The **C628 Enhanced JPEG Module** is a small, lightweight and low power consumption devices including most of the features of a Digital Still Camera (DSC) such as snapshot, video capture, date-time stamp, file management and others. By using external micro-controller, together with a well-developed, user-friendly command, people can build a custom made camera for specific application.
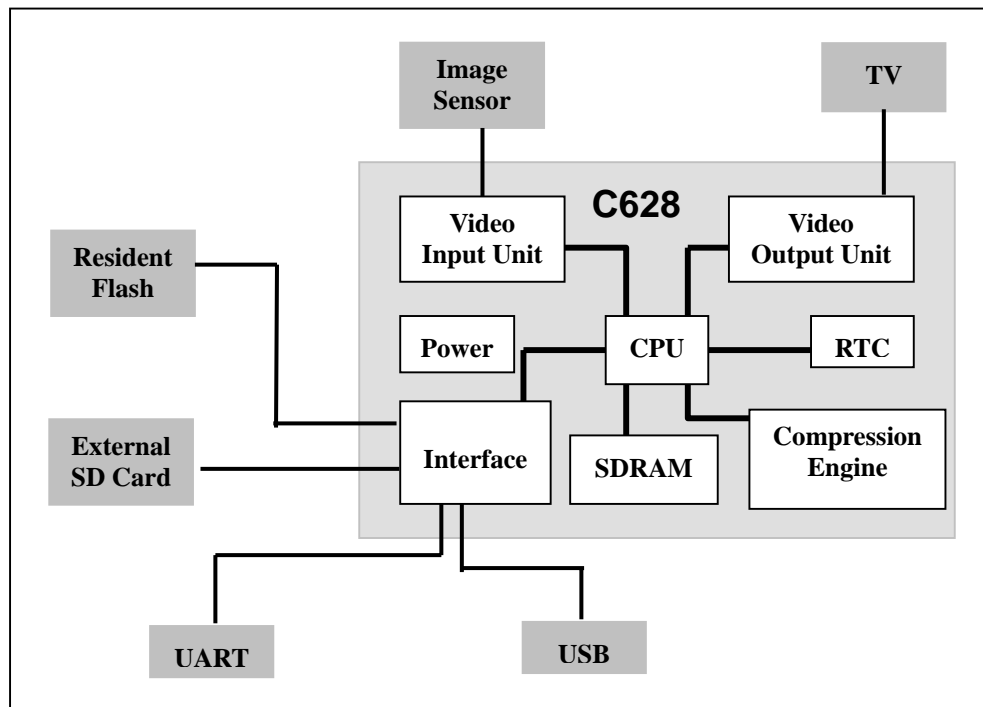

Features

- UART interface for camera control
- User friendly commands
- Different baud rate setting to meet most of MCU and PC software
- Support Mega pixel sensor
- Optional SD connector
- Real time composite video data output
- USB mass storage

Specifications

Image Sensor	MegaPixels CMOS sensor
Image Processor	ZORAN COACH-6E
On Board Memory	64Mb
Storage	Resident 16MB NAND Flash
Video Capture	640×480 (30 fps) 320×240 (30 fps) Unlimited Motion JPEG capturing time depends on available memory space
Photo Resolution	1280×960, 640x480 JPEG format
WhiteBalance	Normal / Daylight / Tungsten / Floures / Cloudy
UART Baud Rate	115200, 57600
TV out	NTSC / PAL
USB Interface	USB 1.1 Mass storage mode Supported OS: Win2000 / XP / ME
Power	DC 5V

Functional Block Diagram

Functions Description

Photo Capture
The Enhanced JPEG Module supports **1280 x 960, 640x480**

Video Cpature
The Enhanced JPEG Module features unlimited video capturing, depenpent on the memory size, with two optional resolutions: **640 x 480 (30fps), 320 x 240 (30fps)** in **AVI**, Audio Video Interleave, format which is currently the most common file format for storing audio / video data.

Storage
The Enhanced JPEG Module features a **16MB** (16M x 8 bits) on-board NAND flash and supports up to **1GB** (optional) external memory card.

Display
The Enhanced JPEG Module provides composite video output, NTSC or PAL.

Serial Interface
The Enhanced JPEG Module features an UART core, based on the industry standard PCI116550 UART device. It supports full duplex and such that users can communicate with it on flexible platforms. The supported baud rates are **115200bps, 57600bps.**

USB
The Enhanced JPEG Module provides a USB port such that user can upload the stored image to PC without any driver when using windows XP and up. It performs as Mass Sorage Mode.

Evaluation Kit

The purpose of the evaluation kit is providing a tool for people to understand the communication with the Enhanced JPEG module. We try to implement as many features as possible in this evaluation program. Most of the command has been used.

Kit Content

Model No	Description	Qty
C628	Enhanced JPEG Module	1
CU2RS	Cable - UART to RS232 adapter	1
CUSBM	Cable - USB with mini connector	1
CRS232	Cable – RS232	1
CAV25	Cable – AV	1
PS5V1A	Power adapter 5V 1A	1
CDR	CD ROM contain C628ap.exe	1

C628AP

The EV Kit accompanies with a PC program, C628AP.exe, provides a graphical user interface for the users to examine the functions provided by the camera platform. PC program divides the basic functions of the platform into 3 categories, namely, General, Capture and Playback.