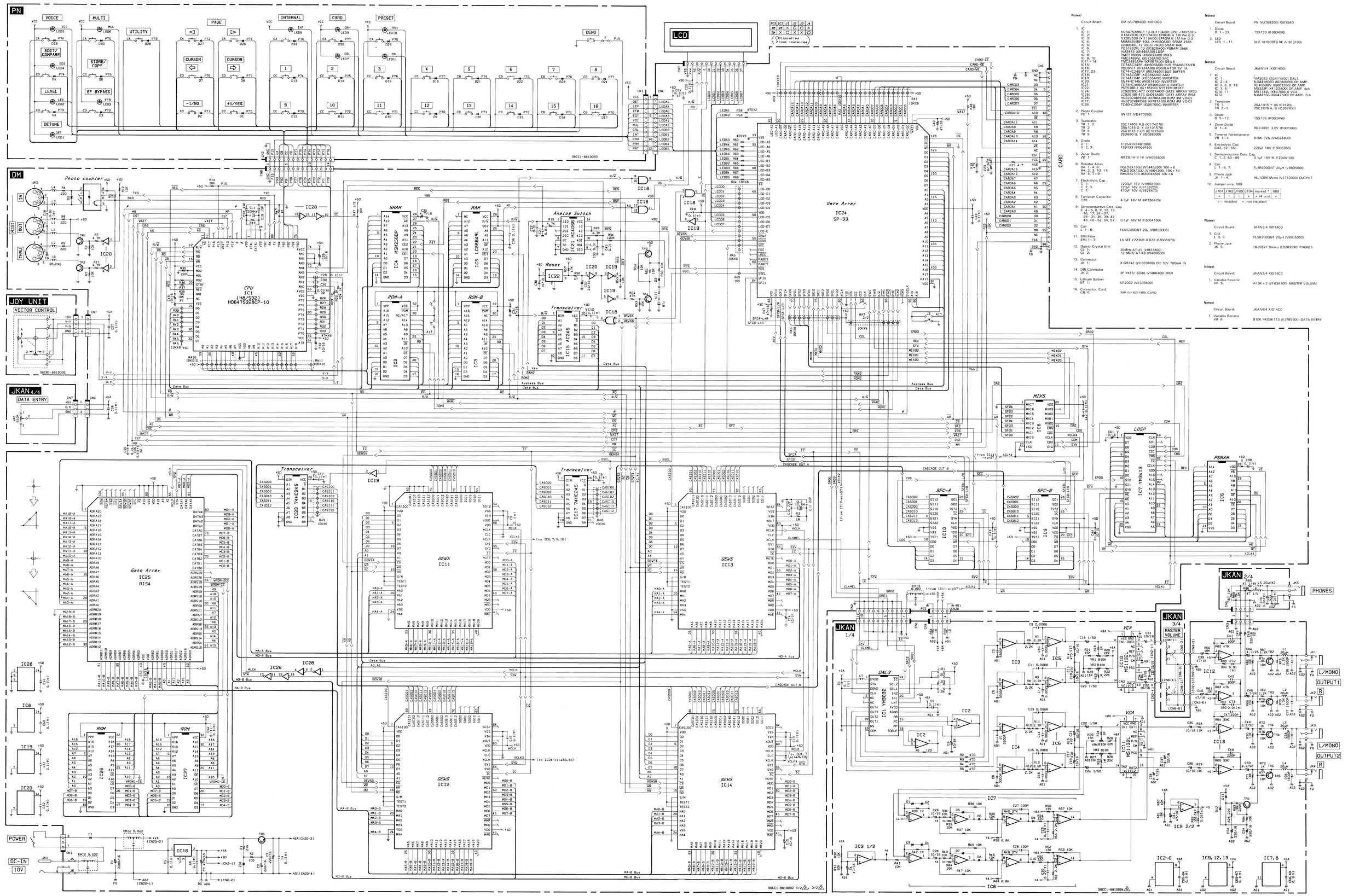
■TG33 OVERALL CIRCUIT DIAGRAM



Notes)

Circuit Board: DM (VJ7894001 XI013C0

1. IC
IC 1: HD6475328CP-10 (X11198A00) CPU <H8/532>
IC 2: 012AV030 (X11TA000) EPROM A 1M Ver 0.3
IC 3: 012BV030 (X11TBA00) EPROM B 1M Ver 0.3
IC 4: M5M5255BP-10LL (XK0B0A00) SRAM 256K
IC 5: LC36564RL-12 (XQ317A00) SRAM 64K
IC 6: TC518329L-10 (XC628A00) PSRAM 256K
IC 7: TC4W53FU (X00A0000) MUX
IC 8: TMC1780N5 (XG6G0A00) MIXS
IC 9, 10: TMC3489N (XE7S5A00) SFC
IC11 – 14: TMC3493AFN (XF9B7A00) GEWS
IC15: TC74AC245P (XH60B0A00) BUS TRANSCEIVER
IC16: PQ05RF1 (X11240A00) REGULATOR 5V 1A
IC17, 23: TC74HC245AP (IR024500) BUS BUFFER
IC18: TC74AC04P (IG0S0A00) INVERTER
IC19: TC74AC04P (IG0S5A00) INVERTER
IC20: SN74HC14N (IR001450) INVERTER
IC21: TC74HC4066AP (IR40E60) A-SWITCH
IC22: PST518B-2 (IG116200) SYSTEM RESET
IC24: CS9202C-K77 (X07AA00) GATE ARRAY SP33
IC25: LC92018B-K76 (XK05A500) GATE ARRAY RI54
IC26: HM62324BPC68 (IR4708A00) ROM 4M VOICE
IC27: HM62324BPC69 (IX197A00) ROM 4M VOICE
IC28: TC40H00AP (IG05100) INVERTER

2. Photo Coupler
PC 1: 6N137 (VD473200)

3. Transistor
TR 1, 2: 2SC1740S R,S (IC17A070)
TR 3: 2SA1015 O, Y (IA101570)
TR 4: 2SC1815 Y OR (IC181500)
TR 5: 2SD880 O, Y (ID080000)

4. Diode
D 1: 11E54 (VB481900)
D 2, 3: 1SS133 (IF003450)

5. Zener Diode
ZD 1: MTZ9.1A 9.1V (VA095500)

6. Resistor Array
RA 1, 4, 6: RGLD8X103J (VE445200) 10K × 8
RA 2, 3, 10, 11: RGLD10X103J (VH564300) 10K × 10
RA 5, 7–9: RML5X103 (HZ004650) 10K × 6

7. Electrolytic Cap.
C 1: 2200µF 16V (VH603700)
C 2, 3: 220µF 16V (UJ138220)
C 7: 470µF 10V (UJ828470)

8. Tantalum Capacitor
C35: 4.7µF 16V M (FP736470)

9. Semiconductive Cera. Cap.
C 4–6, 8, 9, 12, 13, 16, 17, 24–27, 29–31, 36, 39, 42, 43, 48–52, 54, 57: 0.1µF 16V M (F2004100)

10. Coil
L 1 – 6: FL5R2000NT 20µ (VB835000)

11. EMI Filter
EMI 1 – 3: LS MT Y223NB 0.022 (F206970)

12. Quartz Crystal Unit
CL 1: 20MHz AT-49 (VI927300)
CL 2: 12.8MHz AT-49 (VI460600)

13. Connector
JK 1: X-G9242 (VH303600) DC 10V 700mA IN

14. DIN Connector
JK 2: 3P YKF51-5046 (VI466400) MIDI

15. Lithium Battery
BT 1: CR2032 (VE338400)

16. Connector, Card
CN 5: 38P (VF821100) CARD

Notes)

Circuit Board: PN (VJ7892000) XI015A0

1. Diode
D 1 – 33: 1SS133 (IF003450)

2. LED
LED 1 – 11: SLZ-181B097E RE (VB131100)

Notes)

Circuit Board: JKAN1/4 (XI014C0)

1. IC
IC 1: VM3032 (XG41A00) DAL3
IC 2–4: NJM4580E0 (IG040000) OP AMP
IC 5, 6, 8, 13: RC4558DV (IG001390) OP AMP
IC 7, 8: M5218P (XF123A00) OP AMP. 4ch
IC10, 11: M51113L (XE470001) VCA
IC12: NJM4556 (IG042500) OP AMP. 2ch

2. Transistor
TR 1: 2SA1015 Y (IA101520)
TR 2–5: 2SC2878 A, B (IC287800)

3. Diode
D 5 – 12: 1SS133 (IF003450)

4. Zener Diode
D 1 – 4: RD3.6EB1 3.6V (IF001660)

5. Trimmer Potentiometer
VR 1 – 4: B10K EVN (VA024800)

6. Electrolytic Cap.
C43, 52 – 55: 220µF 16V (F206950)

7. Semiconductive Cera. Cap.
C 1, 2, 60 – 69: 0.1µF 16V M (F2004100)

8. Coil
L 1 – 4, 7: FL5R2000NT 20µH (VB835000)

9. Phone Jack
JK 1 – 4: HLJ4306 Mono (VE742000) OUTPUT

10. Jumper wire, RB9

J101	J102	J103	J104	marked " RB9 "
×	○	○	×	× (4 pcs)

(○ : installed × : not installed)

Notes)

Circuit Board: JKAN2/4 XI014C0

1. Coil
L 5, 6: FL5R2000NT 20µH (VB935000)

2. Phone Jack
JK 5: HLJ0521 Stereo (LB203090) PHONES

Notes)

Circuit Board: JKAN3/4 XI014C0

1. Variable Resistor
VR 5: A10K × 2 (VF636100) MASTER VOLUME

Notes)

Circuit Board: JKAN4/4 XI014C0

1. Variable Resistor
VR 6: B10K RK09K113 (VJ789500) DATA ENTRY