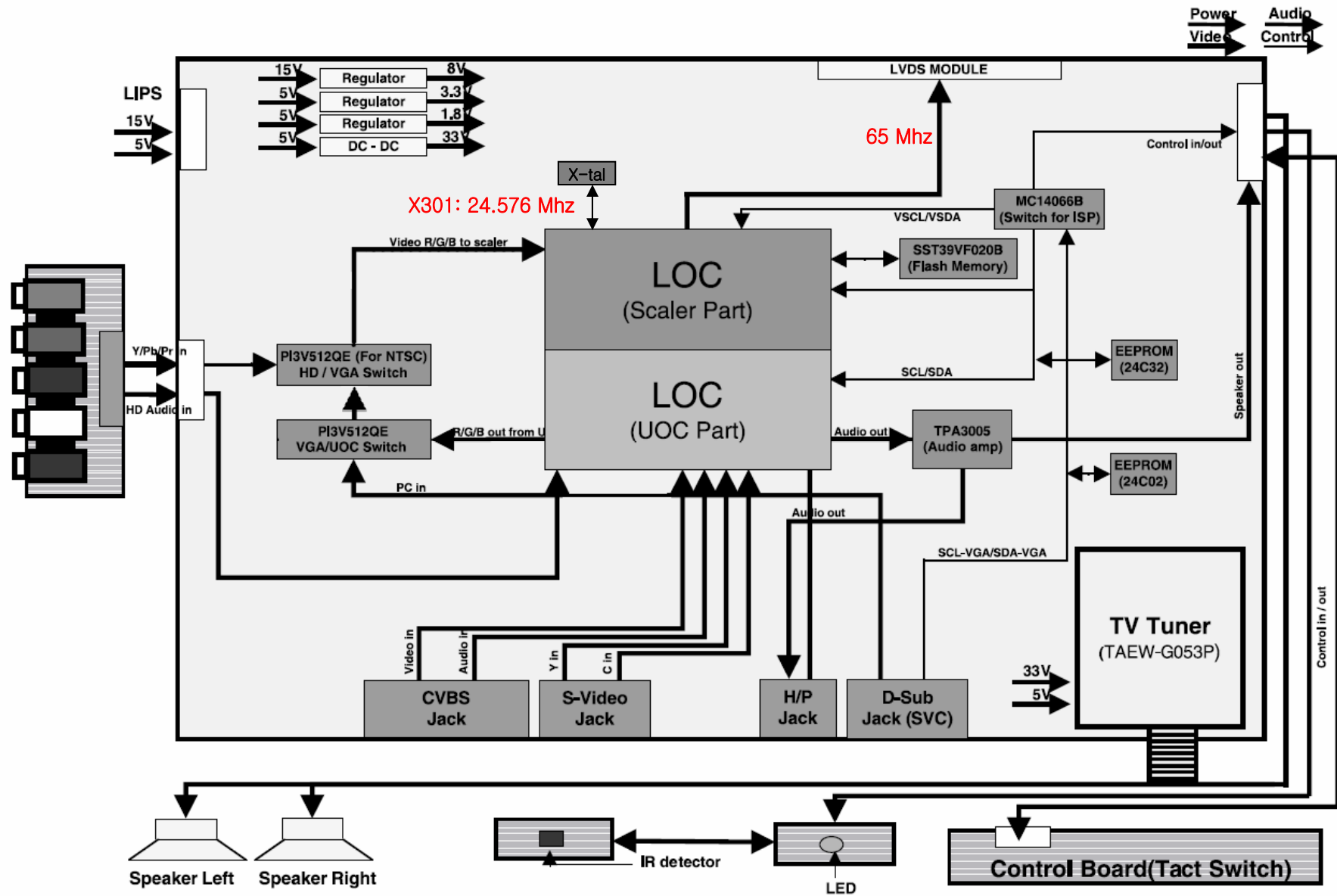


APPENDIX D
: BLOCK DIAGRAM

Block diagram(회로)



DESCRIPTION OF BLOCK DIAGRAM

Power Supply Block (LIPS)

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

Also it has the inverter function that converts input voltage to AC Rms value for the LCD lamp.

DC/DC Converter block

DC/DC Converter convert the input 5V,15V to proper 3.3V, 5V, 8V, 12V for Main control system.

For shooting heat trouble, we use the DC/DC converting IC

Audio Amplifier

This block is composed of TPA3005D2 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.

Switch IC (PI3V512QE)

It is composed of PI3V512QE.

This IC selects between D-sub RGB signal and LOC1 RGB signal, and it transmits the selected signal to video signal processor.

TUNER

Micom controls this through IIC Line.

TUNER makes IF and transmits IF signal to LOC1.

Audio / Video / IF Decoder / Scaler

This block is composed of LOC1 and peripheral devices.

1) Video Decoder

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

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

2) Audio Decoder

This block analyzes audio input signal through A/V Jack and PC audio and Tuner IF.

The analyzed signals transmitted to audio amplifier

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

3) IF Decoder

This block can change IF signal to audio and video signal that transmitted to Video/audio decoder.

4) Scaler

This IC includes A/D Converter and LVDS Transmitter

This IC is directly Inputted Analog Signal and transmits it to LCD Module

5) Micom

This block controls each IC through IIC communication line.
