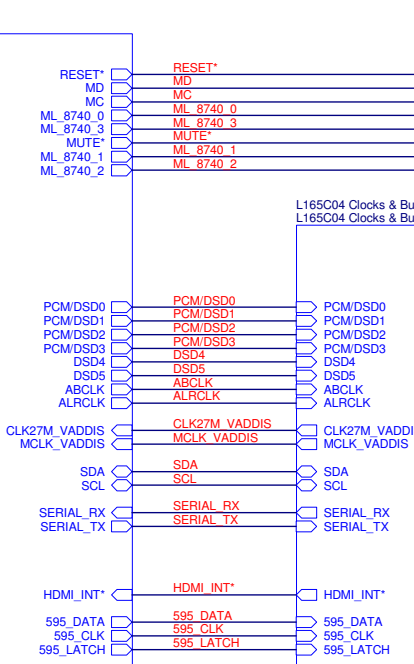


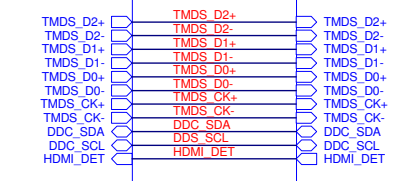
VADDIS 8 SHEET 2



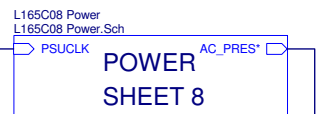
CLOCKS SHEET 4



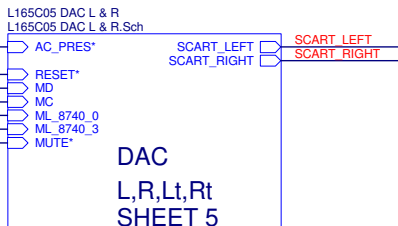
HDMI 1 O/P SCART REMOTE IN SHEET 7



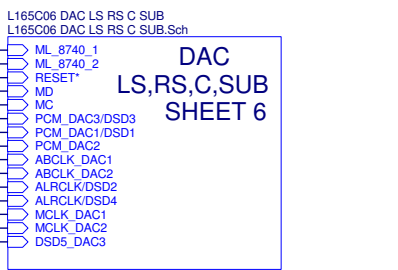
SHEET 12 SPDIF FRONT PANEL I/F



POWER SHEET 8

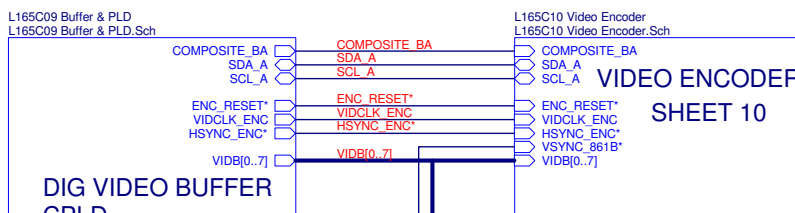


DAC L,R,Lt,Rt SHEET 5

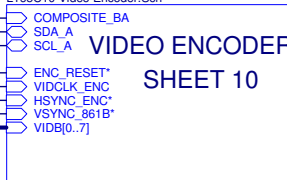


DAC LS,RS,C,SUB SHEET 6

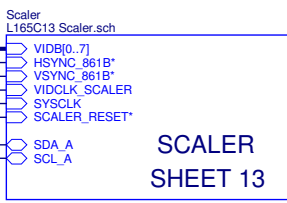
SNAP-OFF VIDEO SECTION



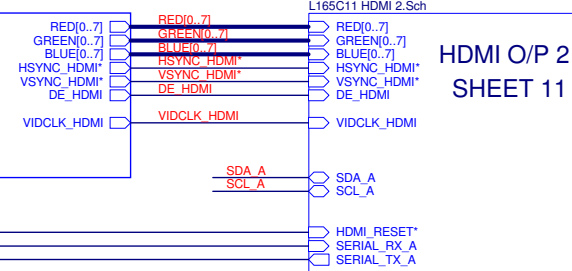
DIG VIDEO BUFFER CPLD RS232 SHEET 9



VIDEO ENCODER SHEET 10



SCALER SHEET 13



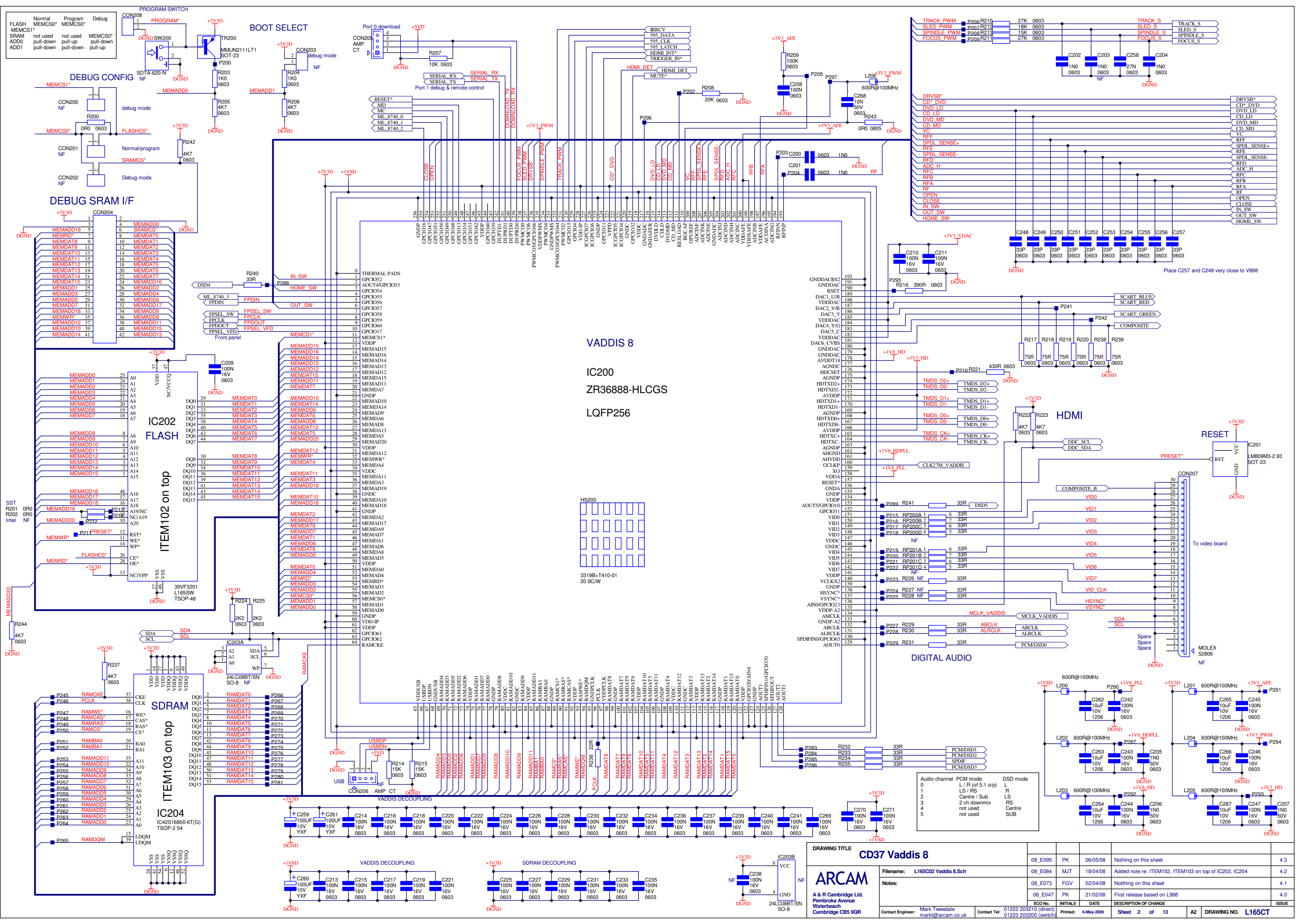
HDMI O/P 2 SHEET 11

NOTES ON VARIANTS  
 This board is one of 4 variants that all use the same bare PCB (L988PB). The build differences are:  
 Number of audio channels (2 OR 8)  
 Type of audio DAC (WM8740 OR WM8741)  
 Video section populated/not populated  
 Scaler/HDMI transmitter used (vaddis internal or external devices)  
 Aux audio PSU fitted/not fitted  
 SPDIF transformer fitted/not fitted

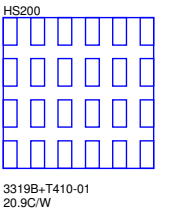
|                    | DV135      | DV137          | DV139                    | CD37          |
|--------------------|------------|----------------|--------------------------|---------------|
| BOARD ASSEMBLY P/N | L111AY     | L988AY         | L110AY                   | L165AY        |
| AUDIO CHANNELS     | 2          | 8              | 8                        | 2             |
| AUDIO DAC          | WM8740     | WM8740         | WM8740                   | WM8741        |
| VIDEO SECTION      | POPULATED  | POPULATED      | NOT POPULATED            | NOT POPULATED |
| HDMI               | VADDIS     | ABT1010/SI9030 | ON SEPARATE BOARD L102AY | NOT POPULATED |
| AUX PSU            | NOT FITTED | NOT FITTED     | FITTED                   | FITTED        |
| SPDIF TRANSFORMER  | NOT FITTED | FITTED         | FITTED                   | FITTED        |

| ITEM    | QTY | PART No. | DESCRIPTION                                 | NOTES                                                                                                                         |
|---------|-----|----------|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| ITEM101 | 1   | E827AP   | Pad Damping 15x6x3MM Rubber                 | Fit on PCB surface, over IC300 footprint, "North/South" orientation. See assembly drawing for exact position and orientation. |
| ITEM102 | 1   | F243     | Ferrite Disk - This part is RoHS compliant. | Fit on top of IC202                                                                                                           |
| ITEM103 | 1   | F243     | Ferrite Disk - This part is RoHS compliant. | Fit on top of IC204                                                                                                           |

|                                                                            |                                   |                                 |                                                   |
|----------------------------------------------------------------------------|-----------------------------------|---------------------------------|---------------------------------------------------|
| ITEM100                                                                    | 1                                 | L988PB                          | Blank PCB DV137 Main Board                        |
| <b>DRAWING TITLE</b>                                                       |                                   |                                 |                                                   |
| <b>CD37 Top Level</b>                                                      |                                   |                                 |                                                   |
| <b>ARCAM</b>                                                               |                                   | Filename: L165C01 Top Level.Sch |                                                   |
| A & R Cambridge Ltd.<br>Pembroke Avenue<br>Waterbeach<br>Cambridge CB5 9QR |                                   | Notes:                          |                                                   |
| 08_E095                                                                    | PK                                | 06/05/08                        | Nothing on this sheet                             |
| 08_E094                                                                    | MJT                               | 18/04/08                        | Voicing completed - component tweaks implemented. |
| 08_E073                                                                    | FGV                               | 02/04/08                        | Nothing on this sheet                             |
| 08_E047                                                                    | PK                                | 21/02/08                        | First release based on L988                       |
| ECO No.                                                                    | INITIALS                          | DATE                            | DESCRIPTION OF CHANGE                             |
|                                                                            |                                   |                                 |                                                   |
| Contact Engineer:                                                          | Mark Tweedale<br>mark@arcam.co.uk | Contact Tel:                    | 01223 203210 (direct)<br>01223 203200 (switch)    |
| Printed:                                                                   | 6-May-2008                        | Sheet                           | 1 of 13                                           |
|                                                                            |                                   | A2                              | DRAWING NO. L165CT                                |

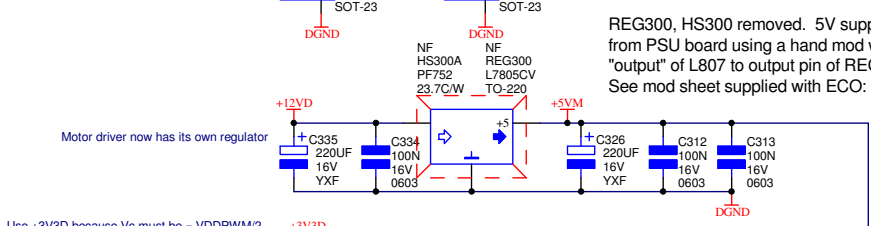
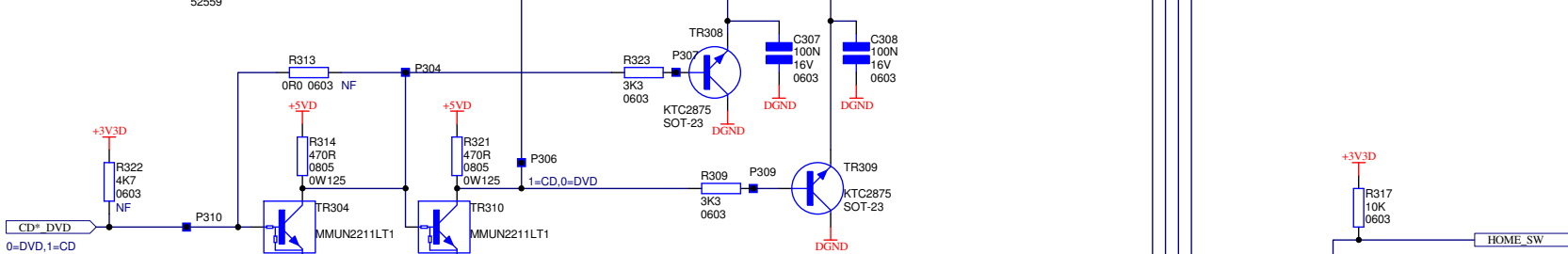
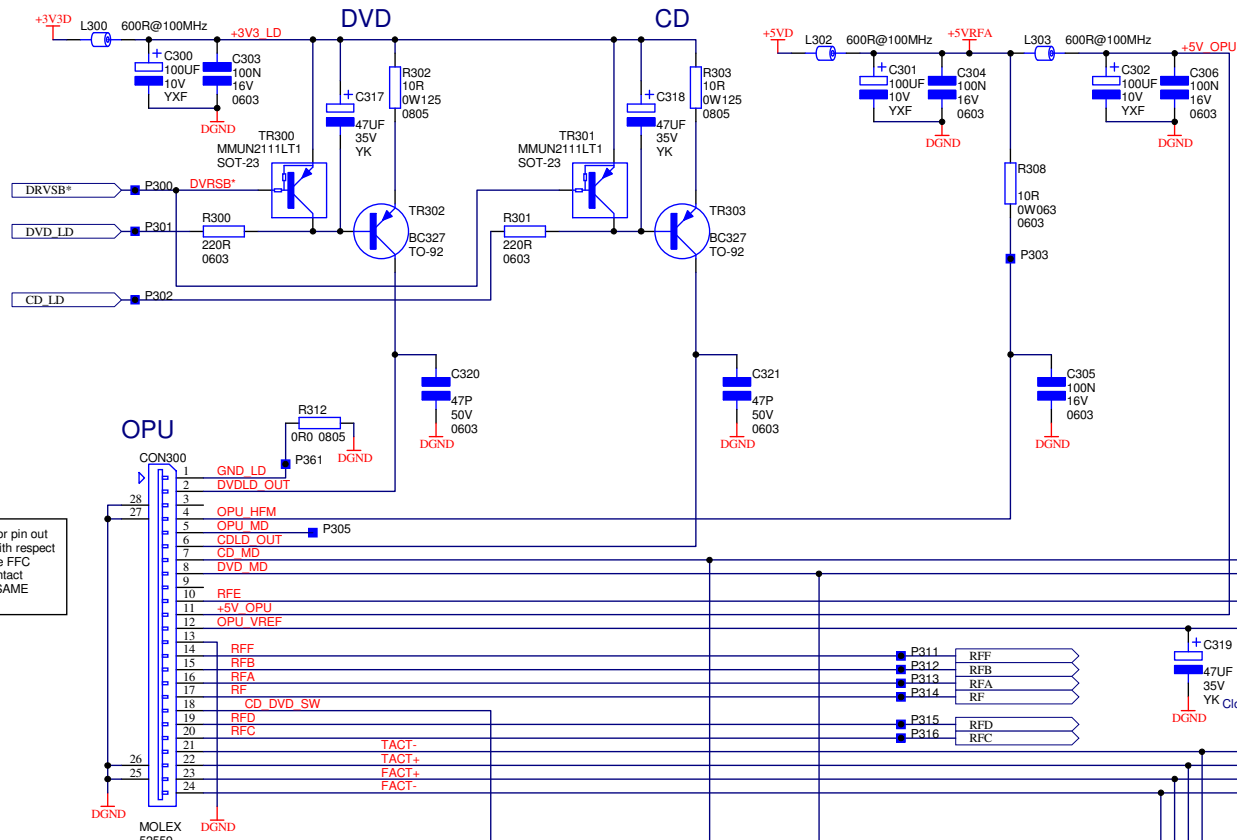


VADDIS 8  
 IC200  
 ZR36888-HLCGS  
 LQFP256

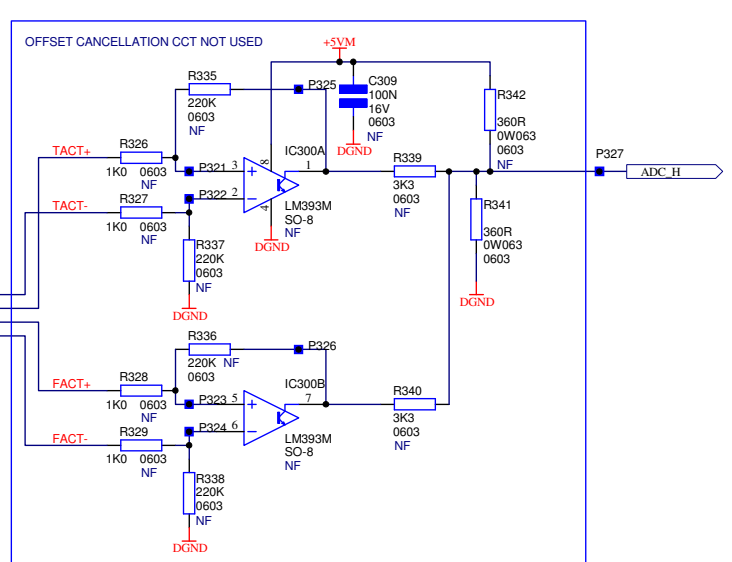
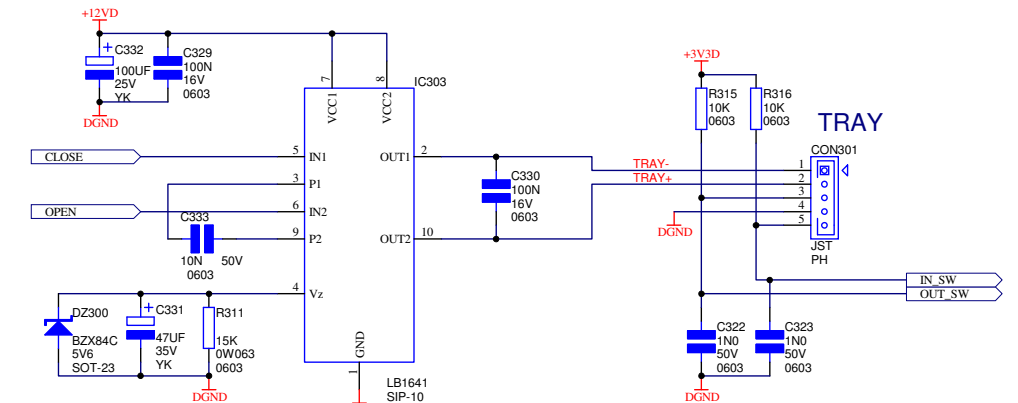
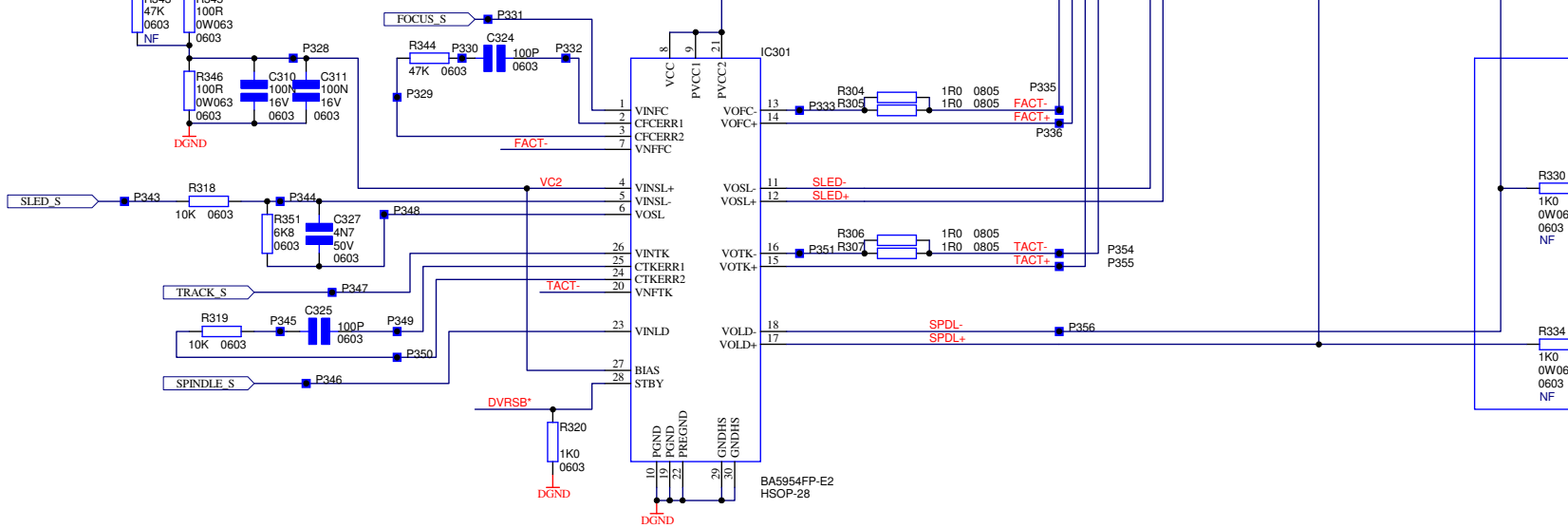


| DRAWING TITLE                                                                              |                                                                                                                                                                                                                           |                   |                                    |                       |                                                |
|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------------|-----------------------|------------------------------------------------|
| <b>CD37 Vaddis 8</b>                                                                       |                                                                                                                                                                                                                           |                   |                                    |                       |                                                |
| <b>ARCAM</b><br>A & R Cambridge Ltd.<br>Pembroke Avenue<br>Waterbeach<br>Cambridge CB5 9QR |                                                                                                                                                                                                                           |                   |                                    |                       |                                                |
| File name:                                                                                 | L165C02 Vaddis 8.Sch                                                                                                                                                                                                      | Contact Engineer: | Mark Tweedale<br>markt@arcam.co.uk | Contact Tel:          | 01223 203210 (direct)<br>01223 203200 (switch) |
| Notes:                                                                                     | 08_E095 PK 06/05/08 Nothing on this sheet<br>08_E094 MUT 18/04/08 Added note re: ITEM102, ITEM103 on top of IC202, IC204<br>08_E073 FGV 02/04/08 Nothing on this sheet<br>08_E047 PK 21/02/08 First release based on L988 |                   |                                    |                       |                                                |
| ESD No.:                                                                                   | INITIALS                                                                                                                                                                                                                  | DATE              | DESCRIPTION OF CHANGE              | ISSUE                 |                                                |
|                                                                                            |                                                                                                                                                                                                                           | 6-May-2008        | Sheet 2 of 13                      | A2 DRAWING NO. L165CT |                                                |

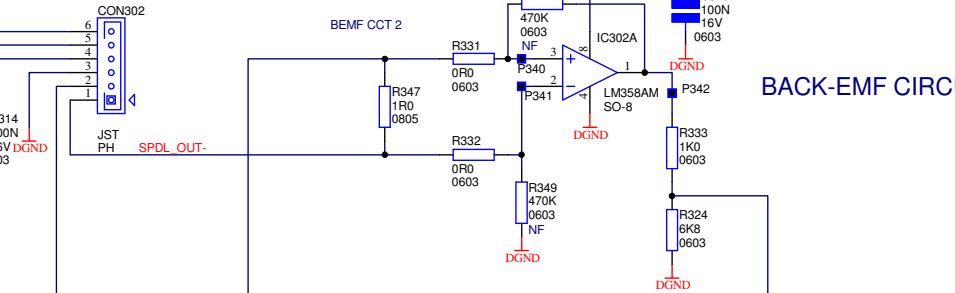
## LASER DRIVERS



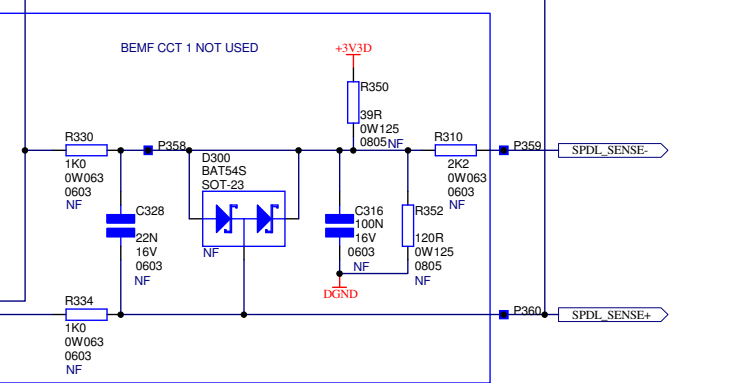
## MOTOR DRIVER



## SLED & SPINDLE

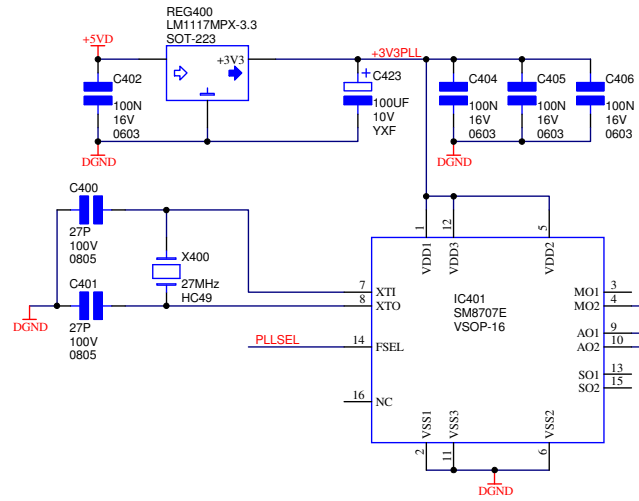


## BACK-EMF CIRCUIT

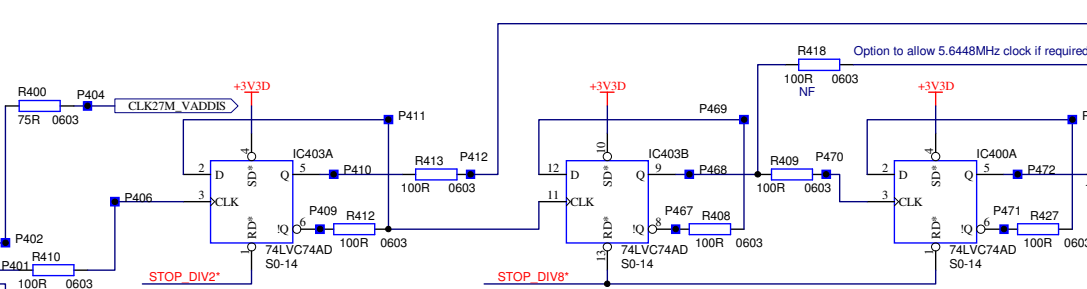


|                                                     |          |          |                                             |                                                                            |                       |
|-----------------------------------------------------|----------|----------|---------------------------------------------|----------------------------------------------------------------------------|-----------------------|
| DRAWING TITLE                                       |          |          |                                             | CD37 Front End                                                             |                       |
| ARCAM                                               |          |          |                                             | File name:                                                                 | L165C03 Front End.Sch |
| Notes:                                              |          |          |                                             | A & R Cambridge Ltd.<br>Pembroke Avenue<br>Waterbeach<br>Cambridge CB5 9QR |                       |
| ECO No.                                             | INITIALS | DATE     | DESCRIPTION OF CHANGE                       | ISSUE                                                                      |                       |
| 08_E095                                             | PK       | 06/05/08 | Nothing on this sheet                       | 4.3                                                                        |                       |
| 08_E094                                             | MJT      | 18/04/08 | REG300, HS300 now set to NF and note added. | 4.2                                                                        |                       |
| 08_E073                                             | FGV      | 02/04/08 | Nothing on this sheet                       | 4.1                                                                        |                       |
| 08_E047                                             | PK       | 21/02/08 | First release based on L988                 | 4.0                                                                        |                       |
| Contact Engineer: Mark Tweedale<br>mark@arcam.co.uk |          |          |                                             | Contact Tel: 01223 203210 (direct)<br>01223 203200 (switch)                | Printed: 6-May-2008   |
| Sheet 3 of 13                                       |          |          | A2                                          | DRAWING NO. L165CT                                                         |                       |

### CLOCK GENERATOR

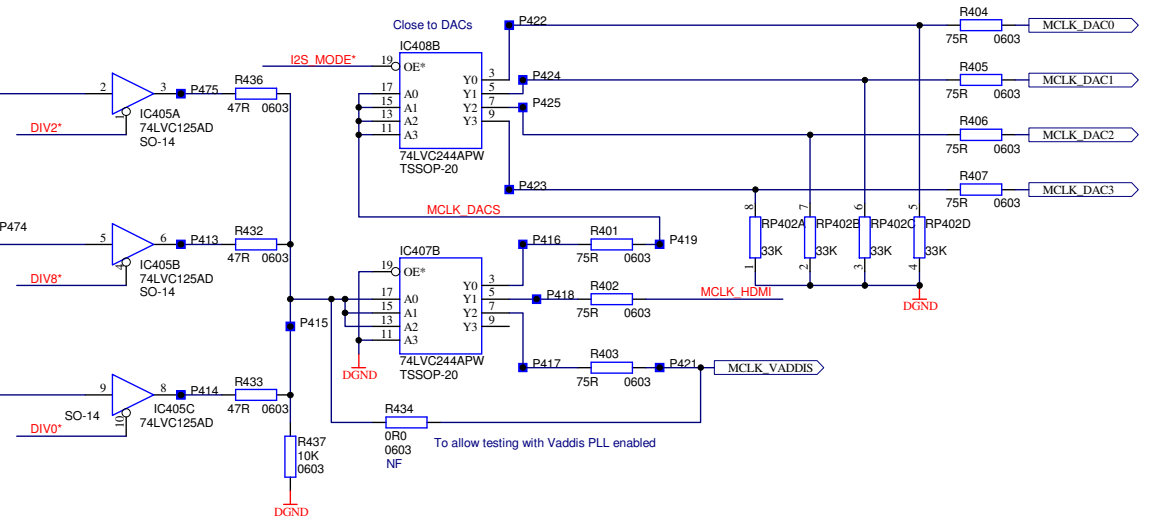


### CLOCK DIVIDER

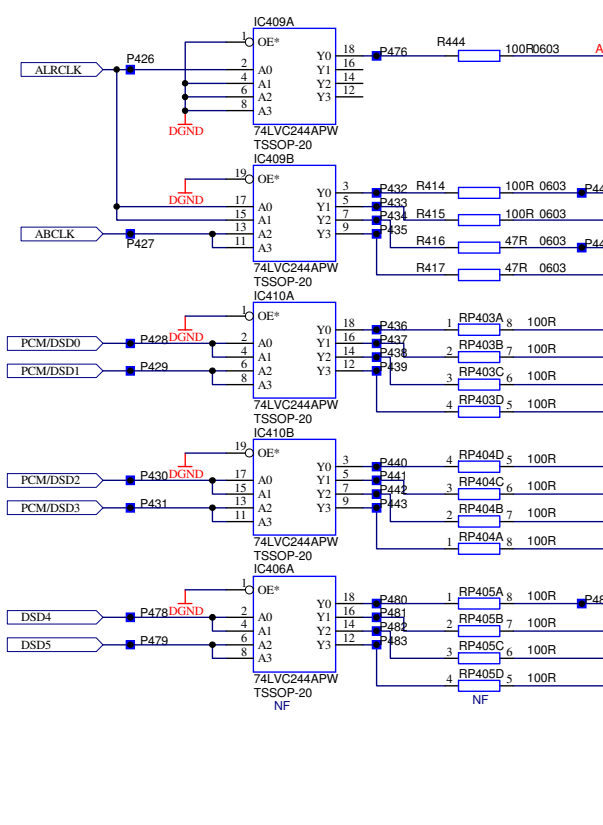


| Fs        | Master clock frequency (384 x Fs) | PLLSEL | DIV0* | DIV2* | DIV8* |
|-----------|-----------------------------------|--------|-------|-------|-------|
| 32kHz     | 12.288MHz                         | 0      | 1     | 0     | 1     |
| 44.1kHz   | 11.2896MHz                        | 0      | 1     | 0     | 1     |
| 48kHz     | 12.288MHz                         | 1      | 1     | 0     | 1     |
| 88.2kHz   | 22.5792MHz                        | 0      | 0     | 1     | 1     |
| 96kHz     | 24.576MHz                         | 1      | 0     | 1     | 1     |
| 176.4kHz  | 22.5792MHz                        | 0      | 0     | 1     | 1     |
| 192kHz    | 24.576MHz                         | 1      | 0     | 1     | 1     |
| DSD 44.1k | 2.8224MHz                         | 0      | 1     | 1     | 0     |

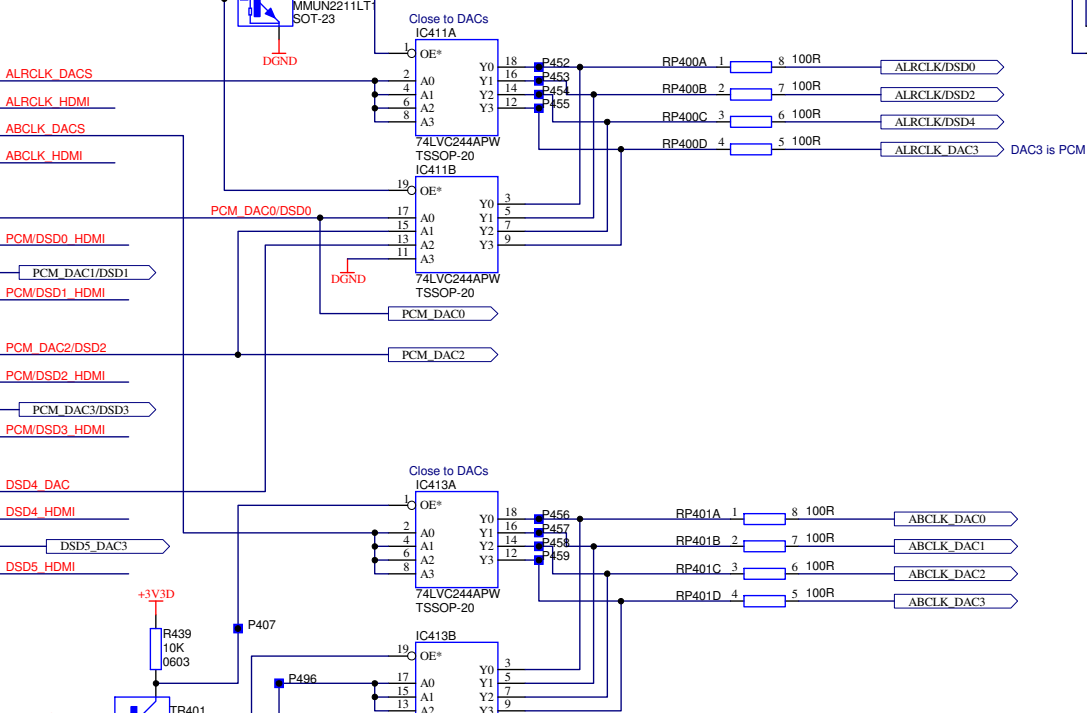
### AUDIO CLOCK BUFFERS



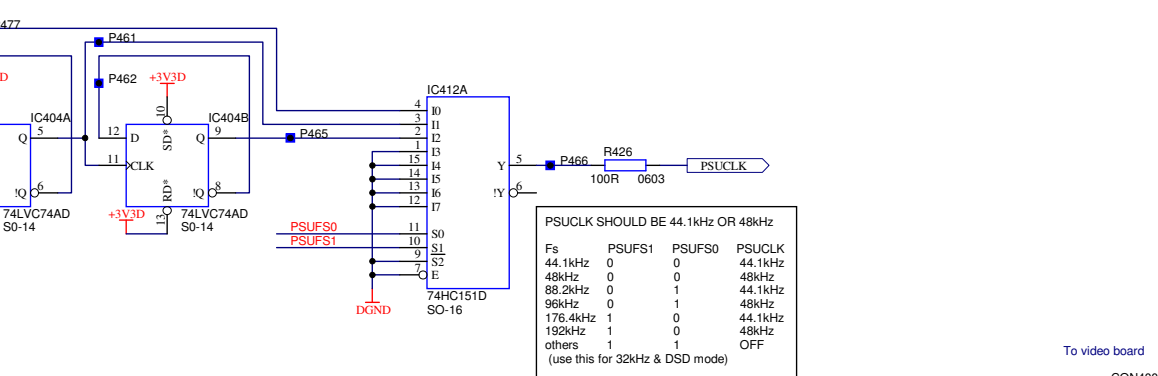
### I2S/DSD BUFFERS



### I2S/DSD MUX

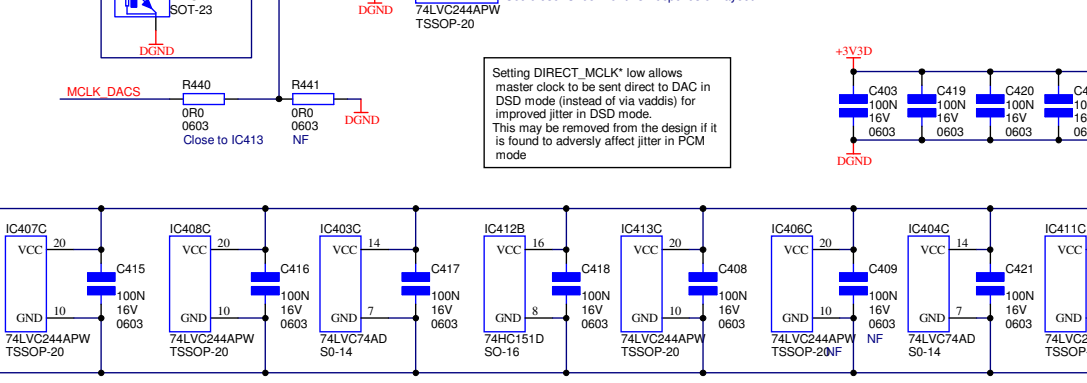
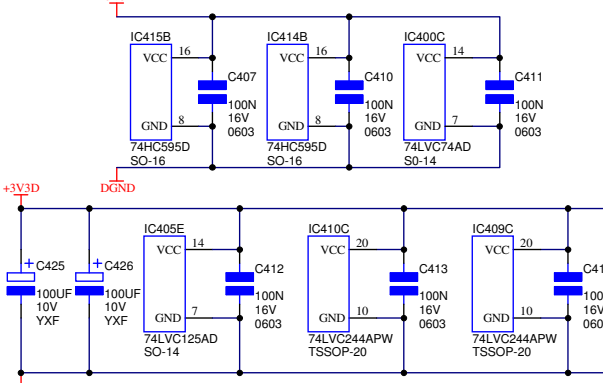


### PSU CLOCK DIVIDER



| Fs       | PSUFS1 | PSUFS0 | PSUCLK  |
|----------|--------|--------|---------|
| 44.1kHz  | 0      | 0      | 44.1kHz |
| 48kHz    | 0      | 0      | 48kHz   |
| 88.2kHz  | 0      | 1      | 44.1kHz |
| 96kHz    | 0      | 1      | 48kHz   |
| 176.4kHz | 1      | 0      | 44.1kHz |
| 192kHz   | 1      | 0      | 48kHz   |
| others   | 1      | 1      | OFF     |

(use this for 32kHz & DSD mode)



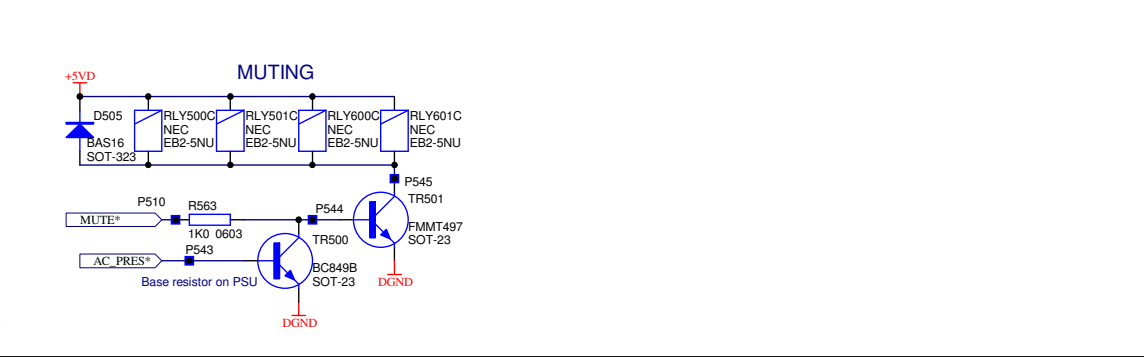
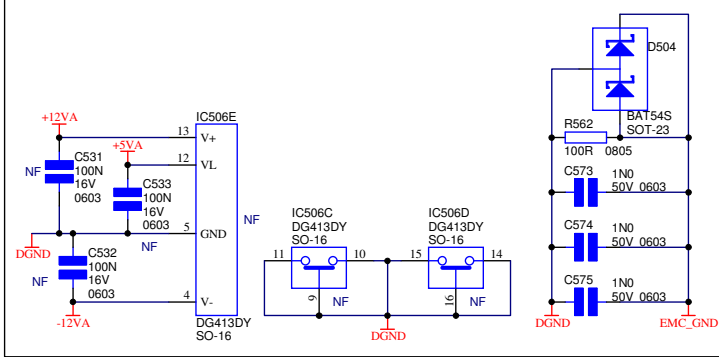
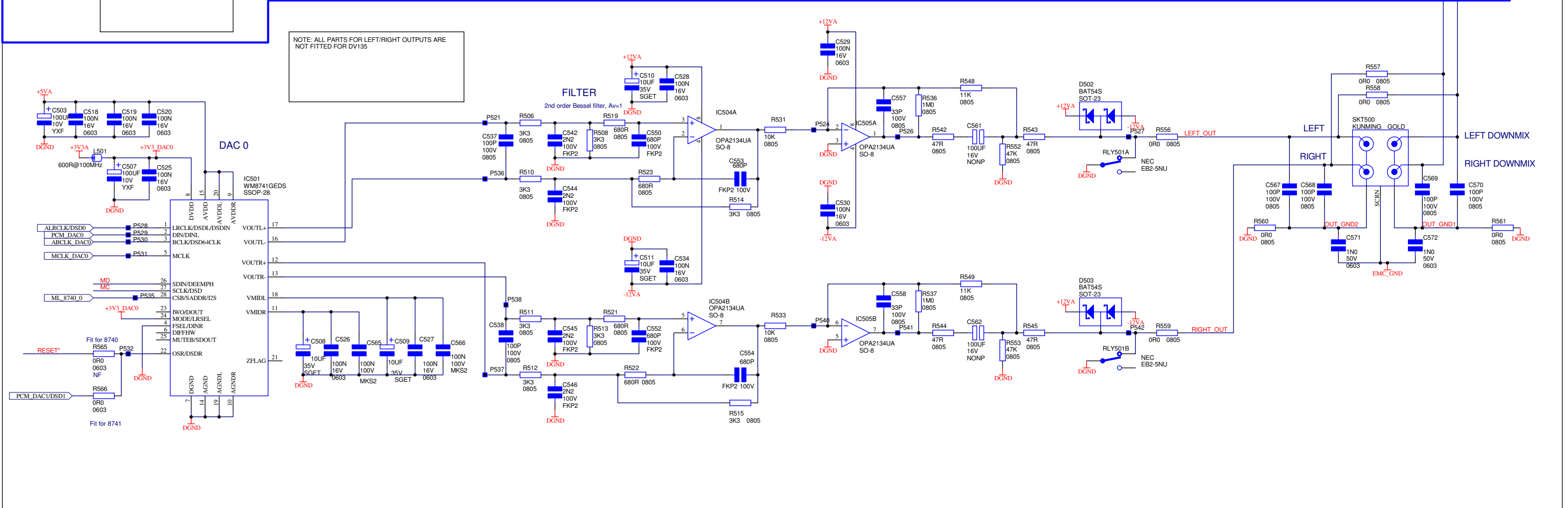
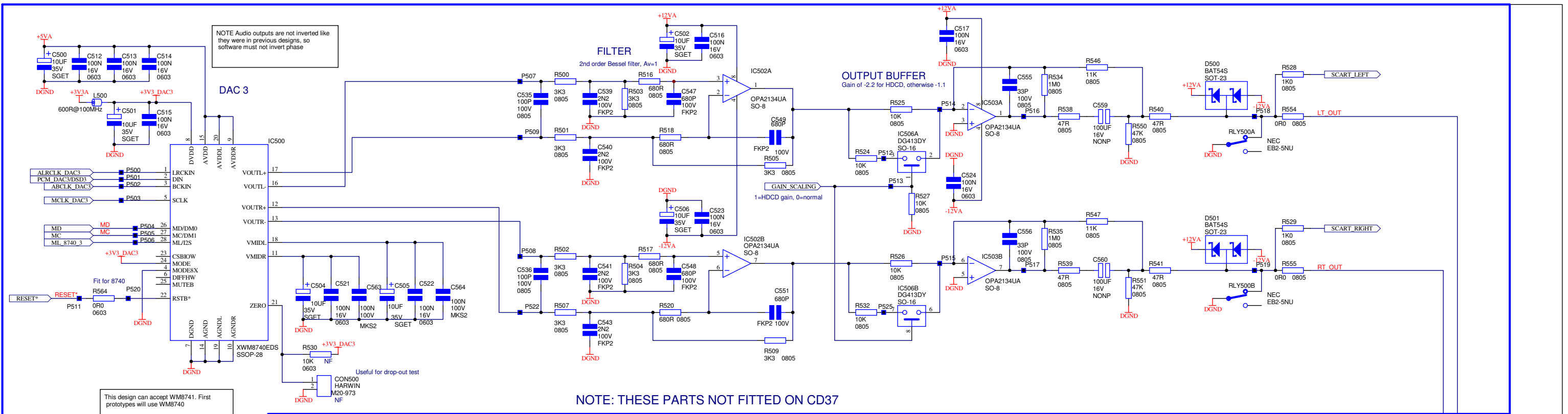
| ITEM#   | QTY | REF    | DESCRIPTION                      | REMARKS                                        |
|---------|-----|--------|----------------------------------|------------------------------------------------|
| ITEM400 | 1   | E828AP | Pad Damping 7.5x6x3MM Rubber     | Fit on one side of XTAL (see assembly drawing) |
| ITEM401 | 1   | F087   | INSULATING PAD FOR HC49 CRYSTALS | Fit to X400 to insulate from PCB               |

**DRAWING TITLE** CD37 Clocks & Buffers

**ARCAM**  
A & R Cambridge Ltd.  
Pembroke Avenue  
Waterbeach  
Cambridge CB5 9QR

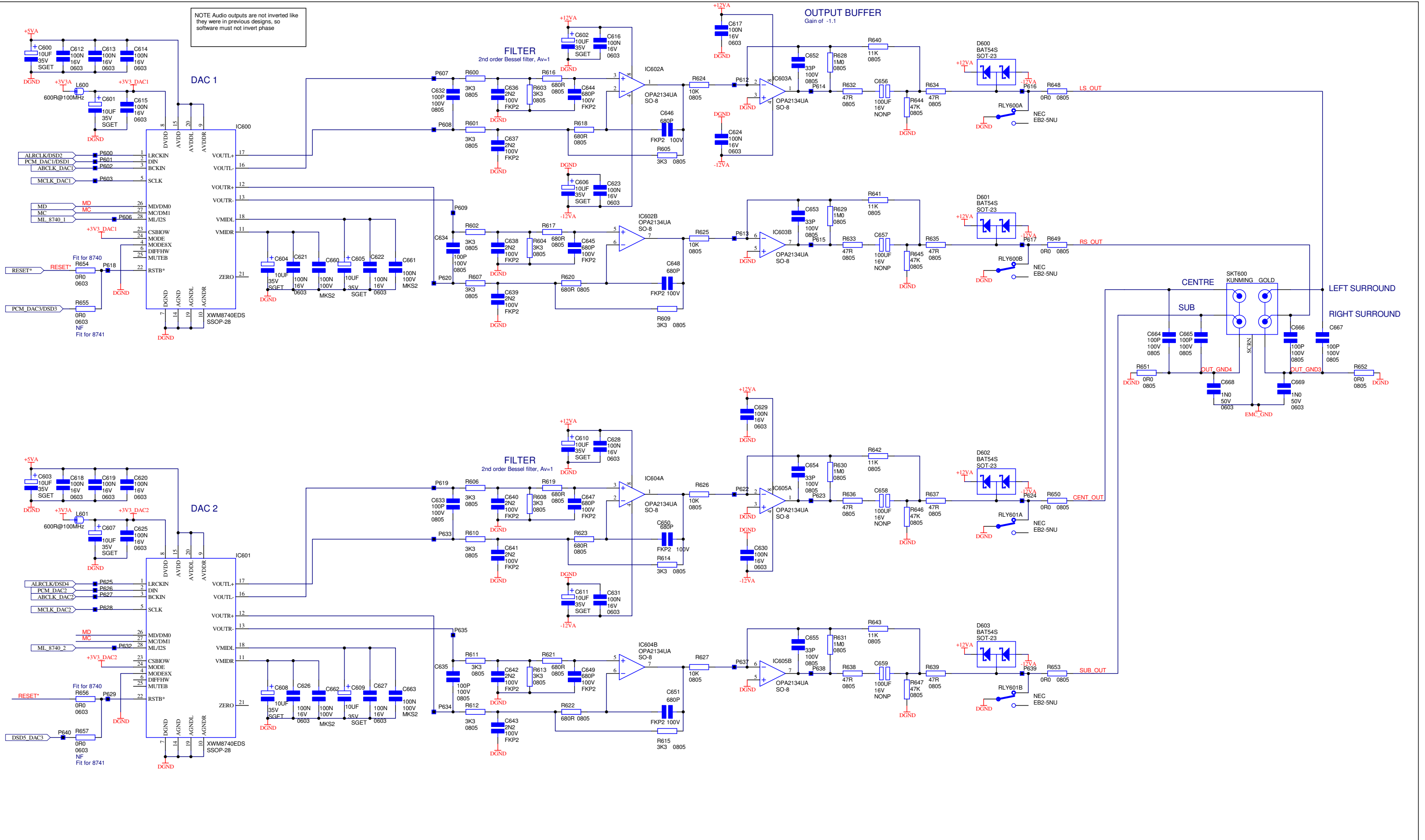
File Name: L165C04 Clocks & Buffers.Sch  
Notes:  
Contact Engineer: Mark Tweedale mark@arcam.co.uk  
Contact Tel: 01223 203210 (direct) 01223 203200 (switch)  
Printed: 6-May-2008  
Sheet 4 of 13  
DRAWING NO. L165CT





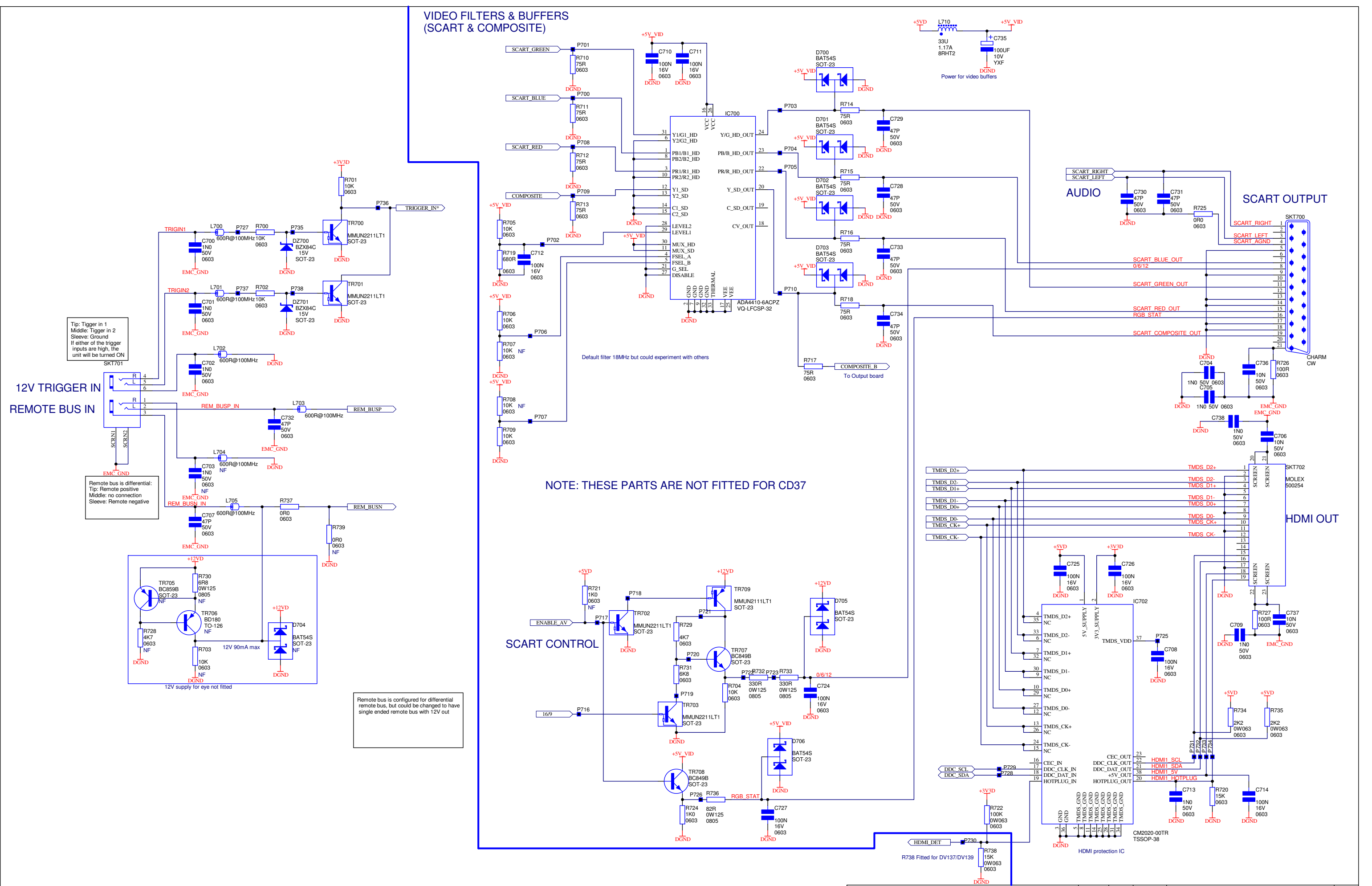
|                                                                            |                       |          |                                                            |                                           |
|----------------------------------------------------------------------------|-----------------------|----------|------------------------------------------------------------|-------------------------------------------|
| ITEM502                                                                    | 1                     | F310     | Ferrite Plate 8x8x2mm                                      | Fit on top of IC501                       |
| ITEM503                                                                    | 1                     | E827AP   | Pad Damping 15x6x3MM Rubber                                | Fit joining tops of C561 & C562 together. |
| ITEM501                                                                    | 1                     | E828AP   | Pad Damping 7.5x6x3MM Rubber                               | Fit on top of relay RLY501                |
| <b>DRAWING TITLE</b>                                                       |                       |          |                                                            |                                           |
| <b>CD37 DAC Left / Right</b>                                               |                       |          |                                                            |                                           |
| <b>ARCAM</b>                                                               |                       |          |                                                            |                                           |
| A & R Cambridge Ltd.<br>Pembroke Avenue<br>Waterbeach<br>Cambridge CB5 9QR |                       |          |                                                            |                                           |
| File name:                                                                 | L165C05 DAC L & R.Sch |          |                                                            |                                           |
| Notes:                                                                     |                       |          |                                                            |                                           |
| ECO No.                                                                    | INITIALS              | DATE     | DESCRIPTION OF CHANGE                                      | ISSUE                                     |
| 08_E095                                                                    | PK                    | 06/05/08 | Nothing on this sheet                                      | 4.3                                       |
| 08_E094                                                                    | MJT                   | 18/04/08 | C503, C507 changed and ITEM502, ITEM503 added for voicing. | 4.2                                       |
| 08_E073                                                                    | FGV                   | 02/04/08 | Mark C547 as NF                                            | 4.1                                       |
| 08_E047                                                                    | PK                    | 21/02/08 | First release based on L988                                | 4.0                                       |
| Contact Engineer: Mark Tweedale mark@arcam.co.uk                           |                       |          |                                                            |                                           |
| Contact Tel: 01223 203210 (direct) 01223 203200 (switch)                   |                       |          |                                                            |                                           |
| Printed: 6-May-2008                                                        |                       |          |                                                            |                                           |
| Sheet 5 of 13                                                              |                       |          |                                                            |                                           |
| A2 DRAWING NO. L165CT                                                      |                       |          |                                                            |                                           |

NOTE Audio outputs are not inverted like they were in previous designs, so software must not invert phase

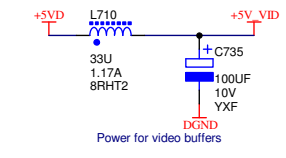


NOTE: ALL PARTS ON THIS SHEET ARE NOT FITTED FOR CD37

| ITEM600                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1        | E828AP                                              | Pad Damping 7.5x6x3MM Rubber | Fit on top of relay                                         |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------|------------------------------|-------------------------------------------------------------|---------|----------|----------|-----------------------|-------|---------|-----|----------|---------------------|-----|---------|-----|----------|-----------------------|-----|---------|----|----------|-----------------------------|-----|
| ITEM601                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1        | E828AP                                              | Pad Damping 7.5x6x3MM Rubber | Fit on top of relay                                         |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
| <b>DRAWING TITLE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |                                                     |                              |                                                             |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
| <b>CD37 DAC LS RS C SUB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |                                                     |                              |                                                             |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
| <table border="1" style="width: 100%;"> <tr> <td>08_E095</td> <td>PK</td> <td>06/05/08</td> <td>Nothing on this sheet</td> <td>4.3</td> </tr> <tr> <td>08_E094</td> <td>MJT</td> <td>18/04/08</td> <td>None to this sheet.</td> <td>4.2</td> </tr> <tr> <td>08_E073</td> <td>FGV</td> <td>02/04/08</td> <td>Nothing on this sheet</td> <td>4.1</td> </tr> <tr> <td>08_E047</td> <td>PK</td> <td>21/02/08</td> <td>First release based on L988</td> <td>4.0</td> </tr> </table> |          |                                                     |                              |                                                             | 08_E095 | PK       | 06/05/08 | Nothing on this sheet | 4.3   | 08_E094 | MJT | 18/04/08 | None to this sheet. | 4.2 | 08_E073 | FGV | 02/04/08 | Nothing on this sheet | 4.1 | 08_E047 | PK | 21/02/08 | First release based on L988 | 4.0 |
| 08_E095                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | PK       | 06/05/08                                            | Nothing on this sheet        | 4.3                                                         |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
| 08_E094                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MJT      | 18/04/08                                            | None to this sheet.          | 4.2                                                         |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
| 08_E073                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | FGV      | 02/04/08                                            | Nothing on this sheet        | 4.1                                                         |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
| 08_E047                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | PK       | 21/02/08                                            | First release based on L988  | 4.0                                                         |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
| <table border="1" style="width: 100%;"> <tr> <th>ECO No.</th> <th>INITIALS</th> <th>DATE</th> <th>DESCRIPTION OF CHANGE</th> <th>ISSUE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>                                                                                                                                                                                                                                                   |          |                                                     |                              |                                                             | ECO No. | INITIALS | DATE     | DESCRIPTION OF CHANGE | ISSUE |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
| ECO No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | INITIALS | DATE                                                | DESCRIPTION OF CHANGE        | ISSUE                                                       |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |                                                     |                              |                                                             |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
| <b>ARCAM</b><br>A & R Cambridge Ltd.<br>Pembroke Avenue<br>Cambridge CB5 9QR                                                                                                                                                                                                                                                                                                                                                                                                   |          | Contact Engineer: Mark Tweedale<br>mark@arcam.co.uk |                              | Contact Tel: 01223 203210 (direct)<br>01223 203200 (switch) |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |
| Printed: 6-May-2008                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Sheet 6 of 13                                       |                              | A2 DRAWING NO. L165CT                                       |         |          |          |                       |       |         |     |          |                     |     |         |     |          |                       |     |         |    |          |                             |     |



**VIDEO FILTERS & BUFFERS (SCART & COMPOSITE)**



Tip: Trigger in 1  
Middle: Trigger in 2  
Sleeve: Ground  
If either of the trigger inputs are high, the unit will be turned ON

**12V TRIGGER IN**  
**REMOTE BUS IN**

Remote bus is differential:  
Tip: Remote positive  
Middle: no connection  
Sleeve: Remote negative

12V supply for eye not fitted

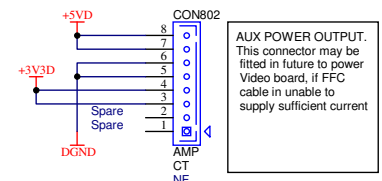
Remote bus is configured for differential remote bus, but could be changed to have single ended remote bus with 12V out

**NOTE: THESE PARTS ARE NOT FITTED FOR CD37**

**SCART CONTROL**

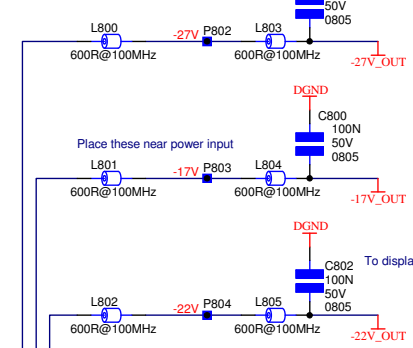
**HDMI OUT**

| DRAWING TITLE                                                                              |                                   |                                 |                                                |          |            |                             |     |                    |
|--------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------|------------------------------------------------|----------|------------|-----------------------------|-----|--------------------|
| <b>CD37 SCART, HDMI 1, remote</b>                                                          |                                   |                                 |                                                |          |            |                             |     |                    |
| <b>ARCAM</b><br>A & R Cambridge Ltd.<br>Pembroke Avenue<br>Waterbeach<br>Cambridge CB5 9QR | Filename:                         | L165C07 HDMI 1 SCART Remote.Sch | 08_E095                                        | PK       | 06/05/08   | Nothing on this sheet       | 4.3 |                    |
|                                                                                            | Notes:                            |                                 | 08_E084                                        | MJT      | 18/04/08   | None to this sheet.         | 4.2 |                    |
|                                                                                            |                                   |                                 | 08_E073                                        | FGV      | 02/04/08   | Nothing on this sheet       | 4.1 |                    |
|                                                                                            |                                   |                                 | 08_E047                                        | PK       | 21/02/08   | First release based on L988 | 4.0 |                    |
| ECO No.:                                                                                   | INITIALS                          | DATE                            | DESCRIPTION OF CHANGE                          | ISSUE    |            |                             |     |                    |
| Contact Engineer:                                                                          | Mark Tweedale<br>mark@arcam.co.uk | Contact Tel:                    | 01223 203210 (direct)<br>01223 203200 (switch) | Printed: | 6-May-2008 | Sheet 7 of 13               | A2  | DRAWING NO. L165CT |

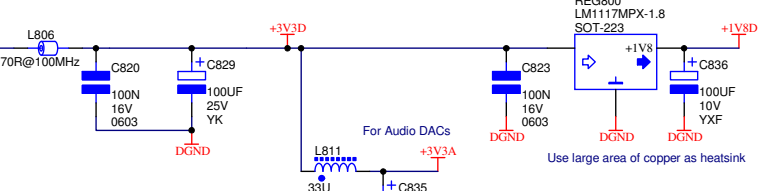


AUX POWER OUTPUT.  
This connector may be fitted in future to power Video board, if FFC cable is unable to supply sufficient current

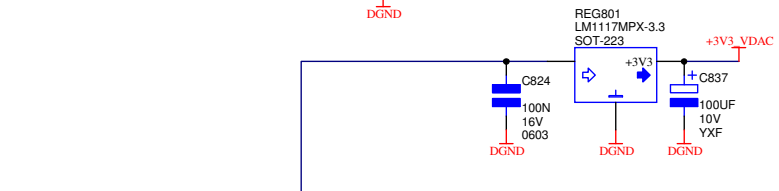
**DISPLAY BOARD SUPPLIES**



**VADDIS +1.8V CORE SUPPLY**



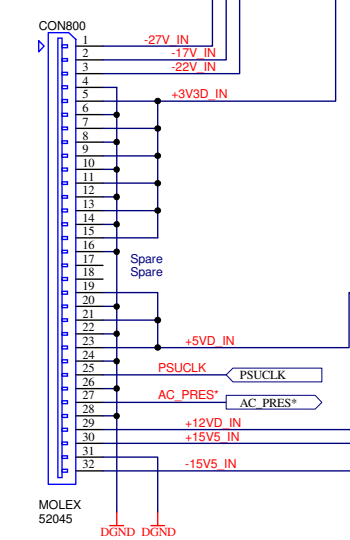
**VADDIS +3.3V DAC SUPPLY**



THIS PART IS TO BE PLACED IN THE REG300 FOOTPRINT  
SEE ASSEMBLY DRAWING FOR INSTRUCTIONS  
N.B THIS COMPONENT HAS NO PCB FOOTPRINT  
AS IT IS FITTED INTO REG300 FOOTPRINT

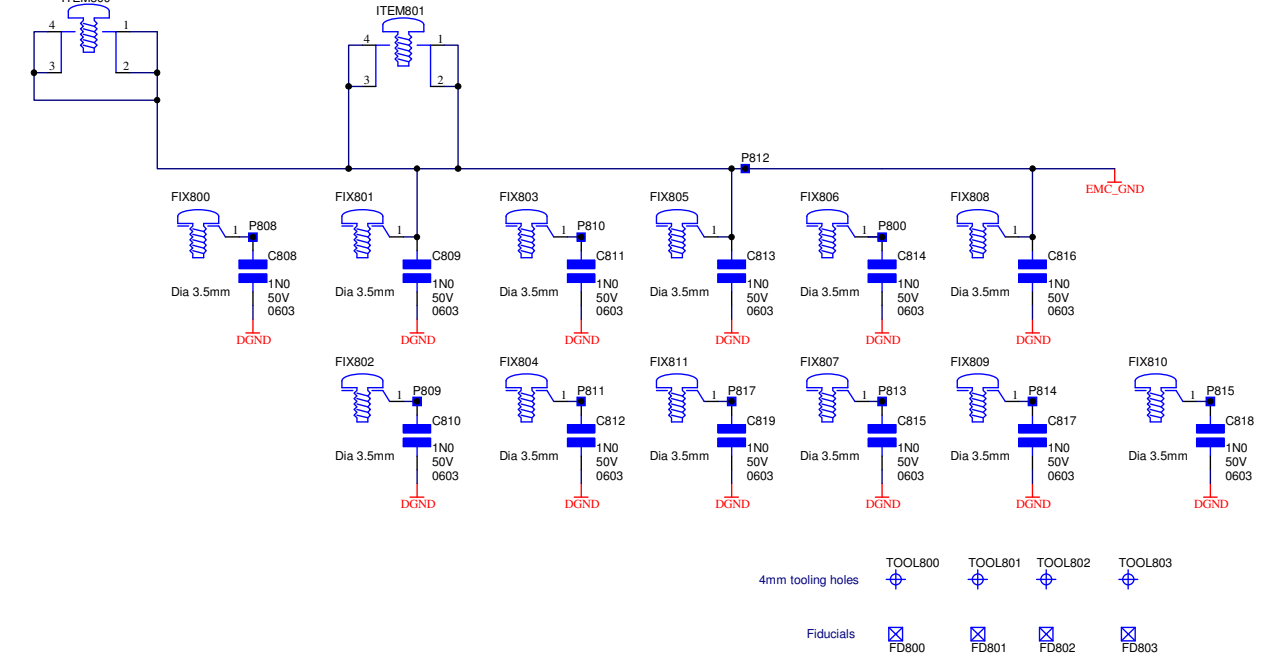


**POWER IN**

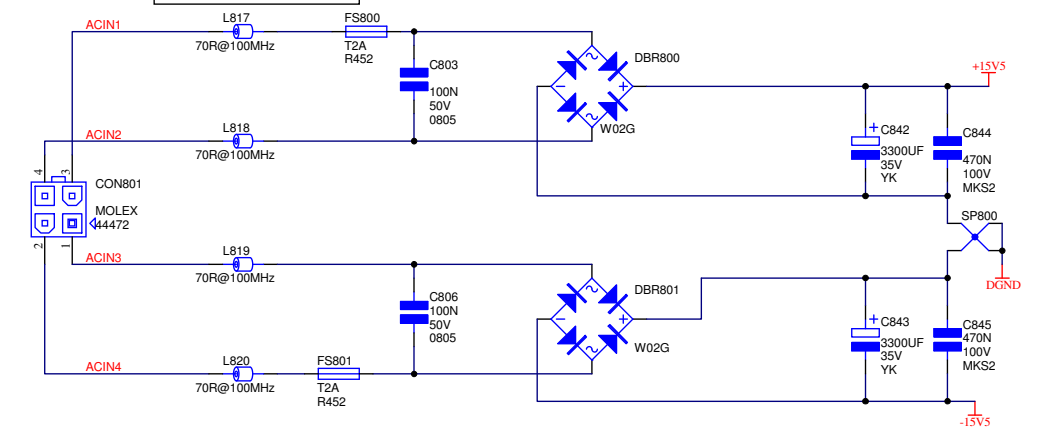


Could use spare connectors for more 5V but would mean mod to PSU

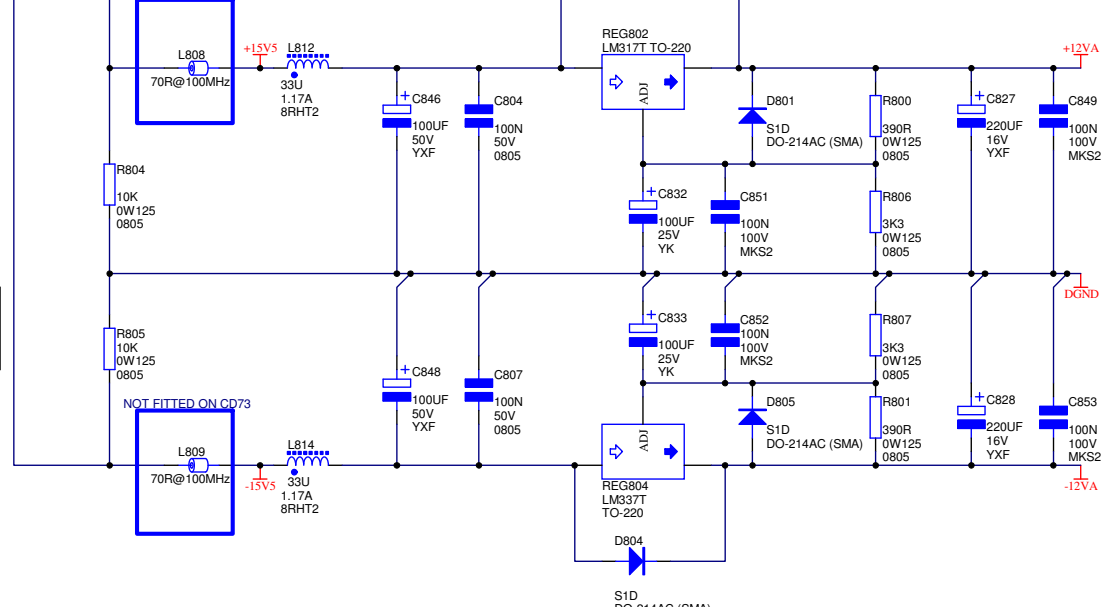
**M3 R/A PCB FIXING BRACKETS**



**AUX PSU**



**AUDIO SUPPLY REGULATORS**



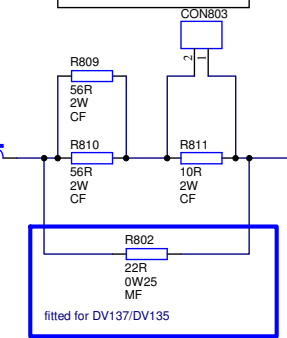
Audio power rails come from AUX PSU for DV139

Dummy loads to stabilise switch mode PSU when rails are not used

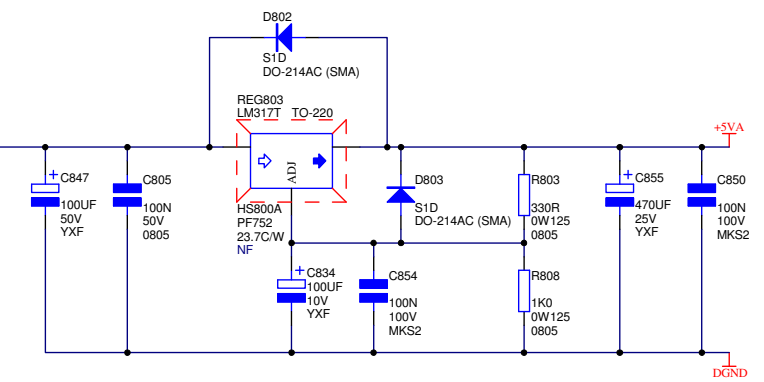
NOT FITTED ON CD73

NOT FITTED ON CD73

Fit jumper CON803 for JAPAN (100v build of DV139)



**AUDIO DAC SUPPLY**



|         |   |        |                               |                                                                   |
|---------|---|--------|-------------------------------|-------------------------------------------------------------------|
| ITEM804 | 1 | F291   | 26.4mm I/D, 32.5mm O/D O-Ring | Fit jointly over C842 & C843 - HALFWAY down the capacitor bodies. |
| ITEM802 | 1 | E828AP | Pad Damping 7.5x6x3MM Rubber  | Fit on top of C827                                                |
| ITEM803 | 1 | E828AP | Pad Damping 7.5x6x3MM Rubber  | Fit on top of C828                                                |

| DRAWING TITLE |          |          |                                                               |       |
|---------------|----------|----------|---------------------------------------------------------------|-------|
| CD37 Power    |          |          |                                                               |       |
| 08_E095       | PK       | 06/05/08 | R812 added. Fitted to load 5V rail to help stabilise PSU      | 4.3   |
| 08_E084       | MJT      | 18/04/08 | C834 changed and ITEM802, ITEM803, ITEM804 added for voicing. | 4.2   |
| 08_E073       | FGV      | 02/04/08 | Mark R811 as fitted                                           | 4.1   |
| 08_E047       | PK       | 21/02/08 | First release based on L988                                   | 4.0   |
| ECO No.       | INITIALS | DATE     | DESCRIPTION OF CHANGE                                         | ISSUE |

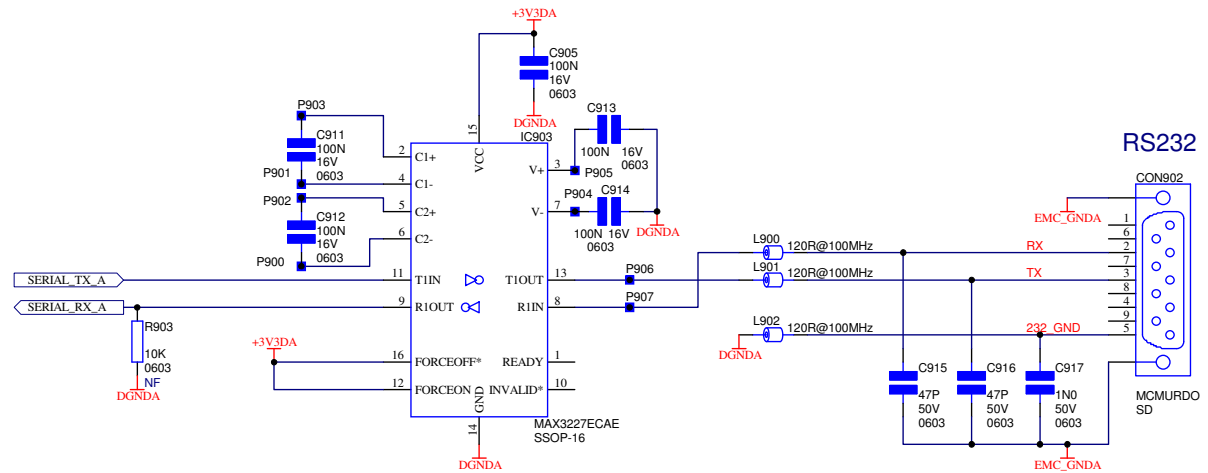
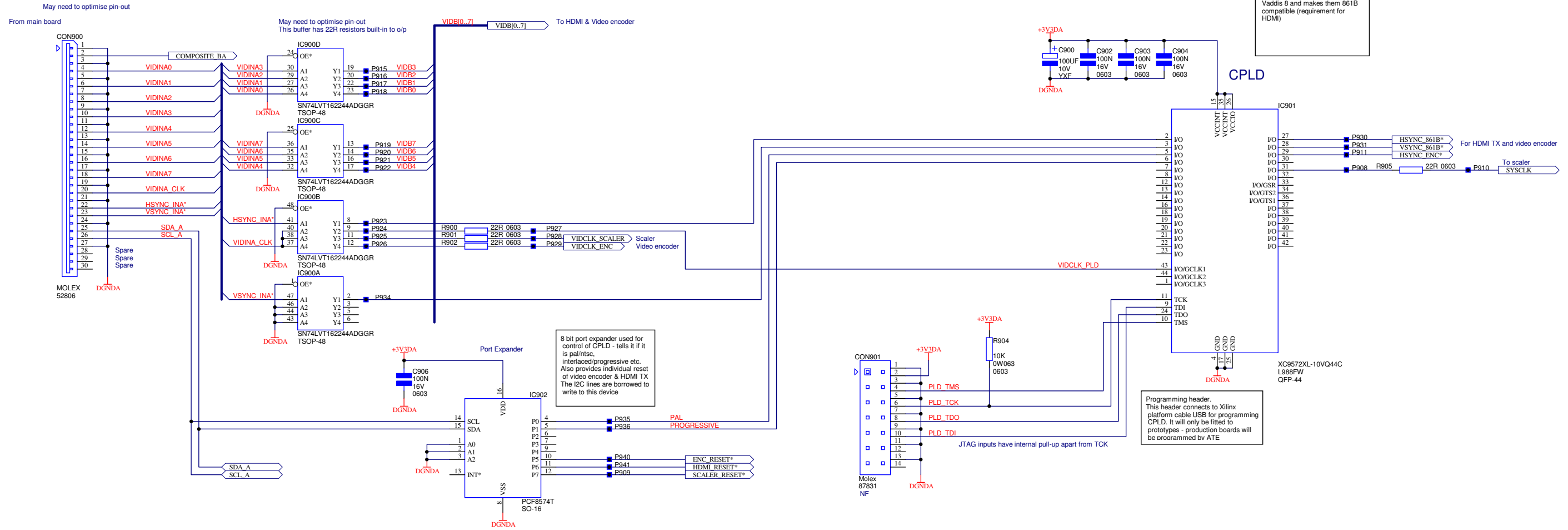
**ARCAM**  
A & R Cambridge Ltd.  
Pembroke Avenue  
Waterbeach  
Cambridge CB5 9QR

File Name: L165C08 Power.Sch  
Contact Engineer: Mark Tweedale mark@arcam.co.uk  
Contact Tel: 01223 203210 (direct) 01223 203200 (switch)  
Printed: 6-May-2008  
Sheet 8 of 13  
A2 DRAWING NO. L165CT

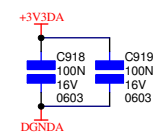
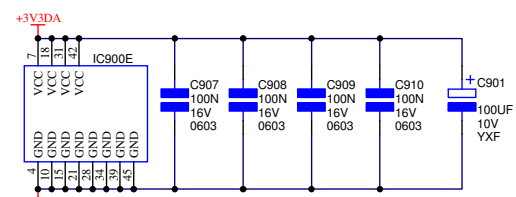


**BUFFER**

This circuit is part of the snap-off section



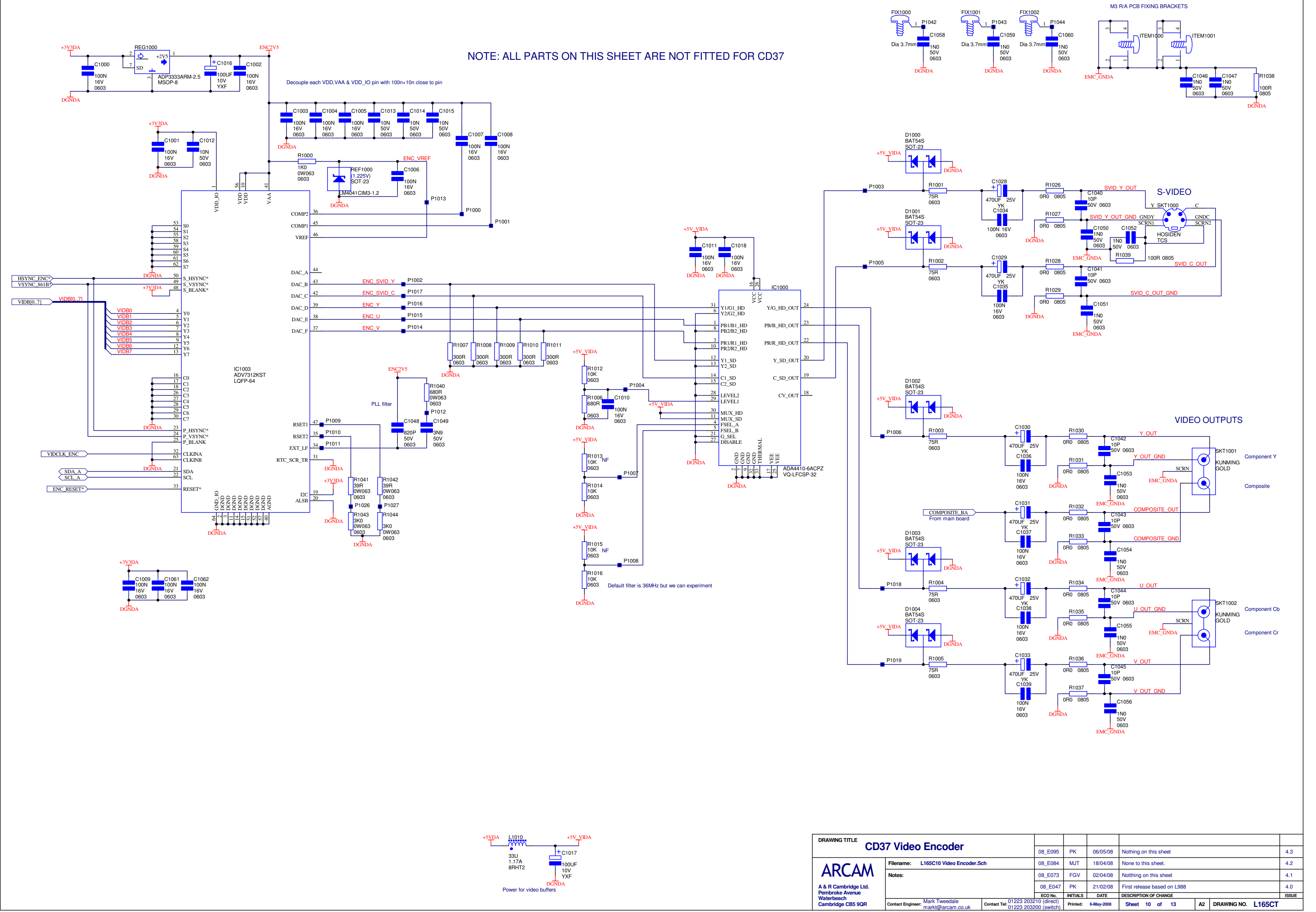
NOTE: ALL PARTS ON THIS SHEET ARE NOT FITTED FOR CD37



NOTE: THESE PARTS ARE NOT FITTED FOR CD37

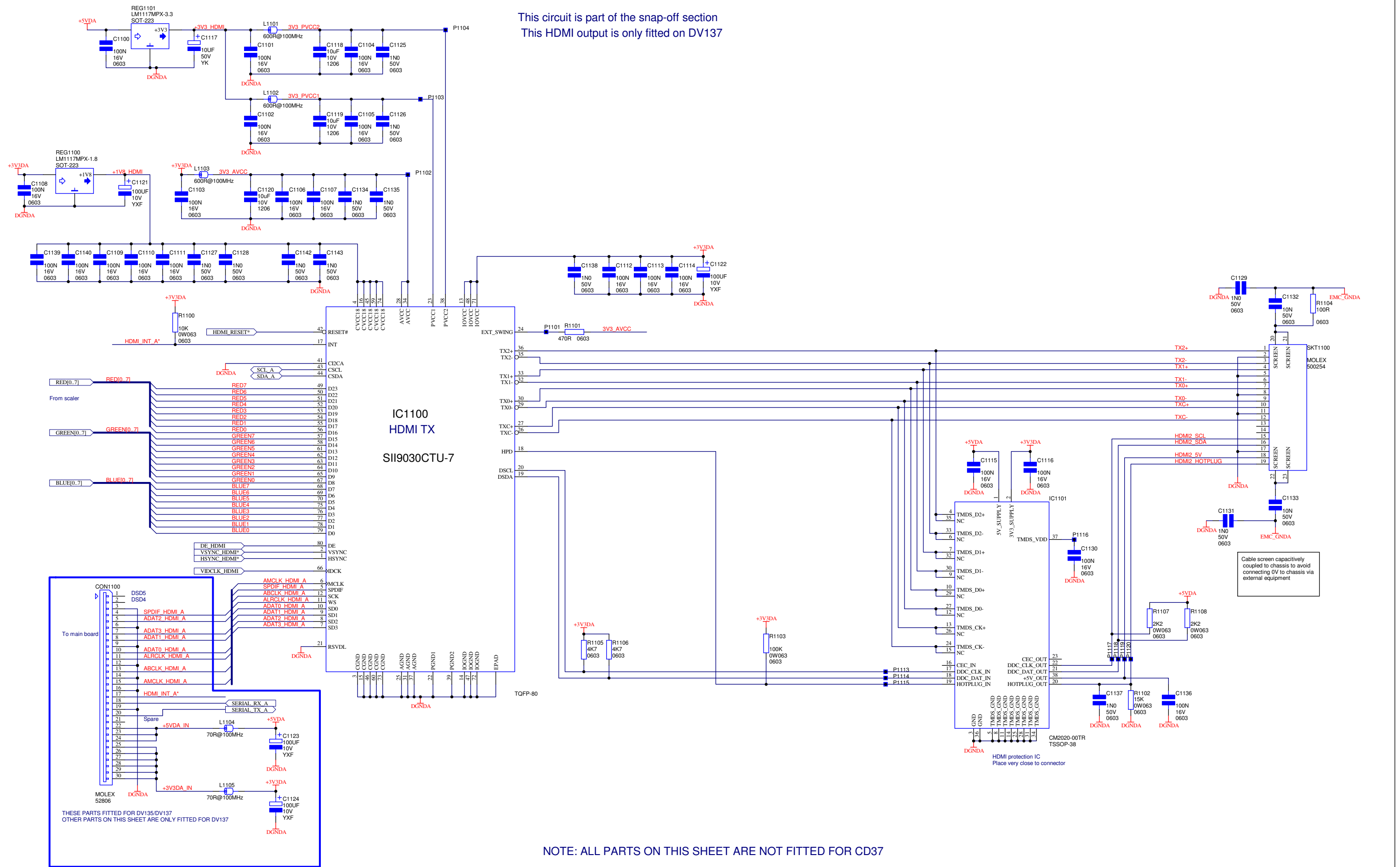
| DRAWING TITLE                                                                              |                   | CD37 Digital video buffer & PLD   |              |                                                |          |                    |
|--------------------------------------------------------------------------------------------|-------------------|-----------------------------------|--------------|------------------------------------------------|----------|--------------------|
| <b>ARCAM</b><br>A & R Cambridge Ltd.<br>Pembroke Avenue<br>Waterbeach<br>Cambridge CB5 9QR | Filename:         | L165C09 Buffer & PLD.Sch          |              |                                                |          |                    |
|                                                                                            | Notes:            |                                   |              |                                                |          |                    |
|                                                                                            | ECO No.           | INITIALS                          | DATE         | DESCRIPTION OF CHANGE                          | ISSUE    |                    |
|                                                                                            | Contact Engineer: | Mark Tweedale<br>mark@arcam.co.uk | Contact Tel: | 01223 203210 (direct)<br>01223 203200 (switch) | Printed: | 6-May-2008         |
|                                                                                            |                   |                                   |              | Sheet 9 of 13                                  | A2       | DRAWING NO. L165CT |

NOTE: ALL PARTS ON THIS SHEET ARE NOT FITTED FOR CD37



| DRAWING TITLE                                                              |          | CD37 Video Encoder                                  |                                                             |                     |                |       |                    |
|----------------------------------------------------------------------------|----------|-----------------------------------------------------|-------------------------------------------------------------|---------------------|----------------|-------|--------------------|
| 08_E095                                                                    | PK       | 06/05/08                                            | Nothing on this sheet                                       |                     |                | 4.3   |                    |
| 08_E094                                                                    | MJT      | 18/04/08                                            | None to this sheet.                                         |                     |                | 4.2   |                    |
| 08_E073                                                                    | FGV      | 02/04/08                                            | Nothing on this sheet                                       |                     |                | 4.1   |                    |
| 08_E047                                                                    | PK       | 21/02/08                                            | First release based on L988                                 |                     |                | 4.0   |                    |
| ECO No.                                                                    | INITIALS | DATE                                                | DESCRIPTION OF CHANGE                                       |                     |                | ISSUE |                    |
|                                                                            |          |                                                     |                                                             |                     |                |       |                    |
| A & R Cambridge Ltd.<br>Pembroke Avenue<br>Waterbeach<br>Cambridge CB5 9QR |          | Contact Engineer: Mark Tweedale<br>mark@arcam.co.uk | Contact Tel: 01223 203210 (direct)<br>01223 203200 (switch) | Printed: 6-May-2008 | Sheet 10 of 13 | A2    | DRAWING NO. L165CT |

This circuit is part of the snap-off section  
 This HDMI output is only fitted on DV137

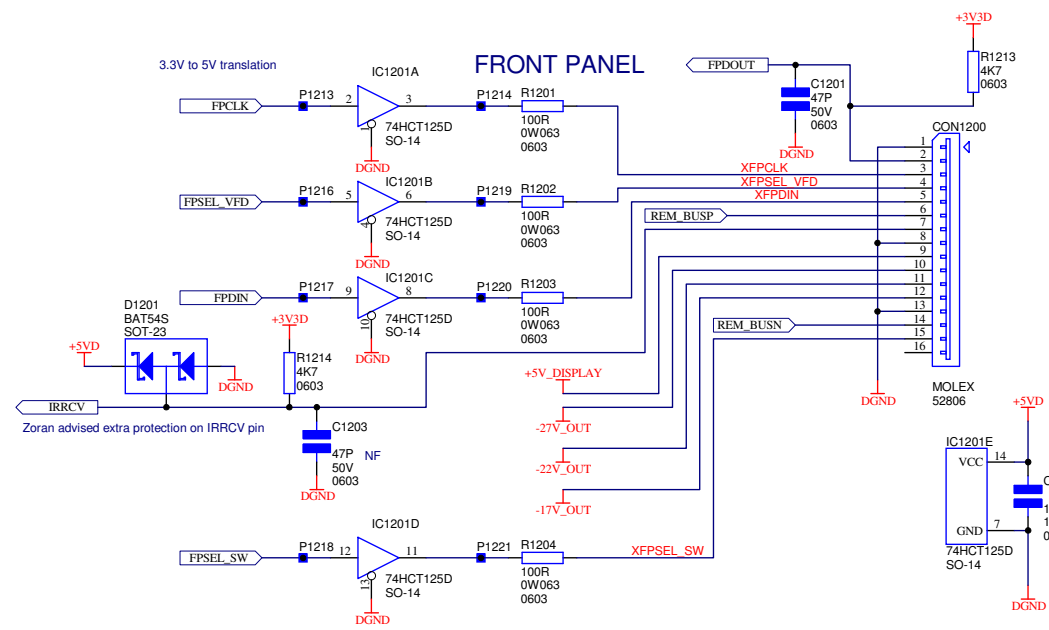
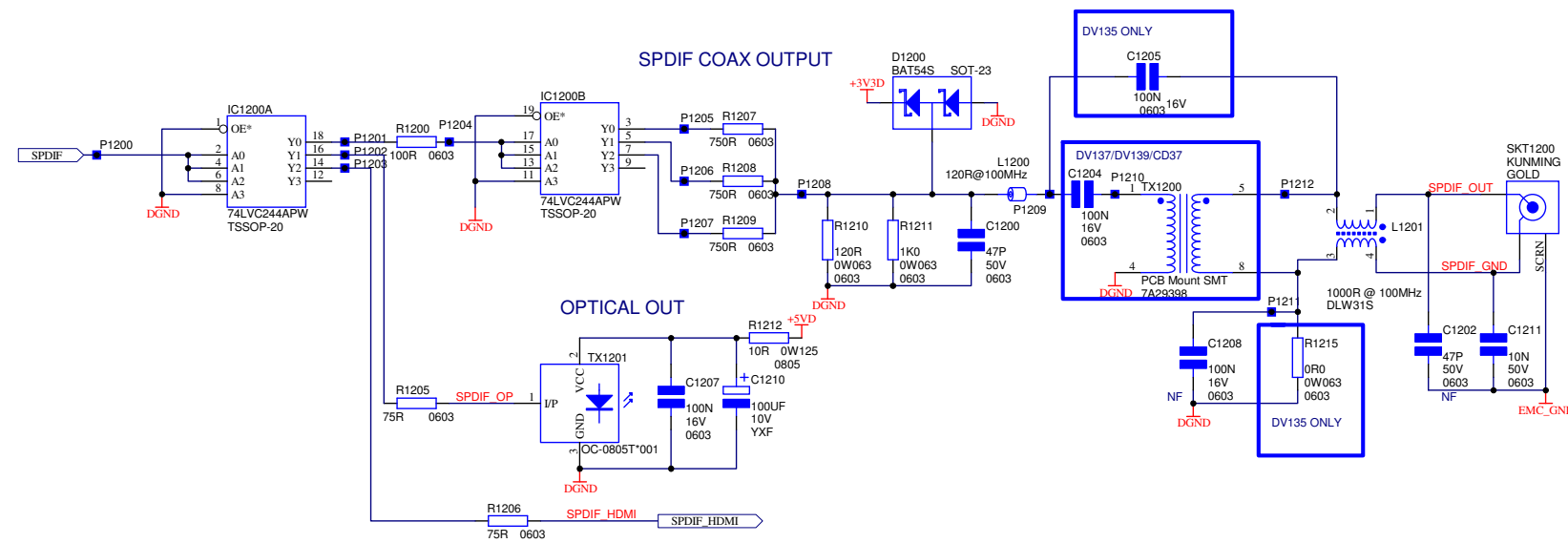
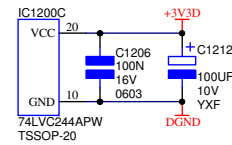


IC1100  
 HDMI TX  
 SII9030CTU-7

NOTE: ALL PARTS ON THIS SHEET ARE NOT FITTED FOR CD37

THESE PARTS FITTED FOR DV135/DV137  
 OTHER PARTS ON THIS SHEET ARE ONLY FITTED FOR DV137

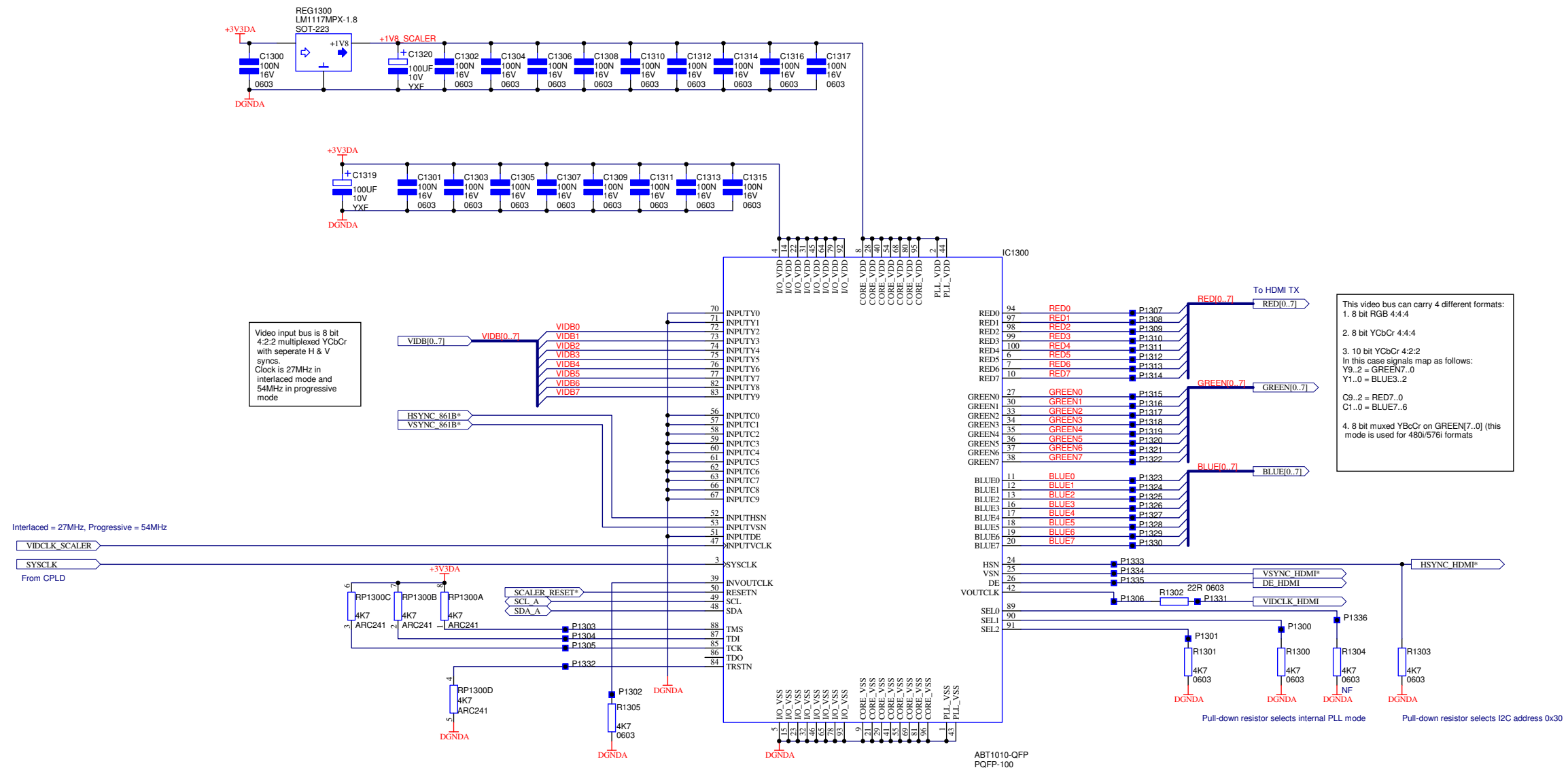
| DRAWING TITLE                                                                              |                                   |                    |                                                |          |                       |                             |                       |
|--------------------------------------------------------------------------------------------|-----------------------------------|--------------------|------------------------------------------------|----------|-----------------------|-----------------------------|-----------------------|
| <b>CD37 HDMI output 2</b>                                                                  |                                   |                    |                                                |          |                       |                             |                       |
| <b>ARCAM</b><br>A & R Cambridge Ltd.<br>Pembroke Avenue<br>Waterbeach<br>Cambridge CB5 9QR | Filename:                         | L165C11 HDMI 2.Sch | 08_E095                                        | PK       | 06/05/08              | Nothing on this sheet       | 4.3                   |
|                                                                                            | Notes:                            |                    | 08_E094                                        | MJT      | 18/04/08              | None to this sheet.         | 4.2                   |
|                                                                                            |                                   |                    | 08_E073                                        | FGV      | 02/04/08              | Nothing on this sheet       | 4.1                   |
|                                                                                            |                                   |                    | 08_E047                                        | PK       | 21/02/08              | First release based on L988 | 4.0                   |
|                                                                                            | ECO No.:                          |                    | INITIALS                                       | DATE     | DESCRIPTION OF CHANGE | ISSUE                       |                       |
| Contact Engineer:                                                                          | Mark Tweedale<br>mark@arcam.co.uk | Contact Tel:       | 01223 203210 (direct)<br>01223 203200 (switch) | Printed: | 6-May-2008            | Sheet 11 of 13              | A2 DRAWING NO. L165CT |



| DRAWING TITLE                                                                              |                                   | CD37 SPDIF and Front panel I/F            |                                                |                       |                |          |                             |     |
|--------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------|------------------------------------------------|-----------------------|----------------|----------|-----------------------------|-----|
| <b>ARCAM</b><br>A & R Cambridge Ltd.<br>Pembroke Avenue<br>Waterbeach<br>Cambridge CB3 9QR | Filename:                         | L165C12 SPDIF & Front panel interface.Sch |                                                | 08_E095               | PK             | 06/05/08 | Nothing on this sheet       | 4.3 |
|                                                                                            | Notes:                            |                                           |                                                | 08_E094               | MJT            | 18/04/08 | None to this sheet.         | 4.2 |
|                                                                                            |                                   |                                           |                                                | 08_E073               | FGV            | 02/04/08 | Nothing on this sheet       | 4.1 |
|                                                                                            |                                   |                                           |                                                | 08_E047               | PK             | 21/02/08 | First release based on L988 | 4.0 |
|                                                                                            | ECO No.                           | INITIALS                                  | DATE                                           | DESCRIPTION OF CHANGE | ISSUE          |          |                             |     |
| Contact Engineer:                                                                          | Mark Tweedale<br>mark@arcam.co.uk |                                           | 01223 203210 (direct)<br>01223 203200 (switch) | Printed: 6-May-2008   | Sheet 12 of 13 | A2       | DRAWING NO. L165CT          |     |



This circuit is part of the snap-off section.  
 NOTE: ALL PARTS ON THIS SHEET ARE NOT FITTED FOR CD37



| DRAWING TITLE                                                                              |                                   | CD37 Scaler        |                                                |                       |            |                             |                       |
|--------------------------------------------------------------------------------------------|-----------------------------------|--------------------|------------------------------------------------|-----------------------|------------|-----------------------------|-----------------------|
| <b>ARCAM</b><br>A & R Cambridge Ltd.<br>Pembroke Avenue<br>Waterbeach<br>Cambridge CB5 9QR | Filename:                         | L165C13 Scaler.Sch | 08_E095                                        | PK                    | 06/05/08   | Nothing on this sheet       | 4.3                   |
|                                                                                            | Notes:                            |                    | 08_E094                                        | MJT                   | 18/04/08   | None to this sheet.         | 4.2                   |
|                                                                                            |                                   |                    | 08_E073                                        | FGV                   | 02/04/08   | Nothing on this sheet       | 4.1                   |
|                                                                                            |                                   |                    | 08_E047                                        | PK                    | 21/02/08   | First release based on L988 | 4.0                   |
|                                                                                            | ECO No.                           | INITIALS           | DATE                                           | DESCRIPTION OF CHANGE | ISSUE      |                             |                       |
| Contact Engineer:                                                                          | Mark Tweedale<br>mark@arcam.co.uk | Contact Tel:       | 01223 203210 (direct)<br>01223 203200 (switch) | Printed:              | 6-May-2008 | Sheet 13 of 13              | A2 DRAWING NO. L165CT |