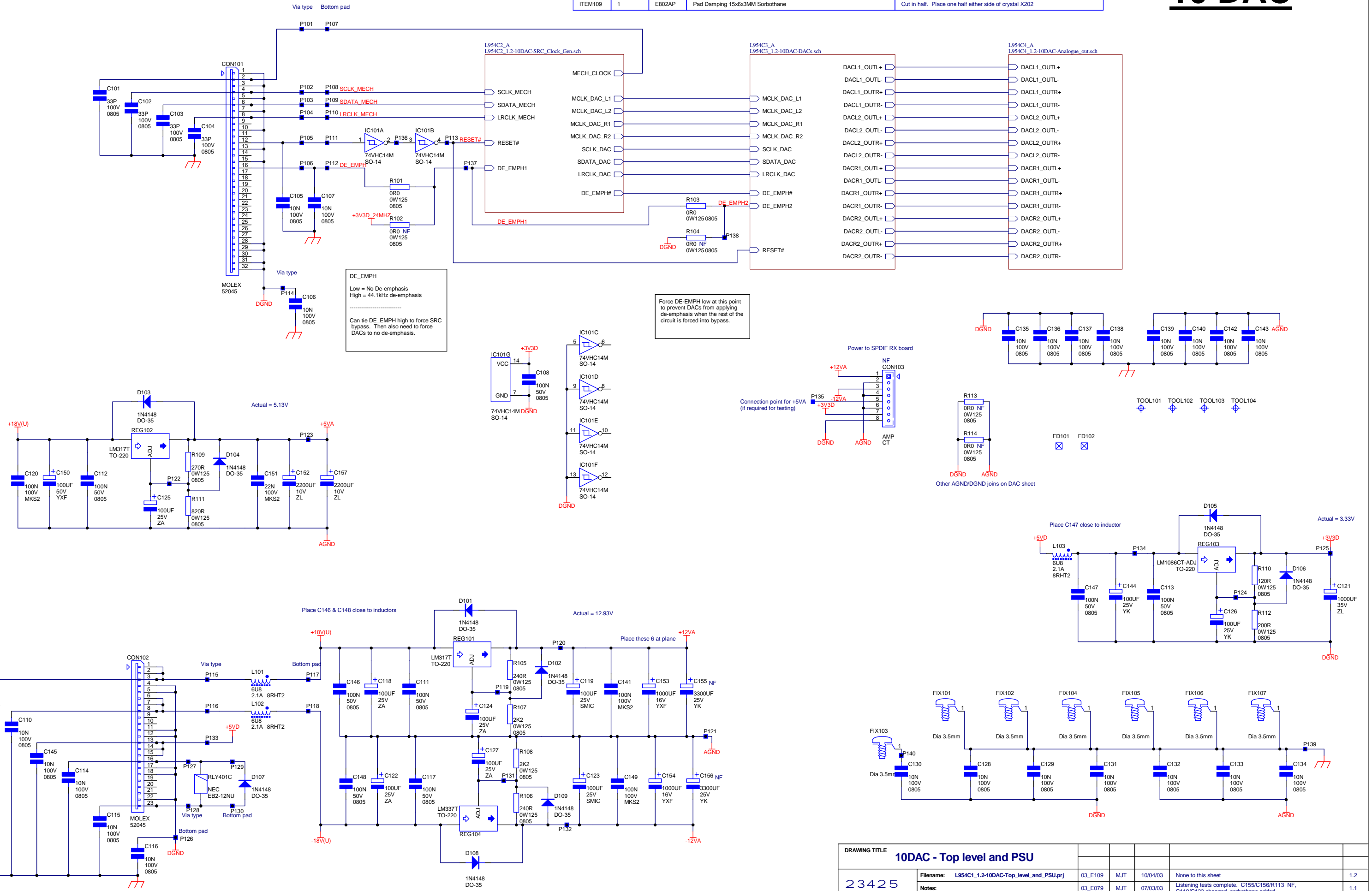


| | | | | |
|---------|---|---------|----------------------------|---|
| ITEM101 | 1 | L954PB | BLANK PCB 10DAC | |
| ITEM102 | 4 | HA3V10A | M Screw Torx M3x10MM ST ZP | |
| ITEM103 | 4 | HJ3A00A | Nut M3 Full Stzp (1000) | |
| ITEM104 | 4 | HL3AB | Washer M3 Plain ST BLK | To be mounted on bottom side under screw head |

| | | | | |
|---------|---|--------|---------------------------------|---|
| ITEM105 | 1 | E802AP | Pad Damping 15x6x3MM Sorbothane | Fit on top of relay RLY401 |
| ITEM106 | 1 | E802AP | Pad Damping 15x6x3MM Sorbothane | Cut in half. Place one half on top of C119 and the other on top of C123 |
| ITEM107 | 1 | E802AP | Pad Damping 15x6x3MM Sorbothane | Cut in half. Place one half on top of C152 and the other on top of C157 |
| ITEM108 | 1 | E802AP | Pad Damping 15x6x3MM Sorbothane | Cut in half. Place one half either side of crystal X201 |
| ITEM109 | 1 | E802AP | Pad Damping 15x6x3MM Sorbothane | Cut in half. Place one half either side of crystal X202 |

10 DAC



DE_EMPH
 Low = No De-emphasis
 High = 44.1kHz de-emphasis

 Can tie DE_EMPH high to force SRC bypass. Then also need to force DACs to no de-emphasis.

Force DE-EMPH low at this point to prevent DACs from applying de-emphasis when the rest of the circuit is forced into bypass.

Power to SPDIF RX board

Connection point for +5VA (if required for testing)

Other AGND/DGND joins on DAC sheet

Place C147 close to inductor

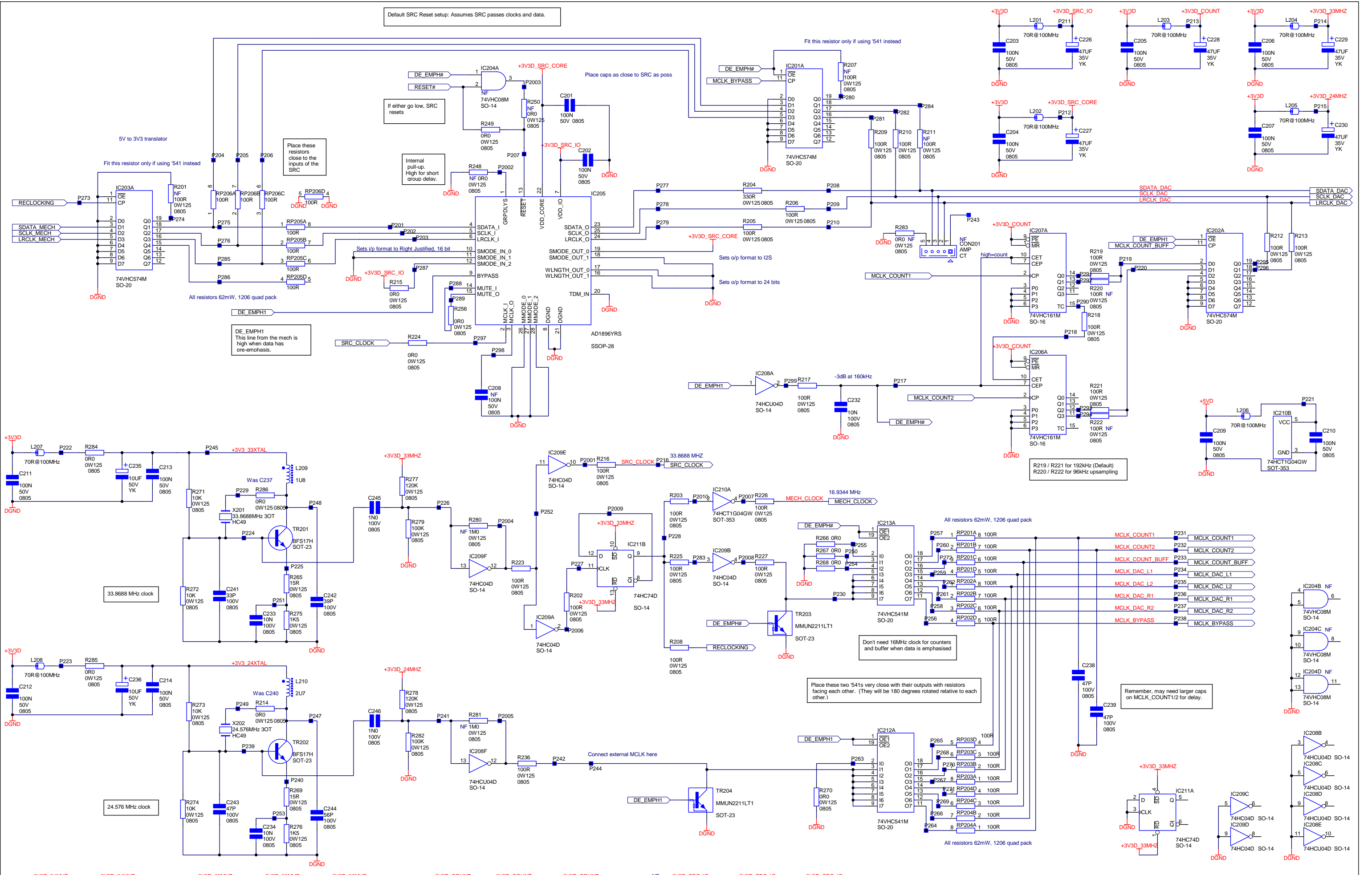
Place C146 & C148 close to inductors

Actual = 12.93V

Place these 6 at plane

This symbol represents Chassis ground

| | | | | | |
|--|----------|----------|---|--|-------|
| DRAWING TITLE | | | | | |
| 10DAC - Top level and PSU | | | | | |
| 23425 | | | | | |
| File Name: L954C1_1.2-10DAC-Top_level_and_PSU.prj | | | | | |
| Notes: | | | | | |
| 03_E109 | MJT | 10/04/03 | None to this sheet | | 1.2 |
| 03_E079 | MJT | 07/03/03 | Listening tests complete. C155/C156/R113 NF, C119/C123 changed, sorbothane added. | | 1.1 |
| 03_E061 | MJT | 20/02/03 | Production release | | 1.0 |
| ECO No. | INITIALS | DATE | DESCRIPTION OF CHANGE | | ISSUE |
| Contact Engineer: Mark Tweedale Contact Tel: 01223 203200 Printed: 10-Apr-2003 Sheet 1 of 4 DRAWING NO. L954CT | | | | | |



Default SRC Reset setup: Assumes SRC passes clocks and data.

Fit this resistor only if using '541 instead

Place caps as close to SRC as possible

Place these resistors close to the inputs of the SRC

Internal pull-up. High for short around delay.

DE_EMPH1
This line from the mech is high when data has pre-emphasis.

All resistors 62mW, 1206 quad pack

SDATA_DAC
SCLK_DAC
LRCLK_DAC

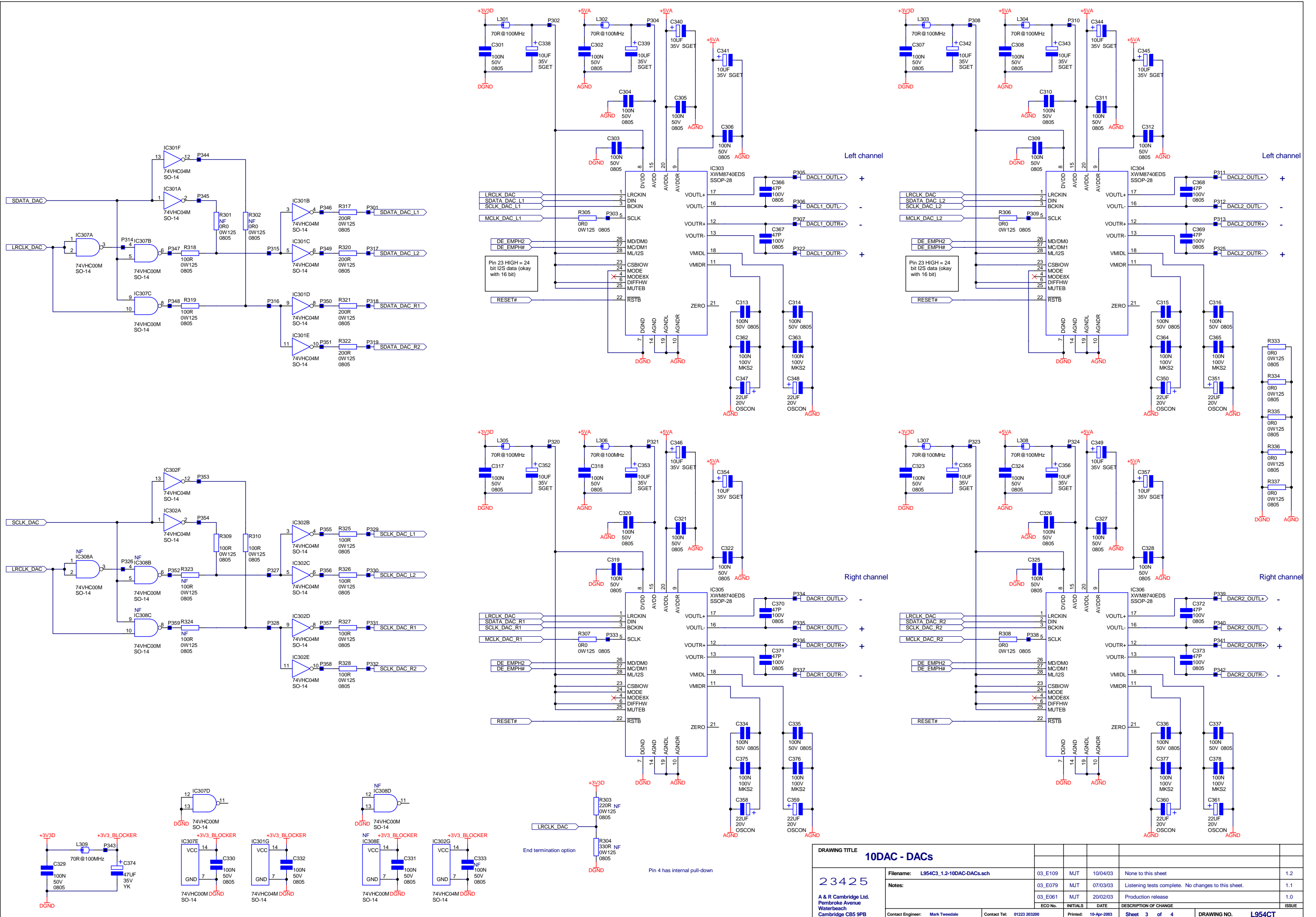
R219 / R221 for 192kHz (Default)
R220 / R222 for 96kHz upsampling

Don't need 16MHz clock for counters and buffer when data is emphasised

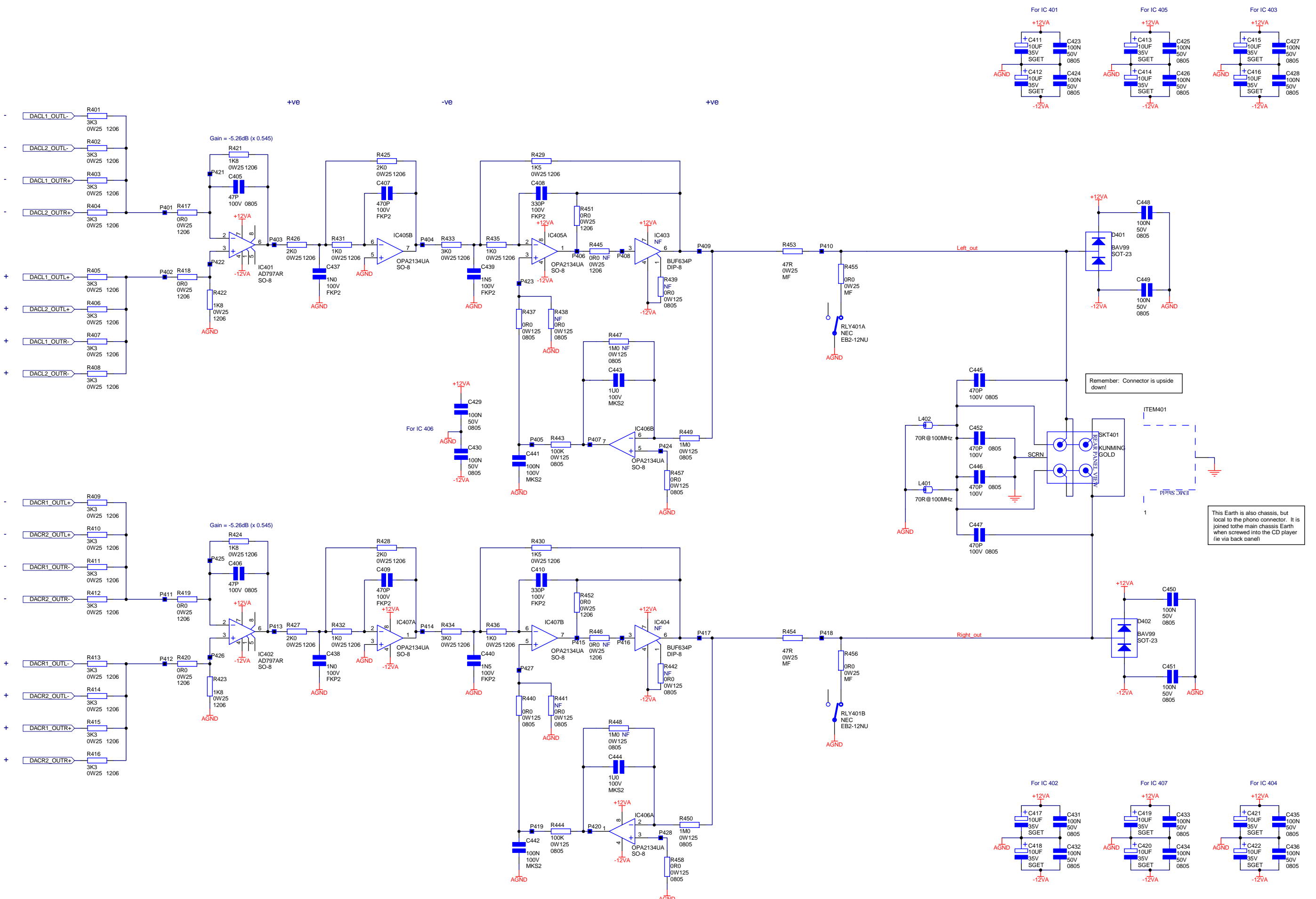
Place these two '541s very close with their outputs facing each other. (They will be 180 degrees rotated relative to each other.)

Remember, may need larger caps on MCLK_COUNT1/2 for delay.

| | | | | | | | | | | | |
|--|--|--|--|---------------------------|------------------------------------|---------|----------------------|----------|-------------------------------|---|--------------------|
| DRAWING TITLE | | | | | | | | | | | |
| 10DAC - SRC and Clock Gen | | | | | | | | | | | |
| 23425 | | | | Filename: | L954C2_1.2-10DAC-SRC_Clock_Gen.sch | 03_E109 | MJT | 10/04/03 | R226 changed to 100R for EMC. | 1.2 | |
| Notes: | | | | | | | 03_E079 | MJT | 07/03/03 | Listening tests complete. IC209/IC211 changed to HC family. | 1.1 |
| A & R Cambridge Ltd. Pembroke Avenue Waterbeach Cambridge CB5 9PB | | | | | | | ECO No. | INITIALS | DATE | DESCRIPTION OF CHANGE | ISSUE |
| Contact Engineer: Mark Tweeddale | | | | Contact Tel: 01223 203200 | | | Printed: 10-Apr-2003 | | Sheet 2 of 4 | | DRAWING NO. L954CT |



| DRAWING TITLE | | | | | | |
|--|--------------------------|--------------|-----------------------|----------|---|-----|
| 10DAC - DACs | | | | | | |
| 23425 | | | | | | |
| A & R Cambridge Ltd. Pembroke Avenue Waterbeach Cambridge CB5 9PB | | | | | | |
| Filename: | L954C_1.2-10DAC-DACs.sch | 03_E109 | MJT | 10/04/03 | None to this sheet | 1.2 |
| Notes: | | 03_E079 | MJT | 07/03/03 | Listening tests complete. No changes to this sheet. | 1.1 |
| | | 03_E061 | MJT | 20/02/03 | Production release | 1.0 |
| ECO No. | INITIALS | DATE | DESCRIPTION OF CHANGE | | ISSUE | |
| 03 | | 10-Apr-2003 | Sheet 3 of 4 | | DRAWING NO. L954CT | |
| Contact Engineer: | Mark Tweedale | Contact Tel: | 01223 203200 | | Printed: | |



| DRAWING TITLE | | | | | | |
|--|-----------------------------------|--------------|-----------------------|----------|---|--------------|
| 10DAC - Analogue out | | | | | | |
| 23425 | | | | | | |
| A & R Cambridge Ltd. Pembroke Avenue Waterbeach Cambridge CB5 9PB | | | | | | |
| Filename: | L954C4_1.2-10DAC-Analogue_out.sch | 03_E109 | MJT | 10/04/03 | None to this sheet | 1.2 |
| Notes: | | 03_E079 | MJT | 07/03/03 | Listening tests complete. R449/R450 changed. C427/C428/C435/C436 fitted. | 1.1 |
| | | 03_E061 | MJT | 20/02/03 | Production release | 1.0 |
| ECO No. | INITIALS | DATE | DESCRIPTION OF CHANGE | | | ISSUE |
| Contact Engineer: | Mark Tweedale | Contact Tel: | (01223) 203200 | Printed: | 10-Apr-2003 | Sheet 4 of 4 |
| | | | | | DRAWING NO. | L954CT |