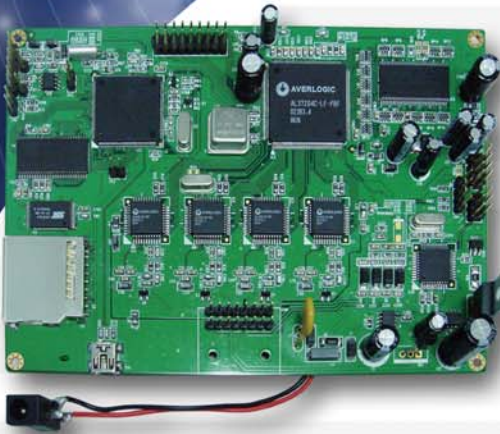


In-Car DVR Application Reference Design



Features

- Supports 4 camera inputs
- Supports event recording
- Supports CAN bus interface
- Supports temperature and driving direction information display
- Supports full screen, quad and PIP display mode
- Supports M-JPEG compression
- Supports SD card
- Supports USB interface for users to access video data

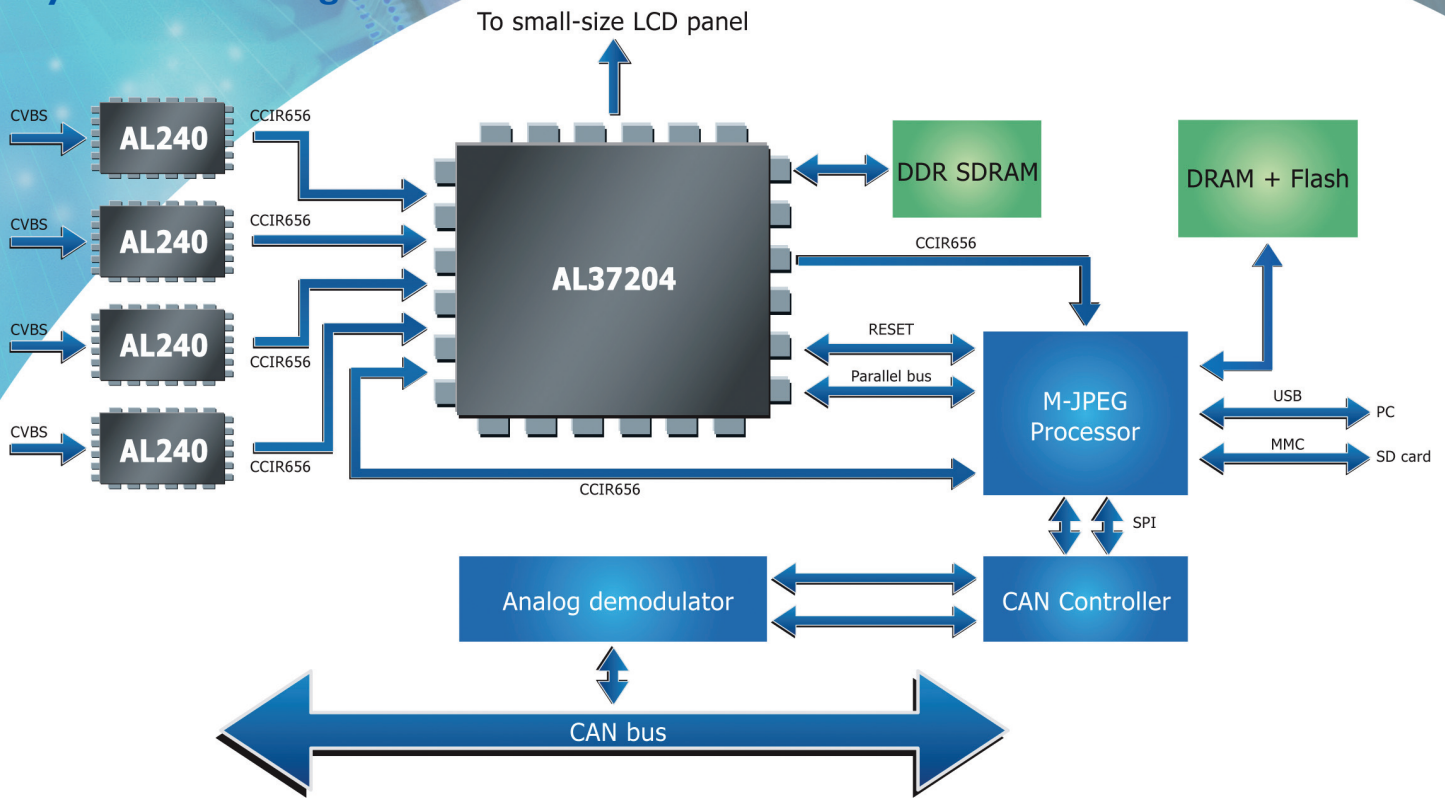
Introduction

The Mobile Digital Video Recorder (DVR) reference design is powered by AverLogic's AL37204, a high performance real time video surveillance controller and capable of streaming up to four live video channels to the system display. The reference design combined with AverLogic video decoders (AL240) and video compression processor to provide high quality mobile DVR system with cost effective structure. It also provides a standard CAN bus interface to communicate with other devices in car. This reference design could display the temperature and driving direction information of the car, monitor the front, side and rear views of the car, real-time record the monitoring video image, store the compressed video image into an SD card if necessary, and so on.

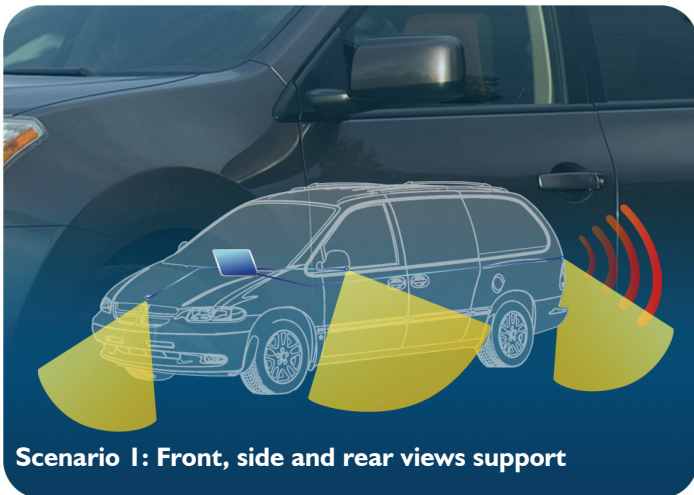
Specifications

Interface	Input	<ul style="list-style-type: none"> • 4 CVBS video inputs supporting NTSC or PAL video system • External alarm inputs supported
	Output	<ul style="list-style-type: none"> • Analog or digital LCD panel • Memory card slot supporting SD card
	Communication	<ul style="list-style-type: none"> • CAN bus interface supporting other CAN devices • USB interface supporting mass storage class. Allow users to access video data.
Processing	Compression	<ul style="list-style-type: none"> • M-JPEG codec • Resolution: up to VGA (640X480) • Frame rate: up to 30 fps • File format: AVI • Record: At least 7 events including 12-second pre-event record and 8-second post-event record
	Display	<ul style="list-style-type: none"> • Quad live view mode supported • Single front, side, rear view mode supported • PIP/POP display mode supported • Temperature information display • Driving direction information display • 2X Zoom in function supported at Quad playback mode
	PC decode software	<ul style="list-style-type: none"> • Fast search mode supported at playback mode

System Block Diagram



Application Scenario



Other applications that AL37204 could support

- Video surveillance Multiplexer
- Network Video Server
- Surveillance DVR
- ATM machine surveillance
- Home surveillance
- Video monitoring for video broadcasting
- Multiple channel IP camera
- Car rear vision system
- High end TV box with channel preview
- Parking aid system