

VC0353 is a high performance USB 2.0 camera processor targeting for high quality embedded Notebook webcam and standard-alone webcam. It comes with high quality Image Signal Processing (ISP) unit and a MJPEG compression engine. Its flexible sensor interface can support most common CMOS image sensors in the market. It is also fully compliant with UVC standard.

KEY FEATURES

Standards

Built-in USB2.0 HS & FS transceiver
Support ISO IN pipe for video streaming
Compliant with USB Video Class 1.1

MCU

Built-in 8051 micro controller
Support external serial flash for program code
Built-in 64KB RAM for program code running
Built-in 4KB RAM for program data
Support EEPROM for setting and code

Sensor Interface

Support CMOS Image Sensors
Support sensors with RAW / YUV output
Support 10-bit parallel interface
Programmable sensor clock output (parallel)
Support I2C for sensor configuration

ISP / IPP

Support 10-bit ISP
Support AE/AWB/AF
Gamma / Brightness adjustment
Contrast / Sharpness adjustment
Edge Enhancement
Backlight compensation
Lens Shading Compensation
Advance DPD&DPC
Noise management

Video capability

Standard	Resolution	YUY2	MJPEG
VGA	640x480	30fps	60fps
HD-720	1280x720	12fps	30fps
SXGA	1280x1024	7fps	30fps
2.0M	1600x1200	4fps	30fps
HD-1080	1920x1080	4fps	30fps

Audio capability

None

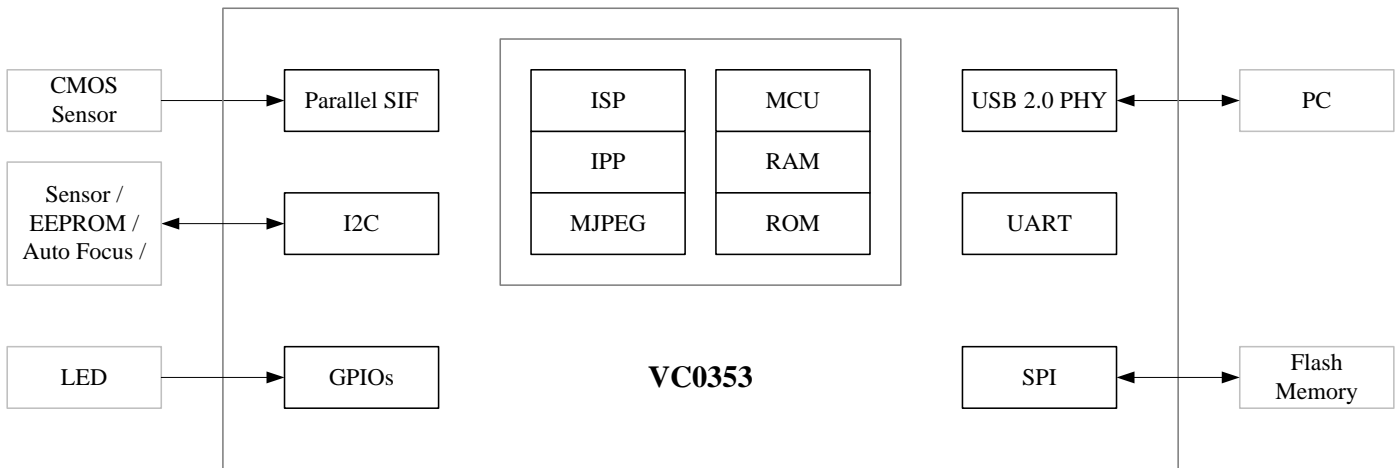
I/O

USB 2.0 High Speed (Device)
GPIO / PWM / UART / I2C
SPI (for Flash Memory)

Package Information

Part Number	VC0353TLNB
Package Type	T-QFN 48pins
Size	6.5 x 5mm

Chip Block Diagram



Application Diagram

