

VC0349 is a cost effective with high quality USB 2.0 camera processor targeting for high quality embedded Notebook webcam and standard-alone webcam. With a programmable sensor master clock output, by integrated MJPEG encode engine, VC0349 can support most common CMOS image sensors from VGA to 2Mega pixel resolution. By integrating PDM for up to 2-channel audio microphones; it is also fully compliant with UVC and UAC standard.

KEY FEATURES

Standards

- Built-in USB2.0 HS & FS transceiver
- Built-in 64KB OTP memory
- Support ISO IN pipe for video streaming
- Compliant with USB Video Class 1.1
- Compliant with USB Audio Class 1.0

MCU

- Built-in 8051 micro controller
- Built-in 32KB OTP ROM for running program code
- Built-in 2KB SRAM for data
- Support EEPROM for setting and code

Sensor Interface

- Support CMOS Image Sensors
- Support sensors with YUV/MJPEG output
- Support MIPI interface
- Programmable sensor clock output
- Support I2C for sensor configuration

ISP / IPP

- 1-D noise reduction and UV suppression
- Hardware digital sizer on YUV
- JPEG compression for video streaming

Video capability

Standard	Resolution	YUY2	MJPEG
VGA	640x480	30fps	60fps
720P	1280x720	10fps	30fps
SXGA	1280x1024	7fps	30fps
UXGA	1600x1200	5fps	15fps
1080P	1920x1080	5fps	15fps

Audio capability

- Built-in PDM interface for digital MIC
- Support up to 2 digital microphones
- Support multiple sample rates(8KHz-48KHz)

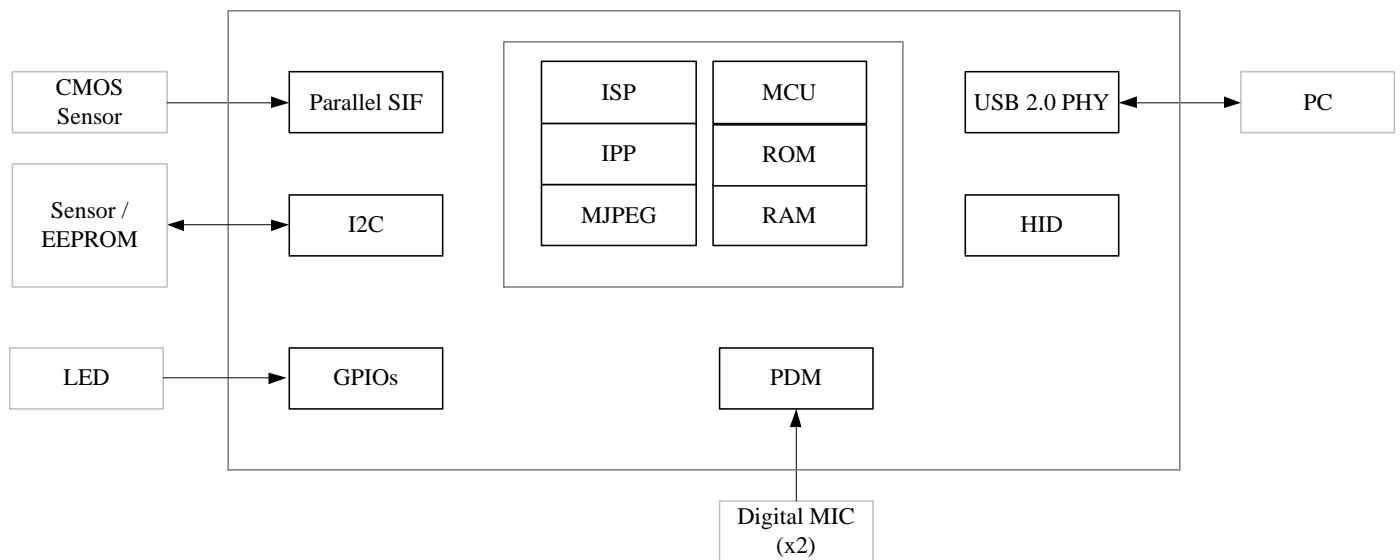
I/O

- USB 2.0 High Speed (Device)
- GPIO / PWM / I2C / PDM / HID

Package Information

Part Number	VC0349TLMA
Package Type	T-QFN 48pins
Size	5 x 7mm

Chip Block Diagram



Application Diagram

