

POWER FOR SYSTEM

The Power circuits is consists of two major sections for system , DC-DC section and LDO section.

1)DC-DC section

The section is made up of

- MP4462

The MP4462 is a high frequency step-down switching regulator with an integrated internal high-side high voltage power MOSFET. It provides 3.5A output with current mode control for fast loop response and easy compensation by switching at 4MHz.

It provides the main circuits of system whit a strong power. And it can be turn on/off by MCU .

2)LDO section

The section is made up of

- LM2954

The UTC LM2954 is a monolithic voltage regulator with low dropout voltage, and low quiescent current. It will work for MCU power and can't turn off.

MCU Circuits

The section is made up of

- STM8S207

The STM8S207 automotive 8-bit microcontrollers covered 128Kbytes of non volatile memory and integrated true data EEPROM.

It can control DVD IC , TFT driver IC, ASP, BT model Tuner IC ,TOUCH Screen and so on

by software.

DVD Circuits

The section is made up of

- DVD decode IC
- Flash
- SDRAM

1) DVD decode IC

Vaddis 966-H is Zoran's ninth-generation of IC product for consumer DVD players, This device includes high level of integration to enable cost efficient solution for Car DVD .

It work to decoding DVD,CD,SD card and USB for this system. And provides a video output to TFT driver ic.

2) FLASH

Hynix NAND HY57V641620HG have 64Mx16 bit with spare 4Mx8 bit capacity. It work to store the software code of DVD decode IC.

3) SDRAM

The SST39VF640X devices are 4X16 respectively, CMOS Multi-Purpose Flsh P;US MANUFACTURED with SST'S prorrietary, high performance CMOS SuperFlash technology. It worked for DVD decode IC to store the data.

TFT DRIVER

The T107B is a highly integrated All in one Visual Processor that provides major cost saving solution for the portable applications. it can manage to digit video signal from analog video, and driver the TFT.

BT Module Board

The BT Module Board is consists of two major sections, Digital section and Analog/RF Section

1) Digital Section

The section is made up of:

- BC352
- Flash Memory

BC352

The BC352 integrated the Baseband/Radio and processor into a single chip it includes a 2.4Ghz BT radio, Baseband circuits and DSP Processor.

Flash Memory

The Flash stores the OS of the device and application code as well as the power-on configuration for the processor, the wireless radio.

2) 16 MHz Crystal

The 16 MHz crystal provide the core clock for the BC352. This crystal is connected to the BC352, which then form an oscillator internally.

3) Analog/RF Section

The RF Front End Section is consists of:

- DBF81F106 - 2.4GHz Band Pass Filter (BPF)
- Antenna -2.4G BT Antenna.

DBF81F106 - 2.4GHz Band Pass Filter (BPF)

The input and output of the 2.4GHz balun is directed to a band pas filter between the BC352 and the 2.4G BT Antenna. This filter is included to reduce spurious emissions

from the BC352 or wireless interference.

- Antenna -2.4G BT Antenna.

Antenna transform the signal on the transmission transform into the electromagnetic waves in unbounded medium (usually free),and the opposite transformation.