

# USB to UART programmer

DTR

R10  
10k

1

2

Q1  
MMBT2222A

EN

RTS

R11  
10k

1

2

Q2  
MMBT2222A

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 R]; R12 --- D4[D4 LED]; D4 --- GND[GND];
```

# Voltage Regulator

The diagram illustrates a voltage regulator circuit. A 5V input is connected to the input pin (VI) of the AMS1117-3.3 voltage regulator (U4). A 2k resistor (R2) and a green LED (D5) are connected in series between the 5V input and ground. A 22uF capacitor (C10) is connected between the input pin and ground. The output pin (VO) of the regulator is connected to a 3V3 output. A 22uF capacitor (C9) is connected between the output pin and ground. The ground pin (GND) of the regulator is connected to the common ground.