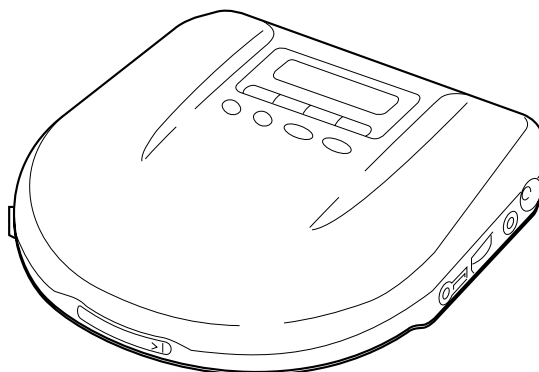


D-E505/E554

SERVICE MANUAL

Ver 1.1 1999.02



Canadian Model
E Model
Australian Model
Chinese Model
D-E554
Tourist Model
D-E505

Model Name Using Similar Mechanism	D-E700/E705
CD Mechanism Type	CDM-2911DBB/2911EBA
Optical Pick-Up Name	DAX-11D/11E

SPECIFICATIONS

CD player section

System

Compact disc digital audio system

Laser diode properties

Material: GaAlAs

Wavelength: $\lambda=780$ nm

Emission duration: Continuous

Laser output: Less than 44.6 μ W (This output is the value measured at a distance of 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)

Error correction

Sony Super Strategy Cross Interleave Reed Solomon Code

D-A conversion

1-bit quartz time-axis control

Frequency response

20 – 20,000 Hz $\pm 1/2$ dB (measured by EIAJ CP-307)

Output (at 4.5 V input level)

Headphones (stereo minijack)

15 mW + 15 mW at 16 ohms

Line output (stereo minijack)

Output level 0.7 V rms at 47 kilohms

Recommended load impedance over 10 kilohms

Optical digital output (optical output connector)

Output level: -21 to -15 dBm

Wavelength: 630 – 690 nm at peak level

General

Power requirements

For the area code of the model you purchased, check the upper left side of the bar code on the package.

- Two Sony NH-DM2AA rechargeable batteries: 2.4 V DC
- Two Sony NC-DMAA rechargeable batteries: 2.4 V DC
- Two LR6 (size AA) batteries: 3 V DC
- AC power adaptor (DC IN 4.5 V jack):
Canadian model: 120 V, 60 Hz
E13 model: 220 – 230 V, 50/60 Hz
Australian model: 240 V, 50Hz
Tourist/E33 model: 100 – 220 V, 50/60 Hz
Hong Kong model: 220 V, 50/60 Hz
Chinese model: 220 V, 50 Hz
- Sony DCC-E245 car battery cord for use on car battery: 4.5 V DC

Dimensions (w/h/d) (without projecting parts and controls)

Approx. 131.8 × 23.9 × 142.0 mm

(5 ¹/₄ × 3 ¹/₂ × 5 ⁵/₈ in.)

Mass (without rechargeable batteries)

Approx. 200 g (7.0 oz)

Operating temperature

5 °C – 35 °C (41 °F – 95 °F)

Supplied accessories

For the area code of the model you purchased, check the upper left side of the bar code on the package.

- AC power adaptor (1)
- Earphones with remote control (1)
- AC plug adaptor (1)*
- Carrying case (1)
- * Supplied with Tourist, E33 and E13 models

Design and specifications are subject to change without notice.

• Abbreviation

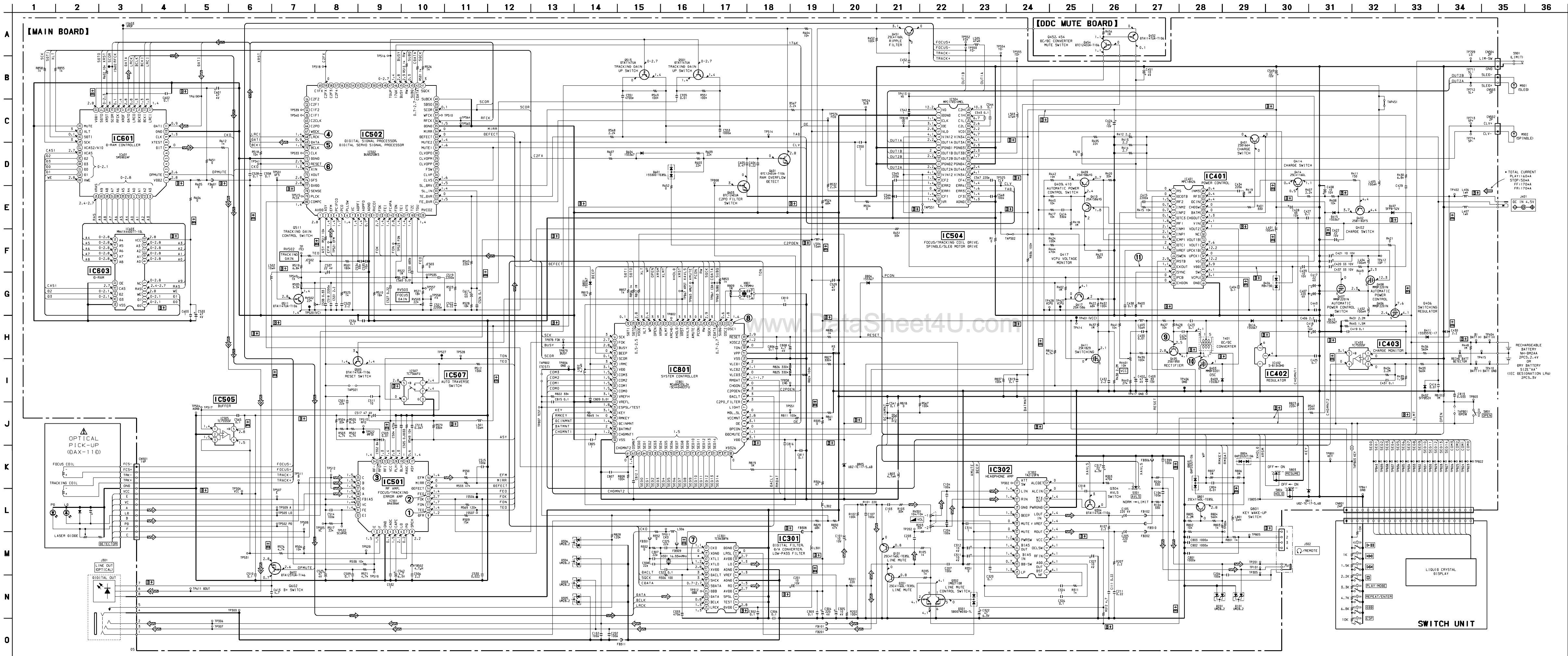
- E13: 220 – 230 V AC area in E model
- E33: 100 – 240 V AC area in E model

COMPACT DISC COMPACT PLAYER



SONY®

6-5. SCHEMATIC DIAGRAM (SUFFIX-11)



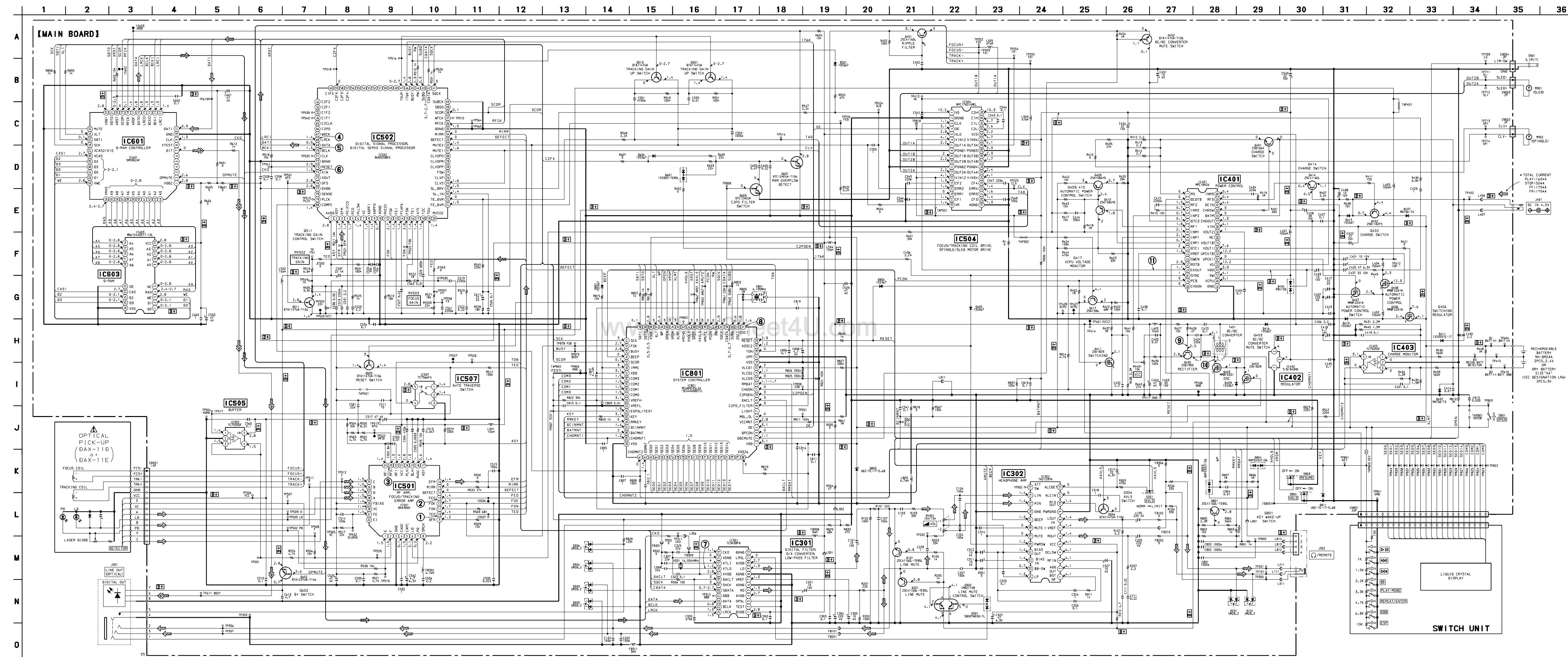
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μF F
- 50 W or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
- Δ : internal component.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- **B+** : B+ Line.
- **□** : adjustment for repair.
- Power voltage is dc 4.5 V and fed with regulated dc power supply from external power voltage jack.
- Voltages and waveforms are dc with respect to ground under conditions in service mode. no mark : CD PLAY
- * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- \Rightarrow : CD PLAY (ANALOG OUT)
- \Rightarrow : CD PLAY (OPTICAL OUT)

6-6. SCHEMATIC DIAGRAM (SUFFIX-12)



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF : μF
- 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- Δ : internal component.

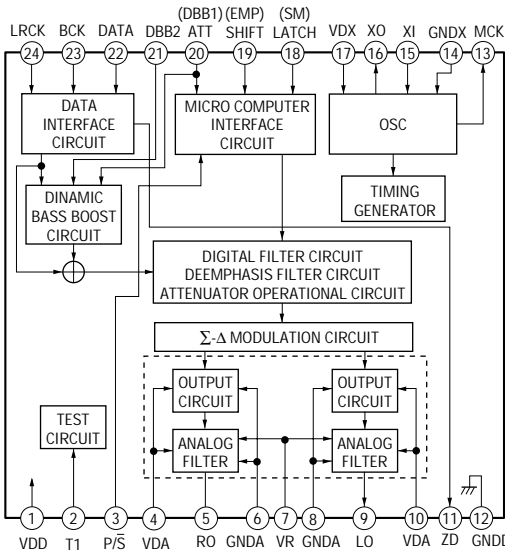
Note:
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Note:
Les composants identifiés par une marque Δ ou traités en pointillés sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

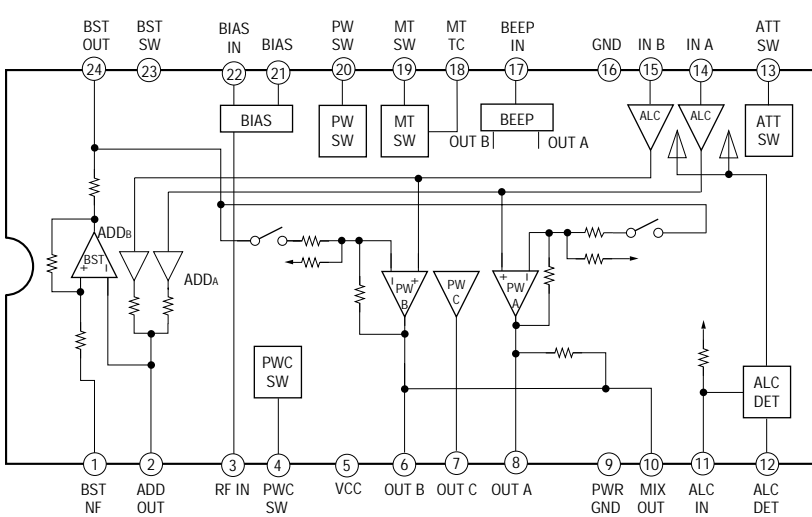
- $B+$: B+ Line.
- \square : adjustment for repair.
- Power voltage is dc 4.5 V and fed with regulated dc power supply from external power voltage jack.
- Voltagés and waveforms are dc with respect to ground under conditions in service mode. no mark : CD PLAY
- * : Impossible to measure
- Voltagés are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- \Rightarrow : CD PLAY (ANALOG OUT)
- \Rightarrow : CD PLAY (OPTICAL OUT)

• IC Block Diagrams

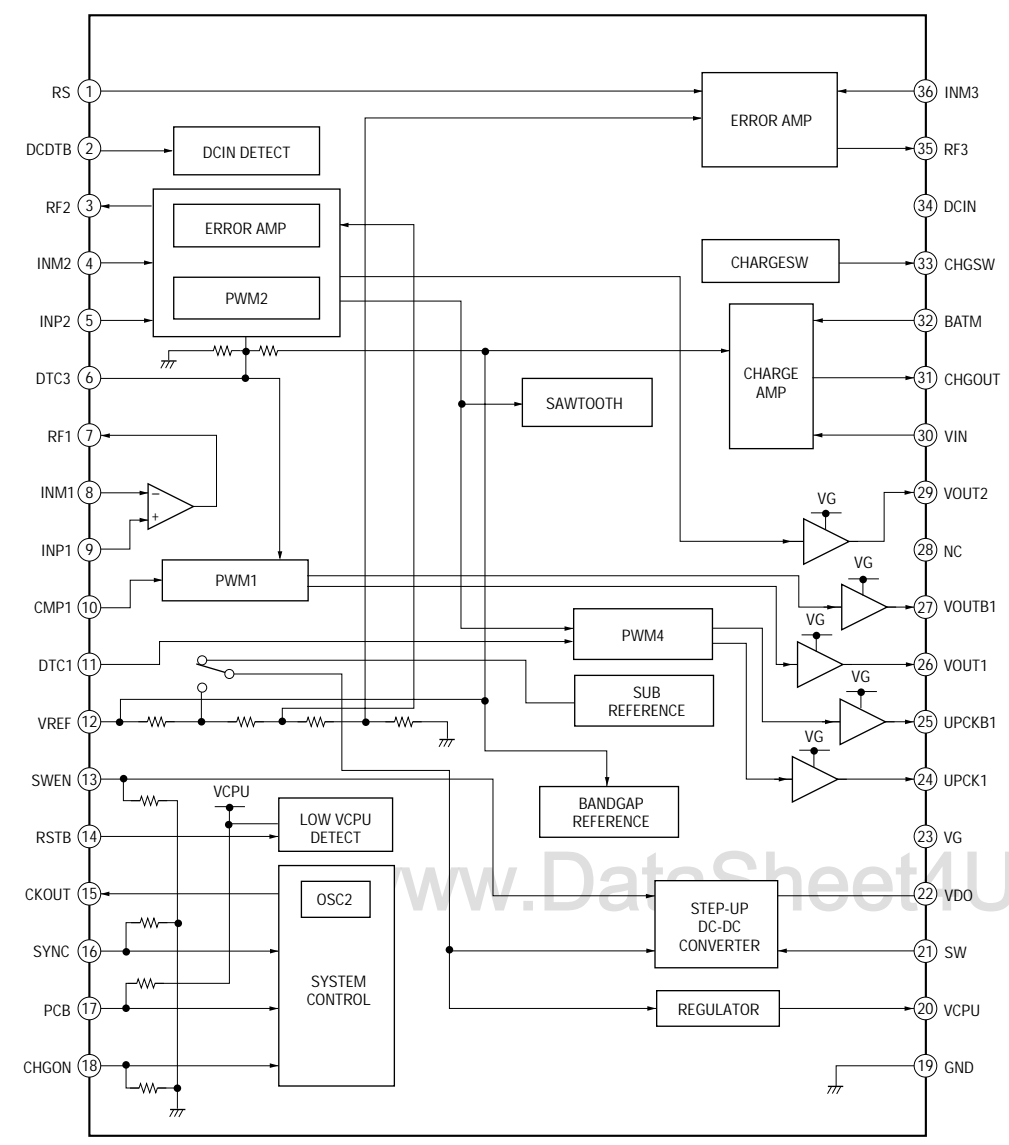
IC301 TC9438FNEL



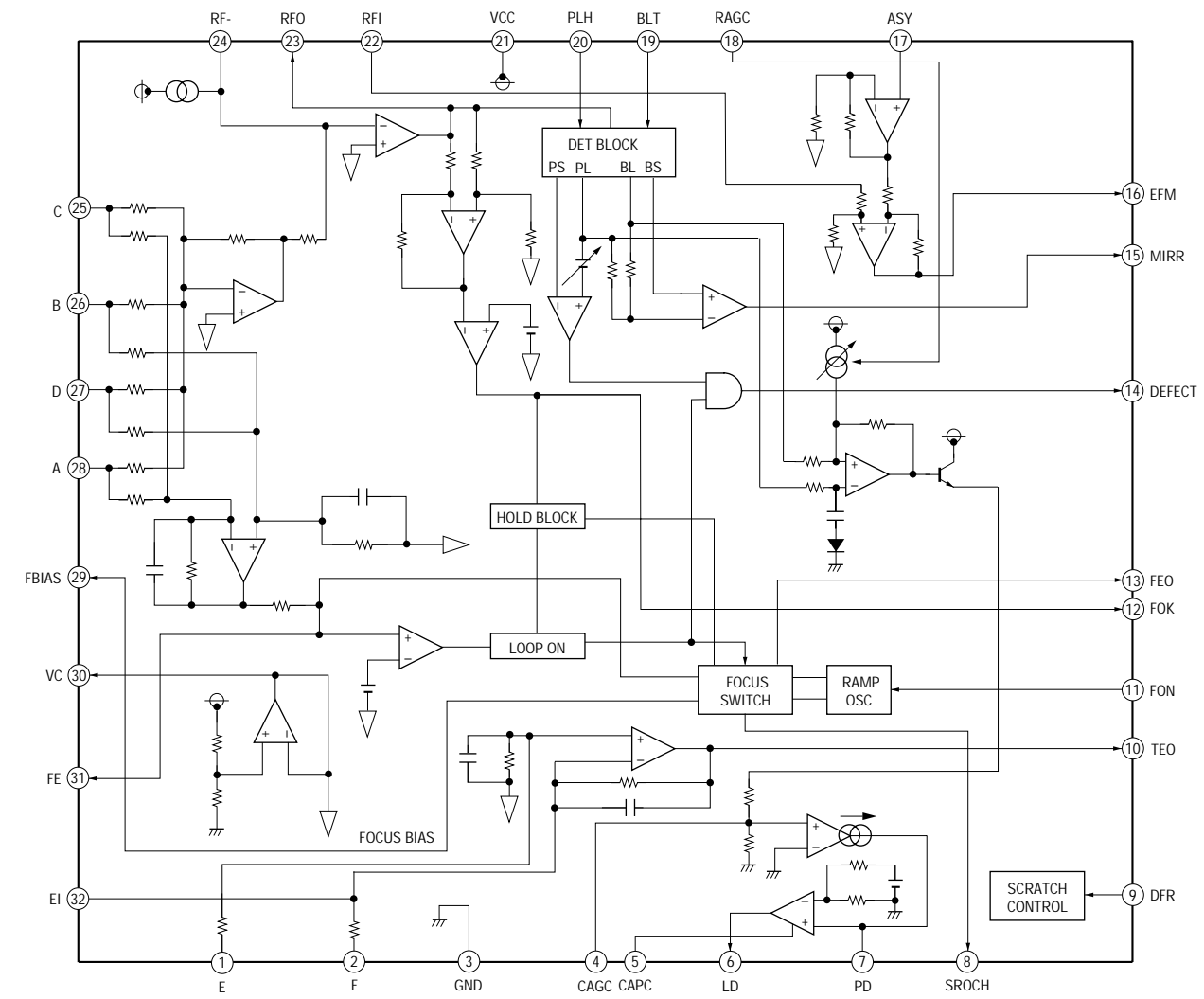
IC302 TA2120FN (EL)



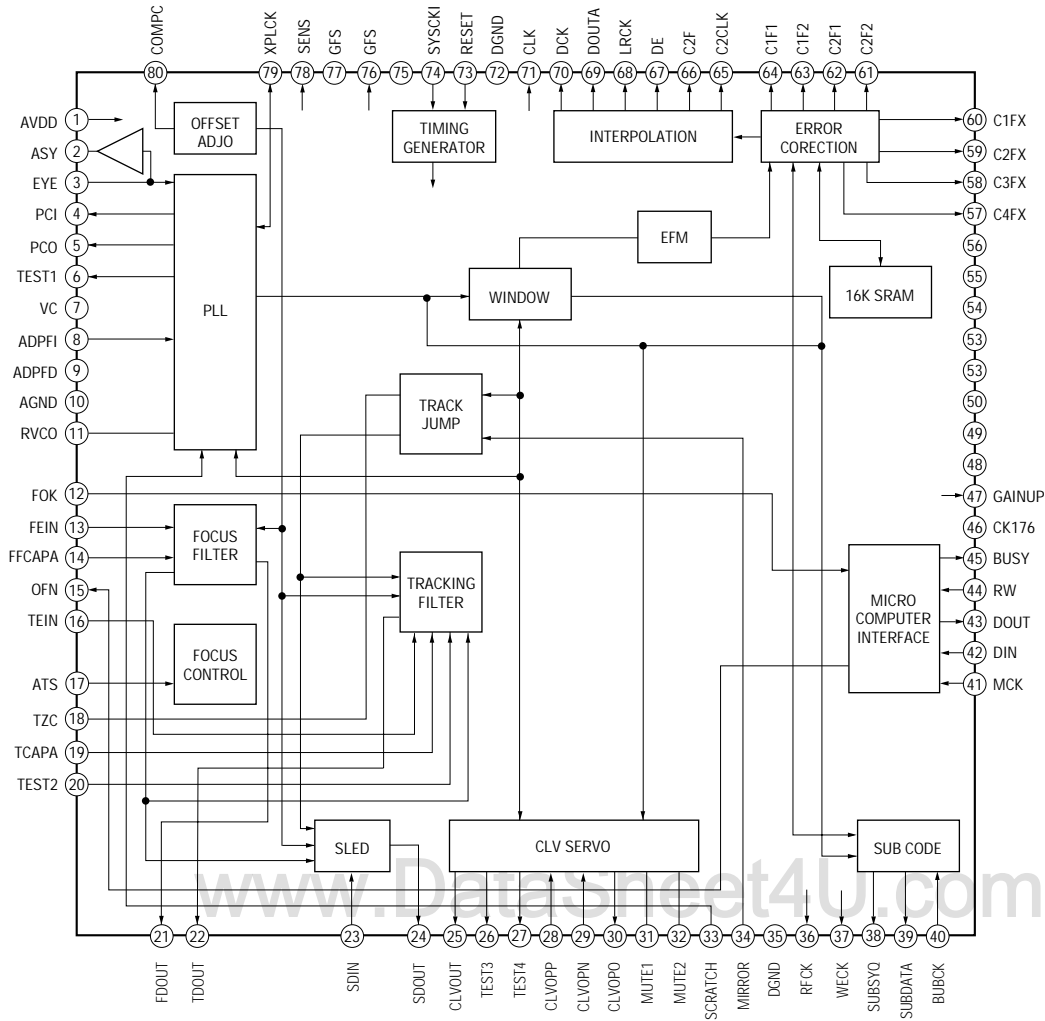
IC401 MPC18A26VMEL



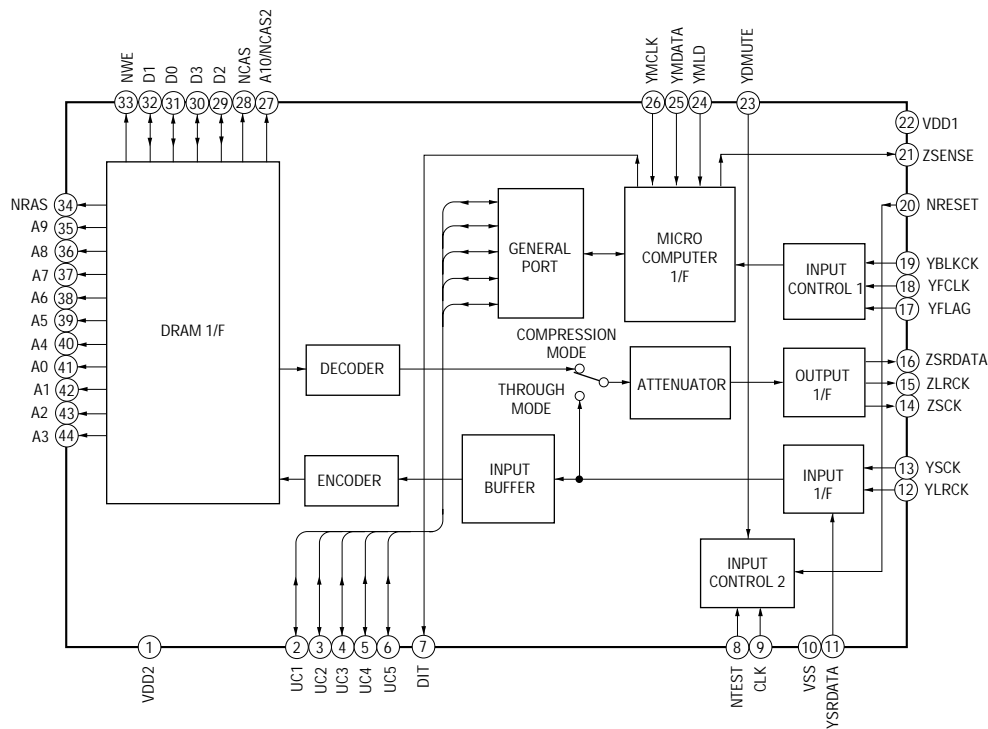
IC501 BA6386K



IC502 BU9325BKS



IC601 SM5902AF



IC504 MPC17A51VMEL

