

AVR ATMEGA32		KORG nanoKontrol	
PIN	NAME		
4	reset		
7	xtal2	16MHZ RC oscillator	
8	xtal1	nc	
29	aref		
27	avcc		
28	gnd		
17, 5, 38	vcc		
18, 6, 39	gnd		
37 PA0	D_OUTPUT	ADDR	A, MUX
36 PA1	D_OUTPUT	ADDR	B, MUX
35 PA2	D_OUTPUT	ADDR	C, MUX
34 PA3	D_OUTPUT		CLK, 74_164
33 PA4	ANALOG	POTS	COMM, U7, VR1-8
32 PA5	ANALOG	POT	VR9
31 PA6	ANALOG	POTS	COMM, U8, VR10-17
30 PA7	ANALOG	POT	VR18
40 PB0	D_OUTPUT		DATA0, USB
41 PB1	D_OUTPUT		DATA1, USB
42 PB2	D_OUTPUT		DATA2, USB
43 PB3	D_OUTPUT		DATA3, USB
44 PB4	D_OUTPUT	SS	DATA4, USB
1 PB5	D_OUTPUT	MOSI	DATA5, USB
2 PB6	D_OUTPUT	MISO	DATA6, USB
3 PB7	D_OUTPUT	SCK	DATA7, USB
19 PC0	D_INPUT	SWITCHES	S1-7
20 PC1	D_INPUT	SWITCHES	S10-17
21 PC2	D_INPUT	SWITCHES	S20-27
22 PC3	D_INPUT	SWITCHES	S30-31
23 PC4	D_OUTPUT		OE, 74_245
24 PC5	D_OUTPUT	ADDR	A, 74_138
25 PC6	D_OUTPUT	ADDR	B, 74_138
26 PC7	D_OUTPUT	ADDR	C, 74_138
9 PD0	D_INPUT	RXD	
10 PD1	D_OUTPUT	TXD	
11 PD2	D_INPUT	interrupt?	INT_N, USB
12 PD3	D_INPUT	interrupt?	RP8_3
13 PD4			A0, USB
14 PD5			RD_N, USB
15 PD6			WR_N, USB
16 PD7			AB, 74_164

each mux address changes the two a/d common lines 222hz

each mux address changes the two a/d common lines 500us/sample

each mux address changes the two a/d common lines

74_164 serial to parallel, led low sides

74_245 is for powering switches

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output enable for powering switches

LED top fet addr

LED top fet addr

LED top fet addr

74_164 serial to parallel, led low sides