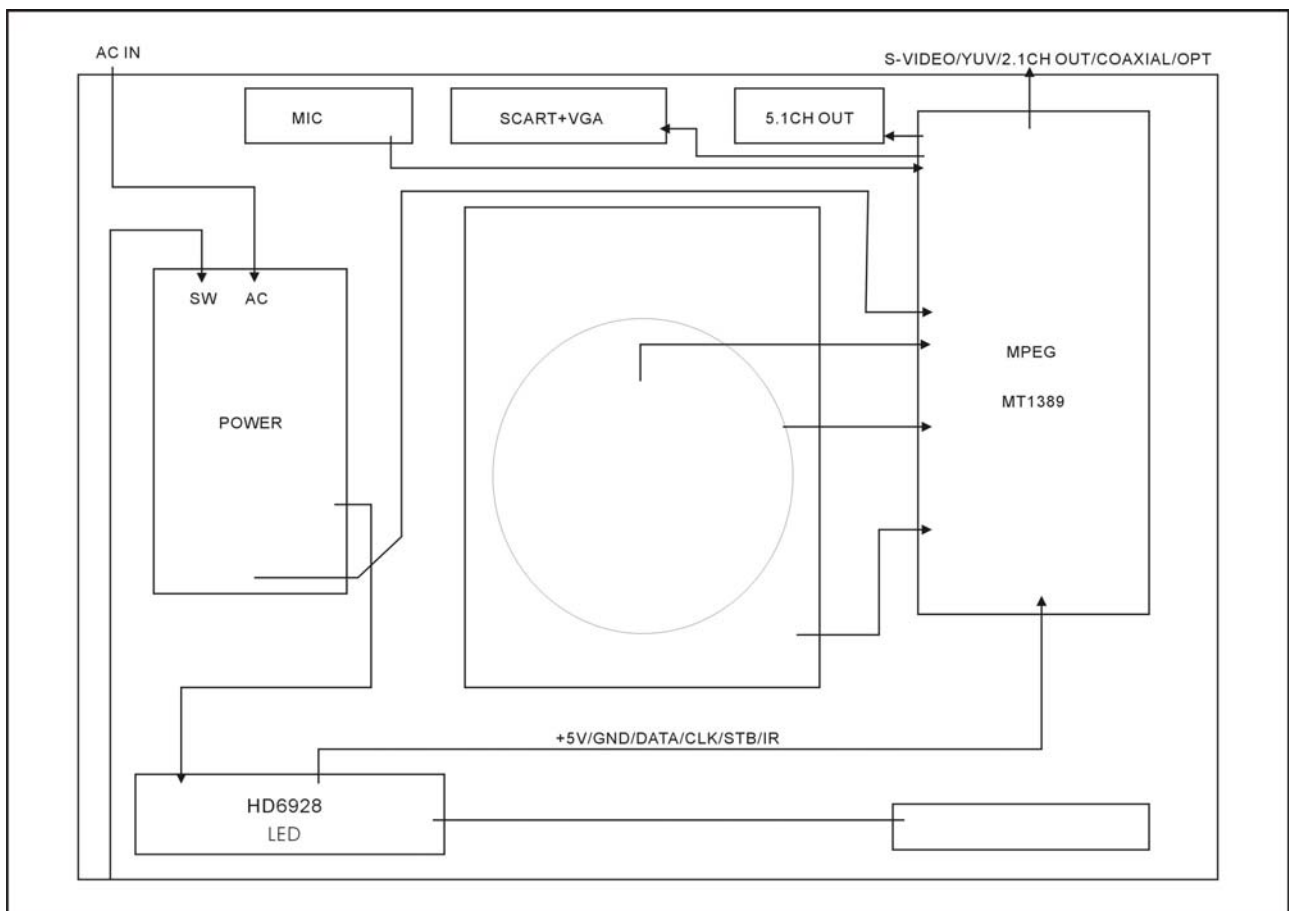


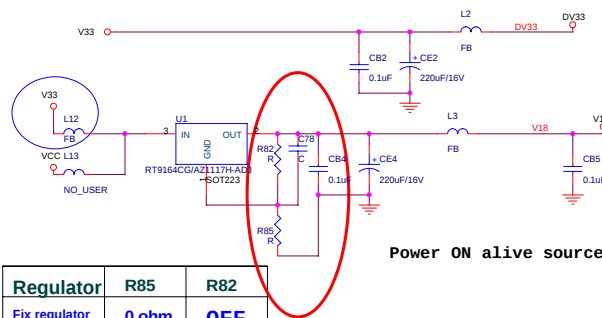
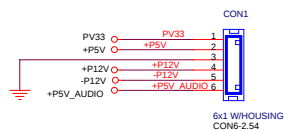


# MT1389E (LQFP256) DVD Demo Board for Sanyo Slim HD60 PUH

- 1 INDEX & POWER, RESET
- 2 RF, SERVO & MPEG - MT1389E
- 3 MEMORY - SDRAM, FLASH/EEPROM
- 4 VIDEO OUT
- 5 AUDIO DAC WMA8746&WMA8720 AND AUDIO OUT

| NAME     | TYPE             | DEVICE        |
|----------|------------------|---------------|
| VCC      | Digital 5V       | SUPPLY        |
| DV33     | Digital 3.3V     | MT1389E       |
| RFV33    | Servo 3.3V       | MT1389E       |
| LDO_AV33 | Laser Diode 3.3V |               |
| AVCC     | RF 5V            | PICKUP HEADER |
| V18      | Digital 1.8V     | MT1389E       |
| SD33     | Digital 3.3V     | SDRAM         |
| +12V     | Audio +12V       | OP AMP.       |
| -12V     | Audio -12V       | OP AMP.       |
| AVDD     | Audio 5V         | Audio DAC     |
| DVDD     | Audio 3V3        | Audio DAC     |

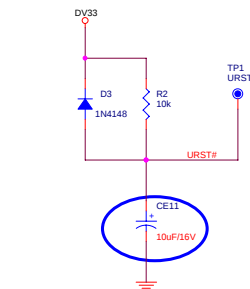
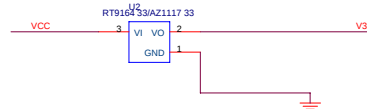
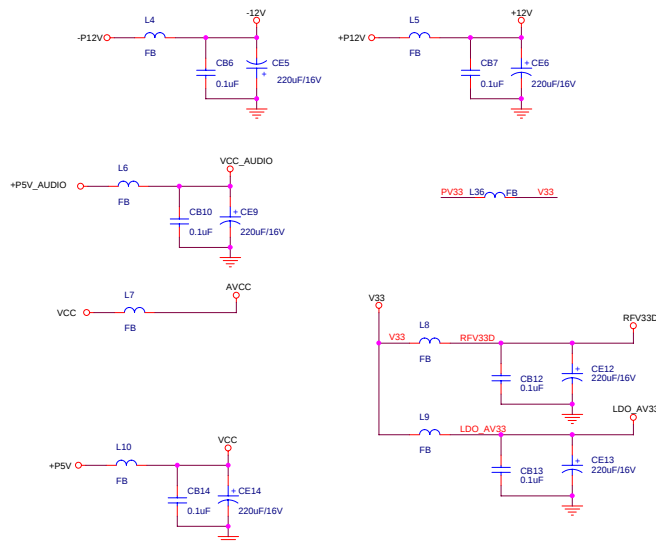
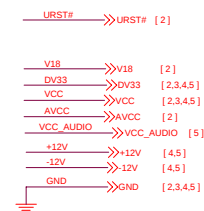
| Rev  | History                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P# | Date                                                               |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------------------------------------------------------|
| V1   | The original released.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    | 2003.6.15                                                          |
| V2   | Change CE11 from 10uF to 100uF<br>Change C3 from C to 220pF<br>Change C1 from 0.1uF to C<br>Change R10, R15 from 750k to 680k<br>Change R17, R19 from 300k to 150k<br>Add C74 220pF<br>Change R37 from 0 to R<br>Change R38 from 0 to R<br>Change C32 from 10uF to C<br>Change PIN 47 from LIMIT to ADIN<br>Add CE1 10uF<br>Change R23 from 1.5k to 1.8k<br>Remove 74H04<br>Change the LIMIT signal from PIN 46 to PIN136<br>Change R4, R5, R6, R8, R12 from 1k to R<br>Change the TRIMOUT pull-up power from 5V to 3V3<br>Add IC circuit<br>Change R57 from 0 to 10k<br>Add the IOW resistance output circuit<br>Change SPDIF output port<br>Add the Audio DAC power to reference filtering |    | 2003.7.17                                                          |
| V3   | Removed L12, L13, L14, L15, L16, L17 and change this power to RFV33<br>Change C1 from 100pF to 390pF<br>Add USB/download connector<br>change J1 and J4 connector direction<br>Removed L18 and change R9V33 to DV33<br>Change L23 from 89V33 to DV33A<br>Change MT1389 pin100 VSDA->VSTB and Pin101 VSTB->VSDA<br>Change R175->R                                                                                                                                                                                                                                                                                                                                                              |    | 2003.9.6                                                           |
| V4   | Change the video output circuit<br>Change R25 from 1K8 to 560<br>Change CE11 from 100uF to 10uF<br>Change C20 from C to 0.1uF (to increase luminance SNR)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    | 2003.9.18                                                          |
| V5   | Change V18 power source and removed R1402<br>Add two resistance at the PUH connector PIN 17 and PIN 18 (concurrent for KMR10)<br>Change power source for MT1389 PIN 65 (to improve digital audio output quality (Reduce SPDIF output jitter))<br>Change the Audio DAC power A_DVDD from 5V to 3.3V and R175->330<br>Change the power source and removed some excessent R                                                                                                                                                                                                                                                                                                                     |    | 2003.10.23<br>2003.10.23<br>2003.10.23<br>2003.10.23<br>2003.10.28 |
| V5.1 | VSDA Pull Up 18k Ohm<br>R9V33 circuit change add LPF for Servo PLVDD3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |    | 2003.12.5<br>2003.12.5                                             |
| V6   | Change the V18 Regulators from V18 to ADJ<br>Add some 104 for power of V33_DAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |    | 2003.12.25<br>2003.12.25                                           |

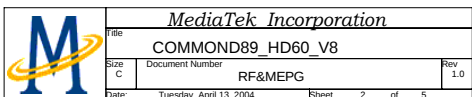


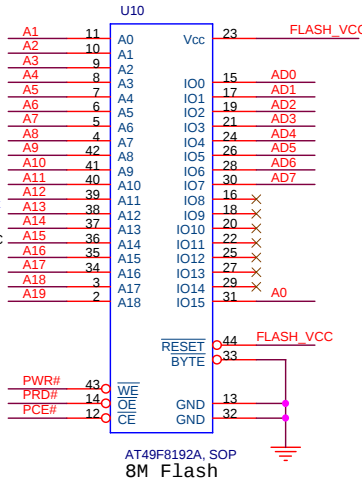
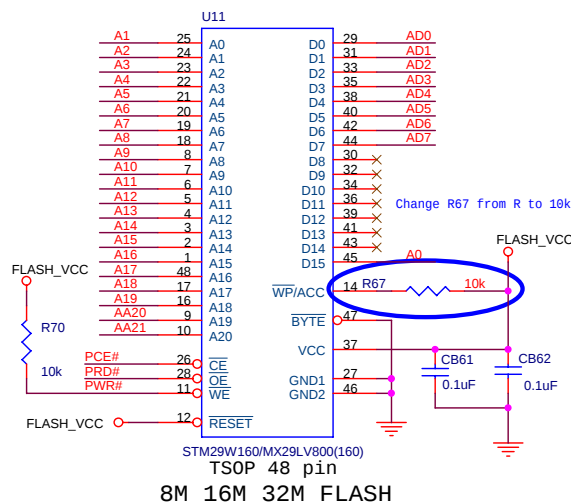
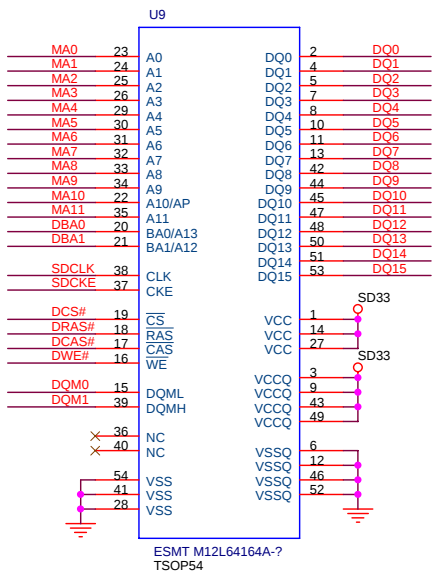
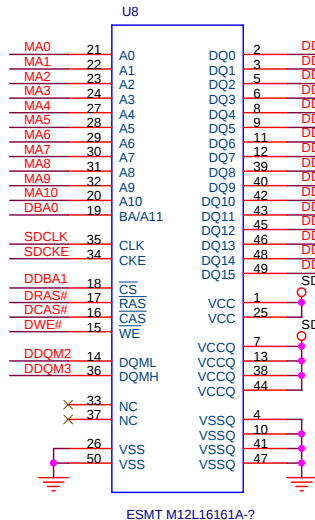
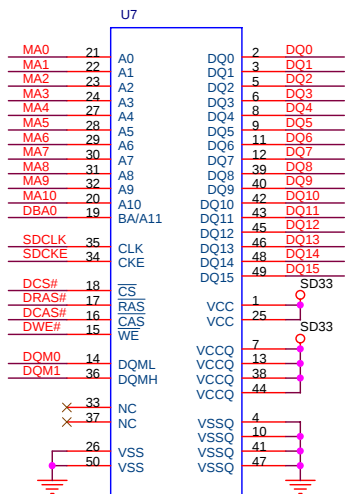
Power ON alive source

| Regulator     | R85    | R82    |
|---------------|--------|--------|
| Fix regulator | 0 ohm  | OFF    |
| Adj regulator | 300 1% | 680 1% |

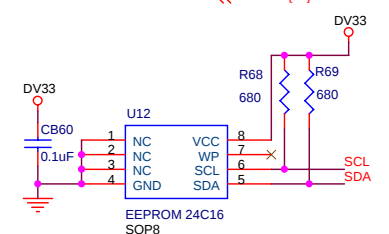
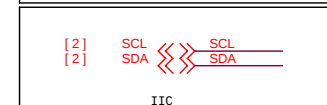
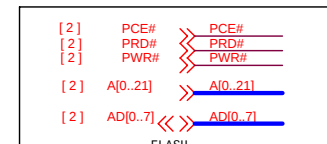
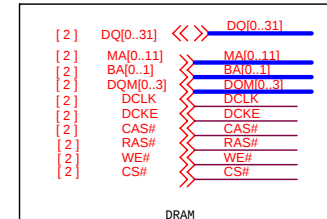
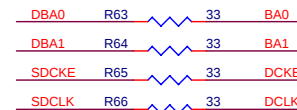
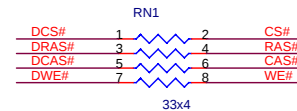
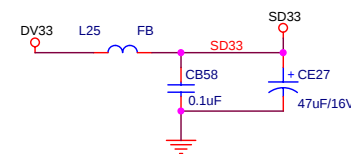
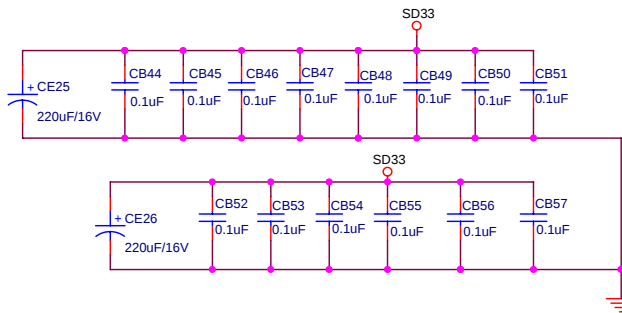
Note for Fix or Adj Regulator

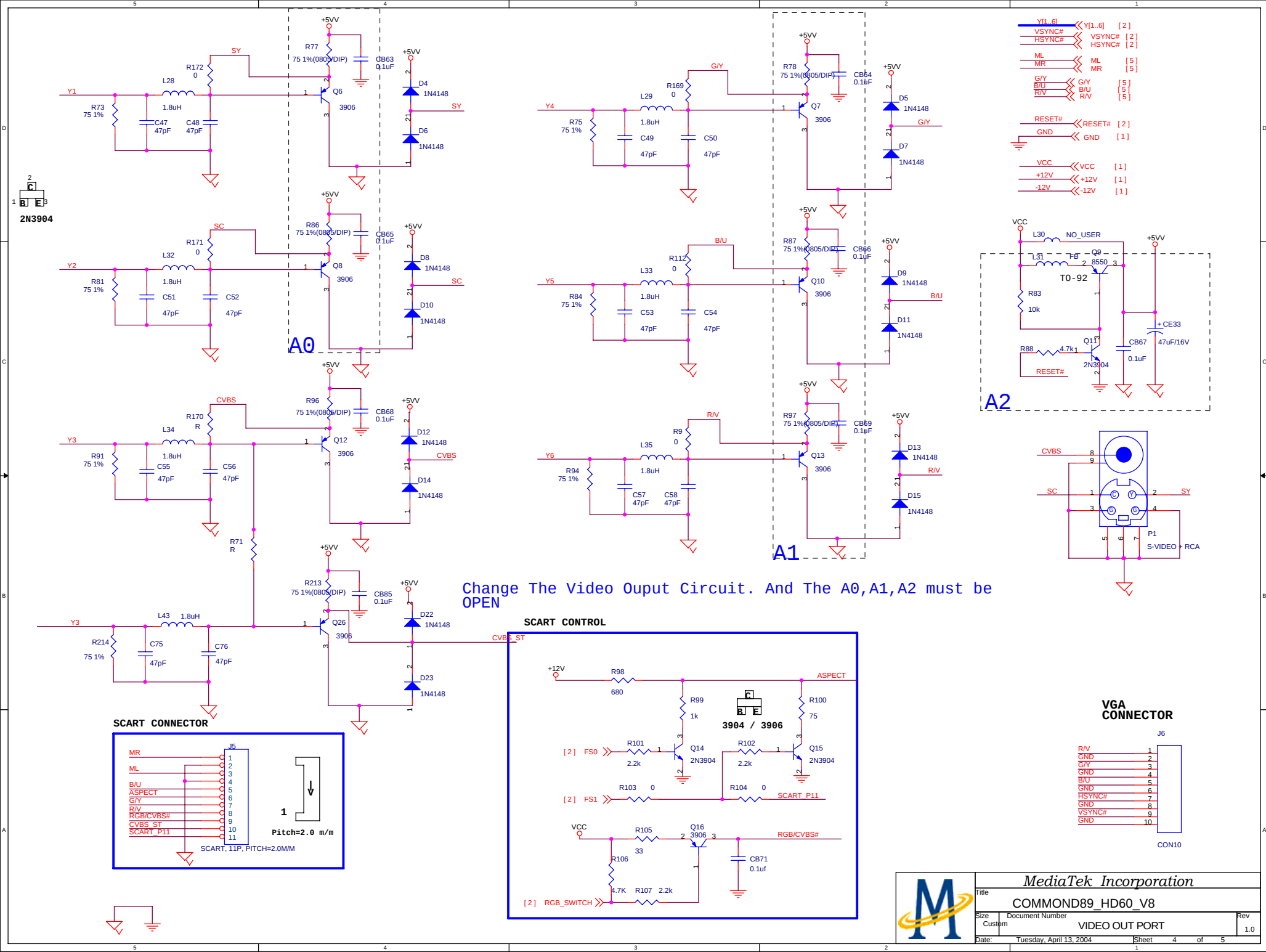




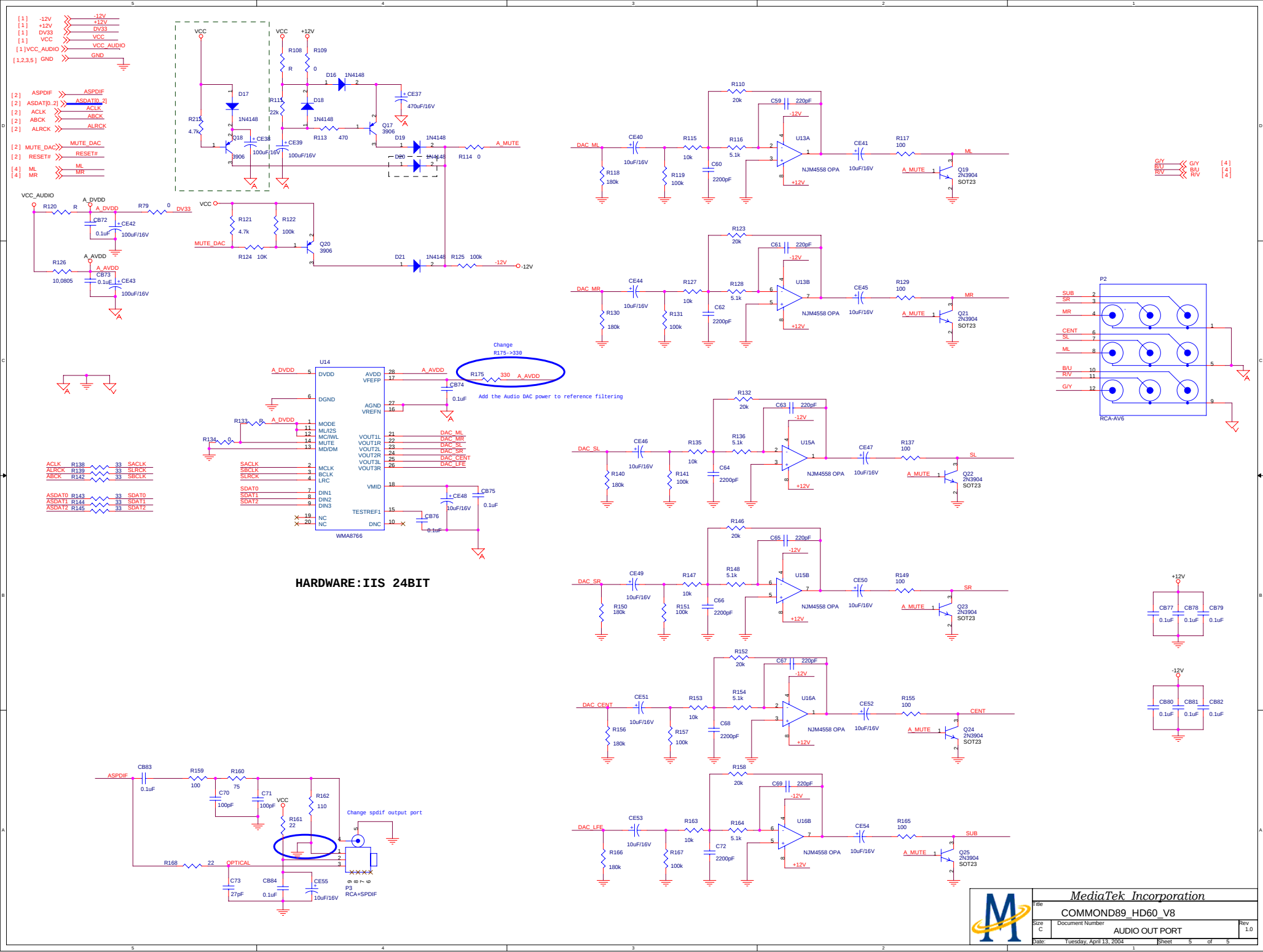


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NC:RN3.RN5.RN7.RN9.R215.R217.R219  
Normalmode:use RN3.RN5.RN7.RN9.R215.R217.R219  
NC:RN2.RN4.RN6.RN8.R216.R218.R220





|                        |                         |       |        |
|------------------------|-------------------------|-------|--------|
| MediaTek Incorporation |                         |       |        |
| Title                  | COMMOND89_HD60_V8       |       |        |
| Size                   | Document Number         | Rev   |        |
| Custom                 | VIDEO OUT PORT          | 1.0   |        |
| Date:                  | Tuesday, April 13, 2004 | Sheet | 4 of 5 |



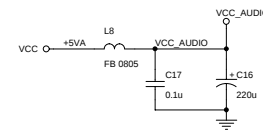
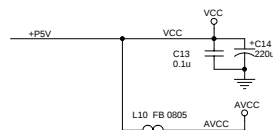
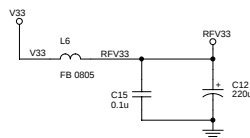
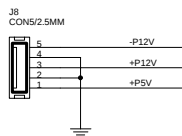
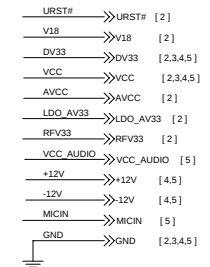
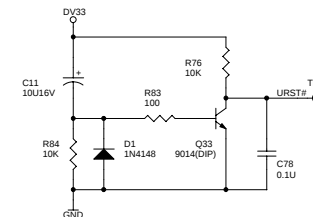
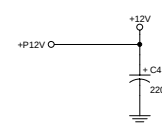
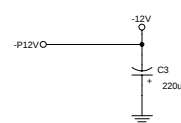
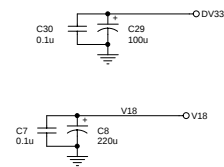
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| Date                   | Tuesday, April 13, 2004 | Sheet           | 5 of 5         |

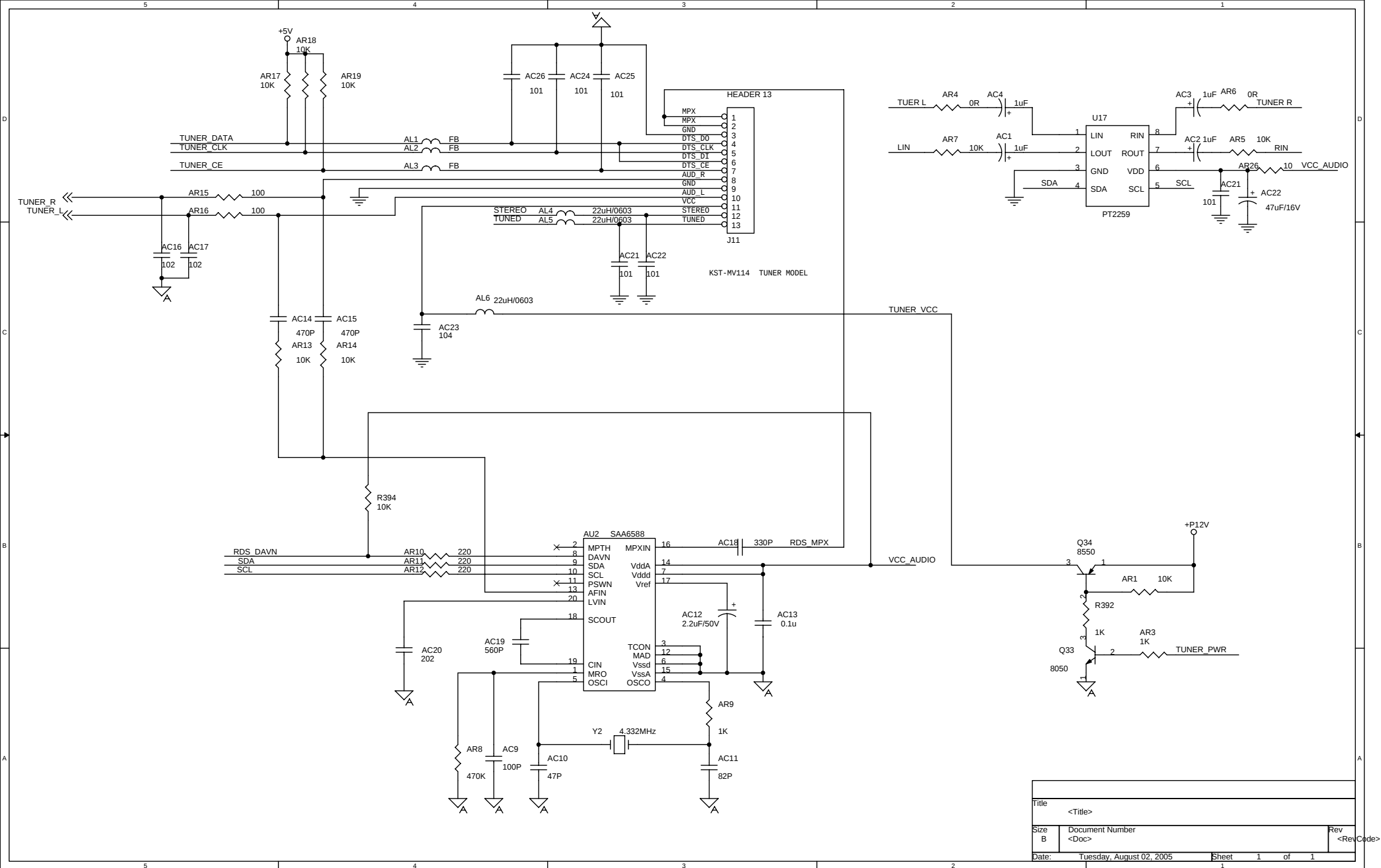
# MR89DM6-11.2

## MT1389DE DVD Demo Board for SANYO HD60 PUH

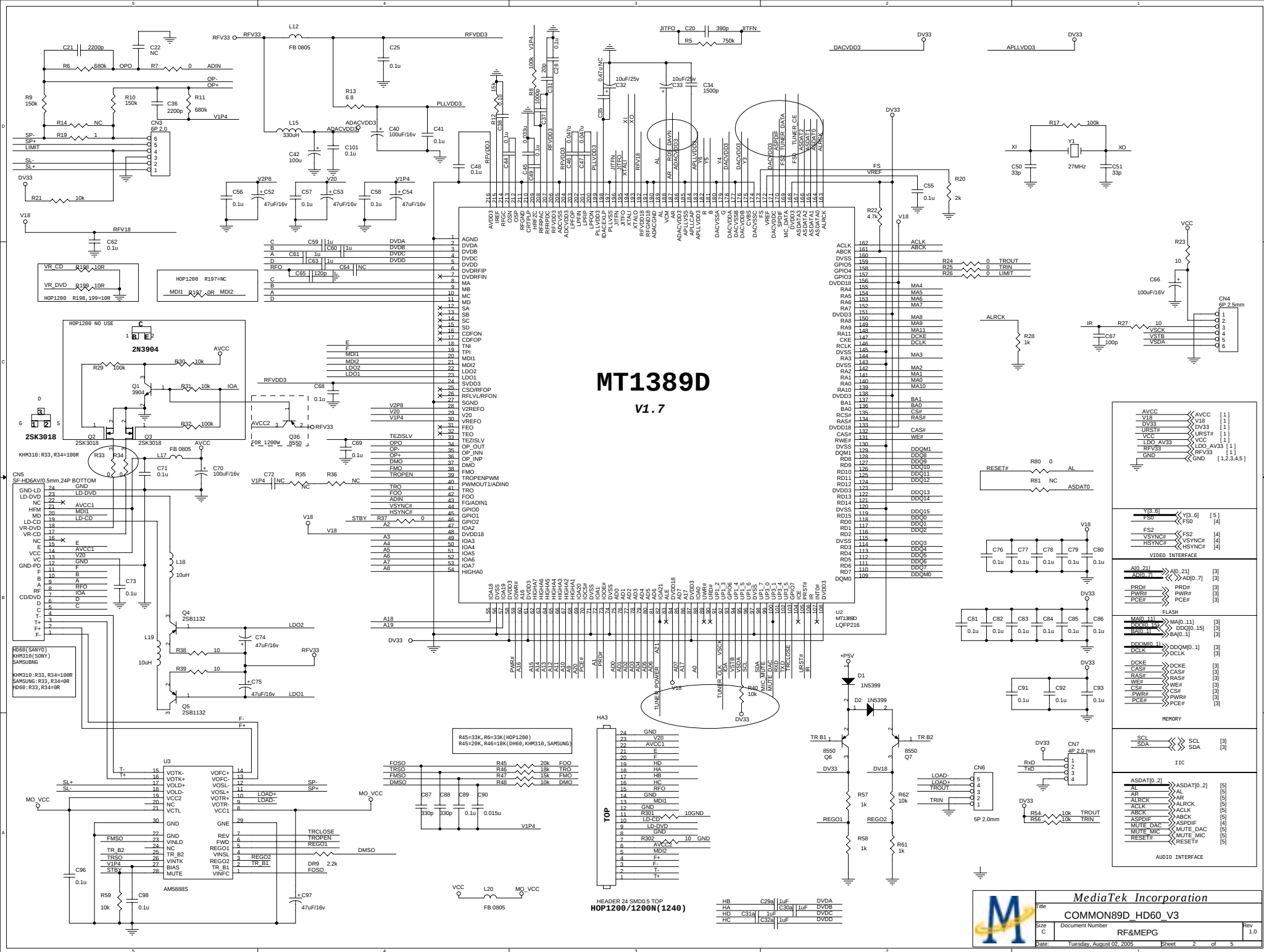
- 1 INDEX & POWER, RESET
- 2 RF / SERVO /MPEG - MT1389D
- 3 MEMORY - SDRAM, FLASH/EEPROM
- 4 VIDEO FILTER
- 5 AUDIO - CS4360, AUDIO FILTER

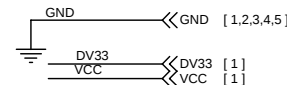
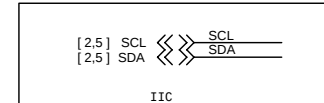
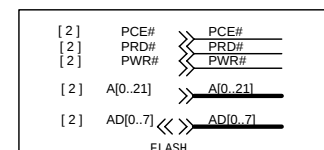
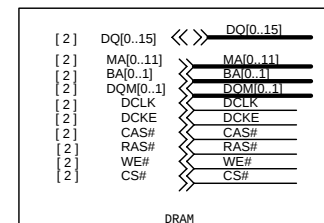
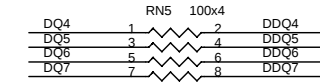
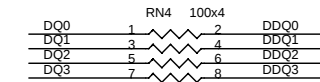
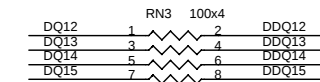
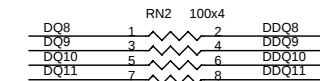
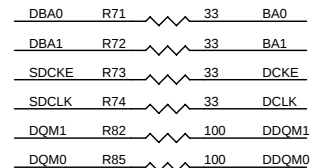
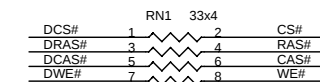
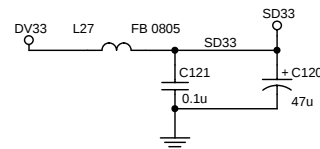
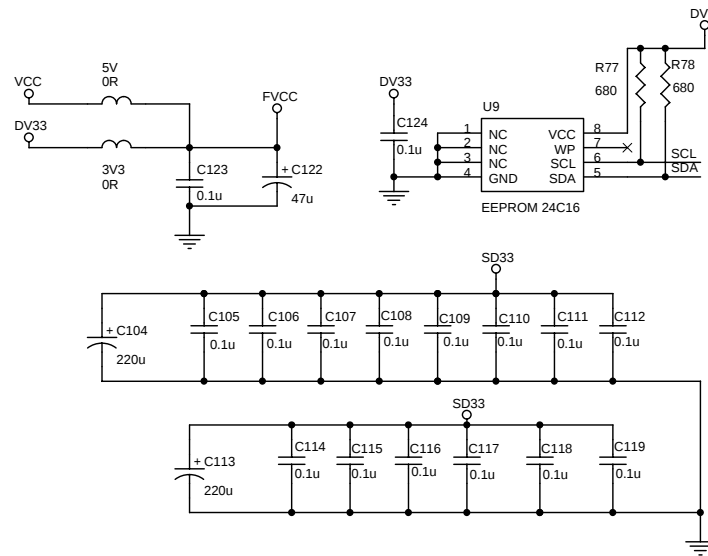
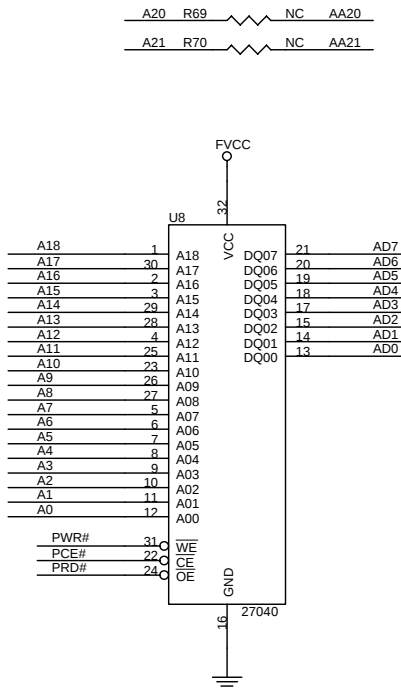
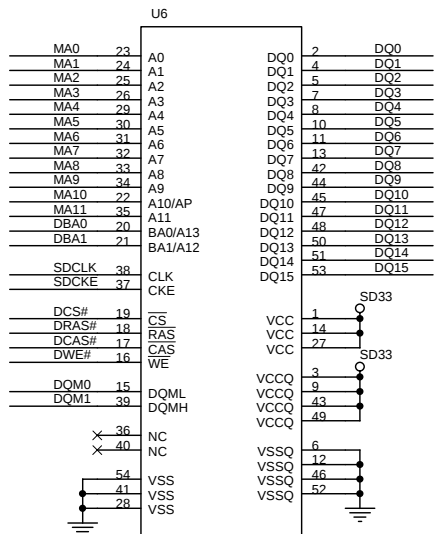
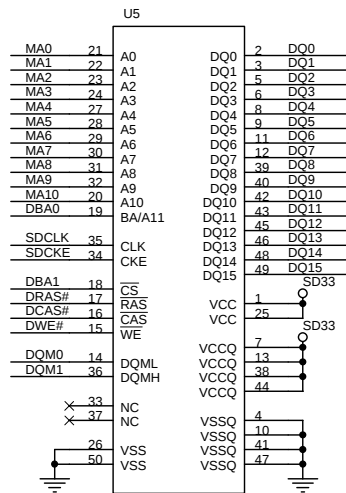
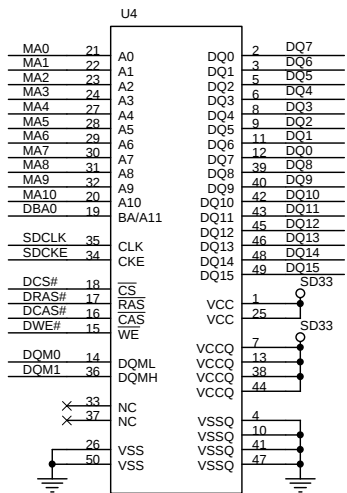
| NAME     | TYPE             | DEVICE        |
|----------|------------------|---------------|
| VCC      | Digital 5V       | SUPPLY        |
| DV33     | Digital 3.3V     | MT1389E       |
| RFV33    | Servo 3.3V       | MT1389E       |
| LDO_AV33 | Laser Diode 3.3V |               |
| AVCC     | RF 5V            | PICKUP HEADER |
| V18      | Digital 1.8V     | MT1389E       |
| SD33     | Digital 3.3V     | SDRAM         |
| +12V     | Audio +12V       | OP AMP.       |
| -12V     | Audio -12V       | OP AMP.       |
| AVDD     | Audio 5V         | Audio DAC     |
| DVDD     | Audio 5V         | Audio DAC     |





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| Title |                          |           | <Title> |
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| B     | <Doc>                    | <RevCode> |         |
| Date: | Tuesday, August 02, 2005 | Sheet     | 1 of 1  |



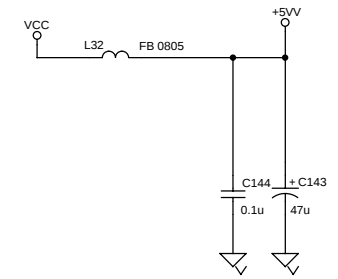
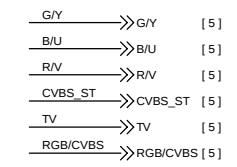
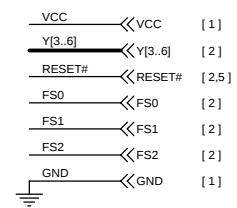
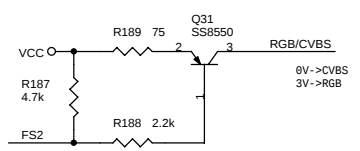
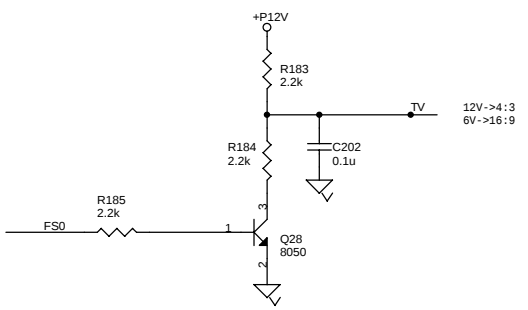
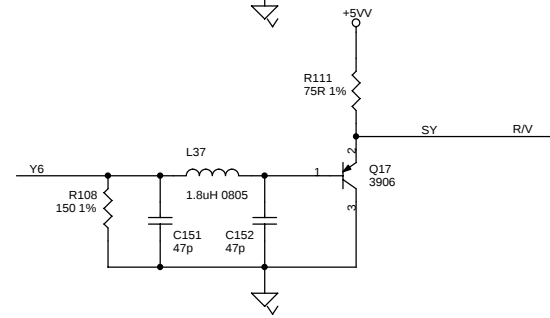
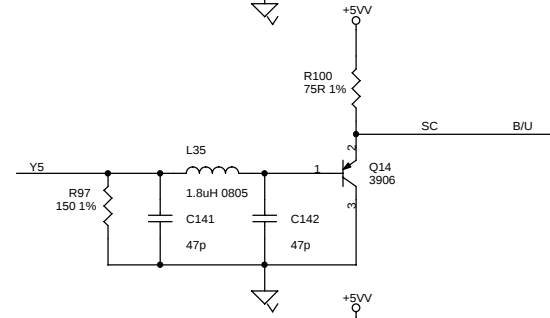
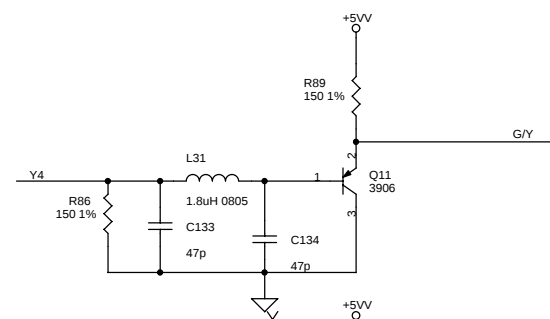
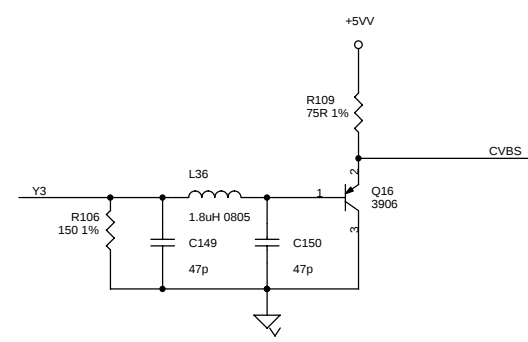


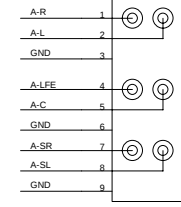
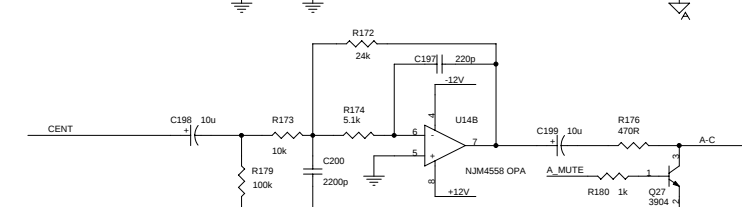
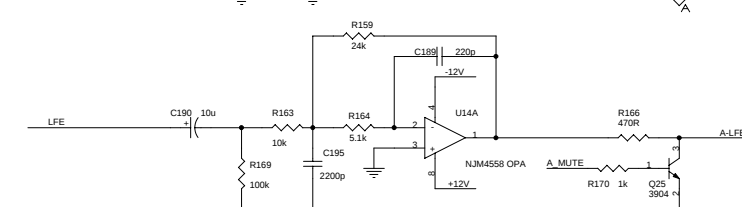
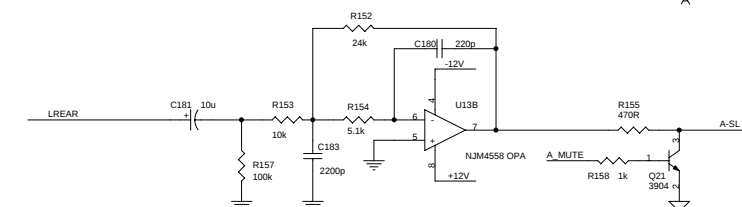
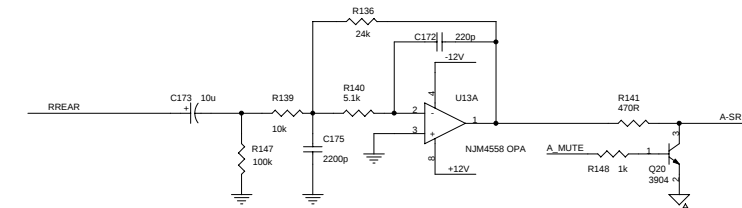
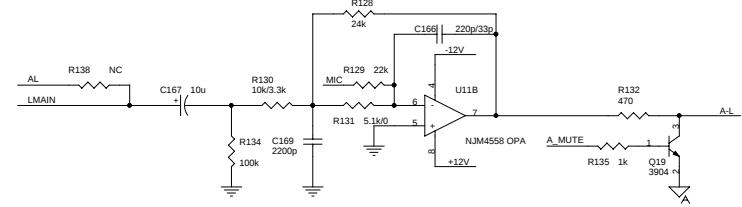
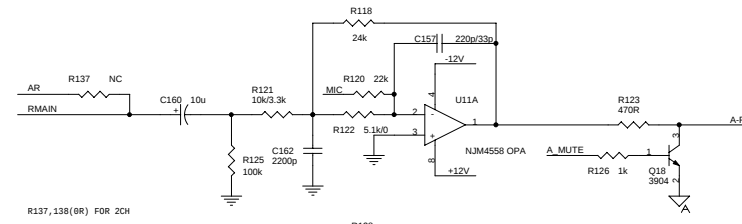
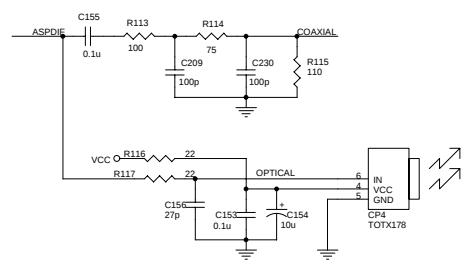
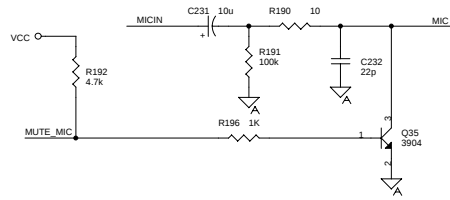
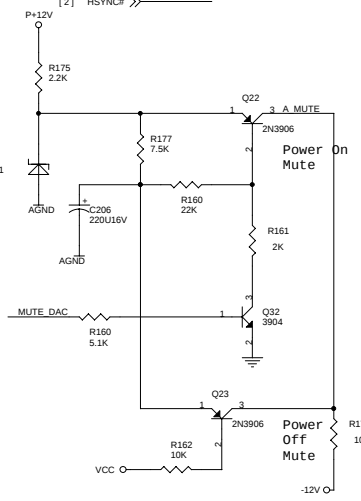
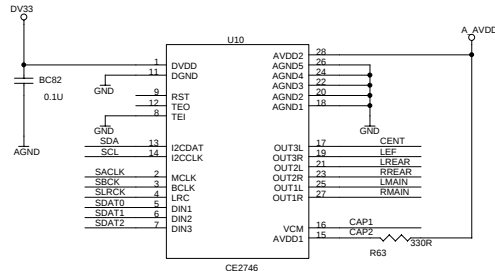
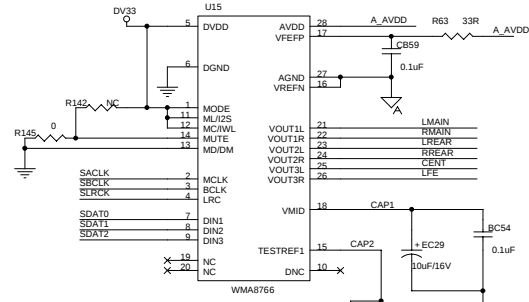
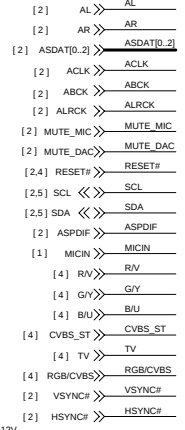
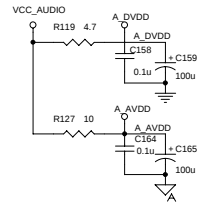
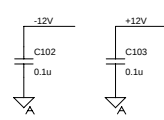
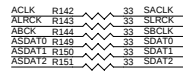
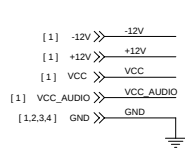
MediaTek Incorporation

COMMON89D\_HD60\_V3

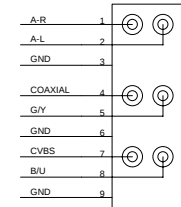
Size B Document Number SDRAM&FLASH Rev 1.0

Date: Tuesday, August 02, 2005 Sheet 3 of 5

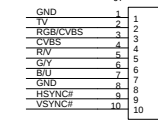
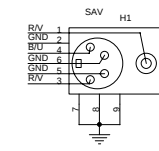




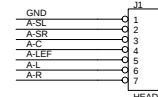
JACK5  
AVS-8.4-19



36  
AVS-8.4-19



HEADER 10



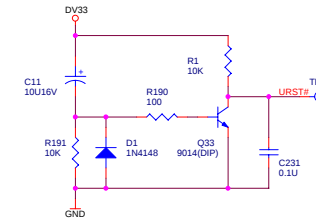
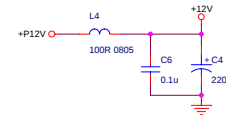
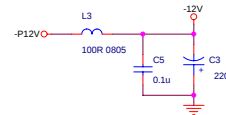
HEADER 7

# 1389EM6-11.1

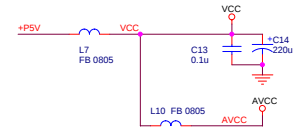
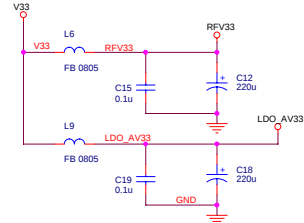
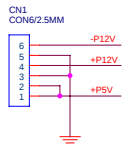
## MT1389E DVD Demo Board for SANYO HD60 PUH

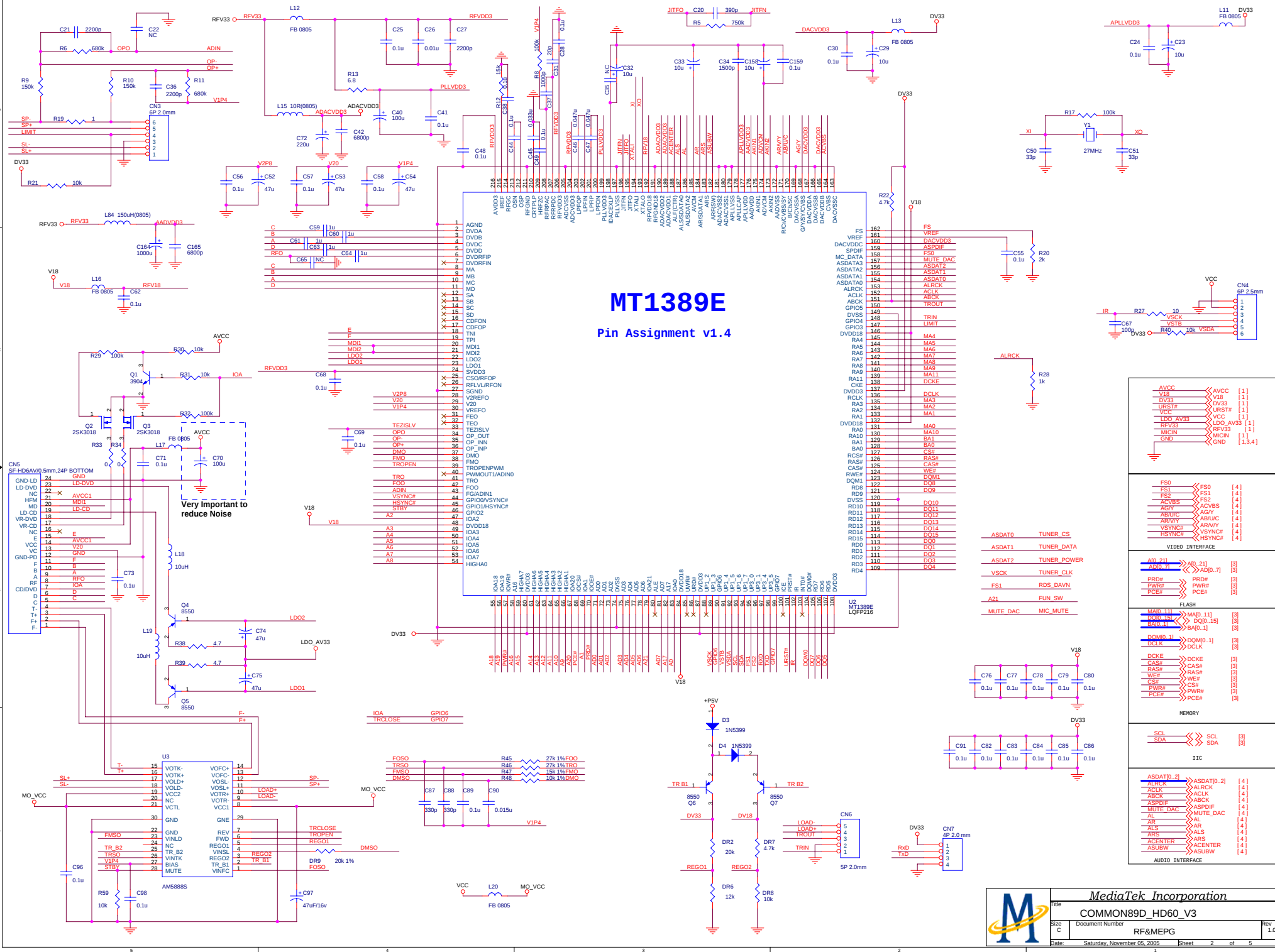
- 1 INDEX & POWER, RESET
- 2 RF / SERVO /MPEG - MT1389D
- 3 MEMORY - SDRAM, FLASH/EEPROM
- 4 VIDEO FILTER
- 5 AUDIO FILTER

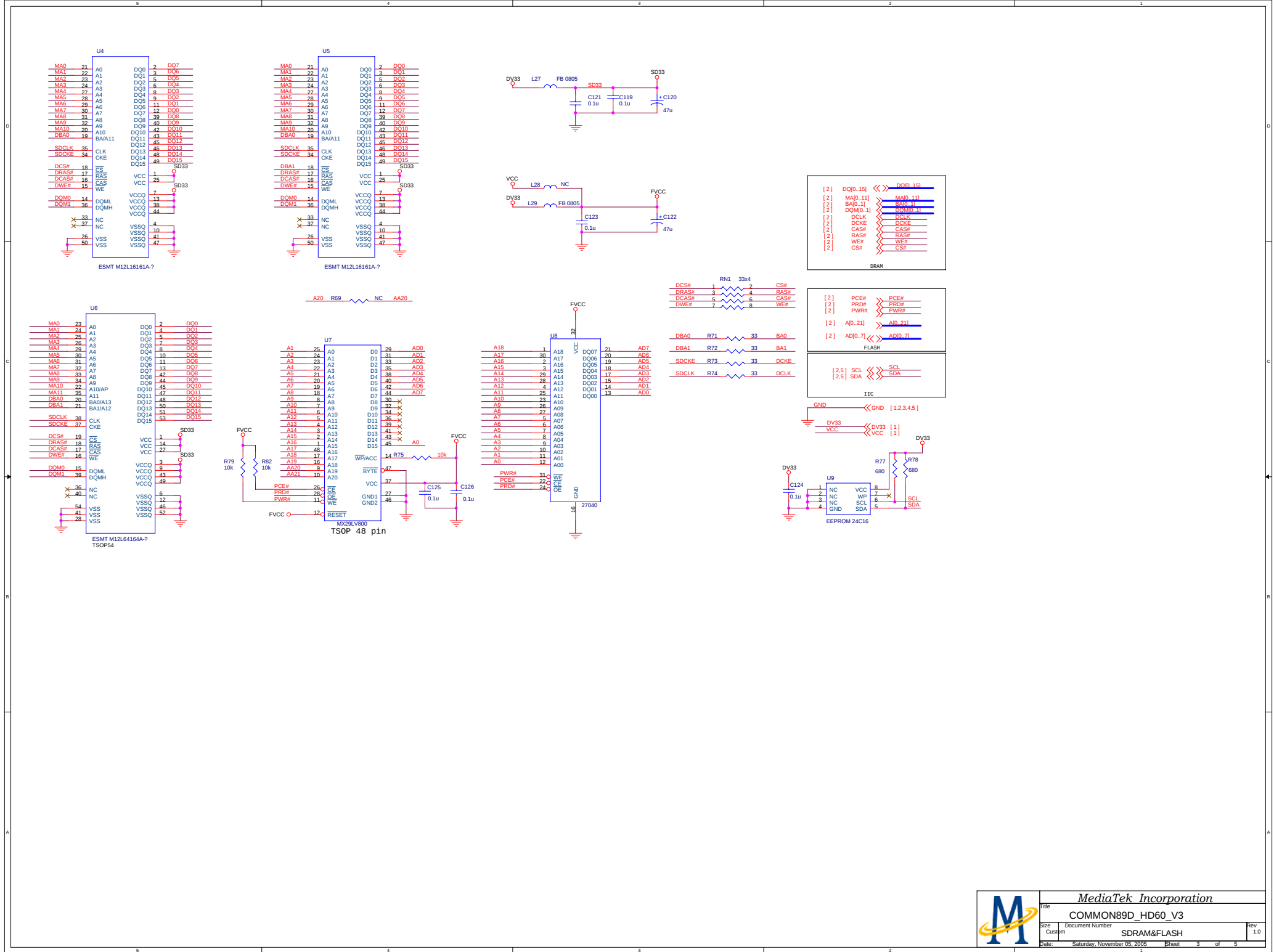
| NAME     | TYPE             | DEVICE        |
|----------|------------------|---------------|
| VCC      | Digital 5V       | SUPPLY        |
| DV33     | Digital 3.3V     | MT1389E       |
| RFV33    | Servo 3.3V       | MT1389E       |
| LDO_AV33 | Laser Diode 3.3V |               |
| AVCC     | RF 5V            | PICKUP HEADER |
| V18      | Digital 1.8V     | MT1389E       |
| SD33     | Digital 3.3V     | SDRAM         |
| +12V     | Audio +12V       | OP AMP.       |
| -12V     | Audio -12V       | OP AMP.       |



- URST# >> URST# [2]
- V18 >> V18 [2]
- DV33 >> DV33 [2,3,4]
- VCC >> VCC [2,3,4]
- AVCC >> AVCC [2]
- LDO\_AV33 >> LDO\_AV33 [2]
- RFV33 >> RFV33 [2]
- VCC\_AUDIO >> VCC\_AUDIO [4]
- +12V >> +12V [4]
- 12V >> -12V [4]
- MICIN >> MICIN [2]
- GND >> GND [2,3,4]







- [1] -12V >> -12V  
 [1] +12V >> +12V  
 [1] VCC >> VCC  
 [1] VCC\_AUDIO >> VCC\_AUDIO  
 [1.2.3.4] GND >> GND
- AR RMAIN  
 AL LMAIN  
 ARS RREAR  
 ALS LREAR  
 ASUBW LFE  
 ACENTER CENT
- [2] ASPDIF >> ASPDIF  
 [2] AL >> AL  
 [2] AR >> AR  
 [2] ALS >> ALS  
 [2] ARS >> ARS  
 [2] ACENTER >> ACENTER  
 [2] ASUBW >> ASUBW  
 [2] ACVBS >> ACVBS  
 [2] AG/Y >> AG/Y  
 [2] AB/U/C >> AB/U/C  
 [2] AR/V/Y >> AR/V/Y  
 [2] VSYNC# >> VSYNC#  
 [2] HSYNC# >> HSYNC#  
 [2] FS0 >> FS0  
 [2] FS2 >> FS2

