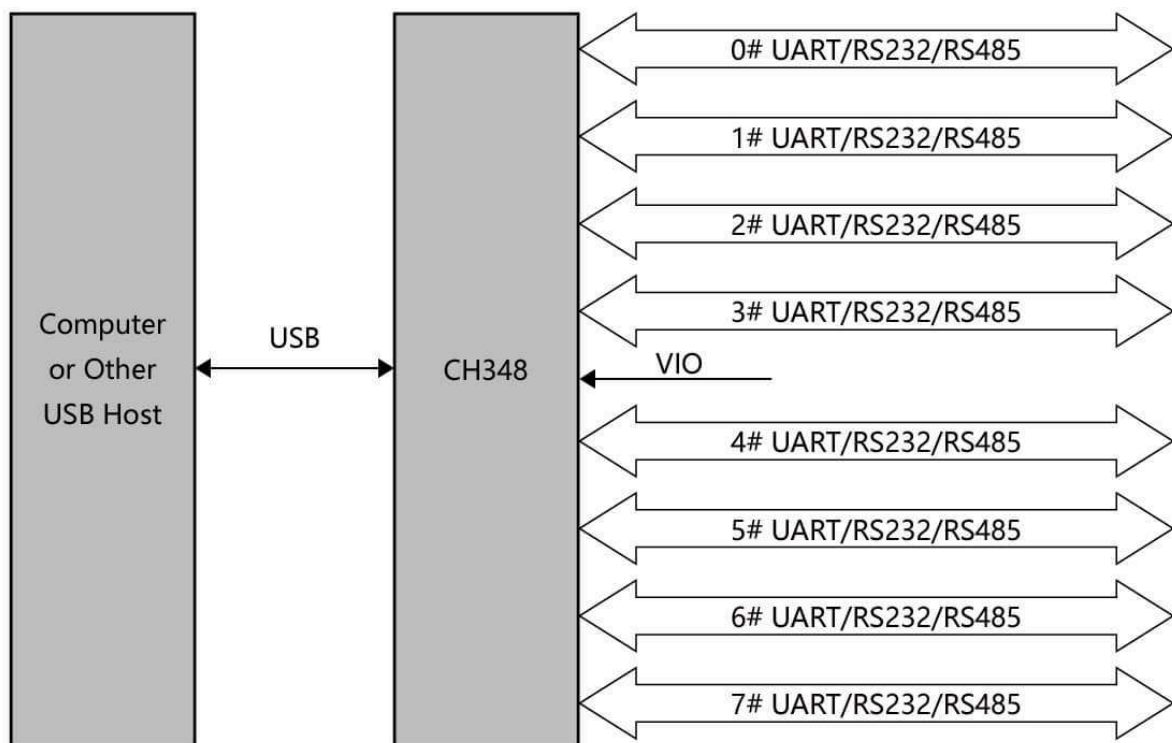


USB to Octal Serial ports Chip CH348

Introduction

CH348 is a high-speed USB bus converter chip, which converts USB to octal serial ports UART0/1/2/3/4/5/6/7, and used to expand serial ports for computer or upgrade directly from normal serial device or MCU to USB bus.

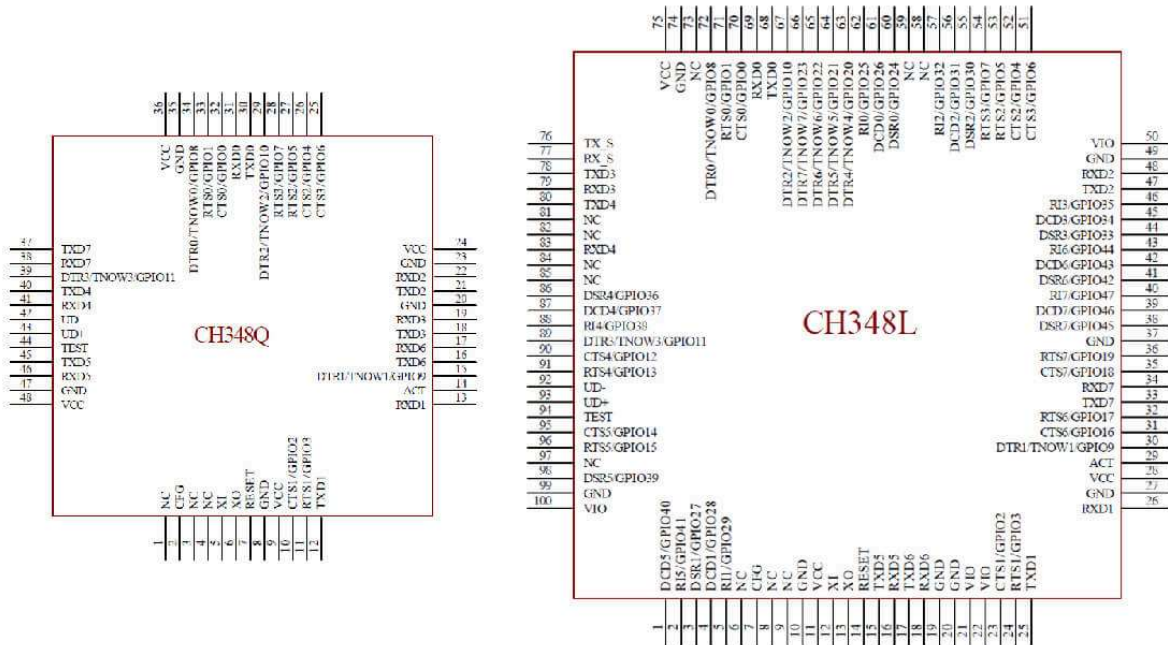


Features

- 480Mbps high-speed USB device interface, peripheral components only need crystal oscillator and capacitors.
- Built-in firmware, emulate standard UART interface, used to upgrade the original serial peripheral or expand additional UART via USB.
- Original serial applications are totally compatible without any modification in Windows operating systems.
- Hardware full duplex UART interface, integrated independent transmit-receive buffer, supports communication baud rate varies from 1200bps to 6Mbps.
- UART supports 8 data bits, supports odd, even, and none parity, supports 1 or 2 stop bits.
- Integrated the 2048-byte RX FIFO and 1024-byte TX FIFO for each UART.
- Supports common MODEM signals RTS, DTR, DCD, RI, DSR and CTS.
- Supports CTS and RTS hardware automatic flow control.
- Supports half-duplex, provides sending status TNOW, used for controlling RS485 to transmit-receive switch.
- Supports up to 48-channel GPIO input and output function.
- Supports RS232/RS485/RS422 interface, through external voltage conversion chip.
- UART I/O of CH348L power supply independently, supports 3.3V, 2.5V, 1.8V power supply voltages.

- Built-in EEPROM used to configure the chip of VID, PID, maximum current value, vendor and product information string, etc.
- Supports only 3.3V power supply.
- RoHS compliant LQFP48 and LQFP100 lead-free package.

Packages



Package	Body size	Lead pitch		Description	Part No.
LQFP48	7*7mm	0.5mm	19.7mil	Standard LQFP48 pin patch	CH348Q
LQFP100	14*14mm	0.5mm	19.7mil	Standard LQFP100 pin patch	CH348L

Note: The USB transceiver of CH348 is designed according to the built-in design of USB2.0, and it is recommended that no external resistor is in series with UD+ and UD- pins.