WTD0001
Touch Screen Controller
(SPI Interface)

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WTD0001

Touch Screen Controller (For SPI Interface)

General Description

WTD0001 serial controllers are designed for electronic product which using four-wired resistance touch screen, for example PDA and LCD Module. The purpose is to lower Host control affording in resistance touch screen to make your product can connect touch screen easily, and add your product additional value.

In hardware, the extra element is cheap materials, for example resistance, diode and capacitance; it needs not expensive quartz; package in SSOP 20 pin can lower your acreage in PCB.

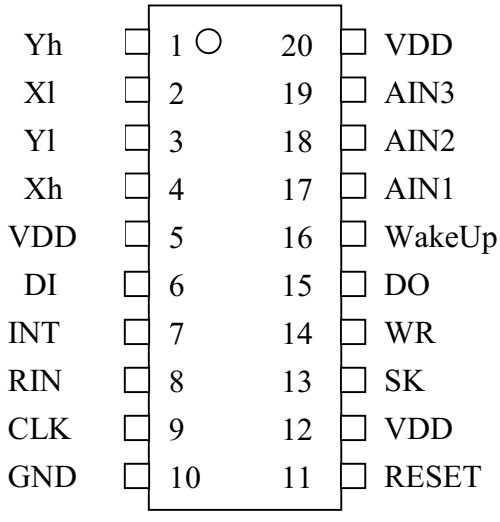
WTD0001 includes function for software filter; it can filter out unnecessary noise to lower flying-line producing rate.

In addition, WTD0001 provides 3-channel, 12-bit A/D converter it can be adapted in many application for example battery voltage detector and charger.

Features

- 8-bit micro controller base
- 12-bit resolution analog to digital converter
- Direct driving Touch Screen no external transistors are required
- Touch pressure could be measure
- Debounce and noise filter function
- Automatic wake up from screen touch (also could be disable)
- Automatic standby power down function
- 3-channel, 12-bit A/D converter
- 4 wire serial interface
- Standby current less then 1 uA @3V
- Single Supply 2.4V to 5V
- 20 Pin SSOP package

Pin Assignment



WTD0001
20 pin SSOP

Pin Description

PIN#	NAME	DESCRIPTION
1	Yh	Connect to Y panel bottom side
2	Xl	Connect to X panel left side
3	Yl	Connect to Y panel top side
4	Xh	Connect to X panel right side
5	VDD	Connect to power source
6	DI	Serial port data input
7	INT	Ready to communication
8	RIN	Connect to power source
9	CLK	Internal ring oscillator output
10	GND	Connect to power ground
11	RESET	Device reset input low active
12	VDD	Connect to power source

13	SK	Serial port clock input
14	WR	Write signal
15	DO	Serial port data output
16	WakeUp	Detect pen down signal or Write signal via diode
17	AIN1	A/D converter channel 1 input pin
18	AIN2	A/D converter channel 2 input pin
19	AIN3	A/D converter channel 3 input pin
20	VDD	Connect to power source