow Dog etc.	USB/I2C/RS232
	Support most 32/64 bit Linux distribution versions,	
	including Kernel 2.6.x / 3.x.x / 4.x.x	
Android	Android 2.3 to latest version	USB/I2C

Technical Specifications

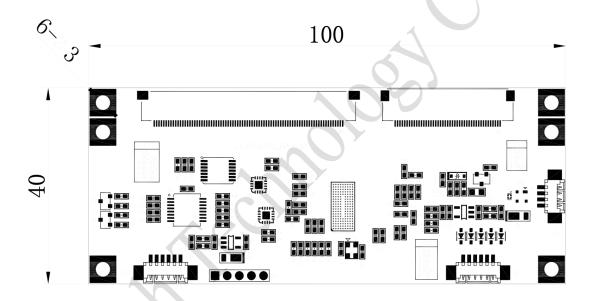
Board Dimension	100mm x 40mm x 5.3mm				
Channels of Panel	Max. TX41 RX71				
Input Voltage	5V(USB), 3.3V(I2C), 5V(RS232)				
Operating Temperature	-40 to 85°C				
Storage Temperature	-40 to 90°C				
Relative Humidity	90% at 60 °C, RH Non-condensing				
	Line drawing accuracy:				
Linearity*	1pt +/- 1mm offset /10mm				
	Touch (point) accuracy: 1pt +/- 1mm				
	USB HID interface				
Interface	I2C: up to 400KHz, Voltage Level 3.3V				
	RS232 interface				
Resolution	16384 x 16384 resolution				
Power consumption	Active Mode: < 60mA, depends on firmware				
Fower consumption	Deep Sleep : < 2.5mA				
	Up to 112 Hz reporting rate for one finger (subject to configuration)				
Report rate(points/sec)*	Typical report rate for 10 touches ≥100 Hz (subject to				
	configuration)				
	Average latency < 27 ms				
Response time	Initial touch latency <14 ms for first touch from idle				
	(subject to configuration)				



Disclaimer

- Performance spec such as report rate can be vary depends on touch sensor channel number, cover thickness, system condition and other parameters.
- Special input performance can be influenced depends on module condition, contact material and volume, subjects including through thick glass touch, gloved-hand input, water resistance and noise immunity etc.
- Special features require to be pre-defined and pre-tuned during project development.

Mechanics



CN1 USB connector:		CN2 I2C connector:		CN3 RS232 connector:	
Molex 53261-0471		Molex 53261-0671		Molex 53261-0671	
1	VBUS	1	GND	1	GND
2	D-	2	CHG	2	UR_VDD
3	D+	3	SDA	3	UR_CTS
4	GND	4	SCL	4	UR_RTS
		5	RESET	5	UR_TX
		6	GND	6	UR RX