Sensors

BATT

BATT_SENSE

R1 100K
R2 100K
GND

SENSE_PWR

R3 10K SOIL_1 1 2 J1 SOIL GND
R4 10K SOIL_2 1 2 J2 SOIL GND
R5 10K SOIL_3 1 2 J5 SOIL GND
R6 10K SOIL_4 1 2 J6 SOIL GND
R7 10K SOIL_5 1 2 J7 SOIL GND
R8 10K SOIL_6 1 2 J8 SOIL GND
R9 10K SOIL_7 1 2 J9 SOIL GND

Power

U2
MCP1700-3302E_SOT89

BATT

BT1 Battery
C3 1uF
2 VI GND VO 3
1
C4 1uF
3V3
GND

Mods

Remove the voltage regulator
that is on the NodeMCU
and disconnet the USB to UART chip.

J4 1 3V3
USB_UART_ON

J3 1
USB_UART_OFF GND

Connect the power pin
of the USB to UART chip,
with a bodge wire,
to either off or on.

RESET
SW1
SW_SPST

U1
NodeMCU_1.0_(ESP-12E)

Pin	Name		Name	Pin
A0 1	A0(ADC0)		D0(GPIO16)	30
2	RSV		D1(GPIO5)	29 SENSE_PWR
3	RSV		D2(GPIO4)	28
4	SD3(GPIO10)		D3(GPIO0)	27
5	SD2(GPIO9)		D4(GPIO2)	26
6	SD1(MOSI)		3.3V	25 3V3
7	CMD(CS)		GND	24 GND
8	SDO(MISO)		D5(GPIO14)	23
9	CLK(SCLK)		D6(GPIO12)	22
10	GND		D7(GPIO13)	21
3V3 11	3.3V		D8(GPIO15)	20
12	EN		RX(DPIO3)	19
RESET 13	RST		TX(GPIO1)	18
14	GND		GND	17 3V3
15	VIN		3.3V	16 3V3

GND

SENSE_PWR
C1 0.1uf
C2 1uF
GND GND

U3
CD4051B

VDD 16

11 A
10 B
9 C

A0 3 X
6 INH
GND

X0 13 BATT_SENSE
X1 14 SOIL_1
X2 15 SOIL_2
X3 12 SOIL_3
X4 1 SOIL_4
X5 5 SOIL_5
X6 2 SOIL_6
X7 4 SOIL_7

VEE 7 VSS 8
GND