

USB to UART programmer

DTR

R10
10k

1

Q1
MMBT2222A

EN

2

3

4

RTS

R11
10k

1

Q2
MMBT2222A

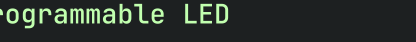
2

DTR	RTS	-->	EN	IOO
1	1	1	1	
0	0	1	1	
1	0	0	1	
0	1	1	0	

Connector Pins

Reset and Boot buttons

Programmable LED



```
graph LR; IO8[IO8] --- R12[R12 22k]; R12 --- D4[D4 LED]; D4 --- GND[GND];
```

Voltage Regulator

The diagram illustrates a voltage regulator circuit. A 5V input is connected to the VI pin (pin 3) of the AMS1117-3.3 IC. The GND pin (pin 1) is connected to the common ground. The VO pin (pin 2) provides the regulated +3V3 output. A 2k resistor (R2) and an LED (D5) are connected in series between the 5V input and ground. A 22uF capacitor (C10) is connected between the 5V input and ground. Another 22uF capacitor (C9) is connected between the +3V3 output and ground.