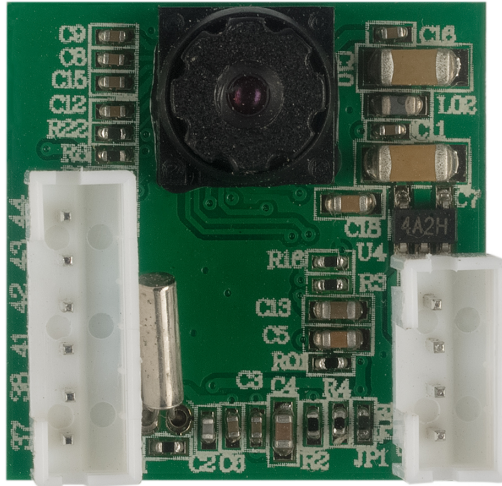


SC03MPH

Spinel Miniature 300K Pixels Serial JPEG Color Camera Module TTL & SPI Dual Output

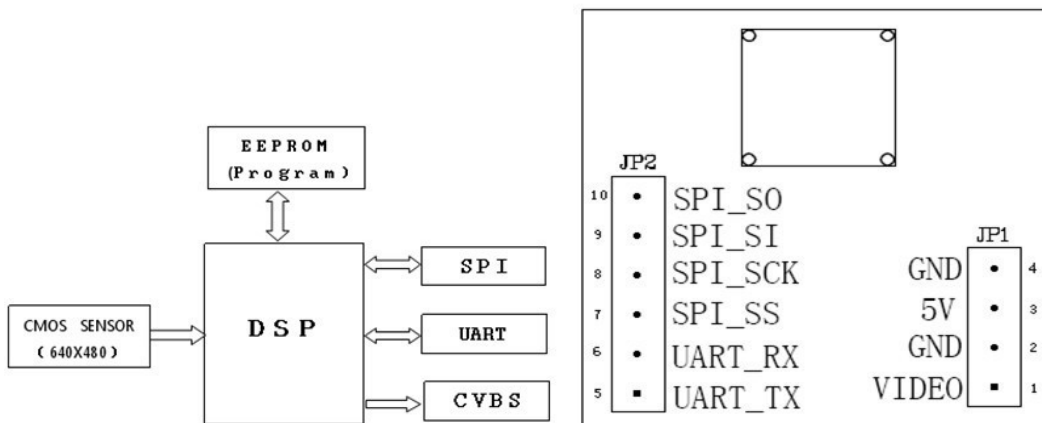


Spinel SC03MPH Camera is a highly integrated miniature serial JPEG camera module which can be attached to any host system that requires a JPEG compressed still camera for embedded imaging applications. The module uses a 1/5" CMOS color image sensor along with a JPEG compression chip that provides a low cost and low powered camera system. The module has an on-board dual-output SPI and TTL (serial interface) that is suitable for a direct connection to any host microcontroller UART or a PC system COM port.

The SC03MPH camera is capable of outputting **JPEG images** and NTSC/PAL video.

The SC03MPH camera module comes in a very compact form factor with a built in lens and a 6 pin PH 2.0 connector for TTL & SPI and 4 pin PH 2.0 connector for power and video that provides easy access to both power and serial data. PC test tool is provided for easy testing.

Below is the structure and pin configuration of the camera module.



SC03MPH Features

Smallest Size of 22x22mm

VC0706 SPI and TTL dual output

Default baud rate and image size can be changed through VC0706 CommTool

Specifications	
Image Device	1/5" CMOS
Serial Output	TTL & SPI Dual Output
Pixels	300K Pixels
Image Resolution	640 x480 (VGA), 320 x 240 (QVGA) (Default), 160x120 (QQVGA)
Image Compression	JPEG
Video	NTSC (default), can be changed to PAL per request
Baud Rate	UART: 38400bps (Default), 9600/19200/57600/115200bps optional SPI: 13.5Mbps(default), optional 0.211/0.422/0.844/ 1.688/3.375/6.75/13.5Mbps
Focal Length	2.8 mm
Angel of View	63°
Minimum Illumination	1 LUX
IR Illuminator	Not available
IR-Cut filter (IR filter)	Default at 650nm
Power Supply	Typical: 5V DC, Range: 4.8V ~ 6.5V DC (default); Can be changed to 3.3V (2.8V ~3.8V) per request
Current Consumption	Typical: 75mA
Night Image	Black and white
Night Vision Range	10 meters (33ft)
Protocol	VC0706 SPI & Serial Protocol
Exposure	Auto
White Balance	Auto
Auto Gain Control	Auto
Cable Length	30CM (11.8in) 6 pin wires (Default) and 4pin wires, other length per request
Pin Configuration	Pin 1: Video, Pin 2: GND, Pin 3: VCC, Pin 4: GND, Pin 5: UART_TX, Pin 6: UART_RX, Pin 7: SPI_SS, Pin 8: SPI_SCK, Pin 9: SPI_SI, Pin 9: SPI_SO
Connector	Default 6 bare wires and 4 bare wires, other connectors can be customized per request
Waterproof	Subject to the housing/enclosure

Environmental	
Operating Temp.	-4°F~176°F (-20°C~+80°C)
Storage Temp.	-40°F~180°F (-40°C~+85°C)
Dimension in Millimeters	22mm (Length) x 22mm (Wide) x 9mm (Height)
Dimension in inches	0.86 " ((Length) x 0.86 " (Wide) x 0.35 " (Height)
Weight	Approx. 5 Grams or 0.2 oz