PRODUCT CHARACTERISTICS

CP2112 highly integrated USB to SMBus bridge controller integrates a USB2.0 full speed function controller, USB transceiver oscillator and 8 GPIO pins. All customization and configuration options can be selected through a simple GUI Based configurator to mark hid devices without developing complex firmware and drivers. CP2112 devices can realize fast USB connection with minimal development work.

Application fields: portable controller, USB dongle, data recording.

PRODUCT DETAILS

USB bus power supply 4.0V ~ 5.25V

From power supply 3.0V ~ 3.6V, I / O voltage 1.8V to VDD

Working environment temperature: - 40 ℃ ~ 85 ℃

On chip power on reset circuit, on-chip voltage regulator: 3.45v output

USB 2.0 compliant: full speed (12mbps)

USB on hook status is supported through the suspend and / suspend pins

Integrated 194 byte disposable programmable ROM for storing customizable product information

512 byte SMBus data buffer, configurable 7-bit value of always speed device address, i.e. slave device address of cp2112

Windows, MAC and Linux hid to SMBus library API for rapid application development, open access interface specification

8 gpios can be configured as input / output and open drain / push-pull type, which are used for configurable external devices

Output 48mhz to 94khz, switch LED during read / write SMBus

With two M3 mounting holes and one micro USB female port

Pin #	Name	Type	Description
1	SDA	D I/O	Serial Data signal for SMBus interface.
2	GND		Ground. Must be tied to ground.
3	D+	D I/O	USB D+
4	D–	D I/O	USB D–
5	VIO	Power In	I/O Supply Voltage Input.
6	VDD	Power In	Power Supply Voltage Input.
		Power Out	Voltage Regulator Output. See Section 9.
7	REGIN	Power In	5 V Regulator Input. This pin is the input to the on-chip voltage regulator.
8	VBUS	D In	VBUS Sense Input. This pin should be connected to the VBUS signal of a USB network.
9	RST	D I/O	Device Reset. Open-drain output of internal POR or VDD monitor. An external source can initiate a system reset by driving this pin low for the time specified in Table 4.
10[1]	NC	—	This pin should be left unconnected or tied to VIO
11[1]	SUSPEND	D Out	This pin is logic high when the CP2112 is in the USB Suspend state.
12[1]	GPIO.7	D I/O	This pin is a user-configurable input or output.
	CLK	D Out	In CLK mode, this pin outputs a clock signal whose frequency is configurable.
13[1]	GPIO.6	D I/O	This pin is a user-configurable input or output.
14[1]	GPIO.5	D I/O	This pin is a user-configurable input or output.
15[1]	GPIO.4	D I/O	This pin is a user-configurable input or output.
16[1]	VPP	Special	Connect a 4.7 µF capacitor between this pin and ground to support ROM programming via the USB interface.
17[1]	/SUSPEND	D Out	This pin is logic low when the CP2112 is in the USB Suspend state.
18[1], 19[1]	NC	—	No connect
20[1]	GPIO.3	D I/O	This pin is a user-configurable input or output.
21[1]	GPIO.2	D I/O	This pin is a user-configurable input or output.
22[1]	GPIO.1	D I/O	This pin is a user-configurable input or output.
	RXT	D Out	In RXT mode, this pin is the Receive Toggle pin and toggles to indicate SMBus transmission. The pin is logic high when a transmission is not in progress.
23[1]	GPIO.0	D I/O	This pin is a user-configurable input or output.
	TXT	D Out	In TXT mode, this pin is the Transmit Toggle pin and toggles to indicate SMBus transmission. The pin is logic high when a transmission is not in progress.
24	SCL	D I/O	Serial Clock signal for SMBus interface.
Center	GND	—	Ground