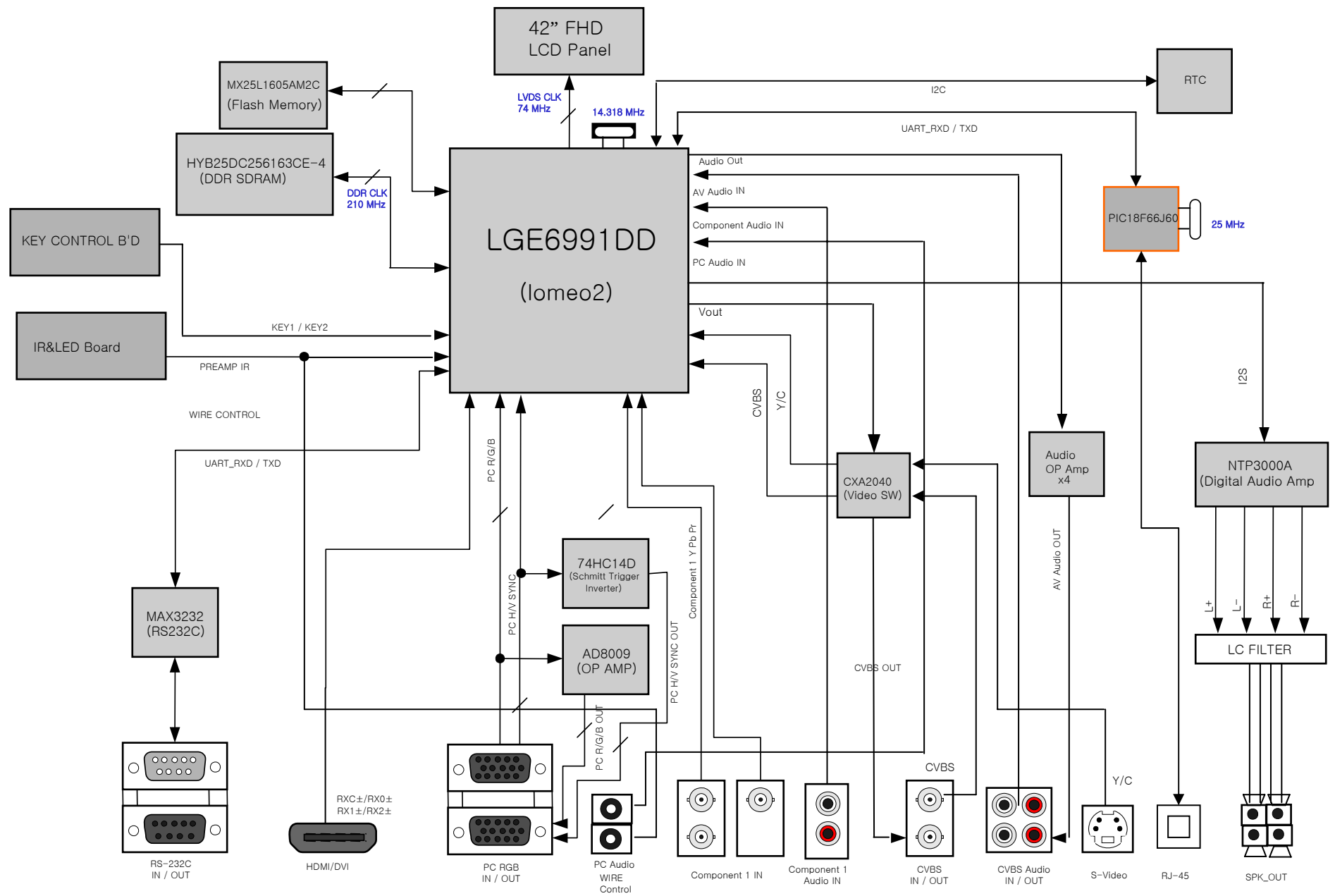


APPENDIX D
: BLOCK DIAGRAM

M4224C Block Diagram



Description of Block Diagram

1. AV INPUT SELECTION CIRCUIT

- This section is composed of Video Switching IC(CXA2040) and peripheral devices.
Video switching IC selects CVBS Video and S-Video and signal is sent to the scaler IC
- CVBS output signal also is sent by CXA2040 after amplifying 6dB for input signal.

2. COMPONENT INPUT

- Component input signal is connected from input jack to scaler directly.

3. RGB INPUT OUTPUT CIRCUIT

- This section is composed of RGB Input Output Jack, Schmitt trigger inverter IC, OP-AMPs, and peripheral devices.
- RGB input signal path is connected from input jack to scaler directly.
- RGB output signal is made by OP-Amps ICs. And this sends output signal to RGB output jack.

4. HDMI/DVI INPUT CIRCUIT

- TMDS input signal is connected from input jack to scaler directly.

5. RS-232C INPUT OUTPUT CIRCUIT

- This section is composed of RS-232C IC(MAX3232), and peripheral devices.
Computer / Controller and scaler(Micom) is connected by RS-232C IC to match signal level.

6. VIDEO SIGNAL PROCESSOR

- This section is composed of LGE6991DD and peripheral devices.
- This IC includes Micom block and Memory interface.
- This IC includes A/D Converter, PLL Circuit, Video decoder and De-interlacer.
- This IC includes TMDS Receiver and LVDS Transmitter.
- This IC also includes Sound Processor.

7. AUDIO AMPLIFIER

- This section is composed of NPT3000A and peripheral devices.
- Audio amplifier's function is amplification of sound signal received from sound processor.

8. LAN Control Block

- IC129 PIC18F66J60 compose LAN Control circuit by processing the input from JK113 RJ-45 with X102 25MHz