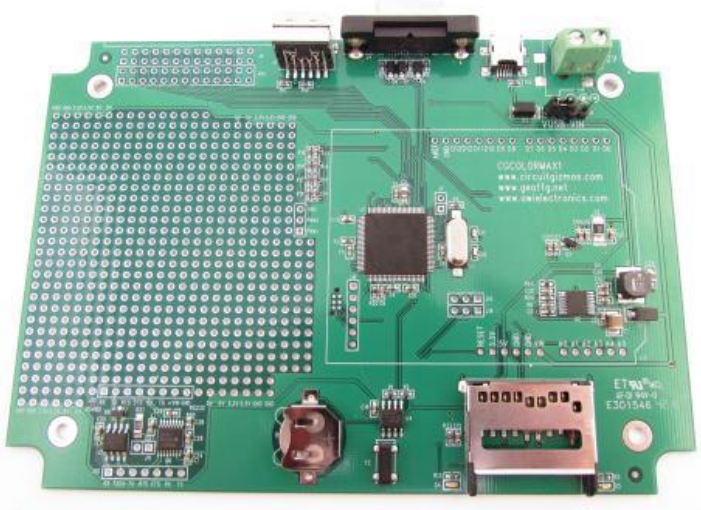
CircuitGizmos, LLC

CGCOLORMAX1



The CGCOLORMAX1 Color Maximite is a small computer on a single printed circuit board that runs a modern implementation of BASIC. There is a connection to a VGA monitor for color video output and keyboard input. An SD card socket is on the front of the board. The SD card would act as a 'disk drive' for program and data storage.

The CGCOLORMAX1 features include a stereo music synthesizer, Arduino Shield interface, and a battery backed clock. There is hardware interfacing available as 20 I/O lines on the rear connector and 20 lines on the Shield connector.

This versatile design makes it simple to interface to serial, SPI, I2C, 1-wire and other circuits. The CGCOLORMAX1 is perfect for students learning to program and learning embedded hardware interfacing.

Features

- 32 bit processor with BASIC interpreter
- Color VGA video, 480 by 432
- 40 I/O lines total
- PS/2 keyboard support
- USB interface
- SD card interface
- Battery-backed Real Time Clock (RTC)

- RS232 and RS485 interface circuits
- Stereo sound – MOD support
- SPI communication
- I2C communication
- PWM output
- 1-Wire communication
- Flexible Pin Use
- BASIC with 200 commands/functions
- Fully assembled and tested
- 9-18 volts DC

Simple Programming Example

All of the I/O lines can be set to be outputs and drive LEDs that flash randomly.

```
' Set all the back port lines to output
For a = 1 To 20
  SetPin a, 8
Next a

' Random LED on/off
Do
  a = 1 + Fix(Rnd(0) * 20)
  b = 1 + Fix(Rnd(0) * 20)
  Pin(a) = 1
  Pin(b) = 0
  Pause 50
Loop
```

For more product information and documentation, see these links:

http://www.circuitgizmos.com/products/cgcolormax1/cgcolormax1.shtml

http://www.circuitgizmos.com/files/begmax.pdf

