

RP2040-PI ZERO

PicoMiteVGA 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



Backside RP2040-PIZERO

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

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

I2C: RTC DS3231, GAMEPAD

PicoMiteVGA USB

RP2040-PIZERO

PicoMiteVGA USB

GP-PIN		TOP		SIDE		GP-PIN	
	3V3		3V3	001	020	5V0	
	GP02	SDA_DVI	GP02	003	040	5V0	
	GP03	SCL_DVI	GP03	005	060	GND	
LCK_I2S	DAC	GP14	GP14	007	080	GP04	
	GND	GND	GND	009	100	GP05	
SCL	I2C	GP17	GP17	011	120	GP18	CLK_SD SPI
	D0_N_DVI	GP27	GP27	013	140	GND	
BLUE	VGA	GP22	GP22	015	160	GP23	GREEN_L VGA
	D2_P_DVI	3V3	3V3	017	180	GP24	GREEN_M VGA
HSYN	VGA	GP11	GP11	019	200	GND	
VSYN	VGA	GP12	GP12	021	220	GP25	RED VGA
	GP10	GP10	GP10	023	240	GP08	TX_COM2 SERIAL
	GND	GND	GND	025	260	GP07	
	GP00	GP00	GP00	027	280	GP01	
DIN_I2S	DAC	GP15	GP15	029	300	GND	
	GP06	GP06	GP06	031	320	GP09	RX_COM2 SERIAL
BCK_I2S	DAC	GP13	GP13	033	340	GND	
MOSI_SD	SPI	GP19	GP19	035	360	GP16	SDA I2C
	DO_P_DVI	GP26	GP26	037	380	GP20	MISO_SD SPI
	GND	GND	GND	039	400	GP21	CS_SD SPI

GP pins

SD-CARD
32GB Max.

RP2040-PIZero

Schematic: [hier](#)



DVI(HDMI) NOT CONNECT

KEYBOARD

5V POWER

Or this configuration where the first 8 pins are free.

PicoMiteVGA MMBasic USB RP2040 Edition V6.00.02RC23

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> OPTION LIST

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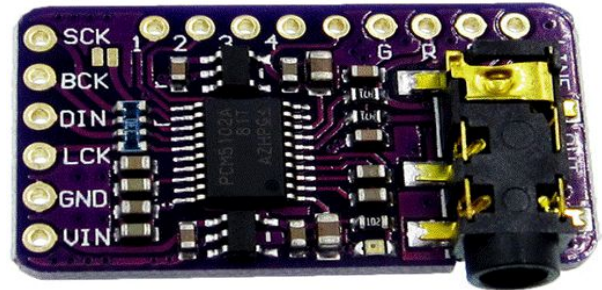
OPTION RESOLUTION 640x480 @ 252000KHz

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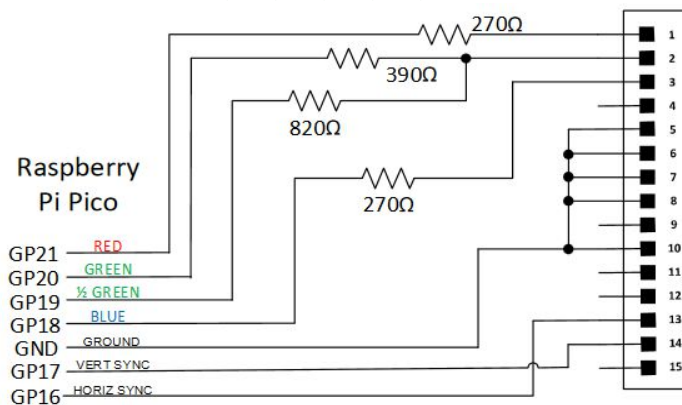
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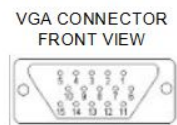
OPTION RTC AUTO ENABLE 'RTC SETTIME JJ,MM,DD,HH,MM,SS



Audio module: PCM5102A I2S DAC



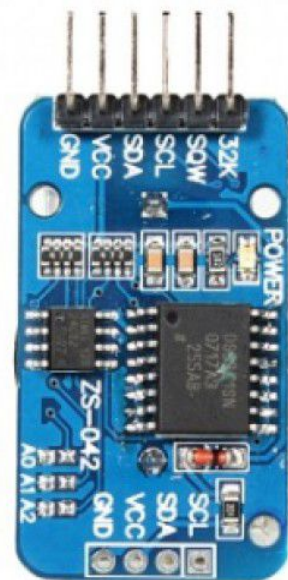
VGA Monitor
DE15 15-pin D-sub



GPnr VGA schematic Raspberry Pi Pico to RP2040-PIZERO

> 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
GP24	42	Boot Reserved : VGA GREEN H
GP25	43	Boot Reserved : VGA RED
GP26	31	OFF
GP27	32	OFF
GP28	34	OFF
GP29	44	OFF



RTC module DS3231
With CR2032 3V,
red diode disconnect.