

For a standard breadboard.

Print it from **PDF** with **Adobe Acrobat** at **102%** due to the dimensions and tape them to both sides with blank tape or laminate the whole thing with stiff **80-100 micro** sleeves. Cut them with one sharp knife and punch the holes with an awl or reamer on a hole print for the correct 0.1" size and use print pins to hold the template in place when punching or drilling. (OpenOffice: Font: Consolas and 6)

```

RP2040-ZERO
SD-CARD HOUDER
GND+ + + GND
TOP P4+ + + MISO
MICRO P2+ + + CLK
SD P3+ + + MOSI
P6+ + + CS
3V3+ + + 3V3_

of OPTION SYSTEM SPI GP2,GP3,GP4
OPTION SDCARD GP6

RPI-DS3231 RPI-DS3231
GND+ + GND GND+ + GND
BT+ + BAT BI+ + BVBA
TOP BAT P5+ + SCL P5+ + SCL
DS3231 P8+ + SDA P8+ + SDA
3V+ + 3V3 3V+ + 3V3_

of OPTION SYSTEM I2C GP8,GP5
OPTION RTC AUTO ENABLE
    
```

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RASPBERY PI PICO
GPIO LED=P25 USB A3=ESYS GPIO
TDIAP00+ +01 v.1.5 40+ +OUT USB
RCSBP01+ +02 LED 39+ +EXT SYS
GND + +03 EXT=SYS 38+ + GND
DCAP02+ +04 1V8-5V5 37+ +3V3_EN
COBP03+ +05 (•)BOOT 36+ +3V3
TDIAP04+ +06 35+ +ADC_REF
RCSBP05+ +07 RASPBERY34+ +P28 A2
GND + +08 PI PICO 33+ +AGND
DCAP06+ +09 RP2040 32+ +P27BOA1
COBP07+ +10 F:2MB 31+ +P26CA0
TDIAP08+ +11 MAKER 30+ +RUN/RST
RCSBP09+ +12 PI PICO 29+ +P22
GND + +13 ADC12Bit 28+ + GND
DCAP10+ +14 ADCGPIO 27+ +P215CR
COBP11+ +15 A0=P26 26+ +P20A1DT
TDIAP12+ +16 A1=P27 25+ +P19BOC
RCSBP13+ +17 A2=P28 24+ +P18ACD
GND + +18 A3=P29SYS23+ + GND
DCAP14+ +19 A4=TEMP 22+ +P175CR
COBP15+ +20 DEBUG 21+ +P16A1DT
UART I2C SPI PWM ADC RST 3V3 5V+
GPIO=3V3/4mA max. 3V3/500mA max.
+ + + + + + + +
    
```

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RASPBERY PI PICO
GPIO LED=P25 USB A3=ESYS GPIO
P00T+ +01 v.1.5 40+ +0USB
P01R+ +02 LED 39+ +ESYS
GND + +03 EXT=SYS 38+ + GND
P02 + +04 1V8-5V5 37+ + 3VE
P03 + +05 (•)BOOT 36+ + 3V3
P04+ +06 35+ +AREF
P05+ +07 RASPBERY34+ +P28
GND + +08 PI PICO 33+ +AGND
P06 + +09 RP2040 32+ +P27
P07 + +10 F:2MB 31+ +P26
P08 + +11 MAKER 30+ + RST
P09 + +12 PI PICO 29+ + P22
GND + +13 ADC12Bit 28+ + GND
P10 + +14 ADCGPIO 27+ + P21
P11 + +15 A0=P26 26+ + P20
P12 + +16 A1=P27 25+ +P19
P13 + +17 A2=P28 24+ +CP18
GND + +18 A3=P29SYS23+ + GND
P14 + +19 A4=TEMP 22+ +SP17
P15 + +20 DEBUG 21+ +IP16
UART I2C SPI ADC RUN 3V3 5V+
GPIO=3V3/4mA max. 3V3/500mA max.
+ + + + + + + +
    
```

v.1.5

pin aantal
klopt,
afstand ->
niet!

```

RASPBERY PI RP2040 16MB
+ + + + + + + + + + + + + + + +
GPIO LED=P25 USB F:16MB GPIO
P00T+ +01 v.1.5 40+ +VUSB
P01R+ +02 VIN=5V 39+ + 5V0
P02 + +04 38+ + + GND
P03 + +05 (•)BOOT 37+ + +3VEN
P04+ + +06 PICOMITE + + + 3V3
GND + + + BASIC NR'S + + + GND
P05+ + +07 RASPBERY + + + RUN
P06 + +09 PI RP2040A3+ + +P29
P07 + +10 F:16MB 34+ + +P28
P08 + +11 BREAD 32+ + +P27
P09 + +12 BOARD 31+ + +P26
P10 + +14 ADCGPIO + + +AGND
P11 + +15 A0=P26 NC+ + + P25
P12 + +16 A1=P27 NC+ + + P24
GND + + + A2=P28 NC+ + + P23
P13 + +17 A3=P29 29+ + + P22
P14 + +19 A4=TEMP 27+ + + P21
P15 + +20 LED26+ + + P20
P16+ + +21 25+ + +P19
P17+ + +22 24+ + +P18
UART I2C SPI ADC RUN 3V3 GND 5V+
GPIO=3V3/4mA max. 3V3/500mA max.
    
```

```

RASPBERY PI PICO 2MB
+ + + + + + + + + + + + + + + +
GPIO LED=P25 USB A3=ESYS GPIO
TDIAP00+ +01 v.1.5 40+ +OUT USB
RCSBP01+ +02 LED 39+ +EXT SYS
GND + +03 EXT=SYS 38+ + GND
DCAP02+ +04 1V8-5V5 37+ +3V3_EN
COBP03+ +05 (•)BOOT 36+ +3V3GPIO
TDIAP04+ +06 35+ +ADC_REF
RCSBP05+ +07 RASPBERY34+ +P28 A2
GND + +08 PI PICO 33+ +AGND
DCAP06+ +09 RP2040 32+ +P27BOA1
COBP07+ +10 F:2MB 31+ +P26CA0
TDIAP08+ +11 BREAD 30+ +RUN/RST
RCSBP09+ +12 BOARD 29+ +P22
GND + +13 ADC12Bit 28+ + GND
DCAP10+ +14 ADCGPIO 27+ +P215CR
COBP11+ +15 A0=P26 26+ +P20A1DT
TDIAP12+ +16 A1=P27 25+ +P19BOC
RCSBP13+ +17 A2=P28 24+ +P18ACD
GND + +18 A3=P29SYS23+ + GND
DCAP14+ +19 A4=TEMP 22+ +P175CR
COBP15+ +20 DEBUG 21+ +P16A1DT
UART I2C SPI PWM ADC RST 3V3 5V+
GPIO=3V3/4mA max. 3V3/500mA max.
    
```

```

RASPBERY PI PICO 2MB
+ + + + + + + + + + + + + + + +
GPIO LED=P25 USB A3=ESYS GPIO
P00T+ +01 v.1.5 40+ +0USB
P01R+ +02 LED 39+ +ESYS
GND + +03 EXT=SYS 38+ + GND
P02 + +04 1V8-5V5 37+ + + 3VE
P03 + +05 (•)BOOT 36+ + + 3V3
P04+ +06 35+ +AREF
P05+ +07 RASPBERY34+ +P28
GND + +08 PI PICO 33+ +AGND
P06 + +09 RP2040 32+ + +P27
P07 + +10 F:2MB 31+ + +P26
P08 + +11 BREAD 30+ + + RST
P09 + +12 BOARD 29+ + + P22
GND + +13 ADC12Bit 28+ + + GND
P10 + +14 ADCGPIO 27+ + + P21
P11 + +15 A0=P26 26+ + + P20
P12 + +16 A1=P27 25+ + +P19
P13 + +17 A2=P28 24+ + +CP18
GND + +18 A3=P29SYS23+ + + GND
P14 + +19 A4=TEMP 22+ + +SP17
P15 + +20 DEBUG 21+ + +IP16
UART I2C SPI ADC RUN 3V3 GND 5V+
GPIO=3V3/4mA max. 3V3/500mA max.
    
```

v.1.5

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```

RP2040-ZERO
BOVEN BACKSIDE ALLE
PINNEN P17 + PINNEN
| +08 | P18 + |
| +09 | P19 + |
| +10 | P20 + |
| +11 | P21 + |
| +12 | P22 + |
| +13 | P23 + |
| +14 | P24 + |
| | P25 + |
| | GND + |

| ADC | I2C |
| UART | SPI |
P8 D+ + + + + P14
P7 + + +WS2812B + + + P15
P6 5+ + + RGB + + +P26
P5 C+ + (•)P16 (•) + +P27
P4 R+ +RESET BOOT1 + +P28
P3 T+ + RP2040 + +P29
P2 C+ + -ZERO- + + 3V3
P1 R+ + v1.5 + + + GND
P0 T+ + USB + + 5V

| | GEEN DIODE |
| | |
OPTION SYSTEM SPI GP2,GP3,GP4
OPTION SYSTEM I2C GP8,GP5
OPTION SDCARD GP6
    
```

```

Raspberry Pi Pico
Pin nr PicoMite.
LILYGO T-PicoC3
RP2040 + ESP32-C3 + ST7789V 240X135
| + + + + + + + + + + + + |
| _ | + | + | + | + | + | + |
ESP32 PICO I2C SPI UART ADC 3V3
ESP32C3 ST7789V 240x135 RP2040
GPIO ESP32-C3 RP2040 GPIO
P9 + +GP6 = RX<=GP8 =TX1+ + 3V3
P8 + +GP7 = TX=>GP9 =RX1+ +TP12
P2 1+ +GP5 =CTS<>GP10=CTS+ +RP13
RUN + +GP4 =RTS<>GP11=RTS+ + P14
GND + +RUN=>GND=OFF + + P15
GND + +GP9 =BOOT ST7789V + +RP16
P293+ + TMP=ADC4 GP01=DC + +SP17
P282+ + BAT=P260 GP02=CLK+ +CP18
P271+ + PWR=P22P GP03=MOS+ +TP19
GND + + GP04=BL + +DP20
GND + + T-PicoC3 GP05=CS + + GND
3V3 + + FLASH4MB GP06=RST+ + 5V
P24 + + S4 =BOOT S1 =RESET
P23 + + /RUN
P21C+ + LED=RP2040 FLASH4MB
GP6 LED=ESP32C3 FLASH4MB GP7
S2 LED=P25 v1.6 S3
| | USB |
    
```

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RP2040
Chip PCB Chip PCB
GPIO Pin GPIO Pin
GP00=01 GP15=20
GP01=02 GP16=21
GP02=04 GP17=22
GP03=05 GP18=24
GP04=06 GP19=25
GP05=07 GP20=26
GP06=09 GP21=27
GP07=10 GP22=29
GP08=11 GP23=NC
GP09=12 GP24=NC
GP10=14 GP25=NC
GP11=15 GP26=31
GP12=16 GP27=32
GP13=17 GP28=34
GP14=19 GP29=A3

LILYGO T-Display RP2040
T-Display + ST7789V 240X135
| + + + + + + + + + + + + |
| - | + | + | + | + | + | + |
+5V GND PIO I2C SPI UART ADC 3V3
4MB ST7789V 240x135 RP2040
FLASH GP01=DC GPIO
GND + + GP02=SCLK + + 3V3
GND + + GP03=MOSI + +TP12
P11C+ + GP04=BL + +RP13
P10D+ + GP05=CS + + P14
P9 R+ + GP06=RST + + P15
P8 T+ + GP22=PWR + +RP16
P293+ + + + + + + + + + + + +
P282+ + TMP=ADC4 + + + + + + + +
P271+ + BAT=P260 + + + + + + + +
GND + + + + + + + + + + + + + +
GND + + T-Display + + + + + + + +
3V3 + + + + + + + + + + + + + +
P24 + + S4 =BOOT S1 =RESET
P23 + + /RUN
P21C+ + LED=RP2040 FLASH=4MB
GP6 + + + + + + GP7
S2 3V3 2 3 GND v1.5 S3
| | USB |
    
```

Voor PicoMite Basic option lijst:
OPTION SYSTEM SPI GP2,GP3,GP0
OPTION LCDPANEL ST7789_135,L,GP1,GP6,GP5,GP4
OPTION SDCARD GP17,GP18,GP19,GP20

Voor PicoMite Basic option lijst:
OPTION SYSTEM SPI GP2,GP3,GP0
OPTION LCDPANEL ST7789_135,L,GP1,GP6,GP5,GP4
SETPIN GP22,DOUT:PIN(GP22)=1 POWER EN = 1