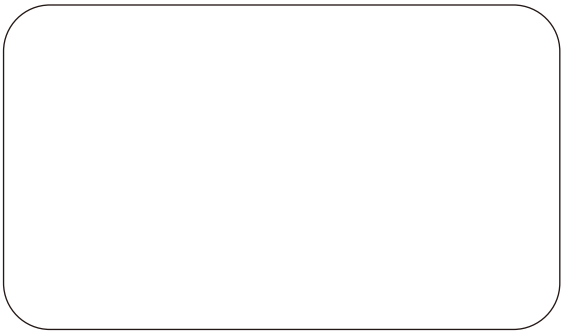
BEETLE

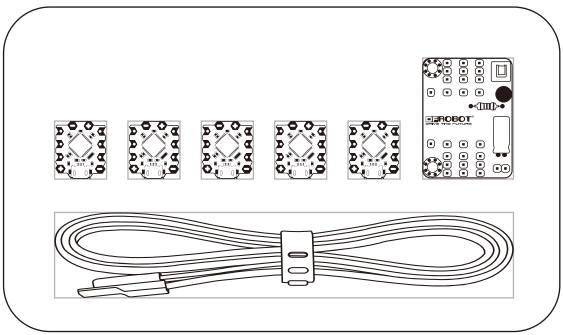
Workshop Kit

quick start guide

getting around



Cover



Box

getting around

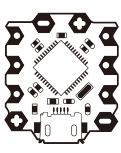
COMPONENT	AMOUNT
Beetle	10x
Beetle Shield	1x
Micro USB Cable	1x

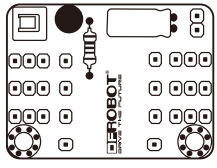
SPEC	DETAIL
Microcontroller	ATmega32u4
Clock Speed	16MHz
Operating Voltage	5V DC
Digital I/O	10
PWM	4
Analog Input	5
SPEC	DETAIL
Power Interface	2
Flash Memory	32 KB (4 KB by bootloader)
SRAM	2.5 KB
EEPROM	1 KB

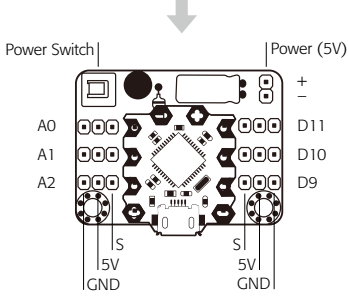
getting connected

You can directly stack the Beetle onto the Beetle Shield in this kit when using. Some soldering will be needed for reinforcement.

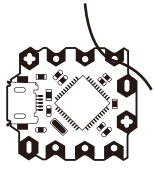
Tip: Check carefully when stacking the Beetle and the Beetle Shield together, turn to corresponding pins between two boards, then press from upon till no room left.







The Beetle can also be wired up individually. Thread the cables through holes according to IO port mapping. Some soldering will be needed for connection.



getting connected

IO Port Mapping with Arduino

SILKSCREEN	DIGITAL	PWM	ANALOG	UART	I2C
RX	0				
TX	1			Serial 1	
SDA	2				SDA
SCL	3	3			SCL
9	9	9	A9		
10	10	10	A10		
11	11	11			
A0	A0		A0		
A1	A1		A1		
A2	A2		A2		

Power Interface

SILKSCREEN	DESCRIPTION
+	VCC
–	GND

precautions

• This product uses DC power supply with a working voltage of 5V. 6V and over will damage the product permanently. This product works reliably between 4.5V-5V; it may work under 3V-4.5V, but the reliability is not guaranteed.

• For large load applications (such as motor control), you need to connect the loaded VCC and GND directly with power supply, and parallel with capacitor over 10uF, in order to prevent restart or malfunction caused by large load transient.

• In Arduino environment, Beetle has the same features as Leonardo with multiple serial ports, Serial used for USB virtual port; Serial1 used for RX/TX port.

contacting us

For support questions, troubleshooting, or help with your Beetle Workshop Kit, please contact DFRobot Tech Support.

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