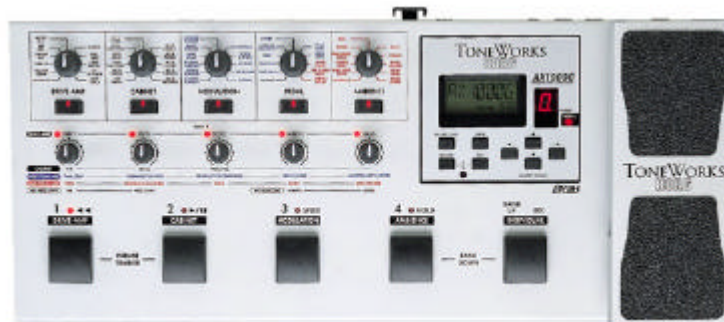


Service Manual

AX1000G

MODELING SIGNAL PROCESSOR



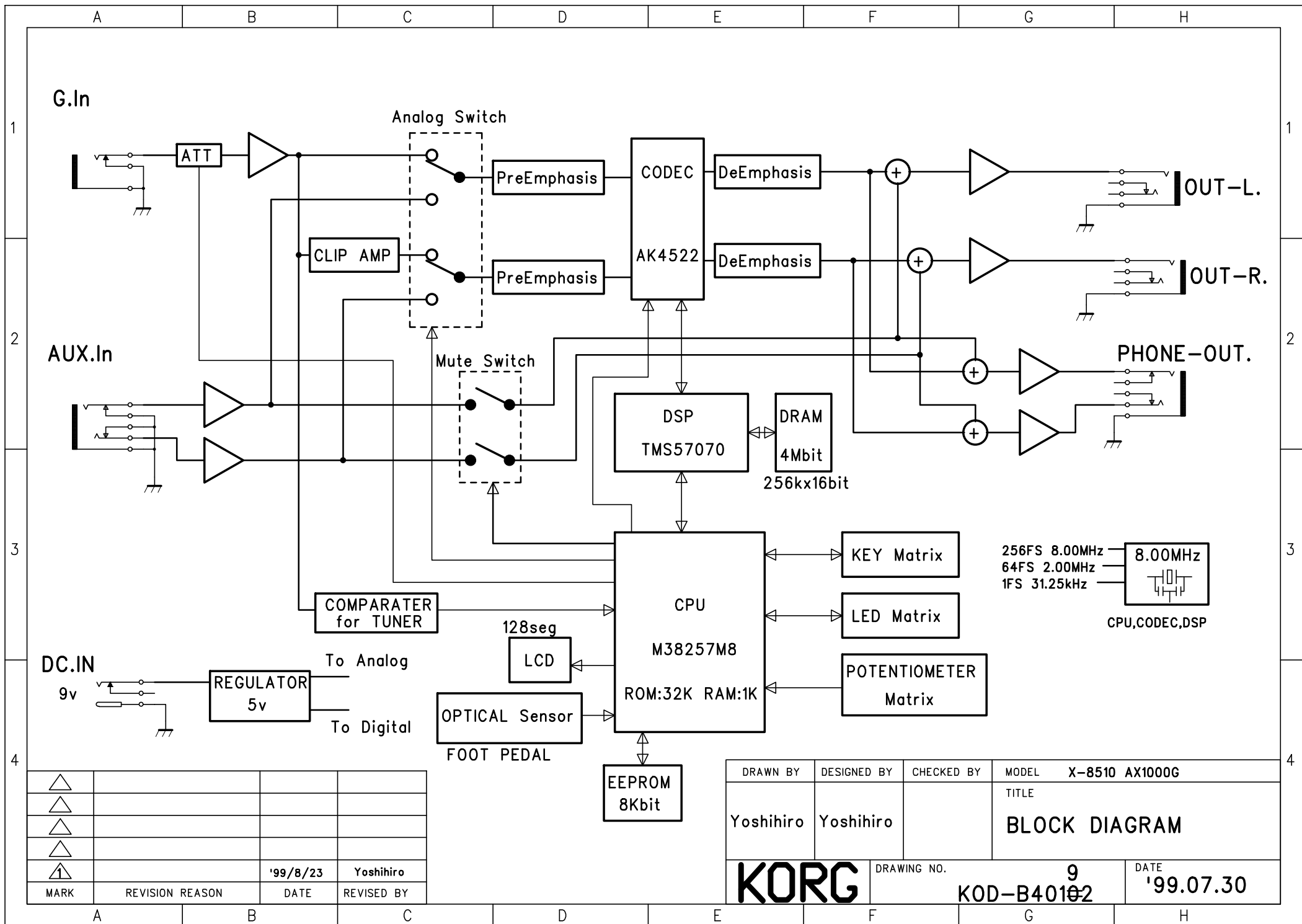
CONTENTS

| | |
|---------------------------------|----|
| 1) Structural Diagram - - - - - | 2 |
| 2) Block Diagram - - - - - | 3 |
| 3) Circuit Diagram - - - - - | 4 |
| 4) Diagnostics - - - - - | 11 |
| 5) Parts List - - - - - | 13 |

Revision: 1.01

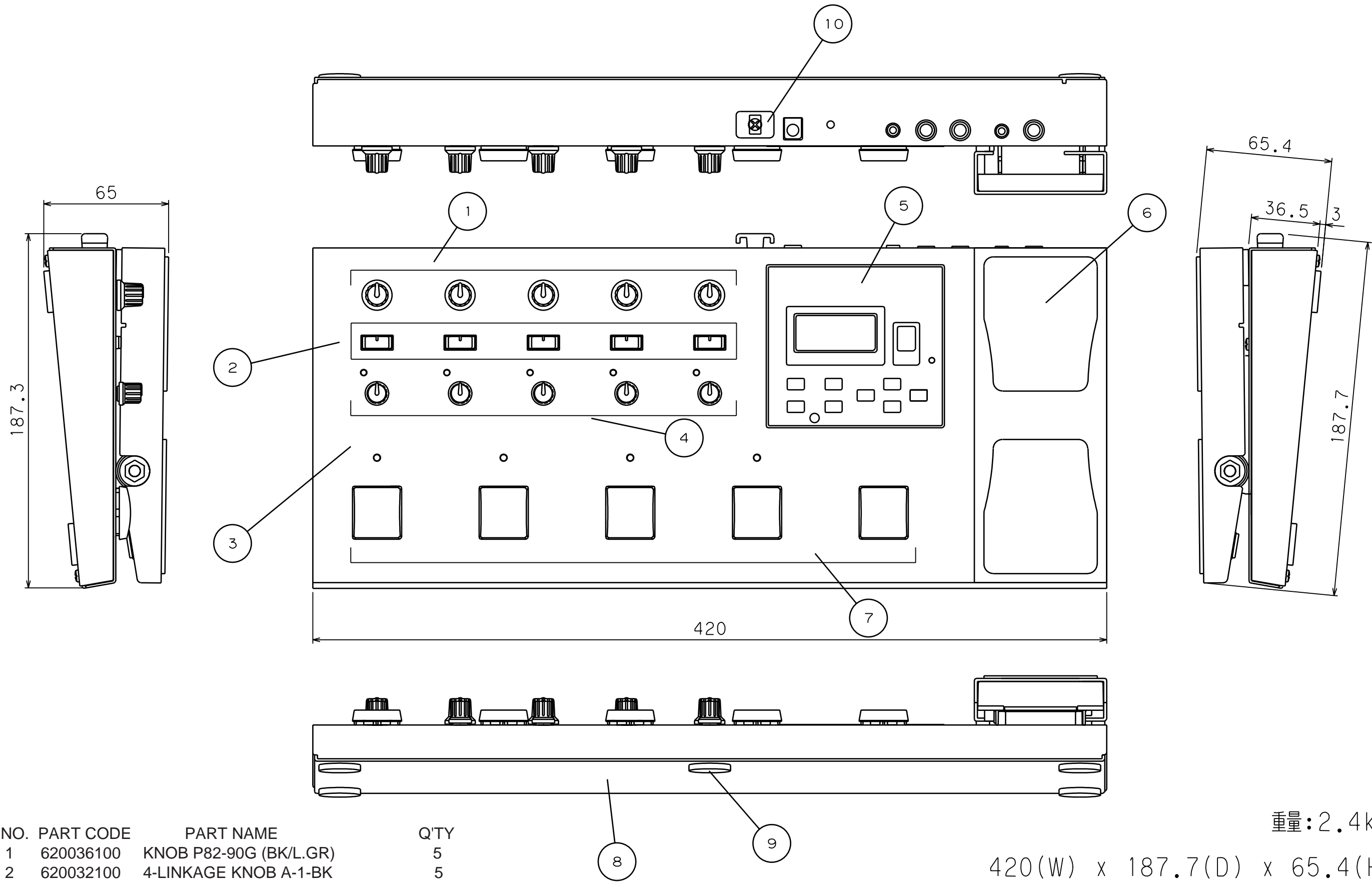
Issued date: Jan.12.2000

Issued by: KORG INC.



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| △ | | '99/8/23 | Yoshihiro |
| MARK | REVISION REASON | DATE | REVISED BY |

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| DRAWN BY | DESIGNED BY | CHECKED BY | MODEL | X-8510 AX1000G |
| Yoshihiro | Yoshihiro | | TITLE | BLOCK DIAGRAM |
| | | | DRAWING NO. | 9 KOD-B40102 |
| | | | DATE | '99.07.30 |

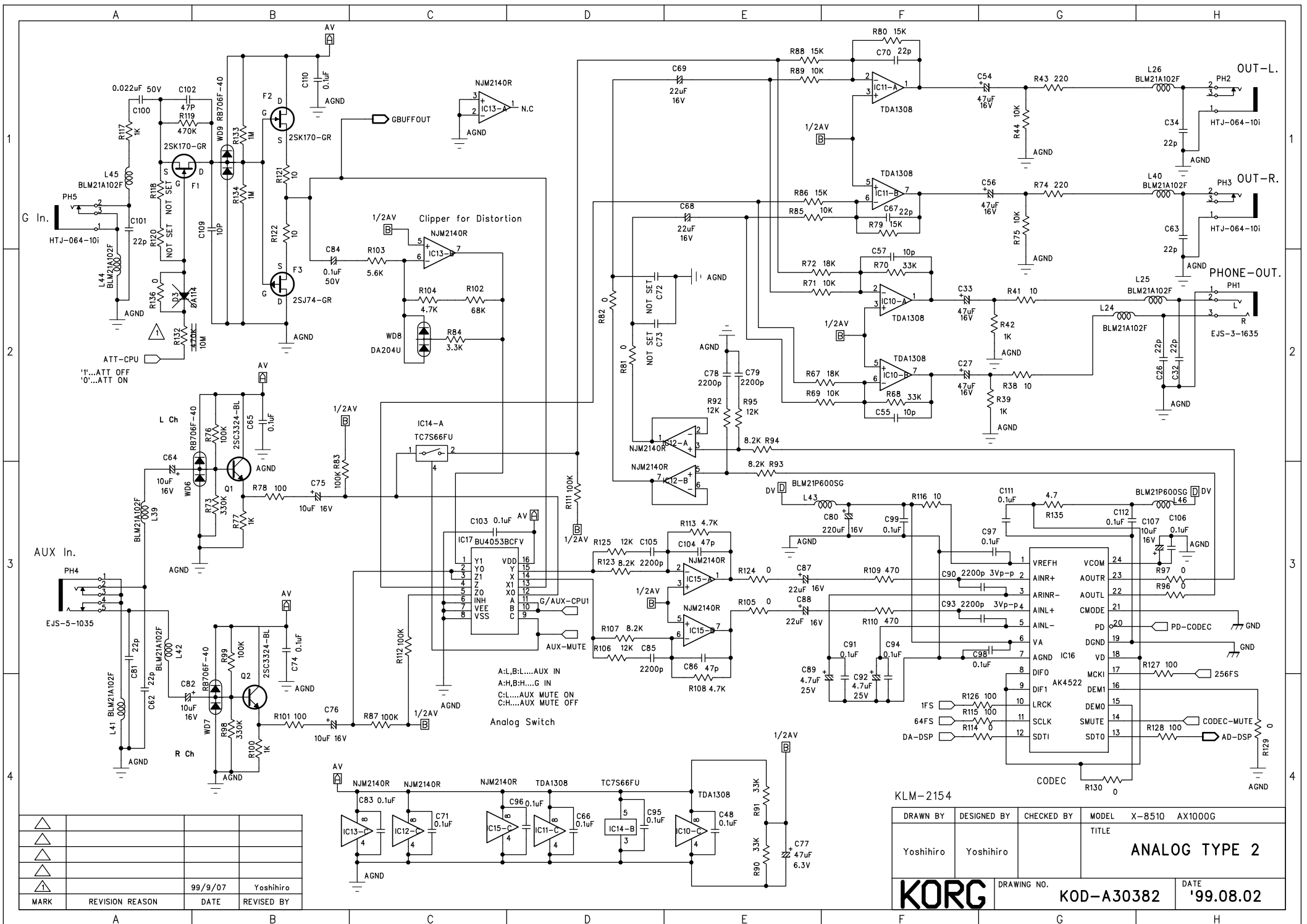


| NO. | PART CODE | PART NAME | Q'TY |
|-----|------------|-------------------------------|------|
| 1 | 620036100 | KNOB P82-90G (BK/L.GR) | 5 |
| 2 | 620032100 | 4-LINKAGE KNOB A-1-BK | 5 |
| 3 | 620033900 | KNOB P422-90G(BK/L.GR) | 5 |
| 4 | *641X85100 | X-8510 UPPER CASE KOC-C20357 | 1 |
| 5 | *646X85100 | X-8510 PARAMETER SHEET E30245 | 1 |
| 6 | *646X85100 | X-8510 PEDAL KOC-E20197 | 1 |
| 7 | *646X85100 | X-8510 MINI PEDAL KOC-E40491 | 5 |
| 8 | *641X85100 | X-8510 LOWER CASE KOC-C30536 | 1 |
| 9 | *500X85100 | X-8510 RUBBER LEG KOC-F40709 | 5 |
| 10 | 646043000 | X-150 CORD HOOK KOC-E4033 | 1 |

重量: 2.4kg

420(W) x 187.7(D) x 65.4(H)

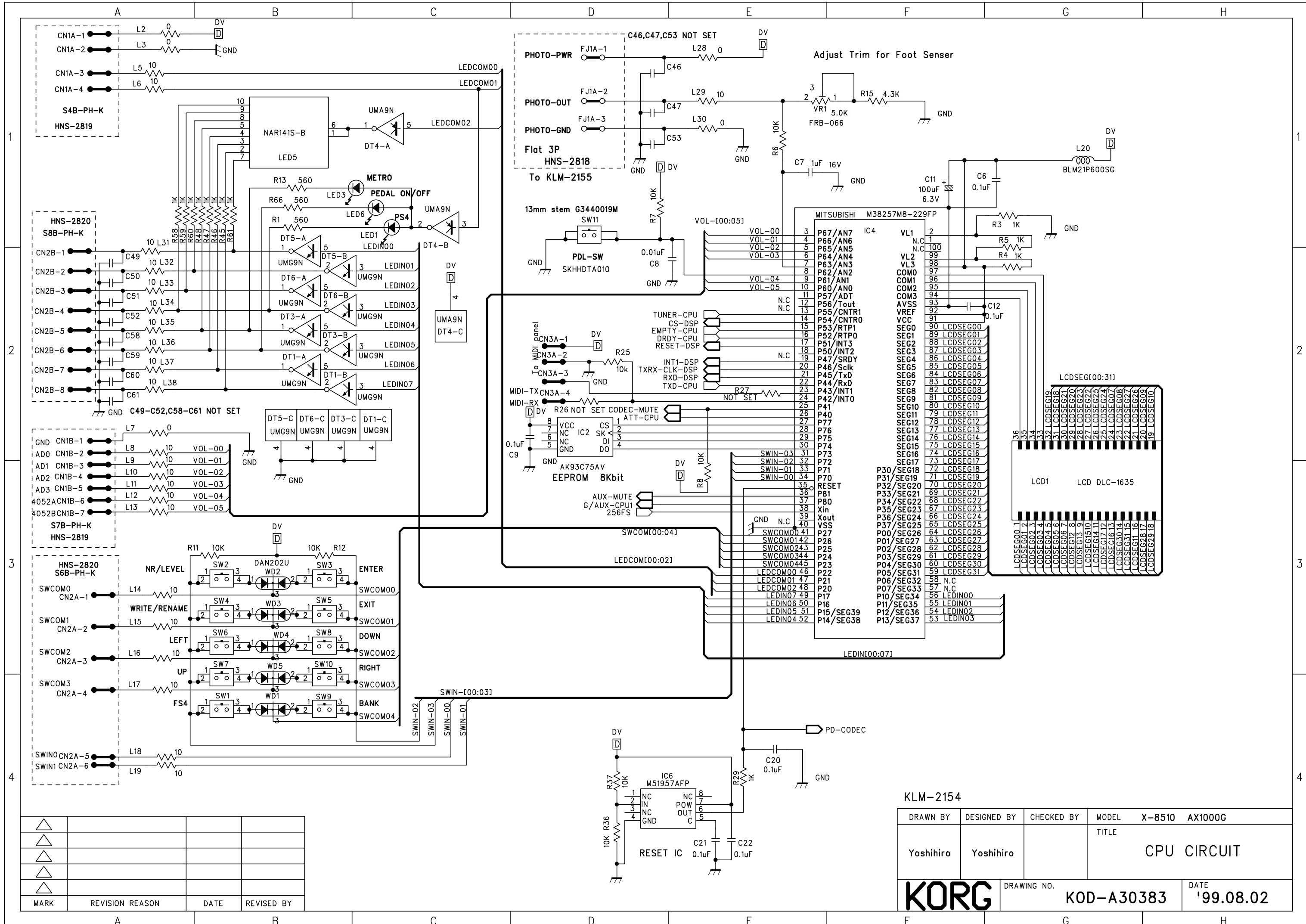
FULL VIEW



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| △ | | 99/9/07 | Yoshihiro |
| MARK | REVISION REASON | DATE | REVISED BY |

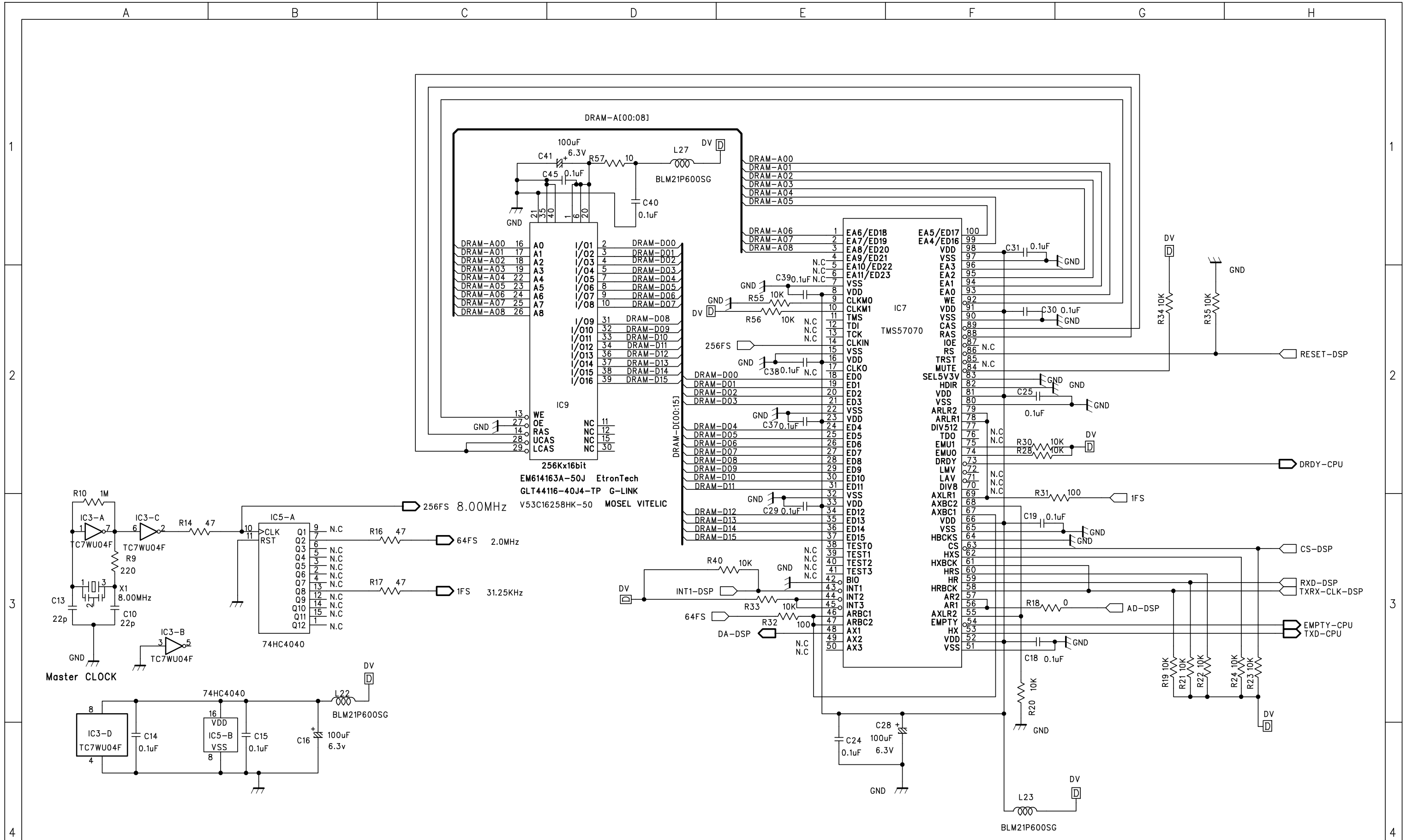
KLM-2154

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| DRAWN BY | DESIGNED BY | CHECKED BY | MODEL | X-8510 AX1000G |
| Yoshihiro | Yoshihiro | | TITLE | ANALOG TYPE 2 |
| DRAWING NO. | | | DATE | |
| KORG | | | KOD-A30382 | '99.08.02 |



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| MARK | REVISION REASON | DATE | REVISED BY |

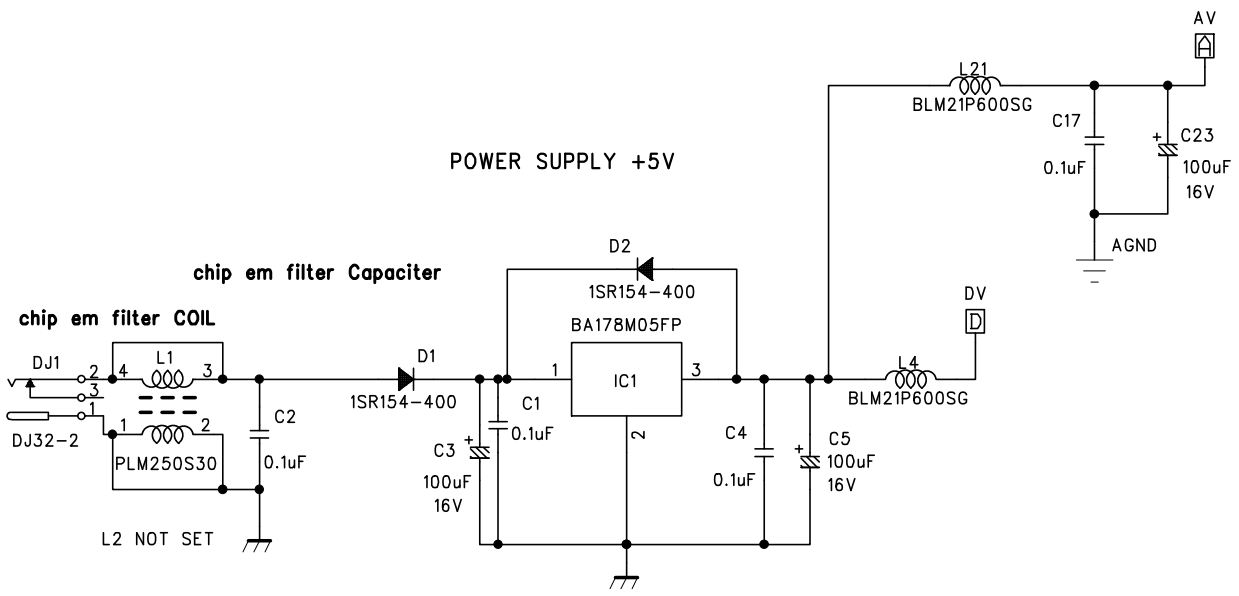
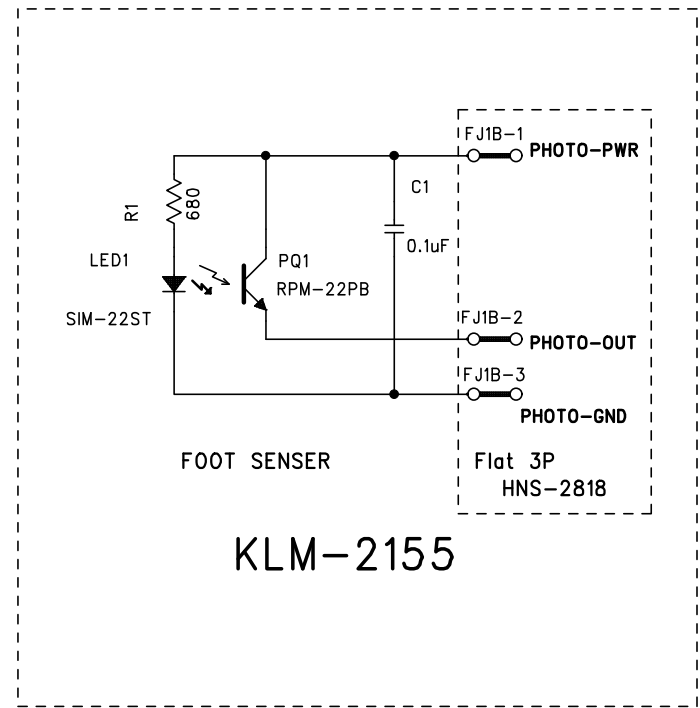
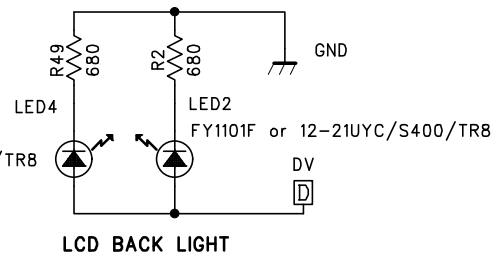
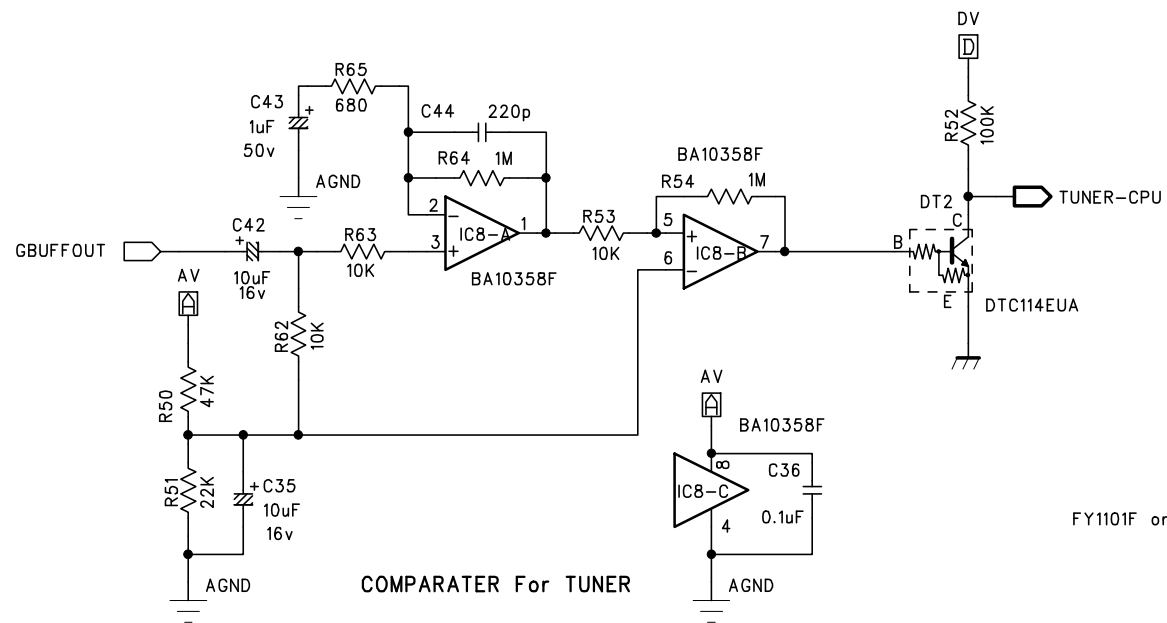
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| KLM-2154 | | | |
| DRAWN BY | DESIGNED BY | CHECKED BY | MODEL X-8510 AX1000G |
| Yoshihiro | Yoshihiro | | TITLE CPU CIRCUIT |
| KORG | | DRAWING NO. KOD-A30383 | DATE '99.08.02 |



KLM-2154

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| MARK | REVISION REASON | DATE | REVISED BY |

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| DRAWN BY | DESIGNED BY | CHECKED BY | MODEL | X-8510 AX1000G |
| Yoshihiro | Yoshihiro | | TITLE | DSP CIRCUIT |
| KORG | | DRAWING NO. | KOD-A30384 | DATE |
| | | | | '99.08.02 |



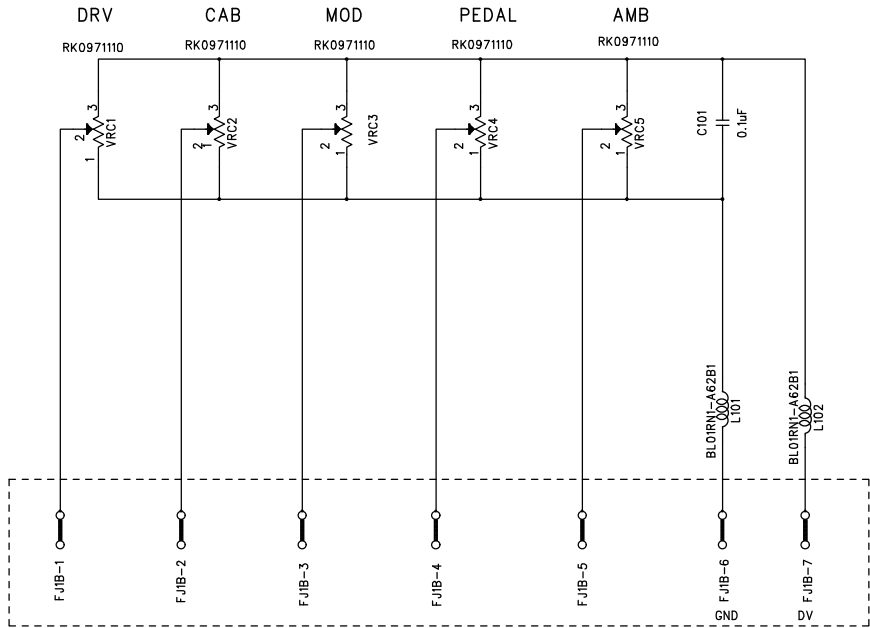
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| MARK | REVISION REASON | DATE | REVISED BY |

KLM-2154,2155

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| DRAWN BY | DESIGNED BY | CHECKED BY | MODEL | X-8510 AX1000G |
| Yoshihiro | Yoshihiro | | TITLE | ANALOG COMMON |
| KORG | | DRAWING NO. | KOD-A30385 | DATE |
| | | | | '99.08.02 |

C:Lead Type

362009005 RK0971110SOLA 10KB 11Click ©54 G1081291M



FLAT JUMPER 7P HNS-2817

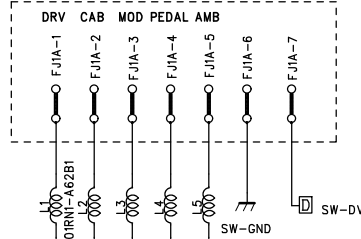
KLM-2157 Bakelite

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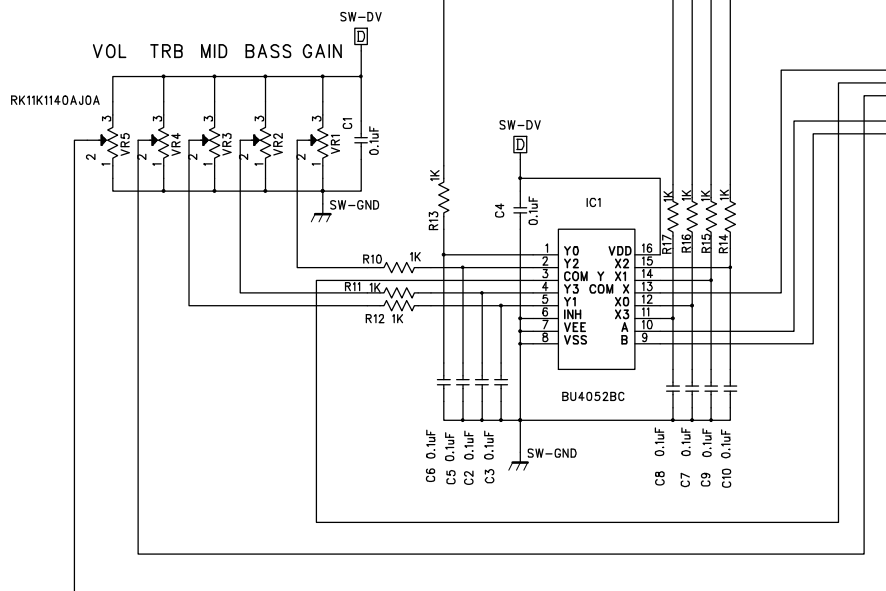
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| DRAWN BY | DESIGNED BY | CHECKED BY | MODEL | X8510 AX1000G |
| Yoshihiro | Yoshihiro | | TITLE | VR-PCB |
| KORG | | DRAWING NO. | KOD-A30386 | DATE '99.02.09 |

C,R:Lead Type

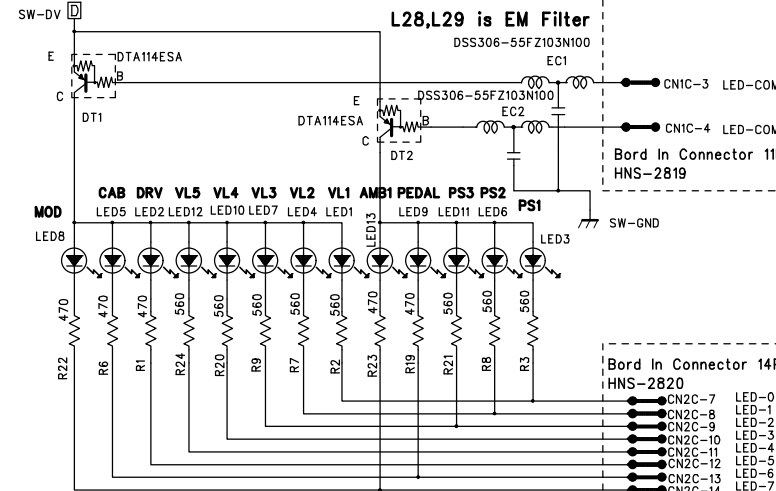
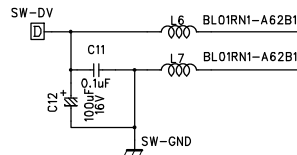
FLAT JUMPER 7P HNS-2817



36200907 RK11K1140AJ0A 10KB @34 G1404481M L=15mm

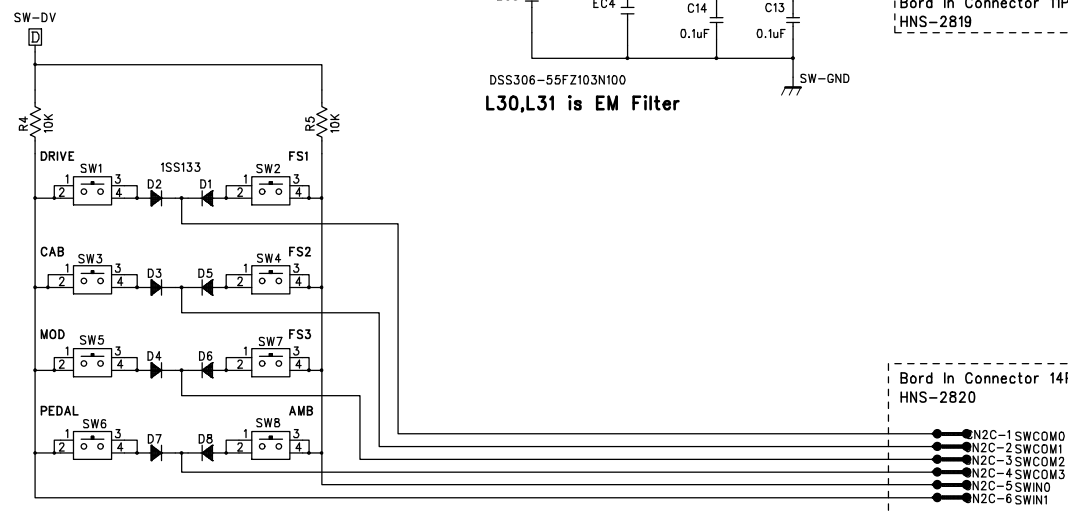


| | | | |
|---|---|-------|------|
| A | B | ADO | AD1 |
| 0 | 0 | MOD | AMB |
| 1 | 0 | CAB | MID |
| 0 | 1 | DRV | GAIN |
| 1 | 1 | PEDAL | BASS |



Bord In Connector 14P HNS-2820

| | | |
|---|---------|-------|
| ● | CN2C-7 | LED-0 |
| ● | CN2C-8 | LED-1 |
| ● | CN2C-9 | LED-2 |
| ● | CN2C-10 | LED-3 |
| ● | CN2C-11 | LED-4 |
| ● | CN2C-12 | LED-5 |
| ● | CN2C-13 | LED-6 |
| ● | CN2C-14 | LED-7 |



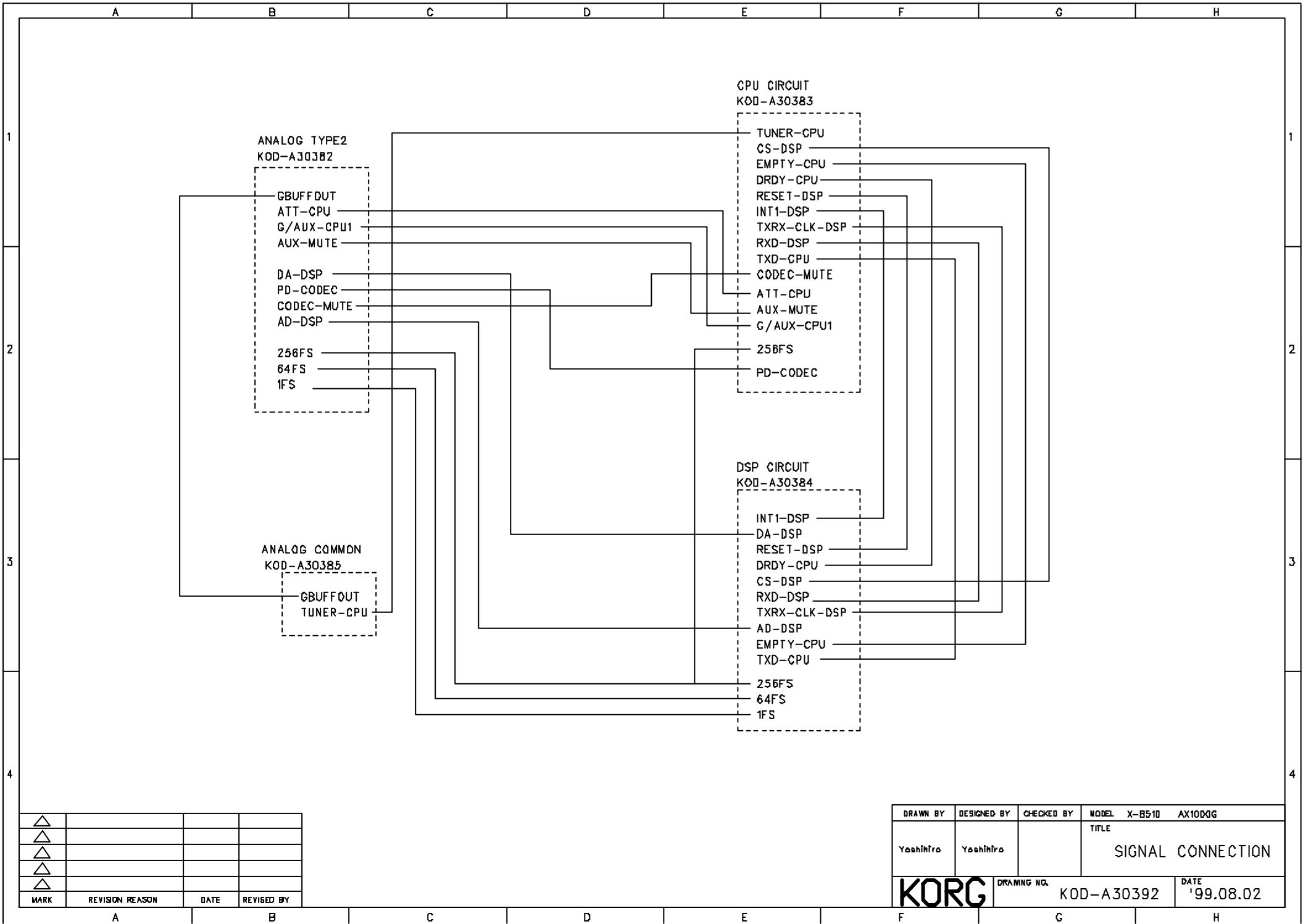
Bord In Connector 14P HNS-2820

| | | |
|---|--------|--------|
| ● | CN2C-1 | SWCOM0 |
| ● | CN2C-2 | SWCOM1 |
| ● | CN2C-3 | SWCOM2 |
| ● | CN2C-4 | SWCOM3 |
| ● | CN2C-5 | SWIN0 |
| ● | CN2C-6 | SWIN1 |

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| MARK | REVISION REASON | DATE | REVISED BY |

KLM-2156 Bakelite

| | | | | |
|-------------|-------------|------------|-------|---------------|
| DRAWN BY | DESIGNED BY | CHECKED BY | MODEL | X8510 AX1000G |
| Yoshihiro | Yoshihiro | | TITLE | VR-SWITCH-PCB |
| DRAWING NO. | | DATE | | |
| KORG | | KOD-A30387 | | '99.05.11 |



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| MARK | REVISION REASON | DATE | REVISED BY |

| | | | |
|-------------|-------------|-------------|----------------------|
| DRAWN BY | DESIGNED BY | CHECKED BY | MODEL X-B510 AX10D0G |
| Yoshinro | Yoshinro | | TITLE |
| | | | SIGNAL CONNECTION |
| KORG | | DRAWING NO. | DATE |
| | | KOD-A30392 | '99.08.02 |

AX1000G test mode

1. The test mode starts when plugging the AC adaptor while pressing [ANBIENCE] and [NR-PROG-LEVEL].
2. Set the pedal to MIN. and confirm that the all the LEDs of [DRIVE-AMP], [CABINET], [MODULATION], [PEDAL] and [AMBIENCE] light up. In case any LEDs do not light up, turn the semi-fixed VR at the rear panel so that all the LEDs light up.
3. After confirming it, press [>] to go to the next test.
4. Press the switches indicated in the LCD in turn and confirm the functions. The order of the switches to be pressed is as follows:

[1], [2], [3], [4], [BANK UP], VR-PEDAL, [DRIVE-AMP], [CABINET], [MODULATION], [PEDAL], [ANBIENCE], [NR-PRG-LEVEL], [RENAME], [WRITE], [EXIT], [<], [UP], [DOWN],[>]
5. Confirm all the characters for the LCD light up and press [>].
6. Confirm all the characters for the LCD disappear and press [>].
7. Confirm 2 patterns of the characters for the LCD light up and press [>].
8. Confirm the value of the LCD changes when turning the VR which is pointed out with the twinkle of the LED to MAX , then to MIN.
9. Set the VR which is pointed out with the twinkle of the LED to center and press [>].
10. Set the pedal to MAX and press [>].

11. Operate the pedal and confirm that the value in the LCD changes between 0 and 127.
12. After confirming it, press [>] to proceed to the next test.
13. Confirm that [RELOAD?] is indicated in the LCD.
14. When loading the factory data, press [>] In case you have to retain the user's data, remove the AC adaptor by force to finish the test mode.

| Parts code | Parts name and Spesfication | PCB No. | Q'ty | Unit Price(Yen) |
|-------------|--------------------------------|---------|------|-----------------|
| 001215400 | PCB ASSY KLM-2154/55 AX1000G | M.PART | 1 | |
| 001215600 | PCB ASSY KLM-2156/57 AX1000G | M.PART | 1 | |
| 309001200 | PHOTO TR RPM-22PB N OR P | | 1 | |
| 312051900 | LED SIM-22ST Q OR R | | 1 | |
| 320011196 | IC M38257M8-229FP(S) | | 1 | |
| 320021156 | IC TMS57070FFT | | 1 | |
| 324004165 | IC HD74HC4040FPEL | | 1 | |
| 324017016 | IC EM614163A-40J(TS) | | 3 | |
| 324018005 | IC AK93C75AV-L(TS) | | 1 | |
| 324018006 | IC AK4522-VF-E2(TS) | | 1 | |
| 324038005 | IC TDA1308T/N1 (TS) | | 2 | |
| 324040005 | IC V53C16258HK-40TP(TS) | | 2 | |
| 405008000 | AC ADAPTOR A30960J | M.PART | 1 | |
| 405008100 | AC ADAPTOR A30950 | M.PART | 1 | |
| 405008300 | AC ADAPTOR A9600E | M.PART | 1 | |
| 405010500 | AC ADAPTOR A9600B | M.PART | 1 | |
| 500031100 | X-750G/B S-PEDAL RUBBER F4085 | M.PART | 1 | |
| 620032100 | 4-LINKAGE KNOB A-1-BK | M.PART | 5 | |
| 620033900 | KNOB P422-90G(BK/L.GR) | M.PART | 5 | |
| 620036100 | KNOB P82-90G (BK/L.GR) | M.PART | 5 | |
| 640084901 | GND SPRING (B) KOC-C4065 | M.PART | 2 | |
| 644007700 | GND SPRING KOC-C4601 | M.PART | 2 | |
| 646043000 | X-150 CORD HOOK KOC-E4033 | M.PART | 1 | |
| 646071500 | X-8500 BL PLATE KOC-E40481 | M.PART | 1 | |
| *313X851000 | LCD DLC-1635 | | 1 | |
| *320X851000 | IC BU4052BC | | 1 | |
| *324X851000 | IC BU4053BCFV | | 1 | |
| *324X851001 | IC AK4522 | | 1 | |
| *324X851003 | IC BA178M05FP | | 1 | |
| *324X851004 | IC TC7S66FU | | 1 | |
| *324X851005 | IC NJM2140R-TE1 | | 1 | |
| *330X851000 | PHOTO SENSOR SIM-22ST | | 1 | |
| *362X851000 | TRIMMER FRB-066 5.0K | | 1 | |
| *375X851000 | TACT SW SKHHDTA010 | | 1 | |
| *375X851001 | TACT SW EVQ PAC-09K | | 18 | |
| *454X851000 | DC JACK DJ32-2 | | 1 | |
| *454X851001 | STEREO MINI JACK ESJ-3-1635 | | 1 | |
| *454X851003 | MONO PHONE JACK HTJ-064-10I | | 3 | |
| *500X851000 | X-8510 PEDAL CUSHION F40890 | M.PART | 2 | |
| *500X851001 | X-8510 SW CUSHION KOC-F40886 | M.PART | 1 | |
| *500X851002 | X-8510 PEDAL CUSHION 2 F40901 | M.PART | 1 | |
| *500X851003 | X-8510 RUBBER LEG KOC-F40709 | M.PART | 5 | |
| *641X851000 | X-8510 UPPER CASE KOC-C20357 | M.PART | 1 | |
| *641X851001 | X-8510 LOWER CASE KOC-C30536 | M.PART | 1 | |
| *641X851002 | X-8510 PEDAL COVER KOC-C30537 | M.PART | 1 | |
| *641X851003 | X-8510 VR PLATE KOC-C41163 | M.PART | 1 | |
| *641X851004 | X-8510 PEDAL SPRING KOC-C41164 | M.PART | 5 | |
| *646X851000 | X-8510 CONTROL PANEL E20195 | M.PART | 1 | |

| Parts code | Parts name and Spesfication | PCB No. | Q'ty | Unit Price(Yen) |
|-------------|-------------------------------|---------|------|-----------------|
| *646X851001 | X-8510 COLLAR KOC-E20196 | M.PART | 1 | |
| *646X851002 | X-8510 PEDAL KOC-E20197 | M.PART | 1 | |
| *646X851003 | X-8510 PARAMETER SHEET E30245 | M.PART | 1 | |
| *646X851004 | X-8510 MINI PEDAL KOC-E40491 | M.PART | 5 | |