

## MCP2221AT-I/ST

Data Sheet

Usb 2.0 To I2c /Uart Protocol Converter With Gpio 14 Tssop 4.4mm t/r

Manufacturers <u>Microchip Technology, Inc</u>

Package/Case TSSOP-14

Product Type Interface ICs

**RoHS** 

Lifecycle Images are for reference only

Please submit RFQ for MCP2221AT-I/ST or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The MCP2221A is a USB-to-UART/I2C serial converter which enables USB connectivity in applications that have a UART and I2C interfaces. The device reduces external components by integrating the USB termination resistors and the oscillator needed for USB operation. The MCP2221A also has four GP pins providing miscellaneous functionalities (GPIO, USBCFG, SSPND, Clock Output, ADC, DAC, interrupt detector). The MCP2221A is identical to the MCP2221 in all aspects except for the maximum supported baud rate of the UART, which has been increased from 115200 (MCP2221) to 460800 (MCP2221A). All MCP2221 USB Drivers and Software can be used for the MCP2221A.

## **Features**

Universal Serial Bus (USB)

Supports full-speed USB (12 Mb/s)

Implements USB protocol composite device:

Communication Device Class (CDC) for communications and configuration

Human Interface Device (HID) for I2C<sup>TM</sup>, chip control and configuration

128-byte Buffer to handle data throughput at any UART baud rate:

64-byte Transmit

64-byte Receive

Human Interface Device (HID) for both I2C<sup>TM</sup> communication and control.

64 byte buffer to handle data throughput at any  $I2C^{TM}$  baud rate

Fully configurable VID and PID assignments, and string descriptors

Bus-powered or self-powered

USB 2.0 Compliant

USB Driver and Software Support

CDC and Universal Asynchronous Receiver/Transmitter (UART) Options

I2CTM/SMBus

SMBus Master

General Purpose Input/Output (GPIO) Pins

Highly Configurable

Operating voltage: 3.0 - 5.5V

Electrostatic Discharge (ESD) protection:

4 kV Human Body Model (HBM)

Industrial (I) Operating Temperature: -40°C to +85°C

## **Related Products**



MCP23008T-E/SO

Microchip Technology, Inc SOIC-18



MCP2551-I/P

Microchip Technology, Inc PDIP-8



MCP25625T-E/ML

Microchip Technology, Inc QFN-28



MCP23008T-E/ML

Microchip Technology, Inc QFN-20



MCP2515T-I/ST

Microchip Technology, Inc TSSOP-20



MCP2210-I/SO

Microchip Technology, Inc SOP-20



MCP2515T-I/SO

Microchip Technology, Inc SOIC-18



MCP2562FDT-H/SN

Microchip Technology, Inc SOIC-8