Projeto Arapuca

Distribuição das portas seriais

|  |  |  |  |
| --- | --- | --- | --- |
| **USCI** | **Modo** | **Periférico** | **Pinos** |
| USCI\_A0 | UART | GPRS | P3.4 = UCA0RXD  P3.3 = UCA0TXD |
| USCI\_A1 | UART | GPS | P1.2 = SoftRXD  P4.3 = UCA1RXD  P4.0 = UCA1TXD |
| UART | Ez-FET | P4.4 = UCA1TXD  P4.5 = UCA1RXD |
| USCI\_B0 | SPI | Flash | P3.0 = UCB0SIMO  P3.1 = UCB0SOMI  P3.2 = UCB0CLK  P2.6 = #CS |
| USCI\_B1 | I2C | LCD+RTC+MPU | P4.2 = SDA  P4.1 = SCL |

USCI\_A1 compartilhada entre Ez-FET e GPRS. Como o GPRS, em geral, só é lido, pode-se construir uma porta serial por software.

Foi importante colocar a Flash na USCI\_B0 para se poder usar o pino P3.2 já destinado ao relógio.

Lista de material e links

1. CPU = MSP430?

2. GPRS SIM9000 – UART

a) <https://produto.mercadolivre.com.br/MLB-1785749678-arduino-shield-modulo-gsm-gprs-sim900-quad-band-antena-_JM?quantity=1>

b) <https://randomnerdtutorials.com/sim900-gsm-gprs-shield-arduino/>

c) <https://www.electronicwings.com/arduino/sim900a-gprs-module-interfacing-with-arduino-uno>

3. Gps Gy-gps6m V2 - UART

<https://produto.mercadolivre.com.br/MLB-2105045627-modulo-gps-gy-gps6m-v2-nf-_JM#position=1&search_layout=grid&type=pad&tracking_id=82872e9f-9671-4c7d-94bd-8113517f77db&is_advertising=true&ad_domain=VQCATCORE_LST&ad_position=1&ad_click_id=NThhMTJhZTktYmRmMC00ZGUxLWFmZWMtZmQ5NGM4YTU0ZTNj>

4. W25Q32 – Flash – SPI

<https://produto.mercadolivre.com.br/MLB-1777386279-5pcs-ci-winbond-w25q32fvssig-w25q32-virgem-_JM#position=6&search_layout=stack&type=item&tracking_id=9e4beb85-83a5-4a34-894a-5c543b438346>

5. Bateria: 18650

<https://www.aliexpress.com/item/4001142256152.html?spm=a2g0o.detail.1000060.1.60461410yI6pNC&gps-id=pcDetailBottomMoreThisSeller&scm=1007.13339.169870.0&scm_id=1007.13339.169870.0&scm-url=1007.13339.169870.0&pvid=f8fc82f5-0f0c-4c30-83e4-180539eeedd3&_t=gps-id:pcDetailBottomMoreThisSeller,scm-url:1007.13339.169870.0,pvid:f8fc82f5-0f0c-4c30-83e4-180539eeedd3,tpp_buckets:668%232846%238114%231999&pdp_ext_f=%257B%2522sku_id%2522%253A%252210000014880453377%2522%252C%2522sceneId%2522%253A%25223339%2522%257D&pdp_pi=-1%253B15.15%253B-1%253B-1%2540salePrice%253BBRL%253Brecommend-recommend>

6. Carregador

<https://www.aliexpress.com/item/4000226591845.html?spm=a2g0o.9042311.0.0.27424c4dEkkk9M>

7. Fonte de 100-240V 🡪 5V

a) <https://www.aliexpress.com/item/4000820532219.html?spm=a2g0o.productlist.0.0.227973c9n4j0Lb&algo_pvid=c0158623-dfac-4dd8-bda2-8ff6f4caf7ce&algo_exp_id=c0158623-dfac-4dd8-bda2-8ff6f4caf7ce-15&pdp_ext_f=%7B%22sku_id%22%3A%2210000008602888275%22%7D&pdp_pi=-1%3B5.86%3B-1%3B2239%40salePrice%3BBRL%3Bsearch-mainSearch>

b) <https://www.aliexpress.com/item/32826918659.html?spm=a2g0o.productlist.0.0.227973c9n4j0Lb&algo_pvid=c0158623-dfac-4dd8-bda2-8ff6f4caf7ce&algo_exp_id=c0158623-dfac-4dd8-bda2-8ff6f4caf7ce-17&pdp_ext_f=%7B%22sku_id%22%3A%2265055672738%22%7D&pdp_pi=-1%3B6.97%3B-1%3B-1%40salePrice%3BBRL%3Bsearch-mainSearch>

c) <https://produto.mercadolivre.com.br/MLB-1783758442-fonte-de-alimentaco-bivolt-5v-2a-p4-p-tv-box-android-_JM#position=3&search_layout=grid&type=item&tracking_id=bfe06b3f-ca38-42a5-b56b-a70d115cc3c2>