

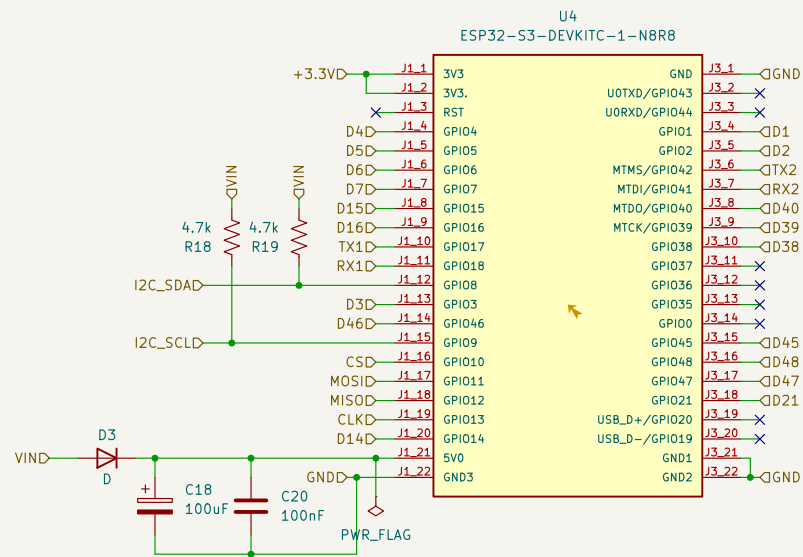
**Mechanic**

~

Logo  
U5

|                    |                    |
|--------------------|--------------------|
| H1<br>MountingHole | H2<br>MountingHole |
| H3<br>MountingHole | H4<br>MountingHole |

|  |                  |         |
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| Main Page                                |                  |         |
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| Sheet: /                                 |                  |         |
| File: Main.kicad_sch                     |                  |         |
| Title: Collecteur de données Animalières |                  |         |
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```

        #ifndef __CONFIG_H_
        #define __CONFIG_H_

        // --- SYSTÈME (LIAISON PC) ---
        // Note : Pour libérer 43/44, utilisez l'USB natif sur GPIO 19/20
        // Dans PlatformIO : build_flags = -DARDUINO_USB_CDC_ON_BOOT=1

        // --- MODULE 4G LTE (UART1 ou UART0 réassigné) ---
        #define MODEM_RX      43
        #define MODEM_TX      44

        // --- GPS EXTERNE (UART2) ---
        #define GPS_RX_PIN    16
        #define GPS_TX_PIN    17

        // --- CARTE SD (SPI) ---
        #define SD_SCK        14
        #define SD_MISO       12
        #define SD_MOSI       13
        #define SD_CS         15

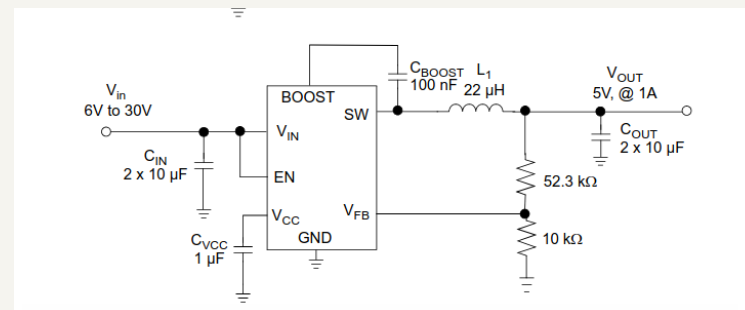
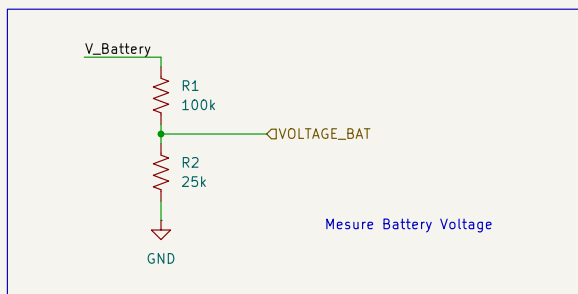
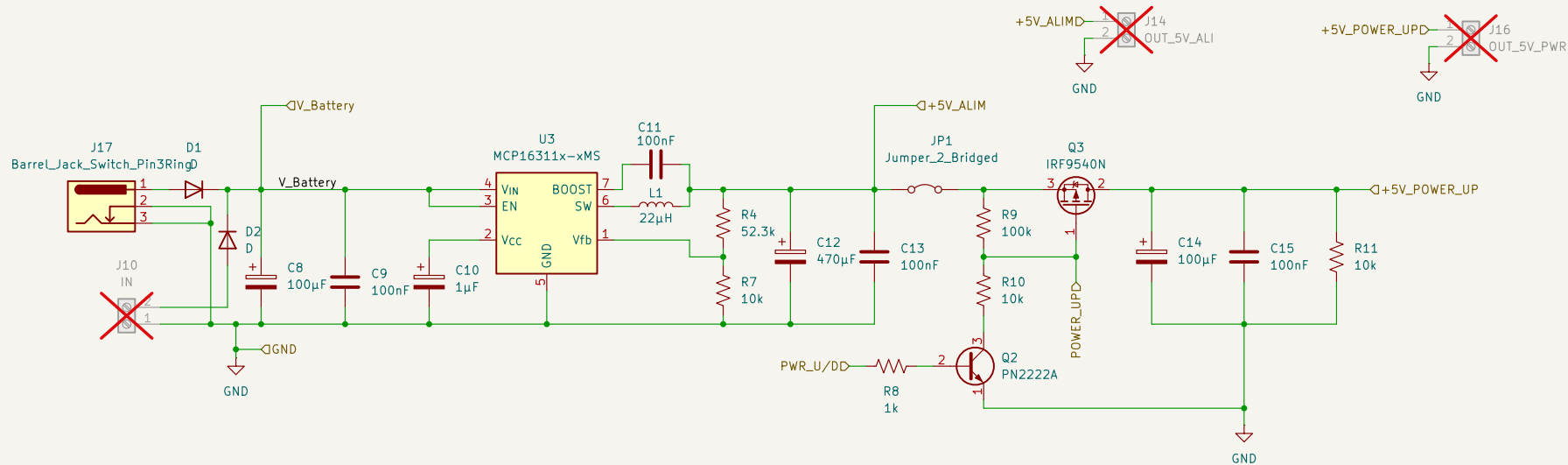
        // --- CAMERA PINS (SÉCURISÉ POUR N16R8) ---
        #define SIOD_GPIO_NUM  21
        #define SIOC_GPIO_NUM  22
        #define XCLK_GPIO      -1
        #define PCLK_GPIO      46
        #define VSYNC_GPIO     3
        #define HREF_GPIO      25
        #define D0_GPIO        26
        #define D1_GPIO        47
        #define D2_GPIO        39
        #define D3_GPIO        32
        #define D4_GPIO        27
        #define D5_GPIO        23

#define D6_GPIO              45 // Déplacé depuis 20 pour laisser le port USB Natif libre
        #define D7_GPIO        18

        // --- PINS LIBRES ---
        #define FREE_GPIO_0     0
        #define FREE_GPIO_6     6
        #define FREE_GPIO_7     7
        #define FREE_GPIO_8     8
        #define FREE_GPIO_9     9
        #define FREE_GPIO_10    10
        #define FREE_GPIO_11    11
#define FREE_GPIO_12          20 // Réserve USB Natif (D+)
        #define FREE_GPIO_48    48

        // --- PINS INTERDITES (PSRAM/FLASH) ---
        // GPIO 19, 28-31, 33-37
        #endif

```



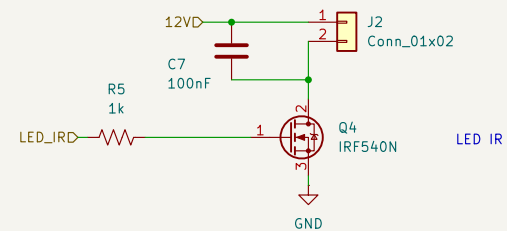
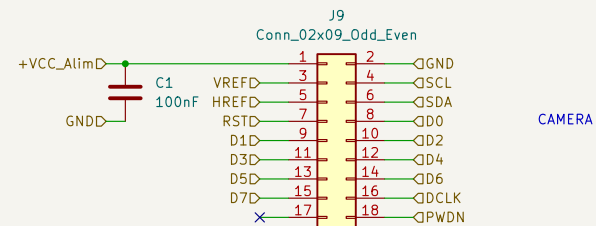
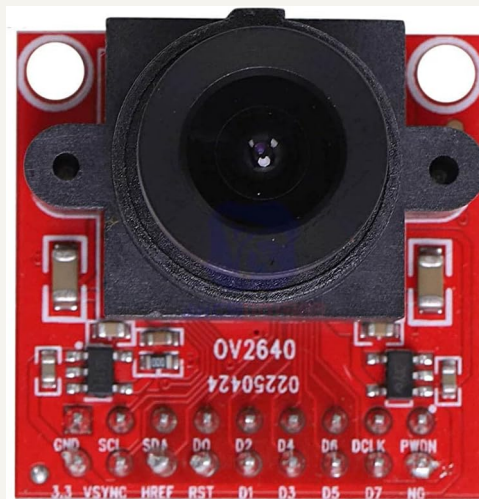
Power Page  
 Architecture Collecteur de données  
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<https://fr.rs-online.com/web/p/borniers-enfichables/0446319>

Camera Page  
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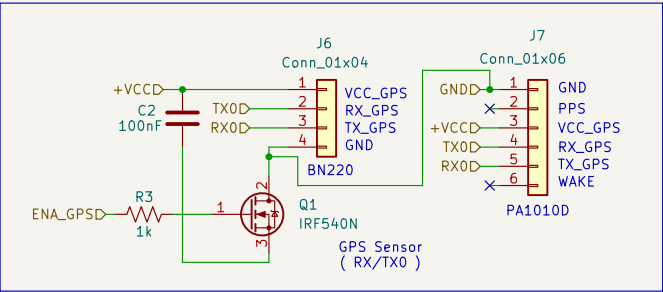
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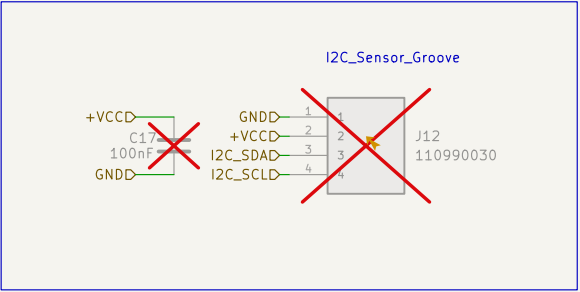
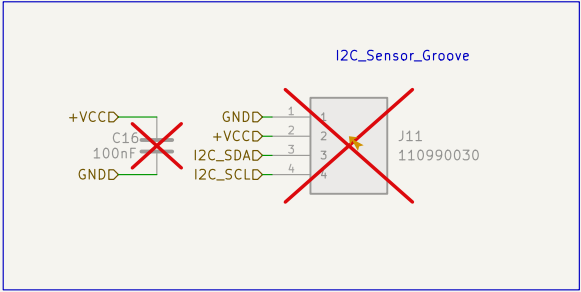
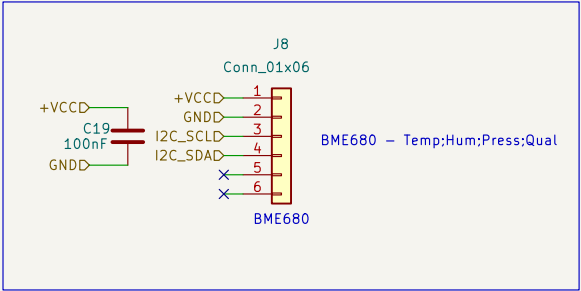
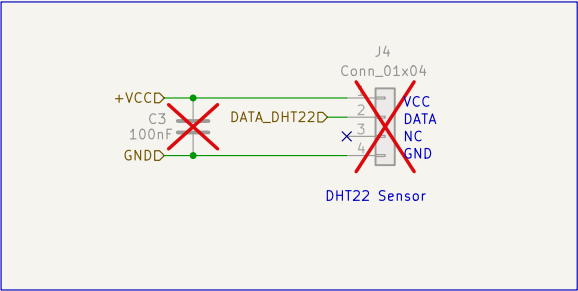
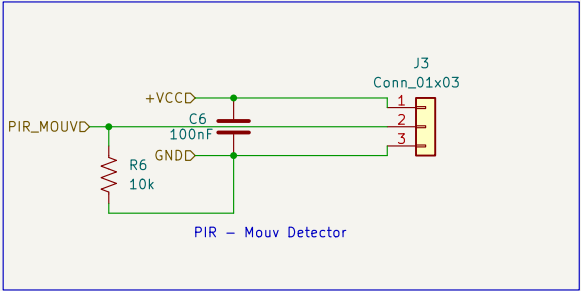
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description:

| J6 | Pin Name | IO | Description                          |
|----|----------|----|--------------------------------------|
| 1  | GND      | G  | Ground                               |
| 2  | TX       | O  | Serial Data Output                   |
| 3  | RX       | I  | Serial Data Input                    |
| 4  | VCC      | I  | DC 3.0V - 5.5V supply input, Typical |



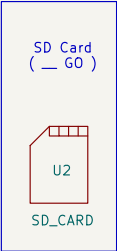
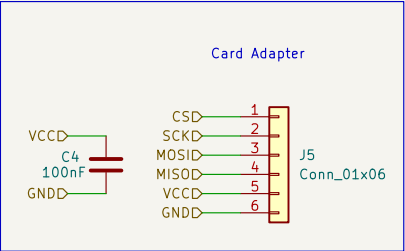
Sensors Page  
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Stockage Page  
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