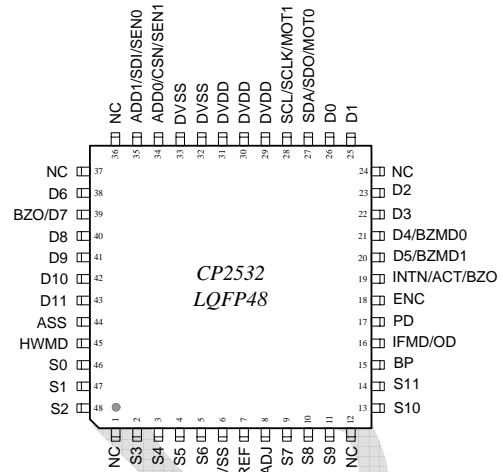


12/8 channels Capacitive Touch Detection Device

General Description

The CP2532/CP2528 is 12/8 channels capacitive touch panel controller, used for scroll, navigation and selection detection. The controller contains SPI or I²C serial interface, extendable GPIO, high PSRR LDO and in-built OSC. The touch status can be read via serial interface or GPIO. GPIO can be configured to open drain mode. Particularly, adjacent sensor suppression (ASS) function ensures only one channel active each time. The range of power is 2.6V ~ 5.5V.

Low-power operation makes the CP2532/CP2528 ideal for battery-operated systems, such as multimedia portable product. The CP2532/CP2528 is specified over the -40°C to +85°C temperature range.



Features

- Up to 12/8 channels
- Fast touch response time: 18~20 ms
- Backlight driver supported, 2 backlight modes: Full backlighting and sensor indication backlighting
- Buzzer driver supported
- Slide detection supported
- High capacitance resolution (0.02pF @ 100uA charge current), measurement range is 0~80pF
- Support SPI/I2C/GPIO, touch state can be read via these interface
- Programmable interrupt, low active
- In-built LDO for high PSRR
- Auto compensation the drift of environment (temperature or humidity) and supply voltage.
- In-built oscillator
- 3 types of operation mode: Sleep / Idle / Normal
- Adjacent Sensor Suppression (ASS)
- Low power consumption
- 0.35um CMOS process,
 - CP2532: LQFP48, QFN40
 - CP2528: LQFP32, QFN32

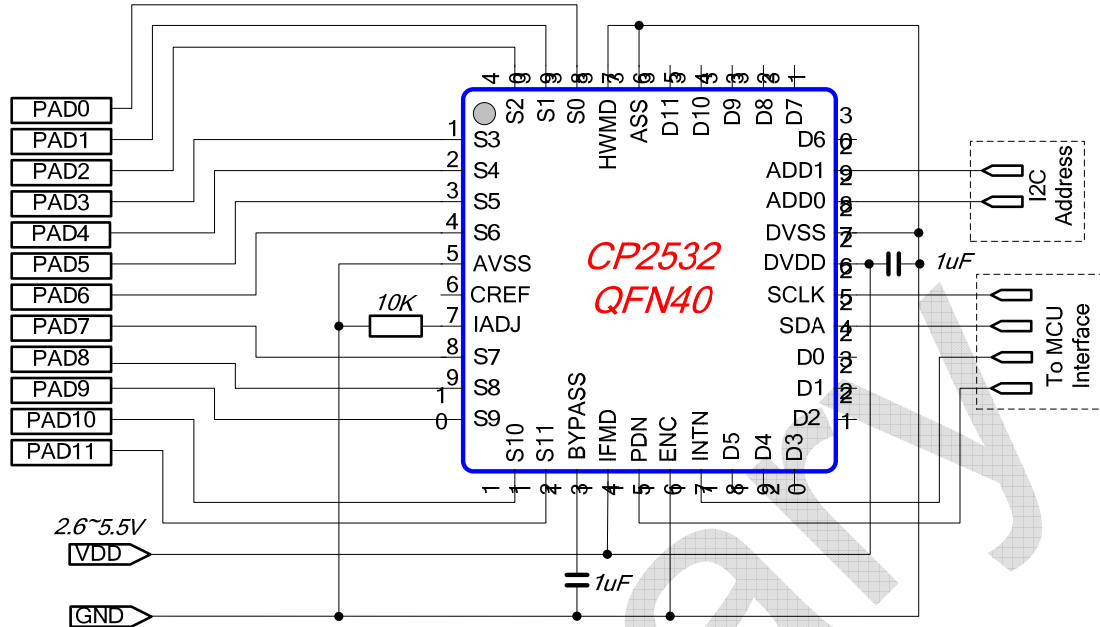
Applications

- MP3 players
- Mobile phones
- PC peripherals
- Television controls
- Pointing devices
- Remote controls

12/8 channels Capacitive Touch Detection Device

Typical Application Circuit

www.datasheet4u.com



CP2532 Typical application with IIC interface

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