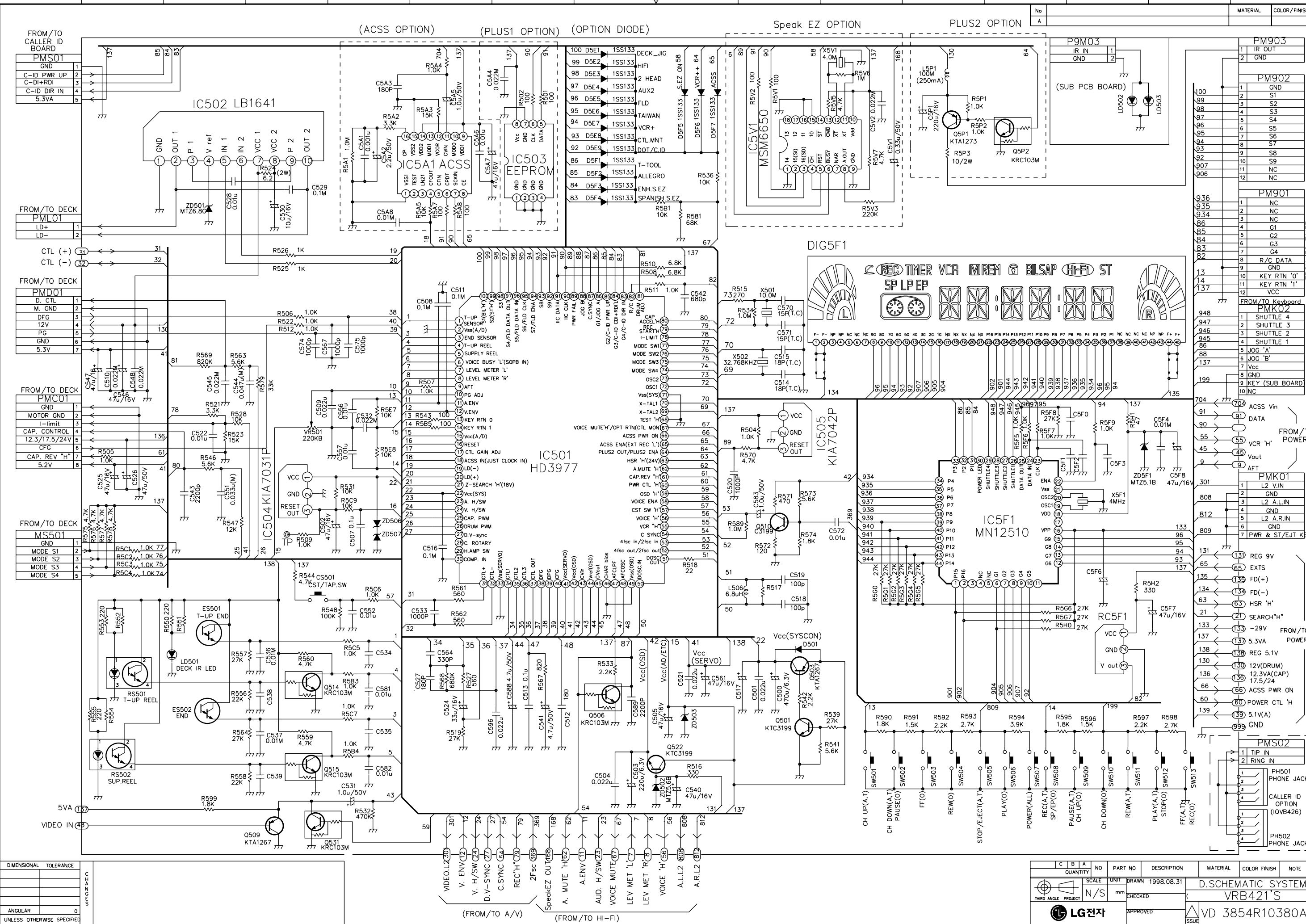


| ITEM | NO                   |
|------|----------------------|
| R    | 101 - 135, 151 - 172 |
| C    | 101 - 130, 151 - 154 |
| D    | 101 - 110, 151 - 157 |
| Q    | 111 - 112, 151 - 161 |

|     |  |          |                   |
|-----|--|----------|-------------------|
| N/S |  | 98.08.31 | D'SCHEMATIC POWER |
| N/S |  |          | VRB424'S          |
|     |  |          | 3854R10378A       |





| FROM/TO BOARD           | NO | DESCRIPTION  |
|-------------------------|----|--------------|
| FROM/TO CALLER ID BOARD | 1  | PMS01 GND    |
| FROM/TO DECK            | 1  | PML01 LD+    |
| FROM/TO DECK            | 1  | PMD01 D. CTL |
| FROM/TO DECK            | 1  | PMC01 GND    |
| FROM/TO DECK            | 1  | MS501 GND    |

| NO | DESCRIPTION      | MATERIAL | COLOR/FINISH |
|----|------------------|----------|--------------|
| 1  | IR IN            |          |              |
| 2  | IR OUT           |          |              |
| 3  | GND              |          |              |
| 4  | S1               |          |              |
| 5  | S2               |          |              |
| 6  | S3               |          |              |
| 7  | S4               |          |              |
| 8  | S5               |          |              |
| 9  | S6               |          |              |
| 10 | S7               |          |              |
| 11 | S8               |          |              |
| 12 | S9               |          |              |
| 13 | NC               |          |              |
| 14 | NC               |          |              |
| 15 | NC               |          |              |
| 16 | G1               |          |              |
| 17 | G2               |          |              |
| 18 | G3               |          |              |
| 19 | G4               |          |              |
| 20 | R/C DATA         |          |              |
| 21 | GND              |          |              |
| 22 | KEY RTN '0'      |          |              |
| 23 | KEY RTN '1'      |          |              |
| 24 | VCC              |          |              |
| 25 | SHUTTLE 4        |          |              |
| 26 | SHUTTLE 3        |          |              |
| 27 | SHUTTLE 2        |          |              |
| 28 | SHUTTLE 1        |          |              |
| 29 | JOG 'A'          |          |              |
| 30 | JOG 'B'          |          |              |
| 31 | Vcc              |          |              |
| 32 | GND              |          |              |
| 33 | KEY (SUB BOARD)  |          |              |
| 34 | NC               |          |              |
| 35 | ACCSS Vin        |          |              |
| 36 | DATA             |          |              |
| 37 | VCR 'H'          |          |              |
| 38 | Vout             |          |              |
| 39 | AFT              |          |              |
| 40 | L2 V.IN          |          |              |
| 41 | GND              |          |              |
| 42 | L2 A.L.IN        |          |              |
| 43 | L2 A.R.IN        |          |              |
| 44 | GND              |          |              |
| 45 | PWR & ST/EJT KEY |          |              |
| 46 | REG 9V           |          |              |
| 47 | EXTS             |          |              |
| 48 | FD(+)            |          |              |
| 49 | FD(-)            |          |              |
| 50 | HSR 'H'          |          |              |
| 51 | SEARCH "H"       |          |              |
| 52 | -29V             |          |              |
| 53 | 5.3VA            |          |              |
| 54 | REG 5.1V         |          |              |
| 55 | 12V(DRUM)        |          |              |
| 56 | 12.3VA(CAP)      |          |              |
| 57 | 17.5/24          |          |              |
| 58 | ACCSS PWR ON     |          |              |
| 59 | POWER CTL 'H'    |          |              |
| 60 | 5.1V(A)          |          |              |
| 61 | GND              |          |              |

| DIMENSIONAL TOLERANCE | UNLESS OTHERWISE SPECIFIED |
|-----------------------|----------------------------|
| ANGULAR               | 0                          |

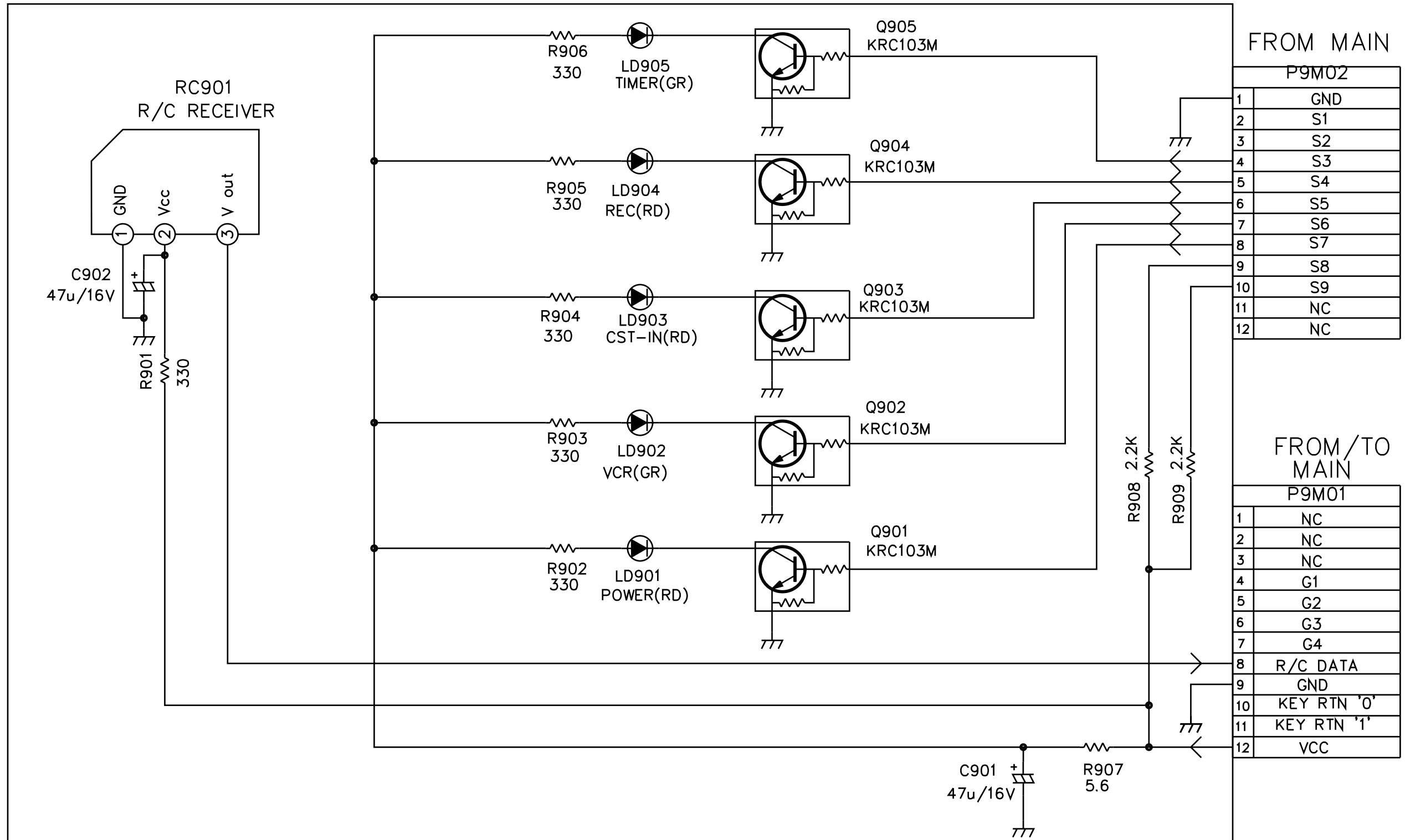
| NO | PART NO | DESCRIPTION | MATERIAL   | COLOR FINISH | NOTE |
|----|---------|-------------|------------|--------------|------|
| 1  |         | SCALE       |            |              |      |
| 2  |         | UNIT        |            |              |      |
| 3  |         | DRAWN       | 1998.08.31 |              |      |
| 4  |         | CHECKED     |            |              |      |
| 5  |         | APPROVED    |            |              |      |

D. SCHEMATIC SYSTEM  
VRB421'S  
VD 3854R10380A





|    |  |          |              |
|----|--|----------|--------------|
| No |  | MATERIAL | COLOR/FINISH |
| A  |  |          |              |

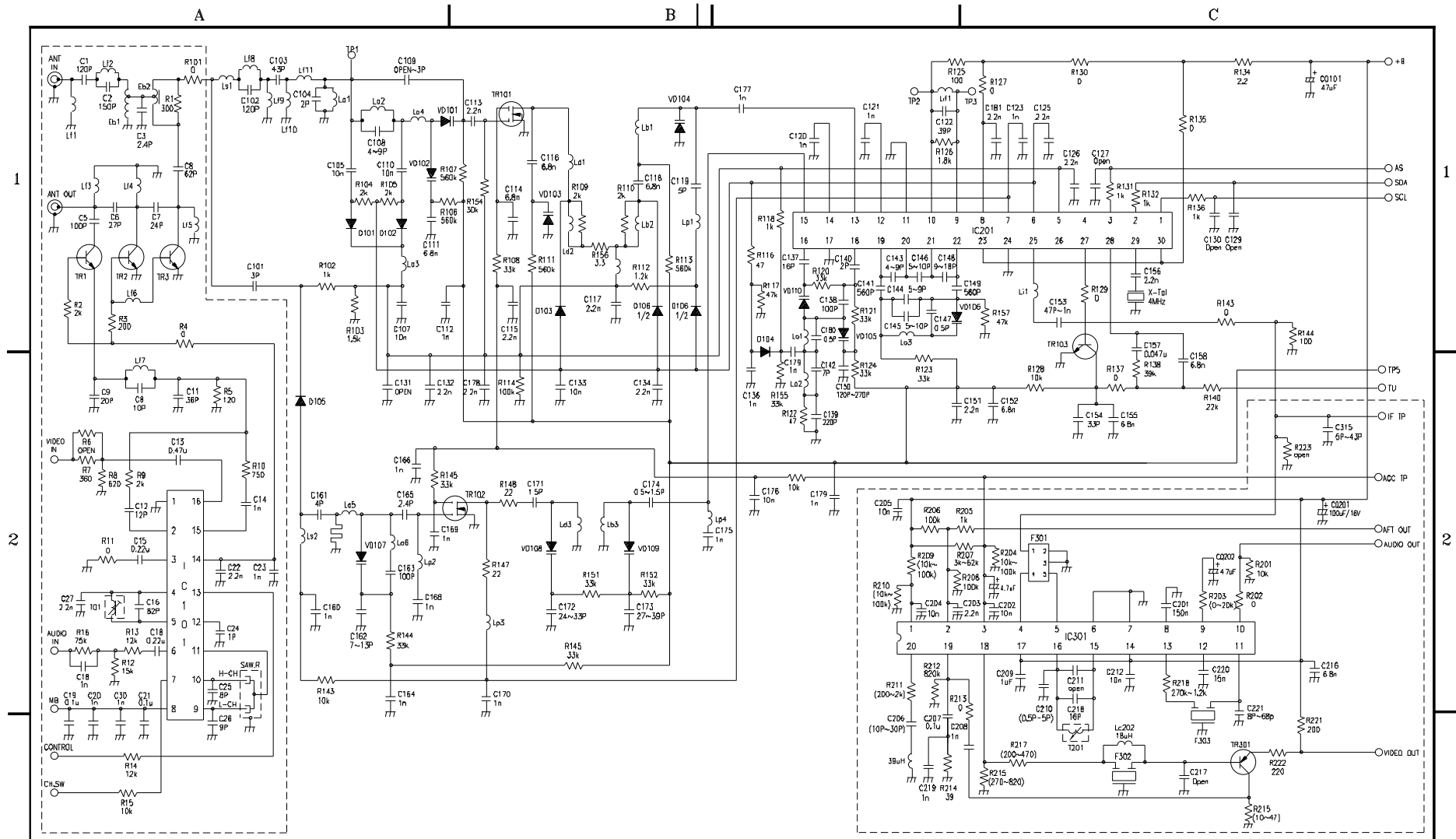


|                            |           |
|----------------------------|-----------|
| DIMENSIONAL                | TOLERANCE |
|                            |           |
|                            |           |
|                            |           |
|                            |           |
| ANGULAR                    | 0         |
| UNLESS OTHERWISE SPECIFIED |           |

|         |  |  |  |
|---------|--|--|--|
| CHANGES |  |  |  |
|         |  |  |  |
|         |  |  |  |
|         |  |  |  |

|                     |   |   |       |         |                                |                  |              |      |
|---------------------|---|---|-------|---------|--------------------------------|------------------|--------------|------|
| C                   | B | A | NO    | PART NO | DESCRIPTION                    | MATERIAL         | COLOR FINISH | NOTE |
| THIRD ANGLE PROJECT |   |   | SCALE | UNIT    | DRAWN 1998.9.27<br>SHIN TAE KI | DOT DISPLAY      |              |      |
|                     |   |   | N/S   | mm      | CHECKED                        | VRB420/ALGB420'S |              |      |
|                     |   |   |       |         | APPROVED                       | VD 3854R10395A   |              |      |
|                     |   |   |       |         |                                | ISSUE            |              |      |





NOTES

- 1 Unless otherwise specified All resistors are in ohm  
Capacitors are in farad. Inductors are in Henry.
- 2 Semiconductors are as follows.

- VO101-109 : HVC200A
- VO110 : HVC202
- D101-D105 : HSC277
- D106 : 1SS313, DAP236U

- IC101 : HA11560FP
- IC201 : CXA3235N, CXA3250N
- IC301 : M52761
- F301 : M1865D, F0728PL
- F302 : TPS4.5MB, TPS4.5MC, TPS4.5MWA
- F303 : SFSH4.5MC, SFSH4.5MD, SFE4.5MC

| SUPPLY VOLTAGE |     |
|----------------|-----|
| +B             | 5V  |
| TU             | 35V |
| MB             | 5V  |

| PART NO. |  |  |  |  |  | NAME |  |  |  |  |  | MATERIAL |  |  |  |  |  | SPEC. |  |  |  |  |  | FINISH   |  |  |  |  |  | SIZE |  |  |  |  |  |          |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |                 |  |  |  |  |  |  |  |  |  |  |  |       |  |  |  |  |  |  |  |  |  |  |  |
|----------|--|--|--|--|--|------|--|--|--|--|--|----------|--|--|--|--|--|-------|--|--|--|--|--|----------|--|--|--|--|--|------|--|--|--|--|--|----------|--|--|--|--|--|--|--|--|--|--|--|------------|--|--|--|--|--|--|--|--|--|--|--|-----------------|--|--|--|--|--|--|--|--|--|--|--|-------|--|--|--|--|--|--|--|--|--|--|--|
| [Symbol] |  |  |  |  |  |      |  |  |  |  |  | [Symbol] |  |  |  |  |  |       |  |  |  |  |  | UNIT     |  |  |  |  |  |      |  |  |  |  |  | SCALE    |  |  |  |  |  |  |  |  |  |  |  | TADC-H002F |  |  |  |  |  |  |  |  |  |  |  |                 |  |  |  |  |  |  |  |  |  |  |  |       |  |  |  |  |  |  |  |  |  |  |  |
| [Symbol] |  |  |  |  |  |      |  |  |  |  |  | [Symbol] |  |  |  |  |  |       |  |  |  |  |  | APPD.    |  |  |  |  |  |      |  |  |  |  |  | CHKD.    |  |  |  |  |  |  |  |  |  |  |  | DSCD.      |  |  |  |  |  |  |  |  |  |  |  | DRAW.           |  |  |  |  |  |  |  |  |  |  |  | TITLE |  |  |  |  |  |  |  |  |  |  |  |
| [Symbol] |  |  |  |  |  |      |  |  |  |  |  | [Symbol] |  |  |  |  |  |       |  |  |  |  |  | [Symbol] |  |  |  |  |  |      |  |  |  |  |  | [Symbol] |  |  |  |  |  |  |  |  |  |  |  | [Symbol]   |  |  |  |  |  |  |  |  |  |  |  | CIRCUIT DIAGRAM |  |  |  |  |  |  |  |  |  |  |  |       |  |  |  |  |  |  |  |  |  |  |  |
| [Symbol] |  |  |  |  |  |      |  |  |  |  |  | [Symbol] |  |  |  |  |  |       |  |  |  |  |  | [Symbol] |  |  |  |  |  |      |  |  |  |  |  | [Symbol] |  |  |  |  |  |  |  |  |  |  |  | [Symbol]   |  |  |  |  |  |  |  |  |  |  |  | DOCUMENT NO.    |  |  |  |  |  |  |  |  |  |  |  |       |  |  |  |  |  |  |  |  |  |  |  |
| [Symbol] |  |  |  |  |  |      |  |  |  |  |  | [Symbol] |  |  |  |  |  |       |  |  |  |  |  | [Symbol] |  |  |  |  |  |      |  |  |  |  |  | [Symbol] |  |  |  |  |  |  |  |  |  |  |  | [Symbol]   |  |  |  |  |  |  |  |  |  |  |  | BD30000         |  |  |  |  |  |  |  |  |  |  |  |       |  |  |  |  |  |  |  |  |  |  |  |
| [Symbol] |  |  |  |  |  |      |  |  |  |  |  | [Symbol] |  |  |  |  |  |       |  |  |  |  |  | [Symbol] |  |  |  |  |  |      |  |  |  |  |  | [Symbol] |  |  |  |  |  |  |  |  |  |  |  | [Symbol]   |  |  |  |  |  |  |  |  |  |  |  | [Symbol]        |  |  |  |  |  |  |  |  |  |  |  |       |  |  |  |  |  |  |  |  |  |  |  |