Ready to use keyboard/mouse controller module



1. Features

KeyWarrior100-MOD is a ready to use PCB module with the KeyWarrior100. The modules have a full speed USB interface and all basic components for the operation of the chip. Only the electromechanical components like keys, mouse sensor and LEDs need to be connected.

2. Variants

KeyWarrior100-MOD ships in a single variant. Custom modifications are possible, please contact us with your requirements.

3. Using the KW100-MOD

To use a KW100-MOD you have to solder connections to the mechanical parts and set the power select jumper.

3.1 Selecting the power setting

The power select jumper sets the amount of current the KeyWarrior100 demands off the host computer. The center pin must be jumpered to either "HI" for 500 mA or "LO" for 100 mA. Do not let this pin float.

3.2 Connecting USB

USB is connected via a mini-B connector. Alternatively the USB is also available on solder pads next to the mini-B connector.

3.3 More details

A detailed description of the pins and the function of the KeyWarrior100 can be found in the main data sheet.

4. Pinout

The pins of KeyWarrior100-MOD are labeled with the pin numbers of the LQFP100 chip. Except for the power connections, which are labeled with their actual value (i.e. +5 V, GND).

Following is the pin assignment as seen from the component side with the USB facing away from you.

	3.3V	+5 V	
Power	77	GND	
Y10	78	79	Y11
Y12	80	81	Y16
Y17	82	83	Y18
Y19	84	85	Y20
Y21	86	87	Y22
Y23	88	89	P0.3
P0.4	90	91	P0.5
P0.6	92	93	P0.7
P1.0	95	96	P1.1
X0	97	98	X1
X2	01	02	X3
X4	03	04	X5
X6	05	07	Y13
Y14	08	09	Y15
TBZ1	10	11	TBZ2
TBX1	12	13	TBX2
Y0	15	16	Y1
Y2	17	18	Y3
TBY1	19	22	TBY2
	VDDA	VDDA	
	GND	GND	

/MouseEn	73	69	PWM2
PWM1	68	67	PWM0
Y9	66	65	Y8
Y7	64	63	Y6
LED7	62	61	LED6
LED5	60	59	LED4
LED3	58	57	LED2
LED1	56	55	LED0
P1.7	54	53	P1.6
P1.5	52	51	P1.4
P1.3	48	47	P1.2
X15	46	45	X14
X13	44	43	X12
X11	42	41	X10
X9	40	39	X8
X7	38	37	P0.2
P0.1	36	35	P0.0
Y5	34	33	Y4
Dout	32	31	NC
DAC1	30	29	DAC0
AIN3	26	25	AIN2
AIN1	24	23	AIN0
	GND	GND	



5. Mechanical dimensions

Top view All dimensions in mm Mounting holes: 3.2 mm diameter for M3 screws

6. Absolute maximum ratings

Storage Temperature	65° C to $+150^{\circ}$ C
Ambient Temperature with power applied	40°C to +85°C
Supply voltage on +5V relative to GND	0.3 V to +6.5 V
DC input voltage into any pin	0.3 V to +4 V
Maximum current into all ports	
Power Dissipation	max. 476 mW
Static discharge voltage	>2000 V
Latch-up current	>200 mA
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These values must not be exceeded, or the device may be damaged.

7. RoHS compatibility

KW100-MOD conforms to the requirements that are necessary to use it in a RoHS compliant device.

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