



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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### Programmable Touch-Screen Interface

- Adds Windows-compatible USB HID touchscreen interface to touch-screen modules
- Supports multiple touch points and pen inputs
- Supports basic mouse functions
- Includes a programmable 8051-based controller that is pre-programmed with USB interface
- Supports most common touch-screen module interfaces: UART, SPI and I<sup>2</sup>C.

### UART Interface

- Data Bits: 5, 6, 7, and 8
- Stop Bits: 1, 1.5, and 2
- Parity: Odd, Even, Mark, Space, and None
- Baud Rates: 9600 bps to 500 kbps

### SPI Master Interface

- 4-wire SPI Master with Chip Select
- Configurable Clock Polarity and Phase
- Clock speeds up to 4 MHz

### SMBus / I<sup>2</sup>C Master Interface

- Operates at configurable clock rates up to 400 kHz
- Supports configurable slave address

### GPIO Capability

- CP2501 supports 16 GPIO pins
- Configurable as inputs, open-drain outputs or push-pull outputs

### High-Speed 8051 $\mu$ C Core

- 48 MHz or 24 MHz system clock
- Pipelined instruction architecture; executes 70% of instructions in 1 or 2 system clocks

### User Memory Space

- 53 kB Flash
- 3.5 kB RAM

### USB Peripheral Function Controller

- HID Touch Screen class device
- USB Specification 2.0 compliant (full-speed)
- Built-in oscillator
- Configurable USB parameters such as VID, PID, and strings
- Supports remote wakeup

### Programming Options

- Obtain pre-programmed parts from the factory
- Program memory in-system
- Program over USB using bootloader

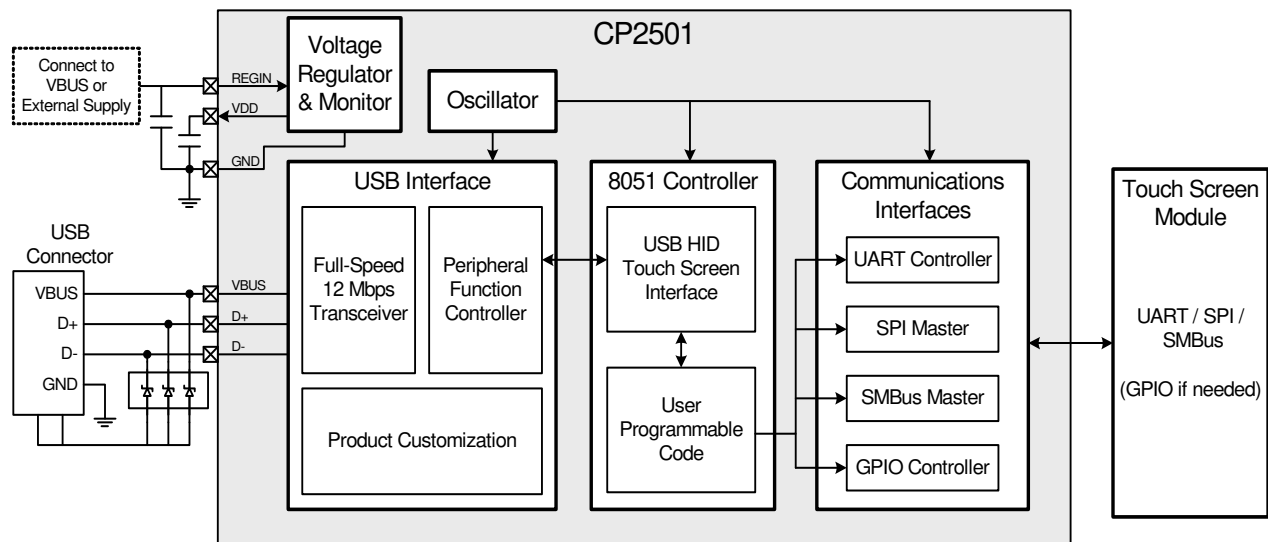
### Supply Voltage 3.0 to 3.6 V

- Built-in voltage supply monitor
- Built-in 3 V regulator

### Ordering Information

- CP2501-B01-GM (QFN-32, 5x5 mm)

### Temperature Range: -40 to +85 °C



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