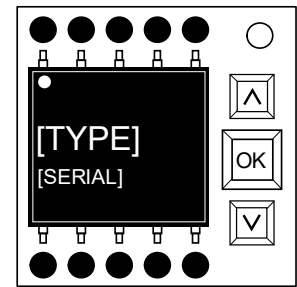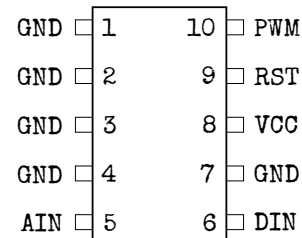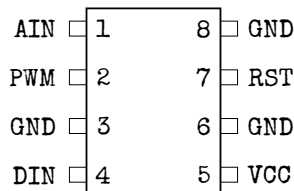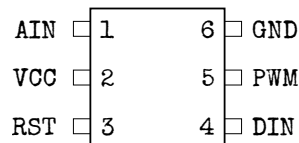# On the Subject of Microcontrollers

It's called "micro"-controller, yet this thing in there is pretty big. Probably because it can cause a pretty big explosion...
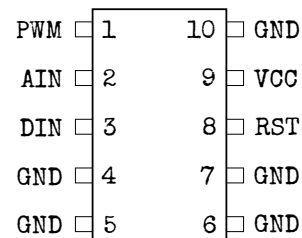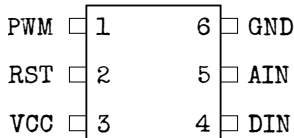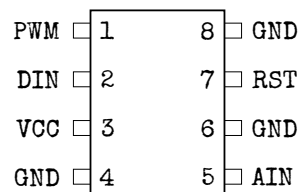
1. Use the controller's imprinted type and its size to determine its pin configuration with the diagrams below.
2. The white mark on the controller indicates where the pin with the number 1 is located. The other pins are in ascending order on the side with the number 1 and then continued backwards on the other side.
3. Using the table below determine the correct color code for each connected element.
4. For each pin choose the correct element by pressing the UP and DOWN buttons and confirming your input with the OK button (the next pin will be selected automatically).
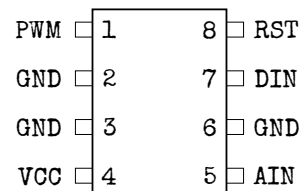
Pin Configurations

Strike (STRK) Controller:

AIN	1	6	GND
VCC	2	5	PWM
RST	3	4	DIN

AIN	1	8	GND
PWM	2	7	RST
GND	3	6	GND
DIN	4	5	VCC

GND	1	10	PWM
GND	2	9	RST
GND	3	8	VCC
GND	4	7	GND
AIN	5	6	DIN

Diode (LEDS) Controller:

PWM	1	8	GND
DIN	2	7	RST
VCC	3	6	GND
GND	4	5	AIN

PWM	1	6	GND
RST	2	5	AIN
VCC	3	4	DIN

PWM	1	10	GND
AIN	2	9	VCC
DIN	3	8	RST
GND	4	7	GND
GND	5	6	GND

Countdown (CNTD) Controller:

PWM	1	10	GND
DIN	2	9	RST
AIN	3	8	GND
GND	4	7	GND
GND	5	6	VCC

GND	1	6	RST
AIN	2	5	DIN
PWM	3	4	VCC

PWM	1	8	RST
GND	2	7	DIN
GND	3	6	GND
VCC	4	5	AIN
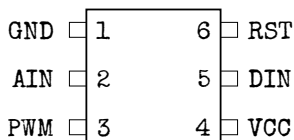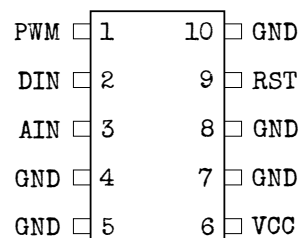
Explosion (EXPL) Controller:

```
PWM □ 1      6 □ GND        RST □ 1    10 □ GND        AIN □ 1    8 □ PWM
VCC □ 2      5 □ DIN        DIN □ 2     9 □ PWM        GND □ 2    7 □ DIN
RST □ 3      4 □ AIN        VCC □ 3     8 □ GND        RST □ 3    6 □ GND
                           GND □ 4     7 □ AIN        GND □ 4    5 □ VCC
                           GND □ 5     6 □ GND
```
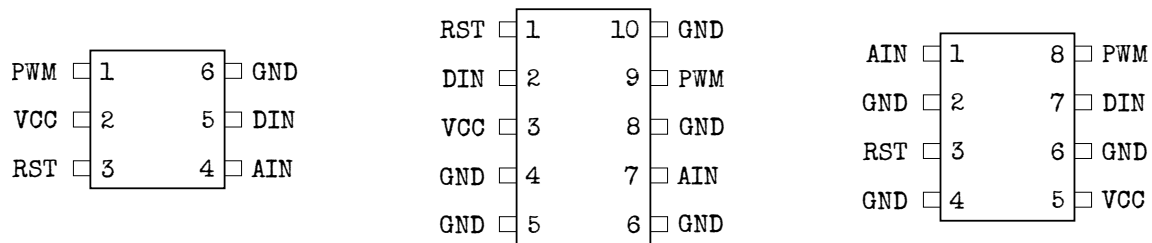
Component Color Codes

	Input Voltage (VCC)	Analog Input (AIN)	Digital Input (DIN)	Pulse Width Modulation (PWM)	Reset (RST)
If the last digit of the controller's serial number is 1 or 4	Yellow	Magenta	Green	Blue	Red
Otherwise, if there is a lit indicator "SIG" or a RJ-45 port	Yellow	Red	Magenta	Green	Blue
Otherwise, if the bomb's serial number contains C, L, R, X, 1 or 8	Red	Magenta	Green	Blue	Yellow
Otherwise, if the second numerical digit of the controller's serial number matches the number of batteries on the bomb	Red	Blue	Yellow	Green	Magenta
Otherwise	Green	Red	Yellow	Blue	Magenta

Note: Ground (GND) is always coded with white.