

## 1. Introduction

The MPR121 IC is a great way to build simple capacitive touch interfaces, and now it's even easier to incorporate into your Arduino projects with the touch shield. The touch shield has 12 capacitive touch pads. With this shield you can have a total of 12 touch sensitive buttons. An on-board logic level converter allows it to work with 5V and 3.3V Arduino boards. Simply solder on some header pins and stack it on to your Arduino for a convenient input device. Check below for some example code to get you started.

## 2. Feature

- 1.71 V to 3.6 V supply operation
- 29  $\mu$ A supply current at 16 ms sampling interval period
- 3  $\mu$ A Stop mode current
- 12 capacitance sensing inputs
- I2C interface, with Interrupt output
- Size: 59mmx53.5mm

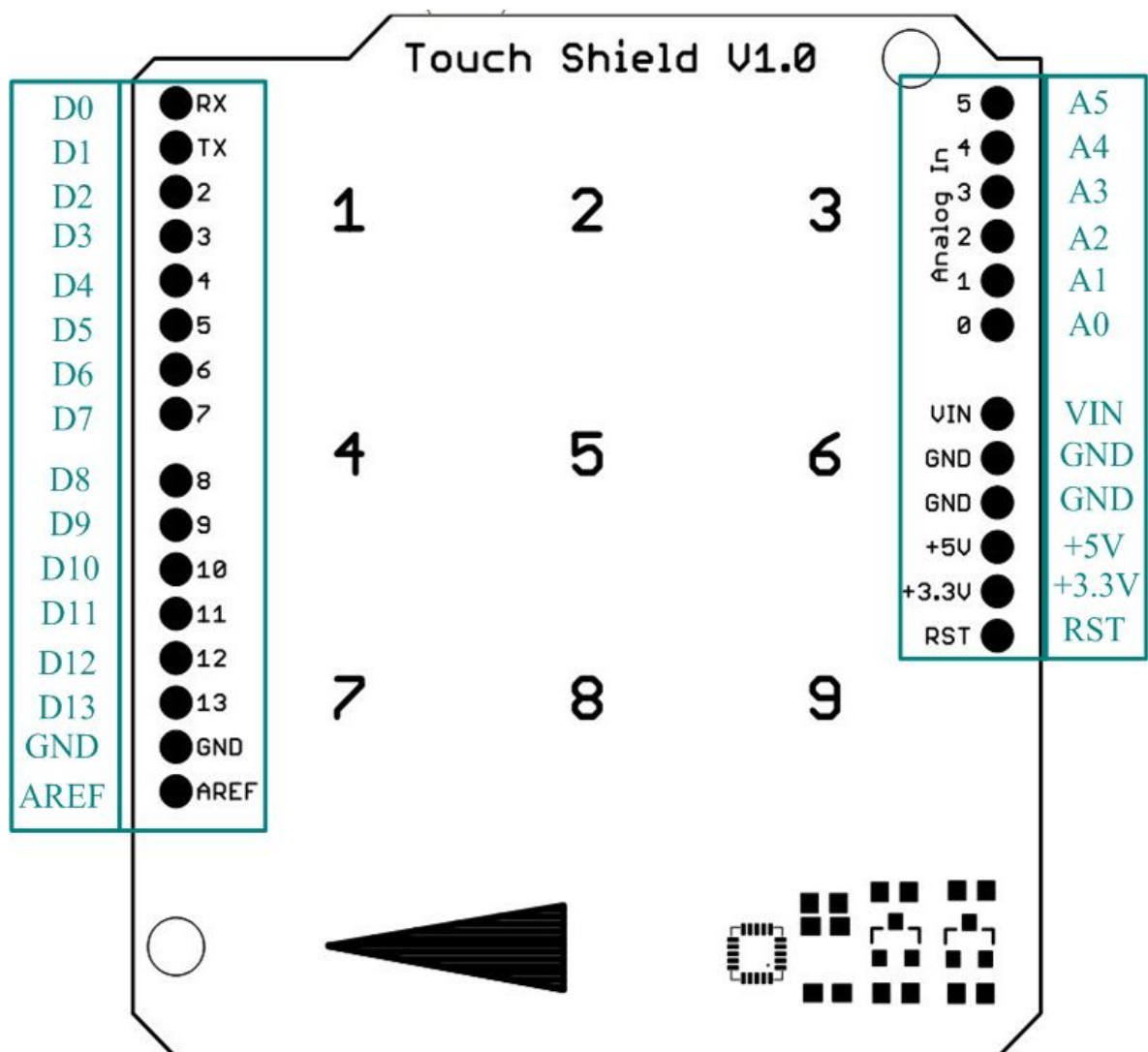
## 3. Application

- PC Peripherals
- MP3 Players
- Remote Controls
- Mobile Phones
- Lighting Controls

## 4. Electronic Properties

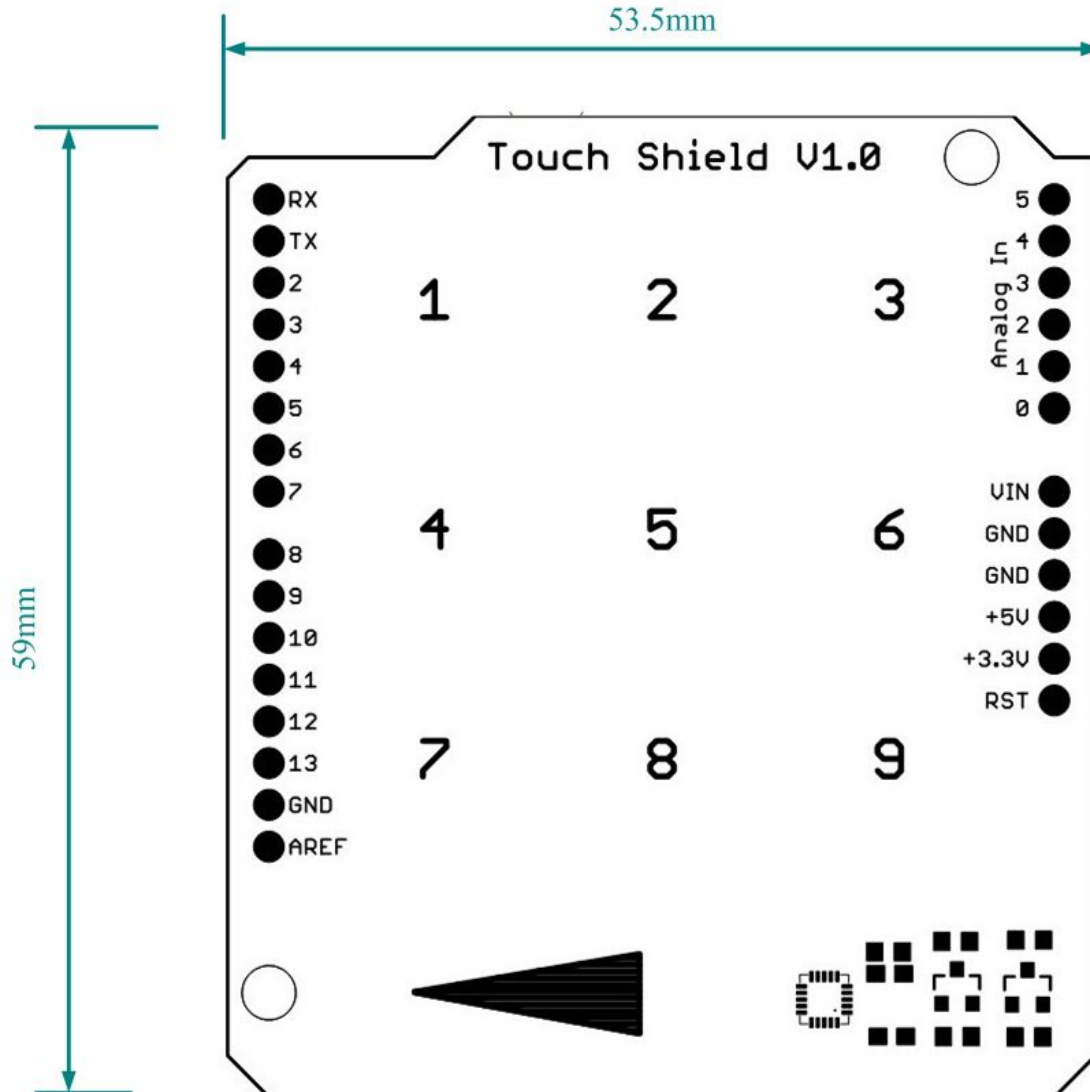
PARAMETER	MIN	TYP	MAX	UNIT
Supply Voltage	1.71	-	3.6	V
Supply Voltage	1.5	100	2000	mA
High Input Voltage	1.71	3.3	3.6	V
Low-level Input Voltage	-0.3	0	0.5	V

## 5. Pin Information



类型	符号	说明
	D0	Communication Pin RX
	D1	Communication Pin TX
	D2	Arduino Digital port D2
	D3	Arduino Digital port D3
	D4	Arduino Digital port D4
	D5	Arduino Digital port D5
	D6	Arduino Digital port D6
	D7	Arduino Digital port D7
	D8	Arduino Digital port D8
Arduino pin	D9	Arduino Digital port D9
	D10	SPI Bus Enable Signal Port
	D11	MOSI SPI Bus Data Input Port
	D12	MISO SPI Bus Data Output Port
	D13	SPI Bus Clock Signal Port
	A0	Arduino Analog Port A0
	A1	Arduino Analog Port A1
	A2	Arduino Analog Port A2
	A3	Arduino Analog Port A3
	A4	Arduino IIC's SDA
	A5	Arduino IIC's SCL
	RST	Arduino Reset
	AREF	Arduino's AREF
	VIN	Adapter Input Power
	GND	Power Ground
	5V	5V Voltage Supplied By The Motherboard

## 6. Dimensions



## 7. Revision History

REVISION	DESCRIPTION	RELEASE DATE
V1.0	Initial version	9/10/2013

## 8. Contact Information

For more information, please visit: <http://www.electfreaks.com>