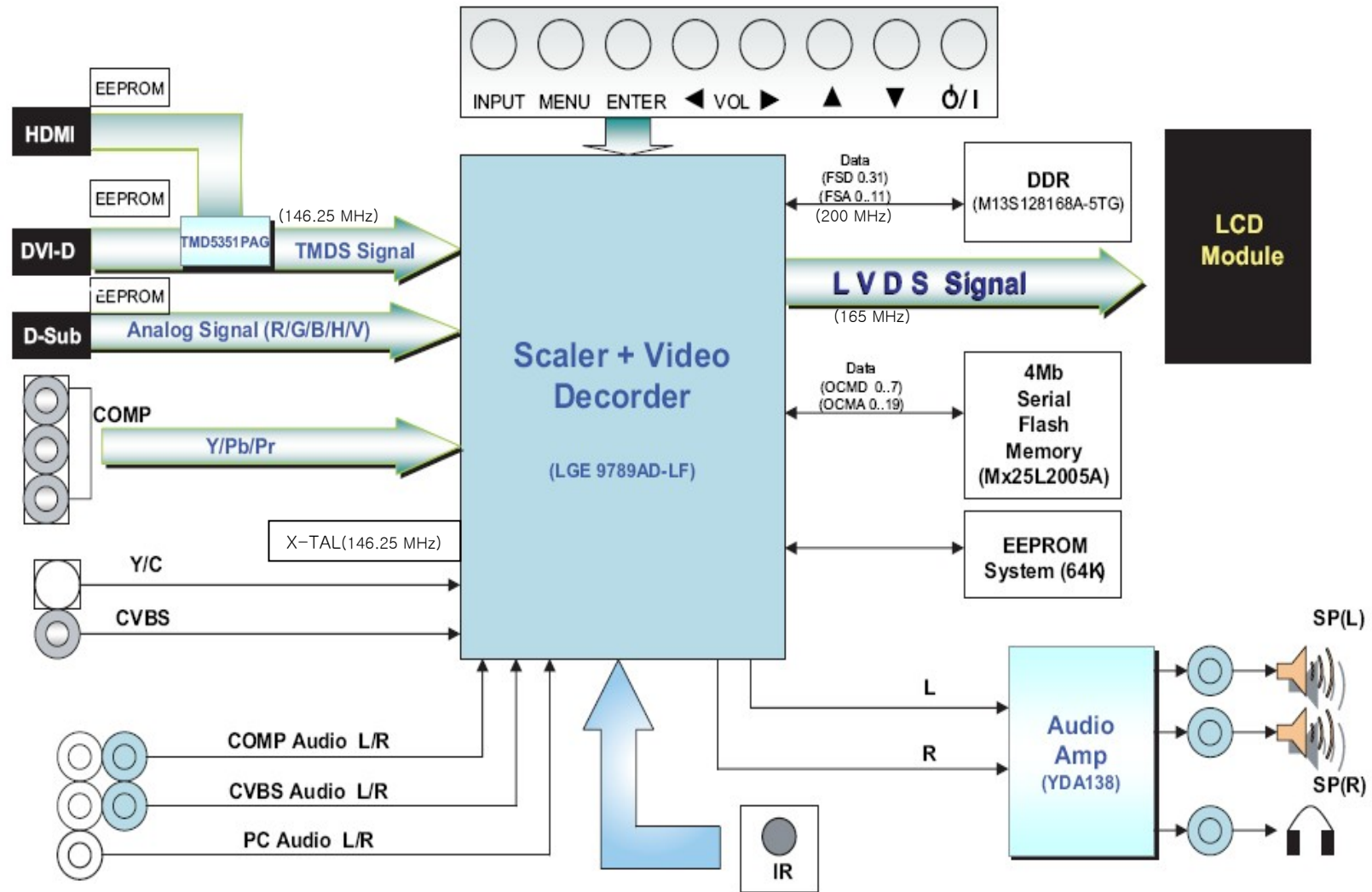


APPENDIX D
: BLOCK DIAGRAM

BLOCK DIAGRAM



Description of Block Diagram

1. Power Supply Block (Lips)

This Block Generates DC Voltage (5V,15V) to main Control system from AC Power (100-240V, 50-60 Hz, 1.0A)

2. DC/DC Converter Block

DC/DC Converter convert the input 5V,15V to proper 1.8V, 2.5V, 3.3V, 5V,10.5V for main control system.

For shooting heat trouble, we use the DC/DC converting IC207.

3. Scalar + Video/Audio decoder (Scaler IC, LGE9789AD-LF)

It is composed of LGE9789AD-LF.

It includes AD Converter, LVDS/TMDS Transmitter, Micom, and Audio processor.

1) Video Signal - DVBS/S-Video/Component/RGB/DVI/HDMI

This Block Selects input Video signals (like DVBS, Y/C) and output RGB signal.

On decoding, We can control signal like Contrast, Brightness, Sharpness, Color, tint signals including Adaptive Comb Filter.

2) Audio Signal

This Block analyzes audio input signals through A/V jack and PC audio and Tuner IF.

The analyzed signals transmitted to audio amplifier (YDA138)

On decoding, We can control signal like Bass, treble.

4. Flash Memory (MX25L4005A)

This is composed of MX25L4005A

This store the source data of micom.

5. Audio Amplifier (YDA138)

This block is composed of YDA138 and peripheral device.

The function of the audio amplifier is that to amplify audio L/R signal transmitted from audio decoder.

The audio signal is amplified according to pre-defined DC volume control curve.

Also, headphone amplifier is included at this IC.