



WT6510 USB Keyboard Controller

WT6510

USB Keyboard Controller (Mask ROM Type)

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WT6510 USB Keyboard Controller

GENERAL DESCRIPTION

The WT6510 is single chip Micro-controller for Universal Serial Bus (USB) keyboard applications, it includes a 8-bits 6502 CPU core, 256 bytes SRAM, 8K Bytes MASK ROM, 32-36 Programmable I/O with build in pull up resistors and interrupt capability (8 with high drive capability up to 14mA), it implement an USB Keyboard (low speed at 1.5Mhz) with integrated PS/2 port for Pointing Device.

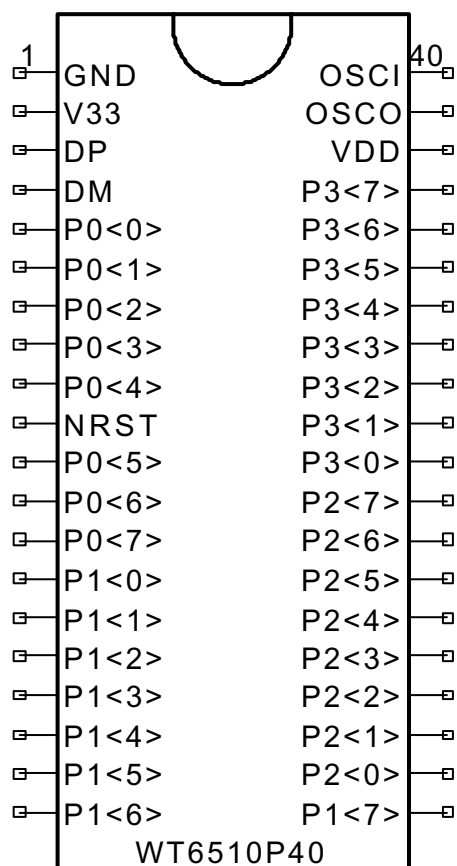
FEATURES

- 8-bit 6502 CPU with 3MHz operating frequency
- 6MHz crystal oscillator
- 256 bytes SRAM
- 8K bytes MASK ROM
- 32-36 programmable I/O(Package Dependant) pins with interrupt capability in input mode.
- Embedded USB function with three endpoints (one control Endpoint0, two Interrupt IN endpoint)
- Watch-dog timer
- One 8-bit programmable timer
- Low VDD reset
- Power on reset
- USB Interface (USB Spec. Version 1.1 compliance)
- CMOS technology for low power consumption
- 40/42PIP package or Die

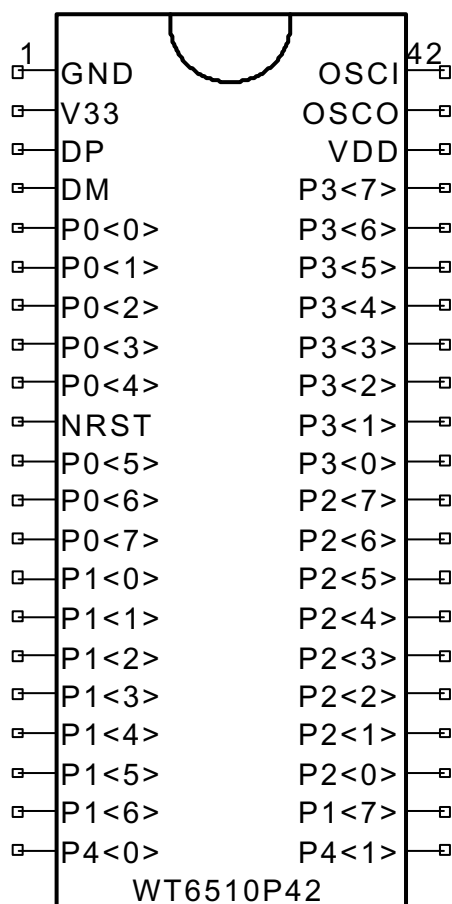


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Pin out



DIP40



DIP42



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PIN DESCRIPTION

Pin No.			Pin Name	I/O	Description
40	42	Die			
1	1	1	GND	P	Ground.
2	2	2	V33	P	3.3V Power output
3	3	3	DP	I/O	USB D+ signal.
4	4	4	DM	I/O	USB D- signal
5	5	5	P00	I/O	General Purpose I/O with programmable pull up resistor and programmable Interrupt Capability at Input falling edge
6	6	6	P01	I/O	General Purpose I/O with programmable pull up resistor and programmable Interrupt Capability at Input falling edge
7	7	7	P02	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
8	8	8	P03	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
9	9	9	P04	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
10	10	10	NRST	I	Power on Reset input
11	11	11	P05	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
12	12	12	P06	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
13	13	13	P07	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
14	14	14	P10	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
15	15	15	P11	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
16	16	16	P12	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
17	17	17	P13	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
18	18	18	P14	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
19	19	19	P15	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
20	20	20	P16	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
	21	21	P40	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
	22	22	P41	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
		23	P42	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
		24	P43	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
21	23	25	P17	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
22	24	26	P20	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
23	25	27	P21	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
24	26	28	P22	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
25	27	29	P23	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
26	28	30	P24	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
27	29	31	P25	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
28	30	32	P26	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
29	31	33	P27	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge
30	32	34	P30	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge. High current drive with typical current sink capability of 14mA.
31	33	35	P31	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge. High current drive with typical current sink capability of 14mA.



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32	34	36	P32	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge. High current drive with typical current sink capability of 14mA.
33	35	37	P33	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge. High current drive with typical current sink capability of 14mA.
34	36	38	P34	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge. High current drive with typical current sink capability of 14mA.
35	37	39	P35	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge. High current drive with typical current sink capability of 14mA.
36	38	40	P36	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge. High current drive with typical current sink capability of 14mA.
37	39	41	P37	I/O	General Purpose I/O with programmable Interrupt Capability at Input falling edge. High current drive with typical current sink capability of 14mA.
38	40	42	VDD	P	+5V power supply.
39	41	43	OSCO	O	6MHz oscillator output.
40	42	44	OSCI	I	6MHz oscillator input.