

# ENCOUNTER

SERVICE MANUAL

AMPLIFIER MODEL

EN-AM4502

**FUSION**<sup>®</sup>

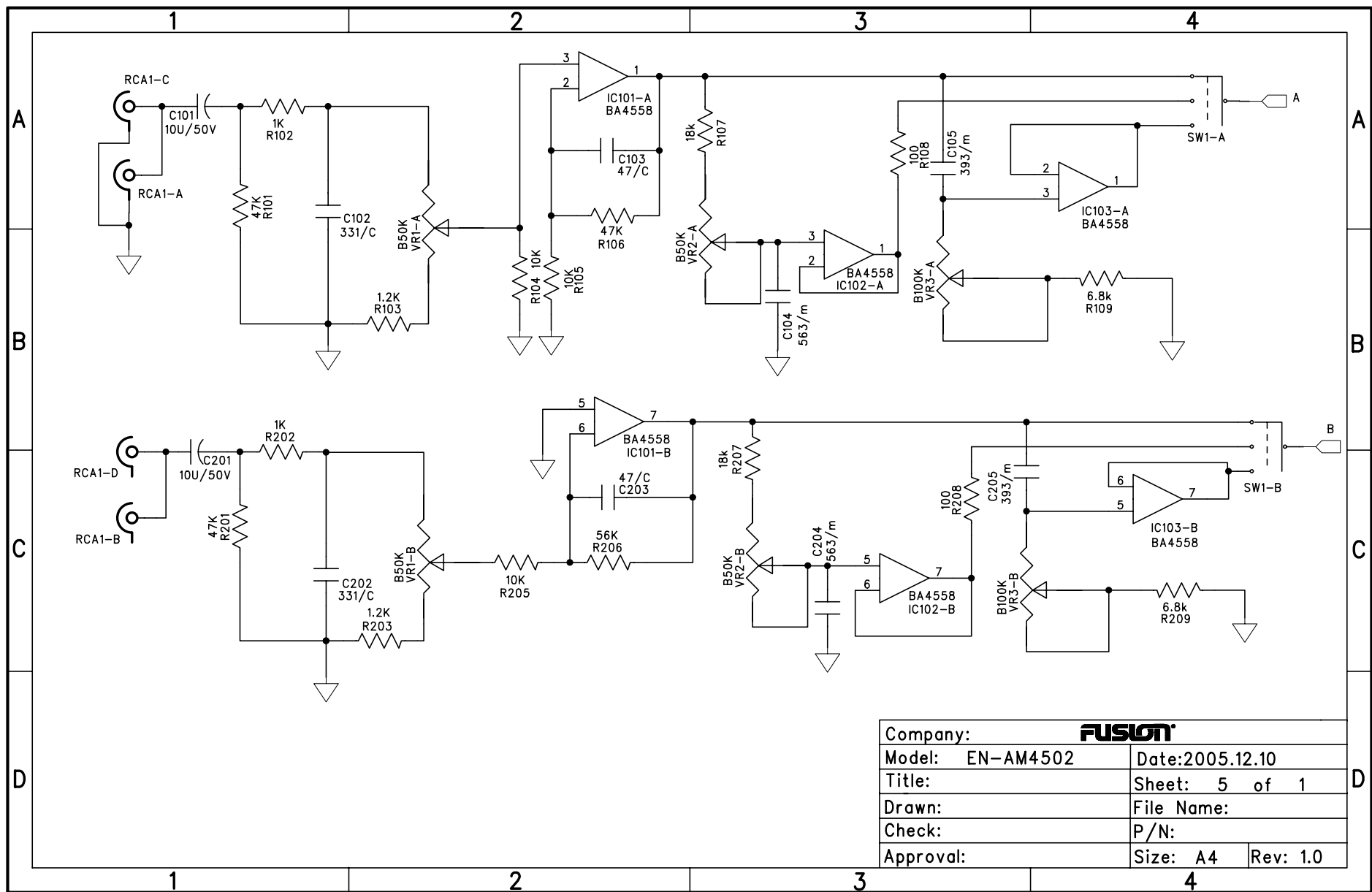
## EN-AM4502 Material list

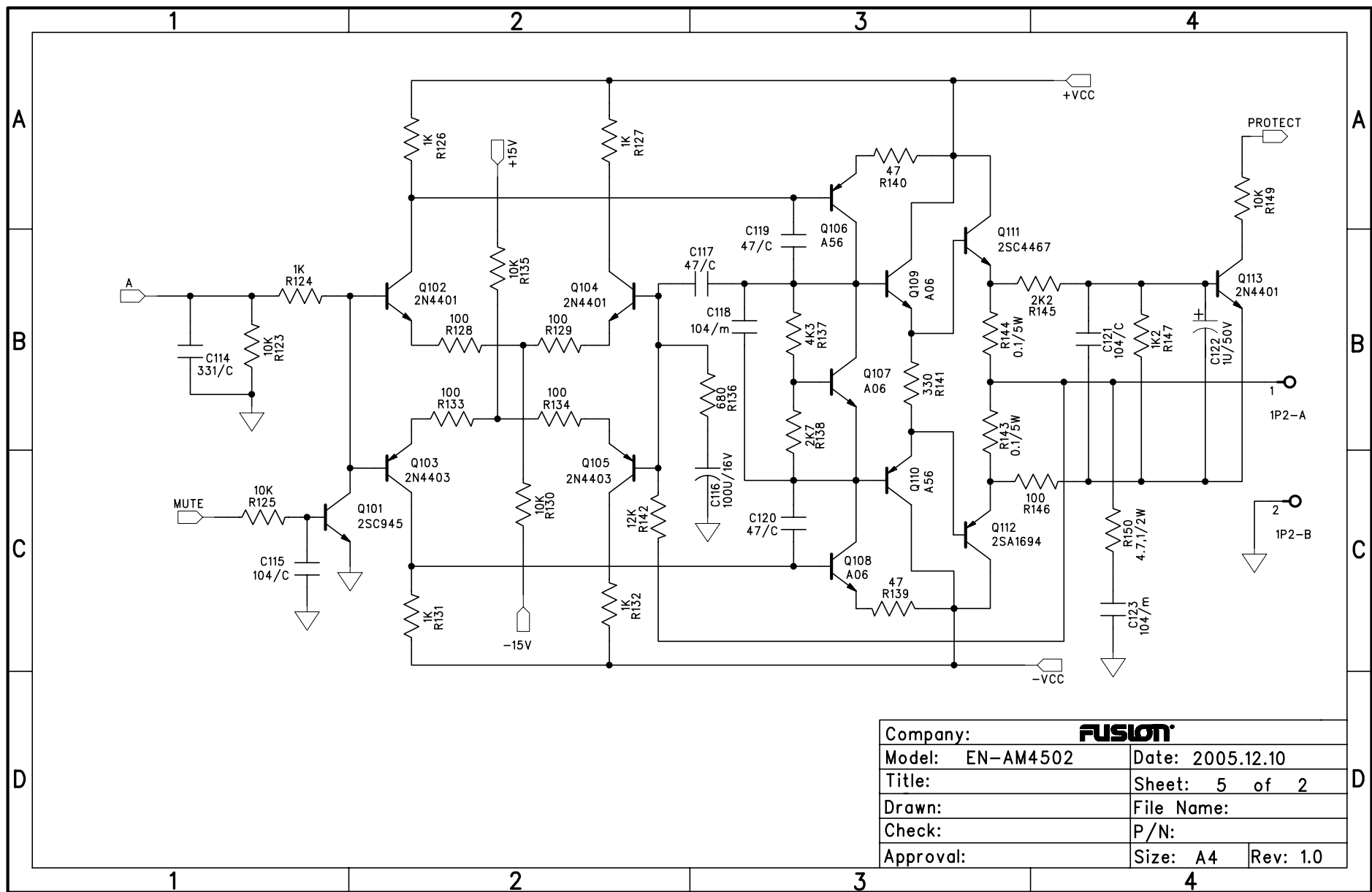
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|      | Part Number    | Items     | Q'ty | Position                                                                                          |
|------|----------------|-----------|------|---------------------------------------------------------------------------------------------------|
| 0    | ASY-ENAM4502   |           |      |                                                                                                   |
| 1... | WZ-ENAM4502    |           |      |                                                                                                   |
| 2... | DIO1N4004R     | diode     | 1    | D2                                                                                                |
| 2... | DIO1N4148R     | diode     | 8    | D3~10                                                                                             |
| 2... | ECT016V107MDR  | Capacitor | 3    | C7.C116.C216                                                                                      |
| 2... | ECT016V477MDR  | Capacitor | 2    | C19~20                                                                                            |
| 2... | ECT025V107MBR  | Capacitor | 1    | C28                                                                                               |
| 2... | ECT025V226MDR  | Capacitor | 1    | C5                                                                                                |
| 2... | ECT050V103KTR  | Capacitor | 1    | C40                                                                                               |
| 2... | ECT050V104KTR  | Capacitor | 11   | C12.C15~16.C21`22.C115.C121.C215.C221.C24.C26                                                     |
| 2... | ECT050V105MBR  | Capacitor | 1    | C10                                                                                               |
| 2... | ECT050V105MDR  | Capacitor | 3    | C8.C122.C222                                                                                      |
| 2... | ECT050V106MDR  | Capacitor | 2    | C101.C201                                                                                         |
| 2... | ECT050V331KTR  | Capacitor | 4    | C102.C114.C202.C214                                                                               |
| 2... | ECT050V470KTR  | Capacitor | 8    | C103.C117.C119~120.C203.C217.C219~220                                                             |
| 2... | ECT050V681KTR  | Capacitor | 1    | C11                                                                                               |
| 2... | ECT100V104DSR  | Capacitor | 5    | C1.C118.C123.C218.C223                                                                            |
| 2... | ECT100V393DSR  | Capacitor | 2    | C105.C205                                                                                         |
| 2... | ECT100V472DSR  | Capacitor | 1    | C2                                                                                                |
| 2... | ECT100V473DSR  | Capacitor | 2    | C3~4                                                                                              |
| 2... | ECT100V563DSR  | Capacitor | 2    | C104.C204                                                                                         |
| 2... | PCBEN45021AR   | PCB       | 1    |                                                                                                   |
| 2... | RESCF121Y101JR | resistor  | 13   | R7.R108.R128~129.R133~134.R146.R208.R228~229.R233~234.R246                                        |
| 2... | RESCF121Y102JR | resistor  | 16   | R25~27.R43.R102.R124.R126`127.R131~132.R202.R224.R226~227.R231~232                                |
| 2... | RESCF121Y103JR | resistor  | 23   | R4.R9~10.R16~17.R19~20.R23.R41~42.R104~105.R123.R125.R130.R135.R149.R205.R223.R225.R230.R235.R249 |
| 2... | RESCF121Y104JR | resistor  | 1    | R6                                                                                                |
| 2... | RESCF121Y122JR | resistor  | 5    | R13.R103.R147.R203.R247                                                                           |
| 2... | RESCF121Y123JR | resistor  | 3    | R2.R142.R242                                                                                      |
| 2... | RESCF121Y152JR | resistor  | 1    | R22                                                                                               |
| 2... | RESCF121Y153JR | resistor  | 1    | R15                                                                                               |
| 2... | RESCF121Y181JR | resistor  | 1    | R1                                                                                                |
| 2... | RESCF121Y183JR | resistor  | 2    | R107.R207                                                                                         |
| 2... | RESCF121Y205JR | resistor  | 1    | R14                                                                                               |
| 2... | RESCF121Y222JR | resistor  | 2    | R145.R245                                                                                         |
| 2... | RESCF121Y224JR | resistor  | 1    | R5                                                                                                |
| 2... | RESCF121Y272JR | resistor  | 2    | R138.R238                                                                                         |
| 2... | RESCF121Y302JR | resistor  | 3    | R8.R21.R50                                                                                        |
| 2... | RESCF121Y331JR | resistor  | 2    | R141.R241                                                                                         |
| 2... | RESCF121Y392JR | resistor  | 1    | R24                                                                                               |
| 2... | RESCF121Y393JR | resistor  | 1    | R18                                                                                               |
| 2... | RESCF121Y432JR | resistor  | 2    | R137.R237                                                                                         |
| 2... | RESCF121Y433JR | resistor  | 1    | R12                                                                                               |

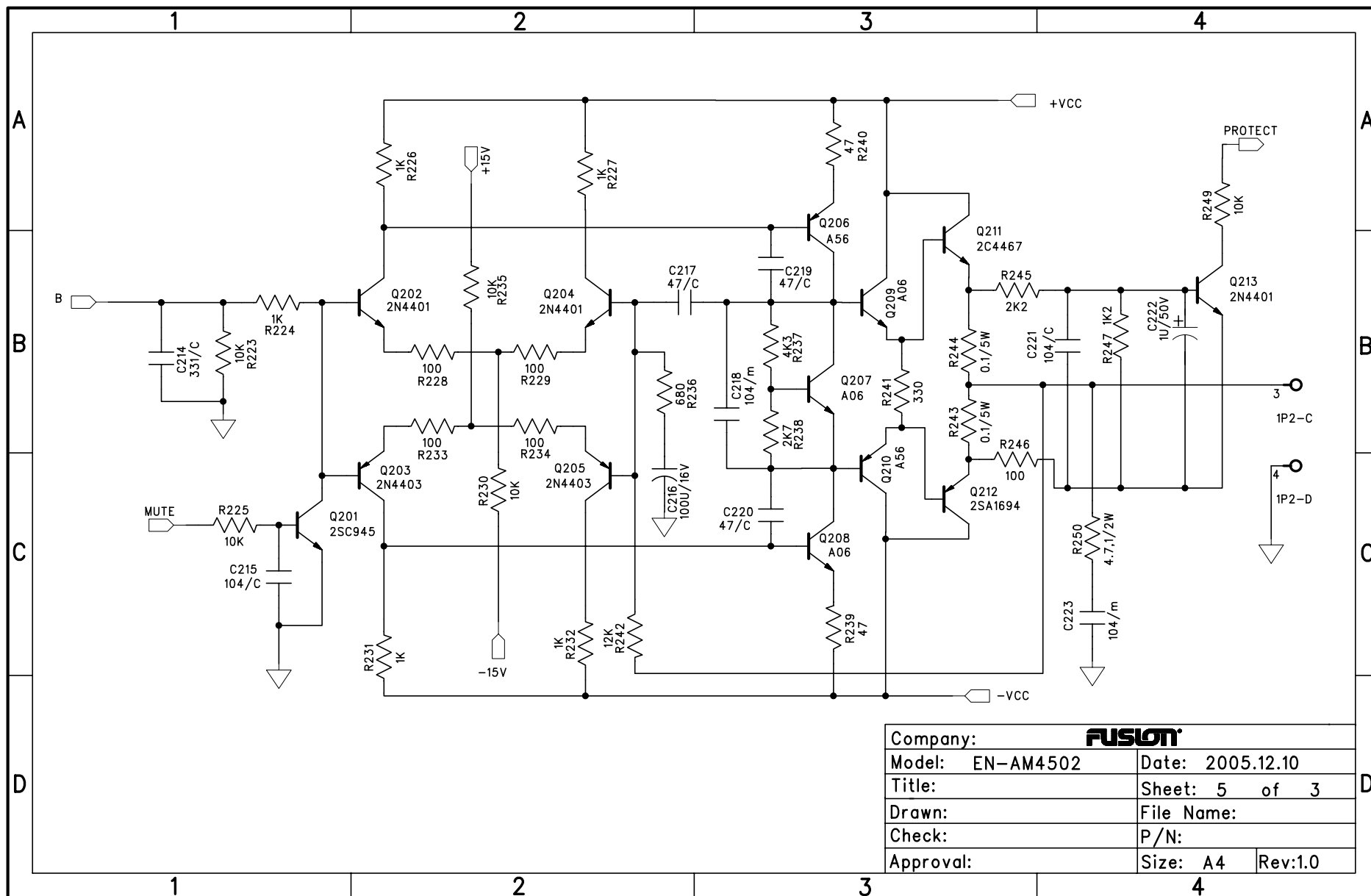
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|------|--------------------|--------------|----------|----------------------------------|-----|
| 2... | RESCF121Y470JR     | resistor     | 4        | R139~140.R239~240                | 2/3 |
| 2... | RESCF121Y472JR     | resistor     | 2        | R3.R11                           |     |
| 2... | RESCF121Y473JR     | resistor     | 3        | R101.R106.R201                   |     |
| 2... | RESCF121Y563JR     | resistor     | 1        | R206                             |     |
| 2... | RESCF121Y681JR     | resistor     | 4        | R28~29.R136.R236                 |     |
| 2... | RESCF121Y682JR     | resistor     | 2        | R109.R209                        |     |
| 2... | RESCF251Y101JR     | resistor     | 4        | R30~33                           |     |
| 2... | RESCF251Y102JR     | resistor     | 2        | R48~49                           |     |
| 2... | TRA2N4401R         | triode       | 7        | Q1.Q102.Q104.Q113.Q202.Q204.Q213 |     |
| 2... | TRA2N4403R         | triode       | 8        | Q2~5.Q103.Q105.Q203.Q205         |     |
| 2... | TRAA06R            | triode       | 4        | Q108~109.Q208~209                |     |
| 2... | TRAA56R            | triode       | 4        | Q106.Q110.Q206.Q210              |     |
| 2... | WIR060R6R          | jumper       | 21       | J1~21                            |     |
| 2... | WIR080R6R          | jumper       | 9        | J22~30                           |     |
| 2... | WIR100R6R          | jumper       | 13       | J31~43                           |     |
| 2... | WIR130R6R          | jumper       | 13       | J44~55.J73                       |     |
| 2... | WIR150R6R          | jumper       | 2        | J56~57                           |     |
| 2... | WIR170R6R          | jumper       | 4        | J58~61                           |     |
| 2... | WIR200R6R          | jumper       | 5        | J62~66                           |     |
| 2... | WIR250R6R          | jumper       | 2        | J67~68                           |     |
| 2... | WIR300R6R          | jumper       | 2        | J69~70                           |     |
| 2... | WIR330R6R          | jumper       | 2        | J71~72                           |     |
| 2... | ZD1N5239BR         | diode        | 1        | ZD1                              |     |
| 2... | ZD1N5241BR         | diode        | 1        | ZD2                              |     |
| 2... | ZD1N5245BR         | diode        | 2        | ZD3~4                            |     |
| 2... | <b>WS-ENAM4502</b> |              | <b>1</b> |                                  |     |
| 2... | DIO1N5402R         | diode        | 1        | D1                               |     |
| 2... | DIOFMG22RR         | diode        | 1        | D11                              |     |
| 2... | DIOFMG22SR         | diode        | 1        | D12                              |     |
| 2... | ECT025B228MER      | Capacitor    | 2        | C25.C27                          |     |
| 2... | ECT035B338MDR      | Capacitor    | 2        | C13~14                           |     |
| 2... | ERT154K01R         | varistor     | 1        | RT1                              |     |
| 2... | FAN09002RR         | pipe         | 1        |                                  |     |
| 2... | FUS1JK201R         | fuse holder  | 1        | FUSE                             |     |
| 2... | ICBA4558D8PR       | IC           | 1        | IC2                              |     |
| 2... | ICBA4558S8PR       | IC           | 3        | IC101~103                        |     |
| 2... | ICKIA494PR         | IC           | 1        | IC3                              |     |
| 2... | ICPC17K1R          | IC           | 1        | IC1                              |     |
| 2... | IND3U1R8H1R        | Inductors    | 1        | L1                               |     |
| 2... | LEDGR302R          | LED          | 1        | LED                              |     |
| 2... | MOSIRFZ44NR        | Mosfet       | 4        | Q6~9                             |     |
| 2... | RCAJU4RWAR         | RCA          | 1        | RCA                              |     |
| 2... | RESCM502NR10KR     | resistor     | 4        | R143~144.R243~244                |     |
| 2... | RESCF501R4R7JR     | resistor     | 2        | R150.R250                        |     |
| 2... | RESMO102R220JR     | resistor     | 1        | R40                              |     |
| 2... | RESMO202L331JR     | resistor     | 2        | R44~45                           |     |
| 2... | ST3DOWHI002R       | Terminal     | 1        | 3PIN                             |     |
| 2... | ST4DOWHI002R       | Terminal     | 1        | 4PIN                             |     |
| 2... | SW12P3T06002R      | Power switch | 1        | SW                               |     |
| 2... | TRA2SA1694R        | Transistor   | 2        | Q112.Q212                        |     |

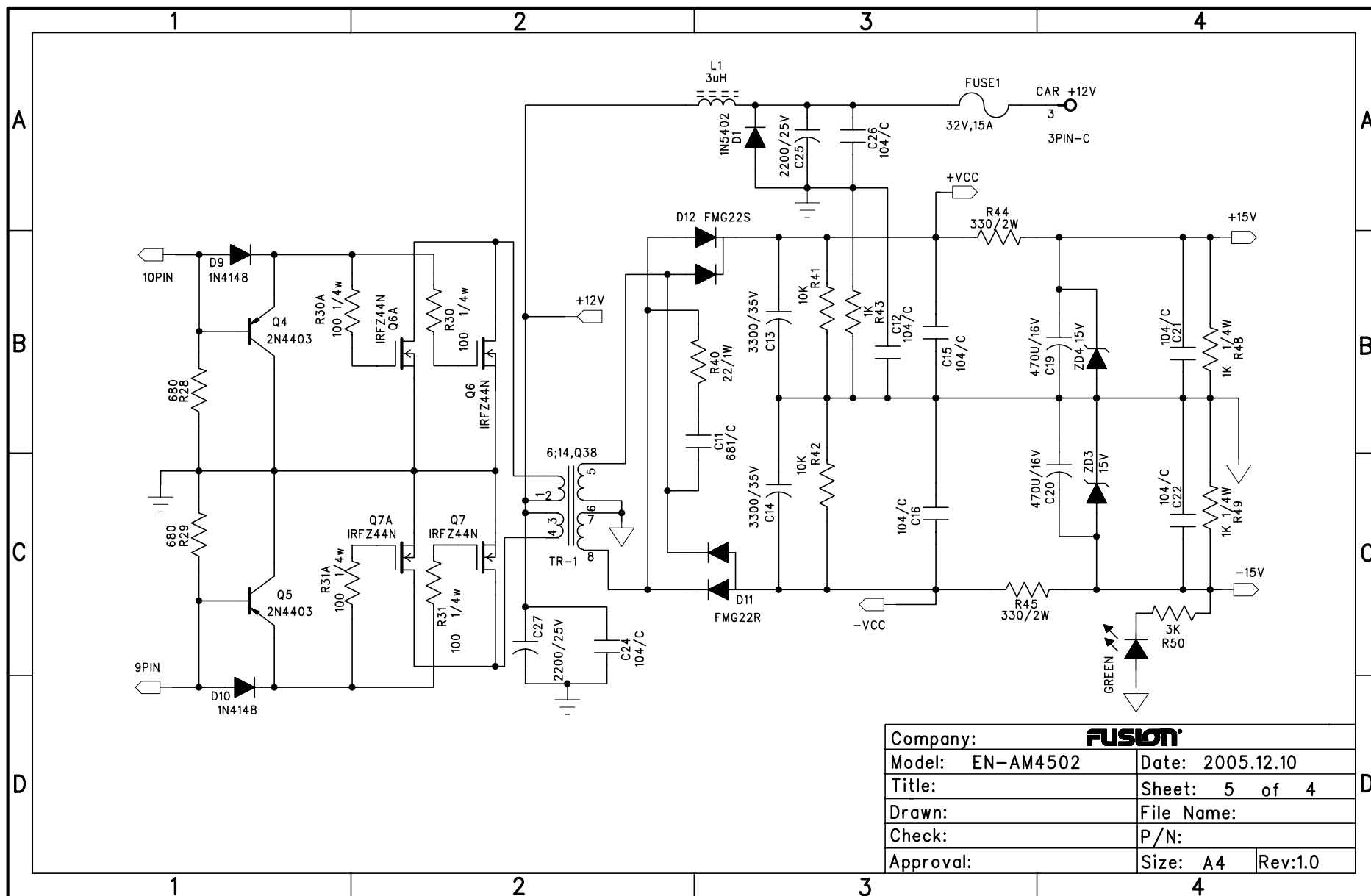
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|------|-------------------|----------------|----------|--------------------------------------------|-----|
| 2... | TRA2SC4467R       | Transistor     | 2        | Q111.Q211                                  | 3/3 |
| 2... | TRA2SC945R        | Transistor     | 2        | Q101.Q201                                  |     |
| 1... | TRAA06R           | triode         | 2        | Q107.Q207                                  |     |
| 2... | TRR38614001R      | transformer    | 1        | TR-1                                       |     |
| 2... | VRRB10402J10R     | VR             | 1        | VR2                                        |     |
| 2... | VRRB50302J1001R   | VR             | 2        | VR1.VR3                                    |     |
| 2... | W051P2207001R     | ground wire    | 1        | GND                                        |     |
| 1... | <b>E-ENAM4502</b> |                | <b>1</b> |                                            |     |
| 2... | FUS0435R032VR     | fuse           | 1        |                                            |     |
| 2... | PCBEN45021BR      | PCB            | 1        |                                            |     |
| 2... | SOC2P02090ONR     | SOC            | 2        | K101A~102A                                 |     |
| 2... | SOC2P04090ONR     | SOC            | 1        | K103A                                      |     |
| 1... | <b>A-ENAM4502</b> |                |          |                                            |     |
| 2... | BRA0300102R       | BAR            | 3        |                                            |     |
| 2... | BRA0420102R       | BAR            | 2        |                                            |     |
| 2... | BRAPP400201R      | Bracket        | 4        |                                            |     |
| 2... | BZB20100T5R       | BZ             | 1        | For slide switch                           |     |
| 2... | ECEN300201R       | plastic endcap | 1        |                                            |     |
| 2... | ECEN300202R       | plastic endcap | 1        |                                            |     |
| 2... | EVA08125TR        | EVA foam       | 2        | Q107、Q207                                  |     |
| 2... | FPEN3002R         | front panel    | 1        |                                            |     |
| 2... | HSEN4502R         | heatsink       | 1        |                                            |     |
| 2... | INN08030T7R       | insulation pad | 2        | For copper pole                            |     |
| 2... | RPEN4502R         | rear panel     | 1        |                                            |     |
| 2... | RUB101012T7R      | rubber pad     | 2        |                                            |     |
| 2... | SC5R0901R         | copper pole    | 2        | To fix PCB                                 |     |
| 2... | SD3R3LZR          | pad            | 1        | For ground wire                            |     |
| 2... | SD8R0GZR          | pad            | 1        | For varistors                              |     |
| 2... | SF3R0DHR          | screw nut      | 4        | For panels                                 |     |
| 2... | SIP035240101R     | pad            | 2        |                                            |     |
| 2... | SIP048290101R     | pad            | 2        |                                            |     |
| 2... | SM3R006PKR        | screw          | 6        | For copper pole and rear panel             |     |
| 2... | SM3R008SKR        | screw          | 4        | For end caps                               |     |
| 2... | SM3R014SKR        | screw          | 1        | For plastic ones                           |     |
| 2... | SM4R013GKR        | screw          | 5        | For bars                                   |     |
| 2... | SP2R006PKR        | screw          | 2        | For fuse holder                            |     |
| 2... | SP3R005PKR        | screw          | 2        | For varistors and ground wire              |     |
| 2... | SP3R006PKR        | screw          | 4        | For big PCB                                |     |
| 2... | SP3R008PKR        | screw          | 11       | For front panel、RCA、terminal、plastic cover |     |
| 1... | <b>B-ENAM4502</b> |                |          |                                            |     |
| 2... | BCEN6001R         | Bottom chassis | 1        |                                            |     |
| 2... | BGF350360R        | PE bag         | 1        |                                            |     |
| 2... | BOXEN4502R        | master carton  | 0.25     |                                            |     |
| 2... | EVA081750T5R      | EVA pad        | 2        | For bottom chassis                         |     |
| 2... | GIBEN4502R        | Giftbox        | 1        |                                            |     |
| 2... | INSEN4502R        | manual         | 1        |                                            |     |
| 2... | LABEN450201LR     | S/N label      | 2        | For amp, GB                                |     |
| 2... | PADEN4502R        | Pad            | 0.5      |                                            |     |
| 2... | SHEEN300201R      | pad            | 2        |                                            |     |
| 2... | SP3R006PKR        | screw          | 6        | for bottom chassis                         |     |





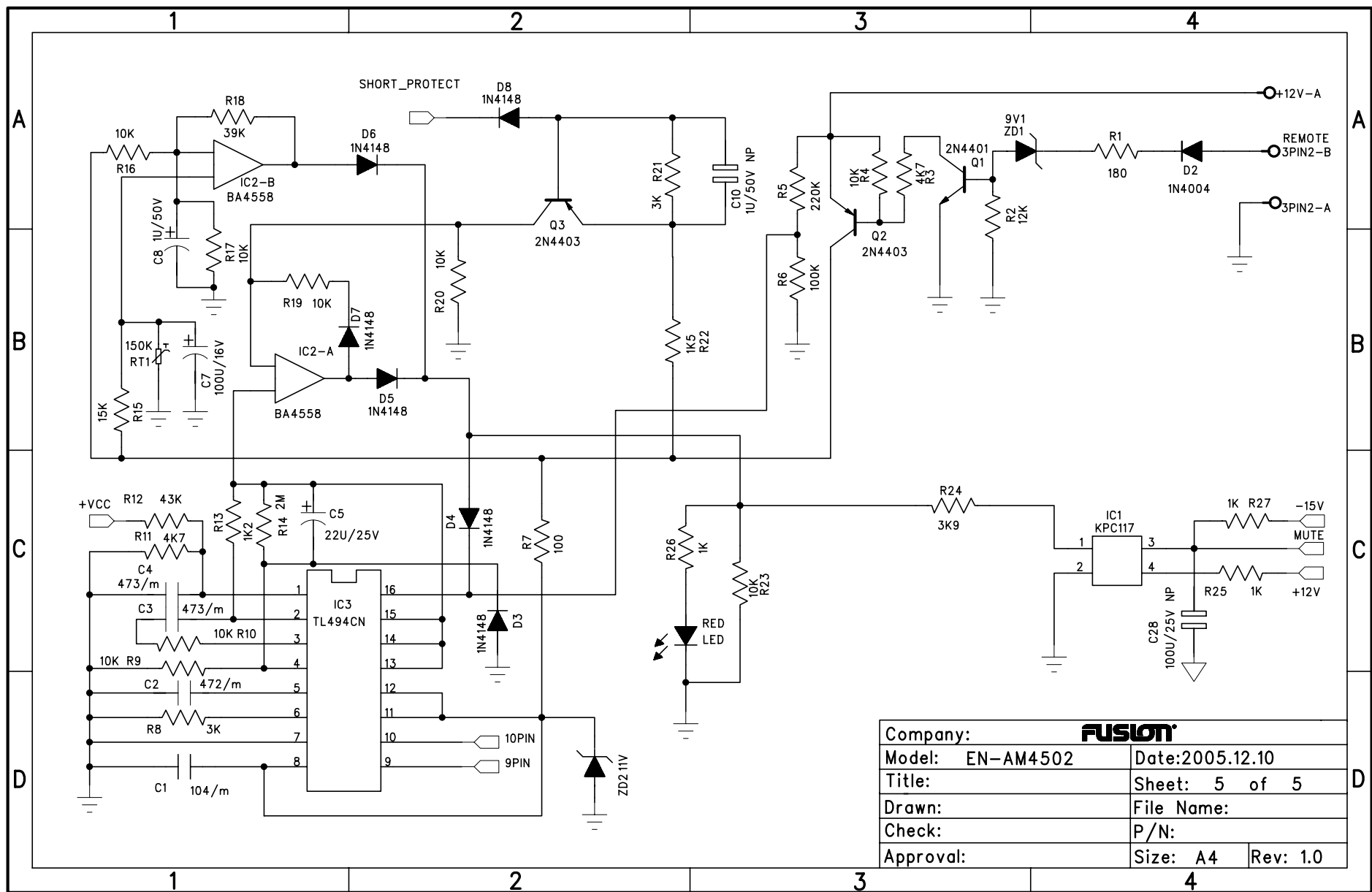
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| Company: <b>FUSION</b> |                   |
| Model: EN-AM4502       | Date: 2005.12.10  |
| Title:                 | Sheet: 5 of 2     |
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| Approval:              | Size: A4 Rev: 1.0 |



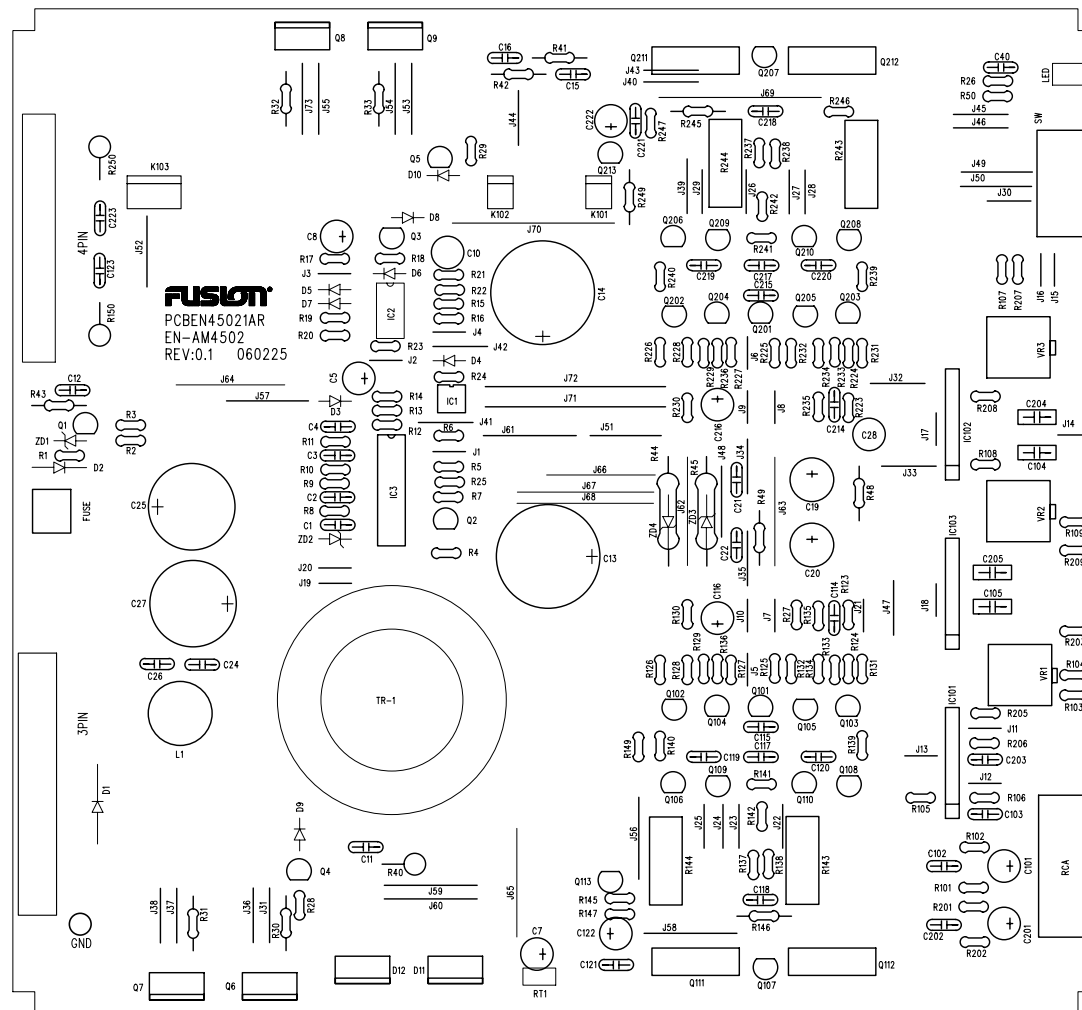


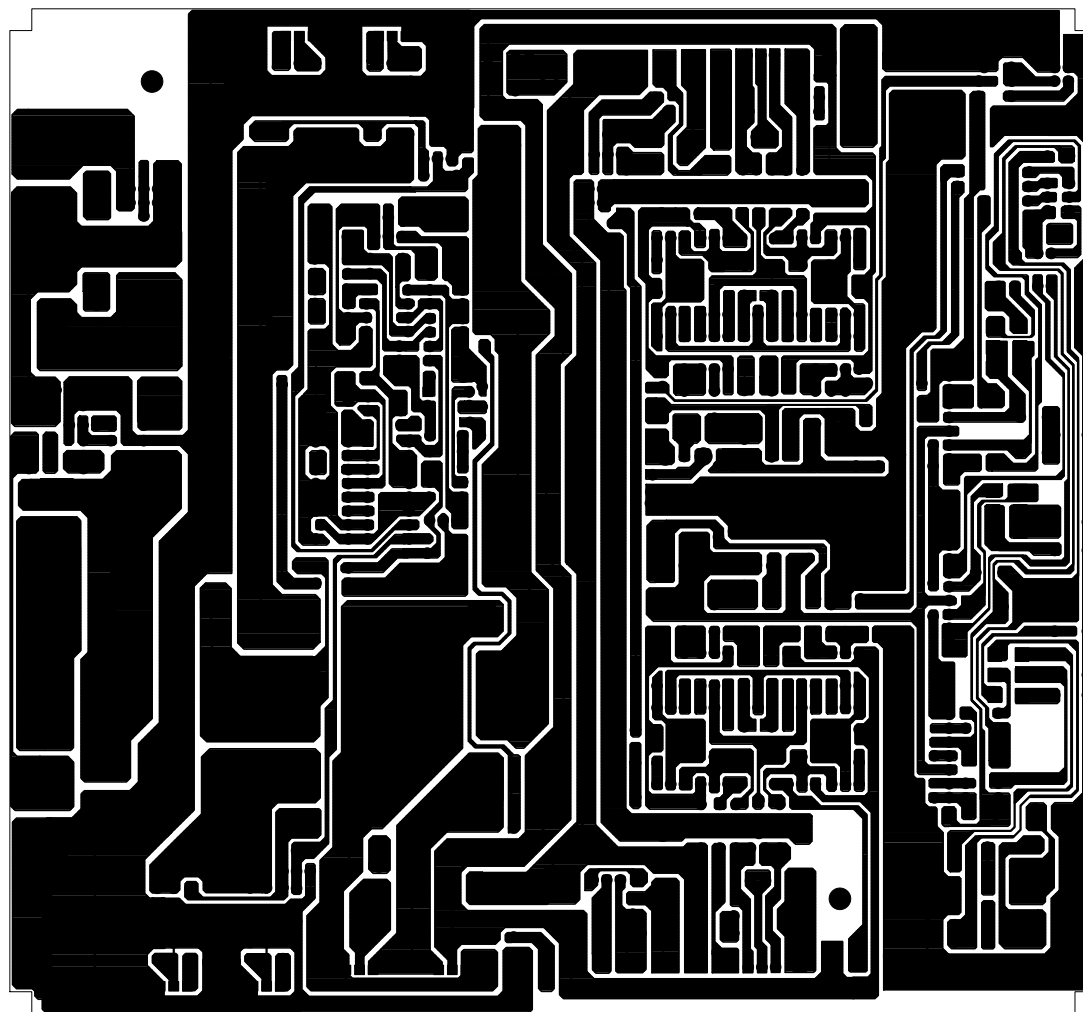
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EN-AM4502 COPPER DIAGRAM