

PicoMiteVGA MMBasic USB RP2040-PI ZERO V6.00.02 V3

PicoMiteVGA MMBasic USB RP2040 Edition V6.00.02

OPTION SERIAL CONSOLE COM2,GP8,GP9

OPTION SYSTEM I2C GP16,GP17

OPTION COLOURCODE ON

OPTION KEYBOARD US

OPTION HEARTBEAT OFF

OPTION PICO OFF

OPTION RESOLUTION 640x480 @ 252000KHz

OPTION SDCARD GP21, GP18, GP19, GP20

OPTION VGA PINS GP11,GP22

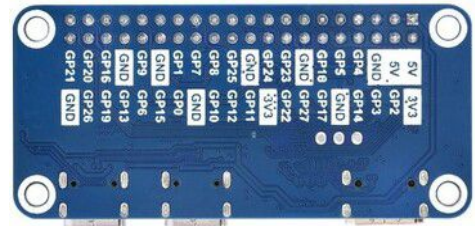
OPTION AUDIO I2S GP13,GP15', ON PWM CHANNEL 6

OPTION RTC AUTO ENABLE ' RTC SETTIME JJ,MM,DD,HH,MM,SS

AUDIO: PCM5102A I2S DAC GP13=BCK, GP14=LCK, GP15=DIN, GND=SCK

VGA: HSYNCpin(2), BLUEpin(4) VGA(HVBSGR): GP11,GP12,GP22,GP23,GP24,GP25

I2C: RTC DS3231, GAMEPAD



Backside RP2040-PIZERO

PicoMiteVGA USB

GP-PIN	
3V3	
GP02	SDA_DVI
GP03	SCL_DVI
LCK_I2S DAC GP14	
GND	
SCL I2C GP17	
GP27	D0_N_DVI
BLUE VGA GP22	D2_P_DVI
3V3	
HSYNC VGA GP11	
VSNC VGA GP12	
GP10	
GND	
GP00	
DIN_I2S DAC GP15	
GP06	
BCK_I2S DAC GP13	
MOSI_SD SPI GP19	
GP26	
GND	

RP2040-PIZERO

TOP	SIDE
3V3	001 020 5V0
GP02	003 040 5V0
GP03	005 060 GND
GP14	007 080 GP04
GND	009 100 GP05
GP17	011 120 GP18
GP27	013 140 GND
GP22	015 160 GP23
3V3	017 180 GP24
GP11	019 200 GND
GP12	021 220 GP25
GP10	023 240 GP08
GND	025 260 GP07
GP00	027 280 GP01
GP15	029 300 GND
GP06	031 320 GP09
GP13	033 340 GND
MOSI_SD GP19	035 360 GP16
DO_P_DVI GP26	037 380 GP20
GND	039 400 GP21

PicoMiteVGA USB

GP-PIN	
5V0	
5V0	
GND	
GP04	
GP05	
GP18	CLK_SD SPI
GND	
GP23	GREEN_L VGA
GP24	GREEN_M VGA
GND	
GP25	RED VGA
GP08	Tx_COM2 SERIAL
GP07	
GP01	
GND	
GP09	Rx_COM2 SERIAL
GND	
GP16	SDA I2C
GP20	MISO_SD SPI
GP21	CS_SD SPI

uC=RP2040 RESET/BOOT ETA6096
pin2 3V3=RT9193-33 FLASH:16MB pin40 VBAT

Gppins:
3V3 max

SD-CARD:
32GB max

* Terminal: Tx GND Rx

RP2040-PIzero
PicoMiteVGAUSB



Schematic: [here](#)

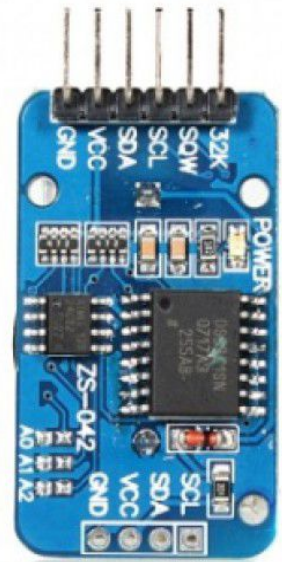
Mini DVI(HDMI) See VGA
NOT CONNECT MMBasic

5V USB-C POWER
USB is not seen

KEYBOARD/HUB/
BOOT/ONLY USB-C

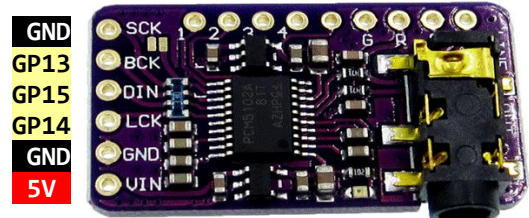
```
> option list
PicoMiteVGA MMBasic USB RP2040 Edition V6.00.02RC24
OPTION SERIAL CONSOLE COM2,GP8,GP9 'PCB:CLK>TX/GND/DIO>RX
OPTION SYSTEM I2C GP16,GP17
OPTION FLASH SIZE 16777216
OPTION COLOURCODE ON
OPTION KEYBOARD US
OPTION HEARTBEAT OFF
OPTION PICO OFF
OPTION RESOLUTION 640x480 @ 252000KHz
OPTION SDCARD GP21, GP18, GP19, GP20
OPTION VGA PINS GP11,GP22
OPTION AUDIO I2S GP13,GP15', ON PWM CHANNEL 6
OPTION RTC AUTO ENABLE ' RTC SETTIME JJ,MM,DD,HH,MM,SS
> list pins
```

GP0	1	OFF
GP1	2	OFF
GP2	4	OFF
GP3	5	OFF
GP4	6	OFF
GP5	7	OFF
GP6	9	OFF
GP7	10	OFF
GP8	11	Boot Reserved : CONSOLE TX
GP9	12	Boot Reserved : CONSOLE RX
GP10	14	OFF
GP11	15	Boot Reserved : VGA HSYNC
GP12	16	Boot Reserved : VGA VSYNC
GP13	17	Boot Reserved : I2S BCLK
GP14	19	Boot Reserved : I2S LRCK
GP15	20	Boot Reserved : I2S DATA
GP16	21	Boot Reserved : SYSTEM I2C SDA
GP17	22	Boot Reserved : SYSTEM I2C SCL
GP18	24	Boot Reserved : SPI SYSTEM CLK
GP19	25	Boot Reserved : SPI SYSTEM MOSI
GP20	26	Boot Reserved : SPI SYSTEM MISO
GP21	27	Boot Reserved : SD CS
GP22	29	Boot Reserved : VGA BLUE
GP23	41	Boot Reserved : VGA GREEN L GP08
GP24	42	Boot Reserved : VGA GREEN H GP09
GP25	43	Boot Reserved : VGA RED
GP26	31	OFF
GP27	32	OFF
GP28	34	OFF
GP29	44	OFF

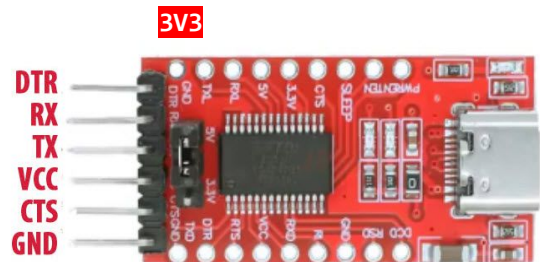


SCL=GP17
SDA=GP16
VCC= 3V3
GND= GND

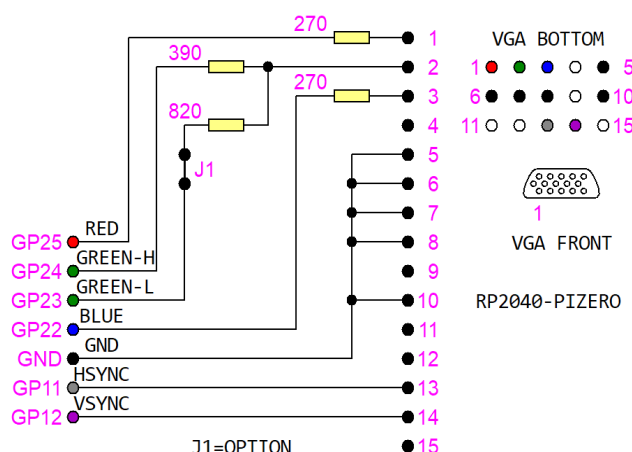
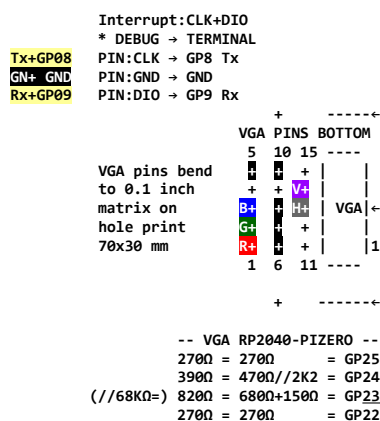
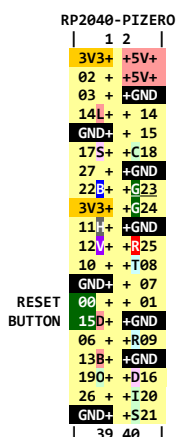
RTC module: DS3231
With CR2032 3V cel
Red diode disconnect
Top I2C = Extra bus
Bottom I2C = Connect



Audio module: PCM5102A I2S DAC
Before mounting, install pins in the holes for stability.



Terminal: RX->TX TX->RX serial COM2 to USB-C



Sjabloon RP2040-PIZERO
Print: Adobe Acrobat 102%

GPnr VGA schematic RP2040-PIZERO