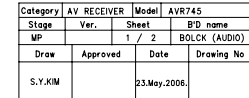


[illegible]

AVR745 BLOCK DIAGRAM of VIDEO PART

REVISION RECORD		1
NO.	Date	Contents

Inputs:

- S-VIDEO:** IP0D, DVD, VID1, VID2, VID3, VID4 IN/OUT
- COMPOSITE:** IP0D, DVD, VID1, VID2, VID3, VID4 IN/OUT
- COMPONENT:** COMP1 Y, COMP1 Pb, COMP1 Pr, COMP2 Y, COMP2 Pb, COMP2 Pr, COMP3 Y, COMP3 Pb, COMP3 Pr
- HDMI:** HDMI1, HDMI2

Processing Blocks:

- IC14 (NJM2296):** S-VIDEO input switch.
- IC13 (NJM2296):** COMPOSITE input switch.
- IC24 (ADV7401):** VIDEO DECODER (HD/SD).
- IC47 (FLI2300):** VIDEO ENHANCER (FAROUDJA).
- IC29 (ADV7320):** VIDEO ENCODER.
- IC54 (SiI9030):** HDMI TRANSCEIVER.

Outputs:

- COMPOSITE:** TSH95 (IC23), TSH95 (IC31), TSH95 (IC35), TSH95 (IC36), TSH95 (IC37)
- S-VIDEO:** TSH95 (IC23), TSH95 (IC31), TSH95 (IC35), TSH95 (IC36), TSH95 (IC37)
- COMPONENT:** Y, Pb, Pr (via RELAYS)
- HDMI:** HDMI1

Other Components:

- IC16 (NJM2296):** S-VIDEO output switch.
- IC17 (MM1503):** S-VIDEO output switch.
- IC18 (MM1503):** S-VIDEO output switch.
- IC19 (MM1503):** S-VIDEO output switch.
- IC20 (MM1503):** S-VIDEO output switch.
- IC21 (MM1503):** S-VIDEO output switch.
- IC22 (MM1503):** S-VIDEO output switch.
- IC23 (TSH95):** S-VIDEO output switch.
- IC24 (ADV7401):** VIDEO DECODER (HD/SD).
- IC25 (MM1503):** S-VIDEO output switch.
- IC26 (MM1503):** S-VIDEO output switch.
- IC27 (LC74763):** OSD.
- IC28 (SD: ITU-656):** SD/HD: YCbCr 4:2:2.
- IC29 (ADV7320):** VIDEO ENCODER.
- IC30 (SD: ITU-656):** SD/HD: YCbCr 4:2:2.
- IC31 (TSH95):** S-VIDEO output switch.
- IC32 (MIXER):** MIXER.
- IC33 (MM1503):** S-VIDEO output switch.
- IC34 (MM1503):** S-VIDEO output switch.
- IC35 (MM1503):** S-VIDEO output switch.
- IC36 (MM1503):** S-VIDEO output switch.
- IC37 (MM1503):** S-VIDEO output switch.
- IC38 (NJM2586):** COMPONENT input switch.
- IC39 (ADA4412):** ANTI ALIASING FILTER.
- IC40 (ADA4410):** ANTI ALIASING FILTER.
- IC41 (SDRAM):** SDRAM.
- IC42 (Y103):** 13.5MHz.
- IC43 (Y105):** 27MHz.
- IC44 (IC55):** 28.322MHz.
- IC45 (SiI9031):** HDMI RECEIVER 2CH.
- IC46 (CAT24C208J):** EEPROM.
- IC47 (FLI2300):** VIDEO ENHANCER (FAROUDJA).
- IC48 (SDRAM):** SDRAM.
- IC49 (Y103):** 13.5MHz.
- IC50 (IC50,51,53):** SN74ALVC244PW.
- IC51 (IC67,68):** SN74LV2257APW.
- IC52 (2X1 MUX):** 2X1 MUX.
- IC53 (IC54):** SiI9030.
- IC54 (SiI9030):** HDMI TRANSCEIVER.
- IC55 (RCLAMP0504M):** FILTER.
- IC56 (RCLAMP0504M):** FILTER.
- IC57 (ESD PROTECTION):** ESD PROTECTION.
- IC58 (ESD PROTECTION):** ESD PROTECTION.
- IC59 (ESD PROTECTION):** ESD PROTECTION.
- IC60 (ESD PROTECTION):** ESD PROTECTION.
- IC61 (ESD PROTECTION):** ESD PROTECTION.
- IC62 (ESD PROTECTION):** ESD PROTECTION.
- IC63 (ESD PROTECTION):** ESD PROTECTION.
- IC64 (ESD PROTECTION):** ESD PROTECTION.
- IC65 (ESD PROTECTION):** ESD PROTECTION.
- IC66 (ESD PROTECTION):** ESD PROTECTION.
- IC67 (ESD PROTECTION):** ESD PROTECTION.
- IC68 (ESD PROTECTION):** ESD PROTECTION.
- IC69 (ESD PROTECTION):** ESD PROTECTION.
- IC70 (ESD PROTECTION):** ESD PROTECTION.
- IC71 (ESD PROTECTION):** ESD PROTECTION.
- IC72 (ESD PROTECTION):** ESD PROTECTION.
- IC73 (ESD PROTECTION):** ESD PROTECTION.
- IC74 (ESD PROTECTION):** ESD PROTECTION.
- IC75 (ESD PROTECTION):** ESD PROTECTION.
- IC76 (ESD PROTECTION):** ESD PROTECTION.
- IC77 (ESD PROTECTION):** ESD PROTECTION.
- IC78 (ESD PROTECTION):** ESD PROTECTION.
- IC79 (ESD PROTECTION):** ESD PROTECTION.
- IC80 (ESD PROTECTION):** ESD PROTECTION.
- IC81 (ESD PROTECTION):** ESD PROTECTION.
- IC82 (ESD PROTECTION):** ESD PROTECTION.
- IC83 (ESD PROTECTION):** ESD PROTECTION.
- IC84 (ESD PROTECTION):** ESD PROTECTION.
- IC85 (ESD PROTECTION):** ESD PROTECTION.
- IC86 (ESD PROTECTION):** ESD PROTECTION.
- IC87 (ESD PROTECTION):** ESD PROTECTION.
- IC88 (ESD PROTECTION):** ESD PROTECTION.
- IC89 (ESD PROTECTION):** ESD PROTECTION.
- IC90 (ESD PROTECTION):** ESD PROTECTION.
- IC91 (ESD PROTECTION):** ESD PROTECTION.
- IC92 (ESD PROTECTION):** ESD PROTECTION.
- IC93 (ESD PROTECTION):** ESD PROTECTION.
- IC94 (ESD PROTECTION):** ESD PROTECTION.
- IC95 (ESD PROTECTION):** ESD PROTECTION.
- IC96 (ESD PROTECTION):** ESD PROTECTION.
- IC97 (ESD PROTECTION):** ESD PROTECTION.
- IC98 (ESD PROTECTION):** ESD PROTECTION.
- IC99 (ESD PROTECTION):** ESD PROTECTION.
- IC100 (ESD PROTECTION):** ESD PROTECTION.

Revision Record:

NO.	Date	Contents

Category: AV RECEIVER Model: AVR745

Sheet: 2 / 2 B'D name: BLOCK VIDEO

Draw: S.Y.KIM Approved: 23.May.2006 Drawing No:

AVR745 BLOCK DIAGRAM of VIDEO PART

REVISION RECORD		1
NO.	Date	Contents

Inputs:

- S-VIDEO:** IP0D, DVD, VID1, VID2, VID3, VID4 IN/OUT
- COMPOSITE:** IP0D, DVD, VID1, VID2, VID3, VID4 IN/OUT
- COMPONENT:** COMP1 Y, COMP1 Pb, COMP1 Pr, COMP2 Y, COMP2 Pb, COMP2 Pr, COMP3 Y, COMP3 Pb, COMP3 Pr
- HDMI:** HDMI1, HDMI2

Processing Blocks:

- VIDEO DECODER (IC24 ADV7401):** Receives composite and component signals, outputs Y, CV, SC, and SD signals.
- VIDEO ENHANCER (IC47 FLI2300):** Processes Y, CV, SC, and SD signals, outputs Y, Pb, Pr, and SD signals.
- VIDEO ENCODER (IC29 ADV7320):** Receives Y, Pb, Pr, and SD signals, outputs Y, Pb, Pr, and SD signals.
- VIDEO ENCODER (IC29 ADV7320):** Receives Y, Pb, Pr, and SD signals, outputs Y, Pb, Pr, and SD signals.

Outputs:

- COMPOSITE:** COMPOSITE, S-VIDEO
- COMPONENT:** Y, Pb, Pr
- HDMI:** HDMI1

Other Components:

- SDRAM (IC48):** 27MHz, Y105
- EEPROM (IC55):** 28.322MHz
- EEPROM (IC56):** 28.322MHz
- EEPROM (IC57):** 28.322MHz
- EEPROM (IC58):** 28.322MHz
- EEPROM (IC59):** 28.322MHz
- EEPROM (IC60):** 28.322MHz
- EEPROM (IC61):** 28.322MHz
- EEPROM (IC62):** 28.322MHz
- EEPROM (IC63):** 28.322MHz
- EEPROM (IC64):** 28.322MHz
- EEPROM (IC65):** 28.322MHz
- EEPROM (IC66):** 28.322MHz
- EEPROM (IC67):** 28.322MHz
- EEPROM (IC68):** 28.322MHz
- EEPROM (IC69):** 28.322MHz
- EEPROM (IC70):** 28.322MHz
- EEPROM (IC71):** 28.322MHz
- EEPROM (IC72):** 28.322MHz
- EEPROM (IC73):** 28.322MHz
- EEPROM (IC74):** 28.322MHz
- EEPROM (IC75):** 28.322MHz
- EEPROM (IC76):** 28.322MHz
- EEPROM (IC77):** 28.322MHz
- EEPROM (IC78):** 28.322MHz
- EEPROM (IC79):** 28.322MHz
- EEPROM (IC80):** 28.322MHz
- EEPROM (IC81):** 28.322MHz
- EEPROM (IC82):** 28.322MHz
- EEPROM (IC83):** 28.322MHz
- EEPROM (IC84):** 28.322MHz
- EEPROM (IC85):** 28.322MHz
- EEPROM (IC86):** 28.322MHz
- EEPROM (IC87):** 28.322MHz
- EEPROM (IC88):** 28.322MHz
- EEPROM (IC89):** 28.322MHz
- EEPROM (IC90):** 28.322MHz
- EEPROM (IC91):** 28.322MHz
- EEPROM (IC92):** 28.322MHz
- EEPROM (IC93):** 28.322MHz
- EEPROM (IC94):** 28.322MHz
- EEPROM (IC95):** 28.322MHz
- EEPROM (IC96):** 28.322MHz
- EEPROM (IC97):** 28.322MHz
- EEPROM (IC98):** 28.322MHz
- EEPROM (IC99):** 28.322MHz
- EEPROM (IC100):** 28.322MHz

Category	AV RECEIVER	Model	AVR745
Sheet	Ver.	Sheet	8'D name
MP	2 / 2	2 / 2	BLOCK (VIDEO)
Draw	Approved	Date	Drawing No.
S.Y.KIM		23.May.2006	

AVR745 BLOCK DIAGRAM of VIDEO PART

REVISION RECORD		1
NO.	Date	Contents

Inputs:

- S-VIDEO:** IP0D, DVD, VID1, VID2, VID3, VID4 IN/OUT
- COMPOSITE:** IP0D, DVD, VID1, VID2, VID3, VID4 IN/OUT
- COMPONENT:** COMP1 Y, COMP1 Pb, COMP1 Pr, COMP2 Y, COMP2 Pb, COMP2 Pr, COMP3 Y, COMP3 Pb, COMP3 Pr
- HDMI:** HDMI1, HDMI2

Processing Blocks:

- VIDEO DECODER (IC24 ADV7401):** Receives composite and component signals, outputs Y, CV, SC, and SD signals.
- VIDEO ENHANCER (IC47 FLI2300):** Processes Y, CV, SC, and SD signals, outputs Y, Pb, Pr, and SD signals.
- VIDEO ENCODER (IC29 ADV7320):** Receives Y, Pb, Pr, and SD signals, outputs Y, Pb, Pr, and SD signals.
- VIDEO ENCODER (IC29 ADV7320):** Receives Y, Pb, Pr, and SD signals, outputs Y, Pb, Pr, and SD signals.

Outputs:

- COMPOSITE:** COMPOSITE, S-VIDEO
- COMPONENT:** Y, Pb, Pr
- HDMI:** HDMI1

Other Components:

- SDRAM (IC48):** 27MHz, Y105
- EEPROM (IC55):** 28.322MHz
- EEPROM (IC56):** 28.322MHz
- EEPROM (IC57):** 28.322MHz
- EEPROM (IC58):** 28.322MHz
- EEPROM (IC59):** 28.322MHz
- EEPROM (IC60):** 28.322MHz
- EEPROM (IC61):** 28.322MHz
- EEPROM (IC62):** 28.322MHz
- EEPROM (IC63):** 28.322MHz
- EEPROM (IC64):** 28.322MHz
- EEPROM (IC65):** 28.322MHz
- EEPROM (IC66):** 28.322MHz
- EEPROM (IC67):** 28.322MHz
- EEPROM (IC68):** 28.322MHz
- EEPROM (IC69):** 28.322MHz
- EEPROM (IC70):** 28.322MHz
- EEPROM (IC71):** 28.322MHz
- EEPROM (IC72):** 28.322MHz
- EEPROM (IC73):** 28.322MHz
- EEPROM (IC74):** 28.322MHz
- EEPROM (IC75):** 28.322MHz
- EEPROM (IC76):** 28.322MHz
- EEPROM (IC77):** 28.322MHz
- EEPROM (IC78):** 28.322MHz
- EEPROM (IC79):** 28.322MHz
- EEPROM (IC80):** 28.322MHz
- EEPROM (IC81):** 28.322MHz
- EEPROM (IC82):** 28.322MHz
- EEPROM (IC83):** 28.322MHz
- EEPROM (IC84):** 28.322MHz
- EEPROM (IC85):** 28.322MHz
- EEPROM (IC86):** 28.322MHz
- EEPROM (IC87):** 28.322MHz
- EEPROM (IC88):** 28.322MHz
- EEPROM (IC89):** 28.322MHz
- EEPROM (IC90):** 28.322MHz
- EEPROM (IC91):** 28.322MHz
- EEPROM (IC92):** 28.322MHz
- EEPROM (IC93):** 28.322MHz
- EEPROM (IC94):** 28.322MHz
- EEPROM (IC95):** 28.322MHz
- EEPROM (IC96):** 28.322MHz
- EEPROM (IC97):** 28.322MHz
- EEPROM (IC98):** 28.322MHz
- EEPROM (IC99):** 28.322MHz
- EEPROM (IC100):** 28.322MHz

Category	AV RECEIVER	Model	AVR745
Sheet	Ver.	Sheet	8'D name
MP	2 / 2	2 / 2	BLOCK (VIDEO)
Draw	Approved	Date	Drawing No.
S.Y.KIM		23.May.2006.	

