

DVP-S7700

RMT-D107E/D107P

SERVICE MANUAL

Self Diagnosis
Supported model

AEP Model
Hong Kong Model
UK Model



SPECIFICATIONS

CD/DVD player

Signal format system PAL/(NTSC)

Audio characteristics

Frequency response DVD (PCM 96kHz): 2 Hz to 44 kHz
(+0.5 dB, -2.0dB)* (AEP, UK)
(±0.5 dB)* (Hong Kong)

DVD (PCM 48kHz): 2 Hz to 22 kHz
(±0.5 dB)

Signal-to-noise ratio CD: 2 Hz to 20 kHz (±0.5 dB)
More than 110 dB (LINE OUT (AUDIO)
connectors only) (AEP, UK)
More than 115 dB (LINE OUT (AUDIO
1, 2) connectors only) (Hong Kong)

Harmonic distortion Less than 0.0025%
Dynamic range DVD: More than 100 dB
CD: More than 98 dB (AEP, UK)
CD: More than 97 dB (Hong Kong)

Wow and flutter Less than detected value
(±0.001% W PEAK)

Outputs and inputs

	Jack type	Output level	Load impedance
LINE OUT (AUDIO) (AEP, UK)	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms
LINE OUT (AUDIO 1, 2) (Hong Kong)	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms
DIGITAL OUT (OPTICAL)	Optical output connector	-18 dBm	Wave length: 660 nm
DIGITAL OUT (COAXIAL)	Phono jack	0.5 Vp-p	75 ohms terminated
LINE OUT (VIDEO) (AEP, UK)	Phono jack	1.0 Vp-p	75 ohms, sync negative
LINE OUT (VIDEO 1, 2) (Hong Kong)	Phono jack	1.0 Vp-p	75 ohms, sync negative
S VIDEO OUT (AEP, UK)	4-pin mini DIN	Y: 1.0 Vp-p C: 0.3 Vp-p	75 ohms, sync negative 75 ohms terminated

S VIDEO OUT 1, 2 (Hong Kong)	4-pin mini DIN	Y: 1.0 Vp-p C: 0.3 Vp-p	75 ohms, sync negative 75 ohms terminated
COMPONENT VIDEO OUT (Y, C, B-Y, Cr/R-Y)	Phono jacks	Y: 1.0 Vp-p C: 0.3 Vp-p B-Y, Cr/R-Y: 0.7 Vp-p	75 ohms, sync negative 75 ohms
PHONES	Phone jack	12 mW	32 ohms

General

Power requirements	220-240 V AC, 50 Hz
Power consumption	20 W (AEP, UK) 19W (Hong Kong)
Dimensions (approx.)	430 × 111 × 335 mm (17 × 4 3/8 × 13 1/4 in.) (w/h/d) incl. projecting parts
Mass (approx.)	7.0 kg (15 lb 7 oz)
Operating temperature	41 °F to 95 °F (5 °C to 35 °C)
Operating humidity	5% to 90%

Supplied accessories

- Audio connecting cord (1)
- Video connecting cord (1)
- S video cord (1)
- Remote commander (remote) RMT-D107P (AEP, UK)
- Remote commander (remote) RMT-D107E (Hong Kong)
- Size AA (R6) batteries (2)

- When you play the PCM sound tracks with 96 kHz sampling frequency, the output signals from the DIGITAL OUT (OPTICAL, COAXIAL) connectors are converted to 48 kHz (sampling frequency) / 16 bits (quantization bits).

Design and specifications are subject to change without notice.



CD/DVD PLAYER

SONY®

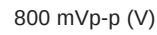
❶ IC006 ⑤① – ⑤② (DVD play)



② IC006 ⑥1 – ⑥2 (DVD play)



③ IC006 ⑥③ – ⑥④ (DVD play)

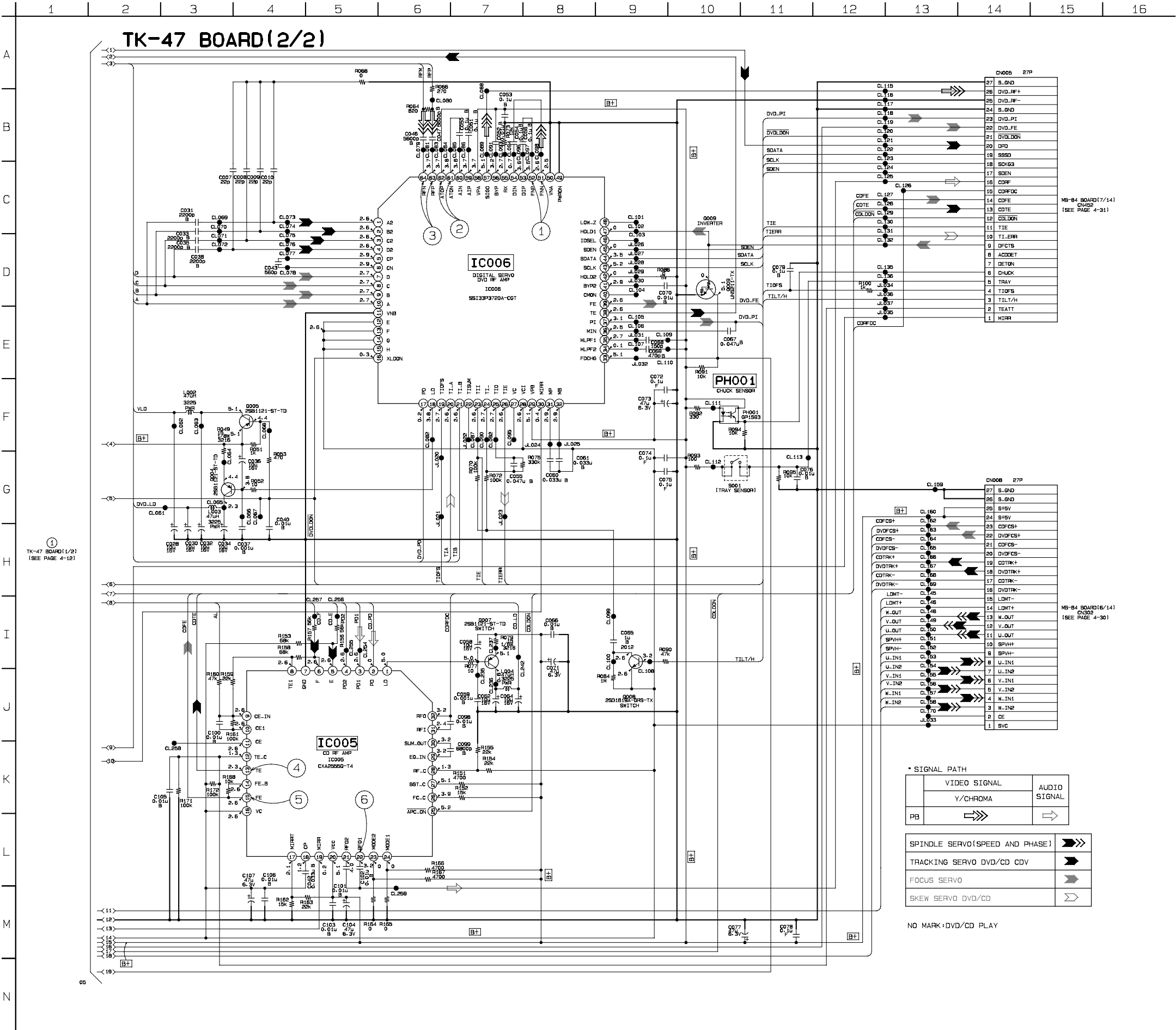


RF, SERVO 1

– Ref. No.: TK-47 board; 3,000 series –

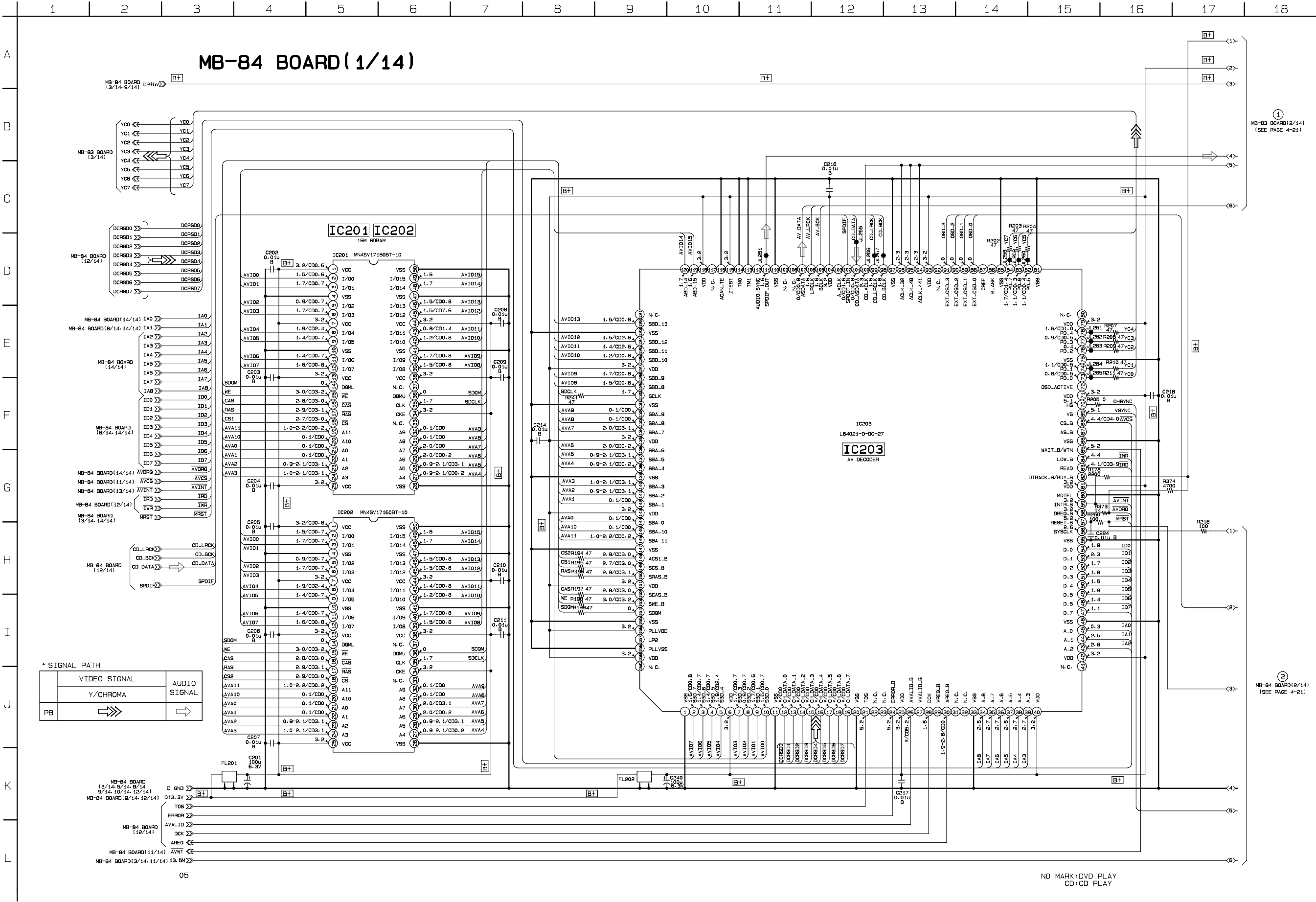
TK-47 (RF, SERVO 2) SCHEMATIC DIAGRAM

– Ref. No.: TK-47 board; 3,000 series –



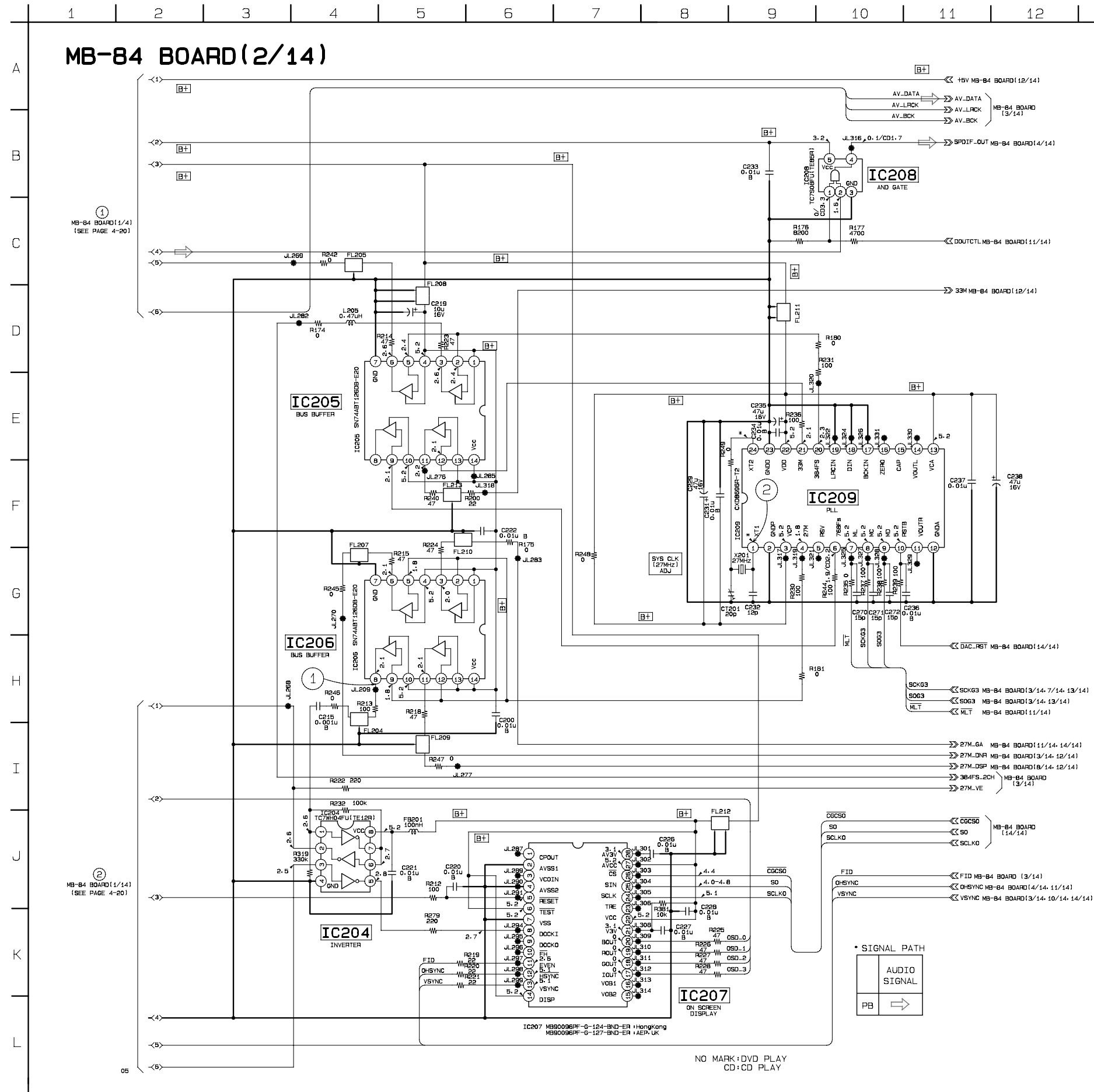
MB-84 (AV DECODER) SCHEMATIC DIAGRAM • See page 4-15 to 4-18 for printed wiring board.

– Ref. No.: MB-84 board; 2,000 series –



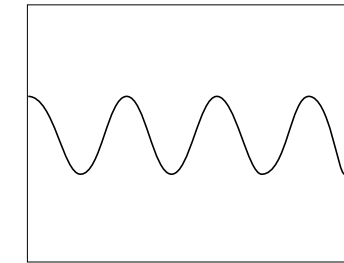
MB-84 (CLOCK GENERATOR) SCHEMATIC DIAGRAM • See page 4-15 to 4-18 for printed wiring board.

– Ref. No.: MB-84 board; 2,000 series –



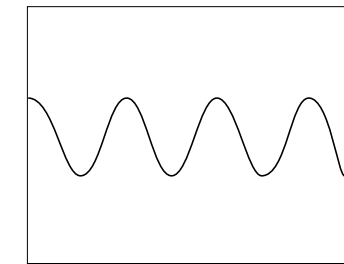
- **Waveforms**

① IC206 ⑧



3.28 Vp-p 27 MHz

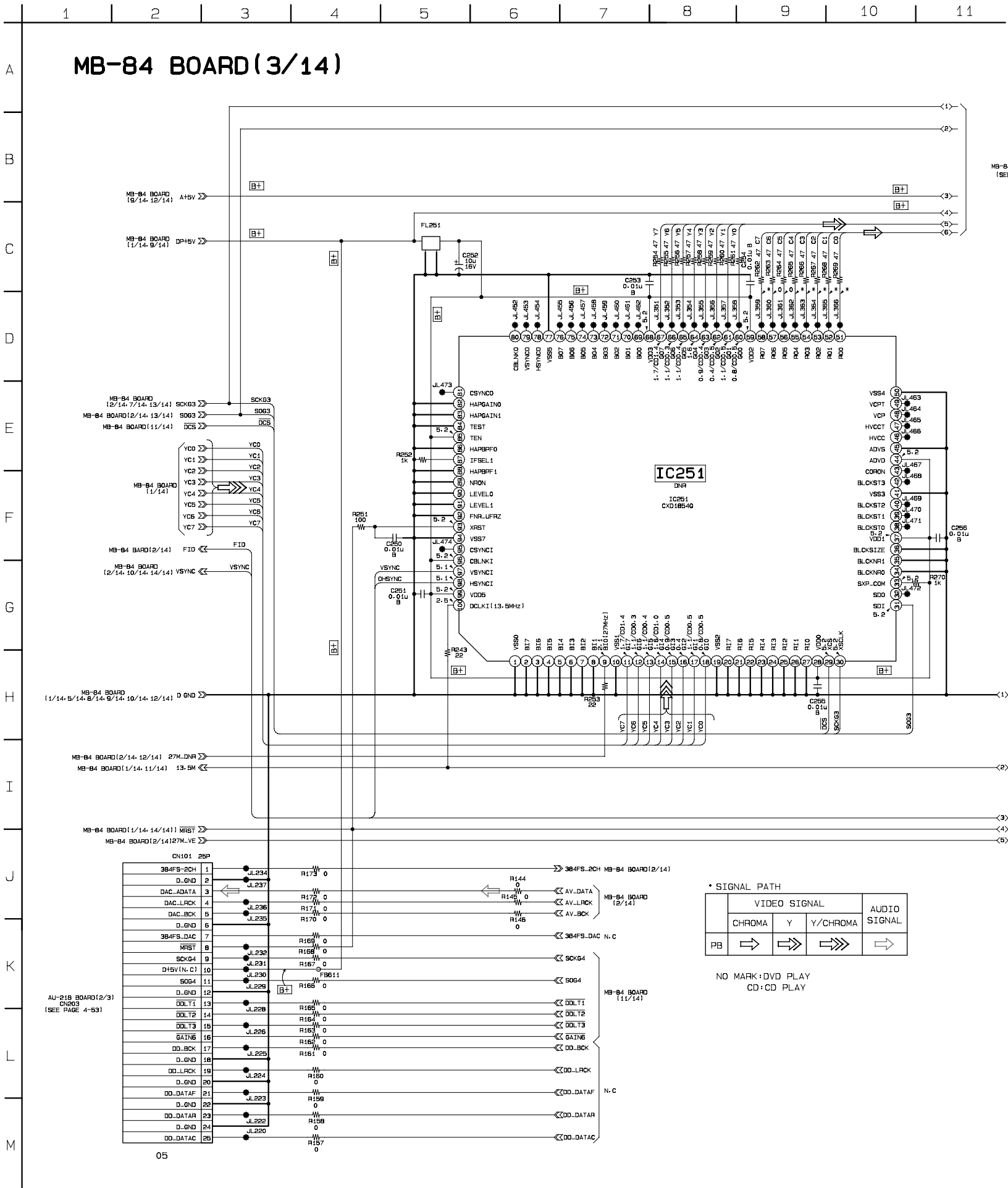
② IC209 ①



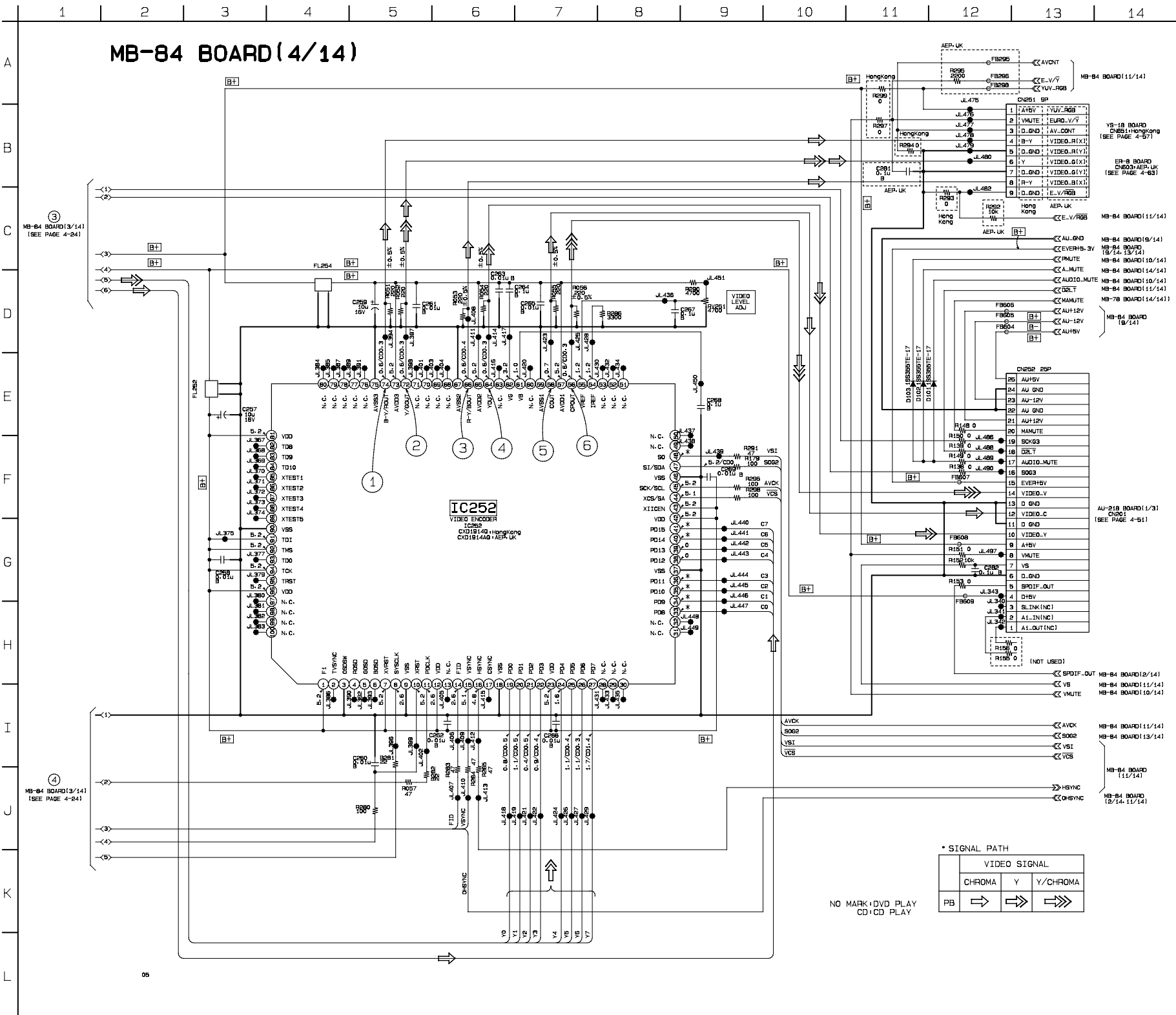
1.4 Vp-p 27 MHz

MB-84 (DNR) SCHEMATIC DIAGRAM • See page 4-15 to 4-18 for printed wiring board.

– Ref. No.: MB-84 board; 2,000 series –

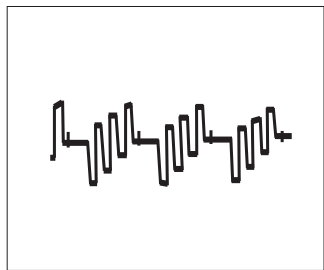


MB-84 (VIDEO ENCODER) SCHEMATIC DIAGRAM • See page 4-15 to 4-18 for printed wiring board.
– Ref. No.: MB-84 board; 2,000 series –



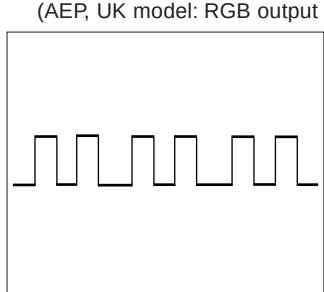
• Waveforms

① IC252 ⑦④



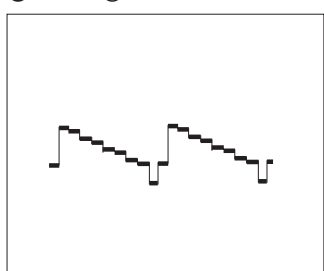
0.7 Vp-p (H)

① IC252 ⑦④



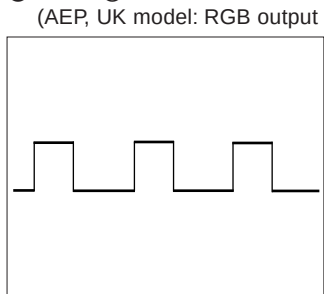
0.7 Vp-p (H)

② IC252 ⑦④



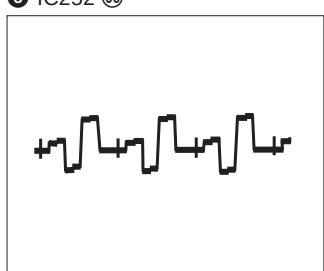
1.0 Vp-p (H)

② IC252 ⑦④



0.7 Vp-p (H)

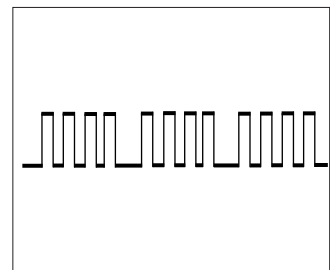
③ IC252 ⑥⑥



0.7 Vp-p (H)

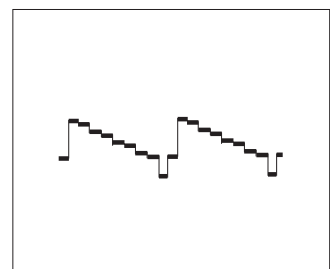
③ IC252 ⑥⑥

(AEP, UK model: RGB output mode)



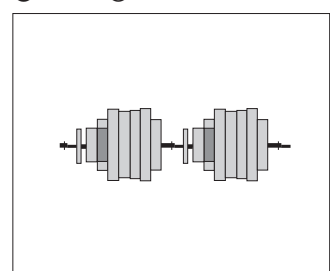
0.7 Vp-p (H)

④ IC252 ⑥④



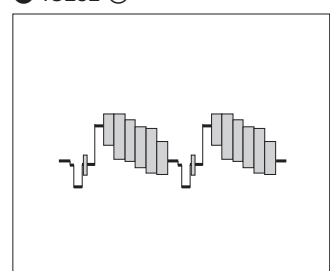
1.0 Vp-p (H)

⑤ IC252 ⑤⑤



0.7 Vp-p (H)

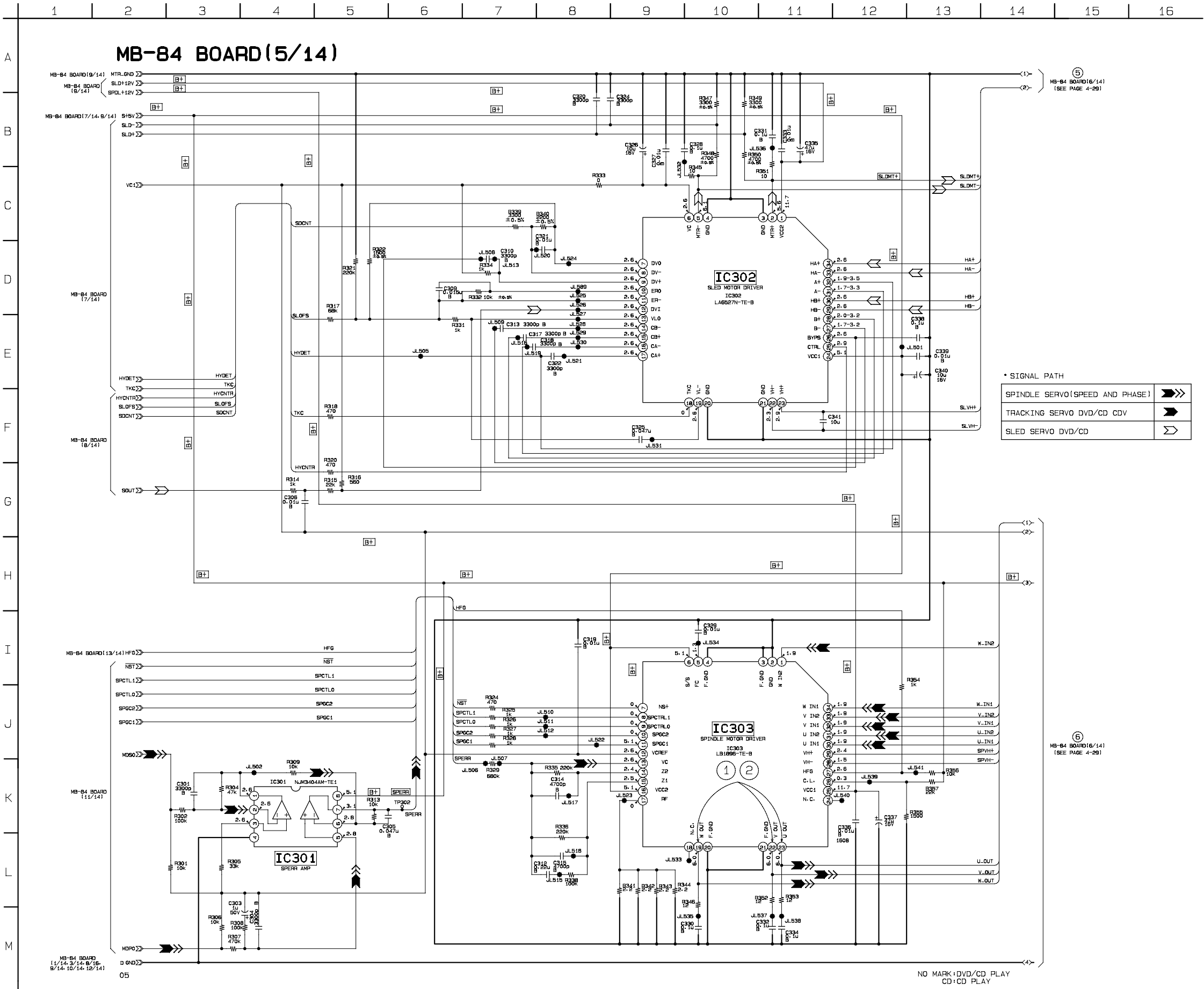
⑥ IC252 ⑤⑥



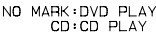
1.1 Vp-p (H)

– Ref. No.: MB-84 board; 2,000 series –

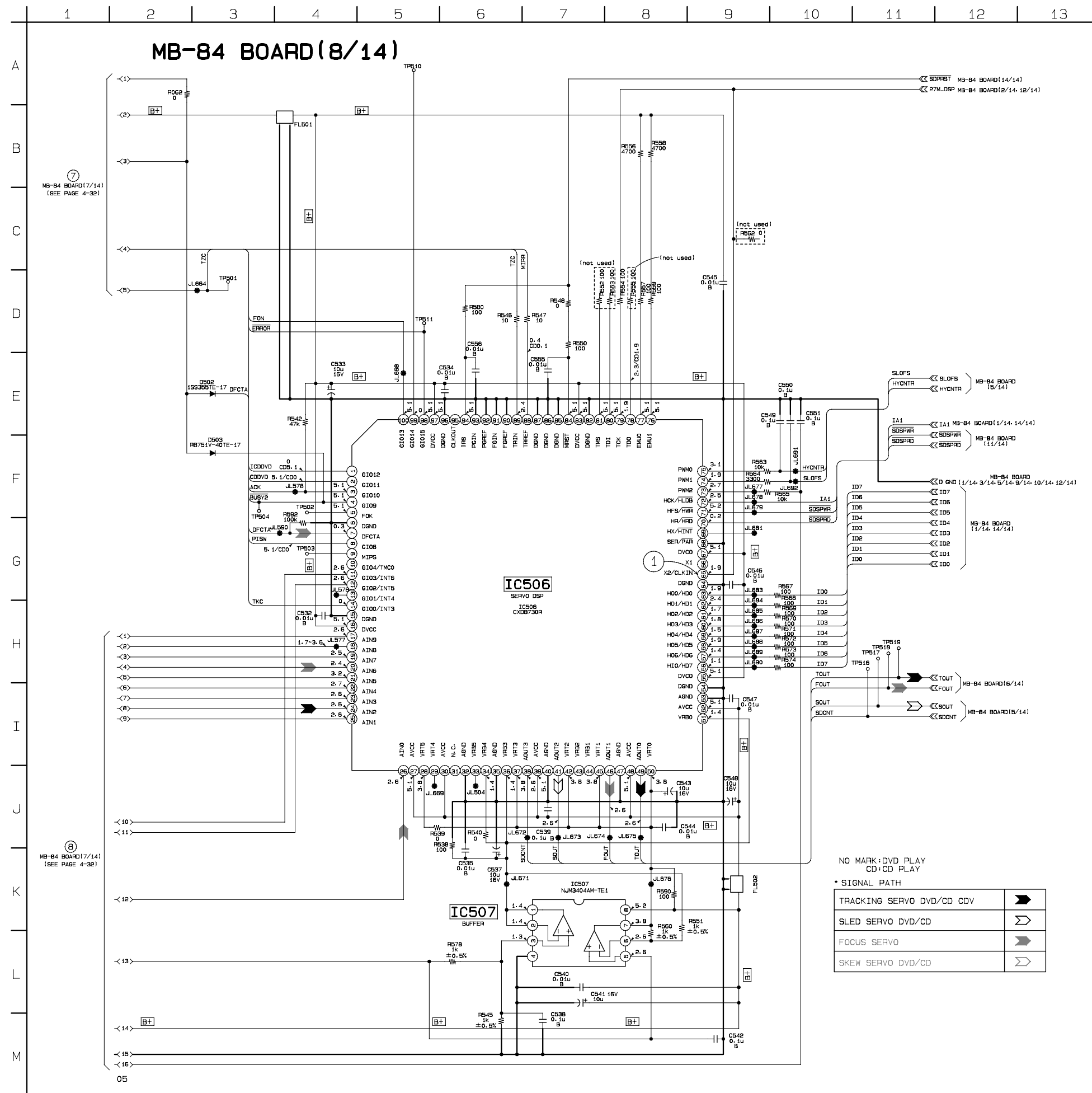
① IC303 ⑱, ㉒, ㉓ (DVD play)



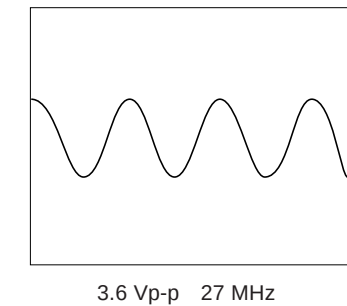
– Ref. No.: MB-84 board; 2,000 series –



– Ref. No.: MB-84 board; 2,000 series –



1 IC506 65



3.6 Vp-p 27 MHz

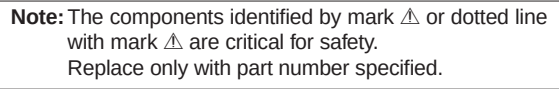
NO MARK: DVD PLAY
CD: CD PLAY

- SIGNAL PATH

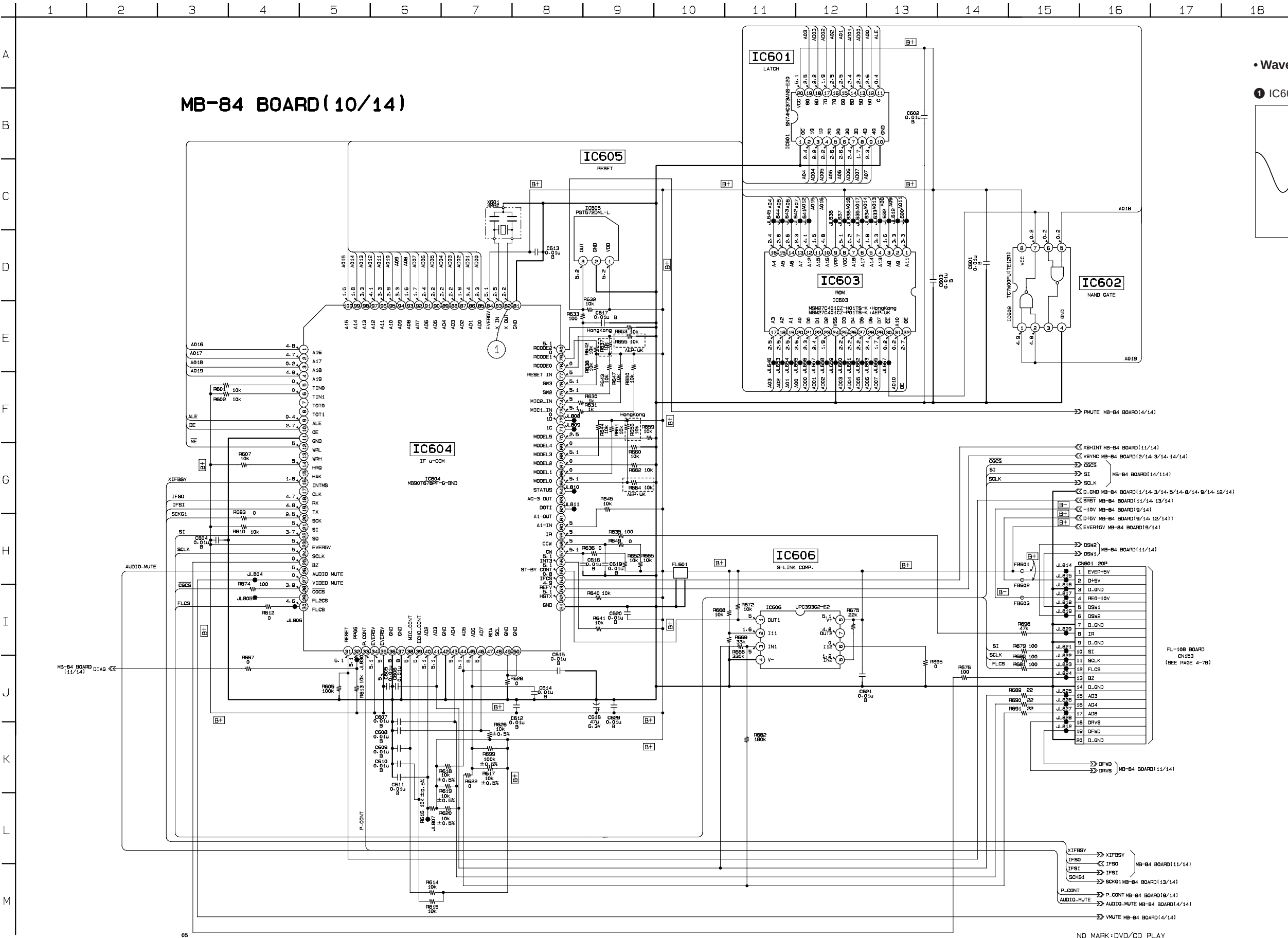
TRACKING SERVO DVD/CD CDV	
SLED SERVO DVD/CD	
FOCUS SERVO	
SKEW SERVO DVD/CD	

4-35

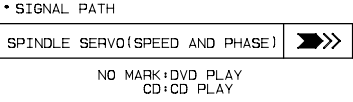
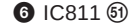
4-36

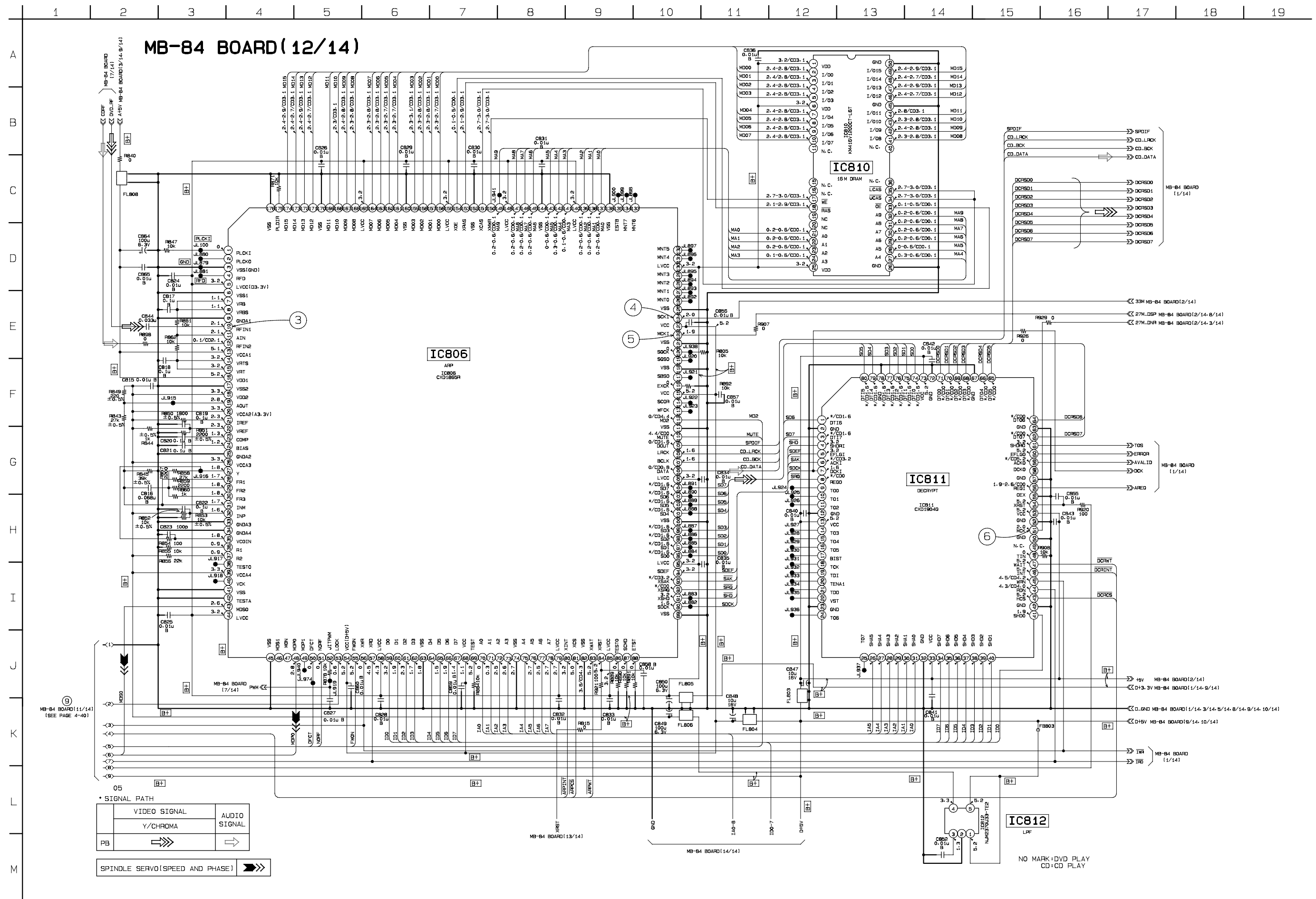


MB-84 (IF μ -COM) SCHEMATIC DIAGRAM • See page 4-15 to 4-18 for printed wiring board.
– Ref. No.: MB-84 board; 2,000 series –



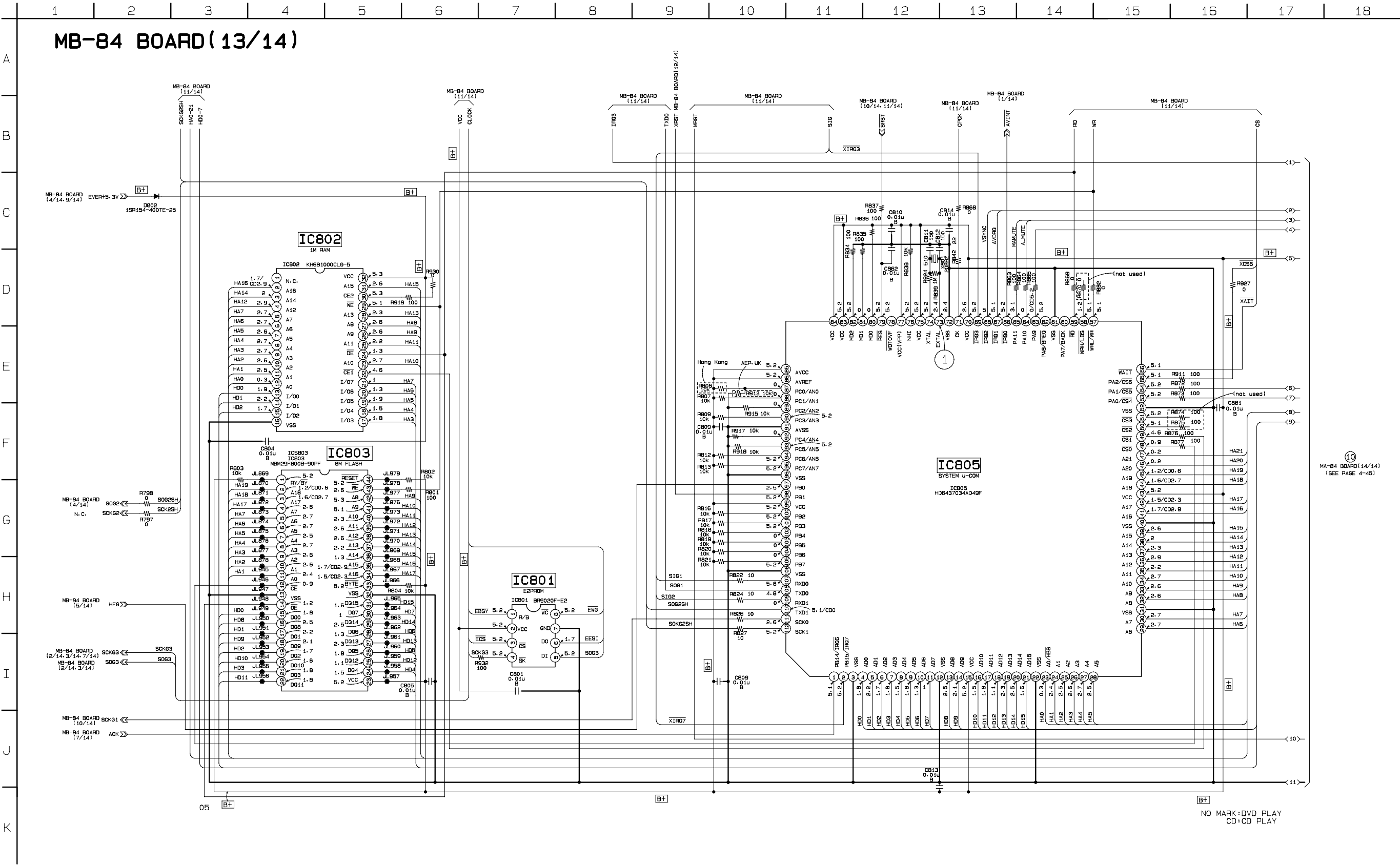
1 IC804 (118)





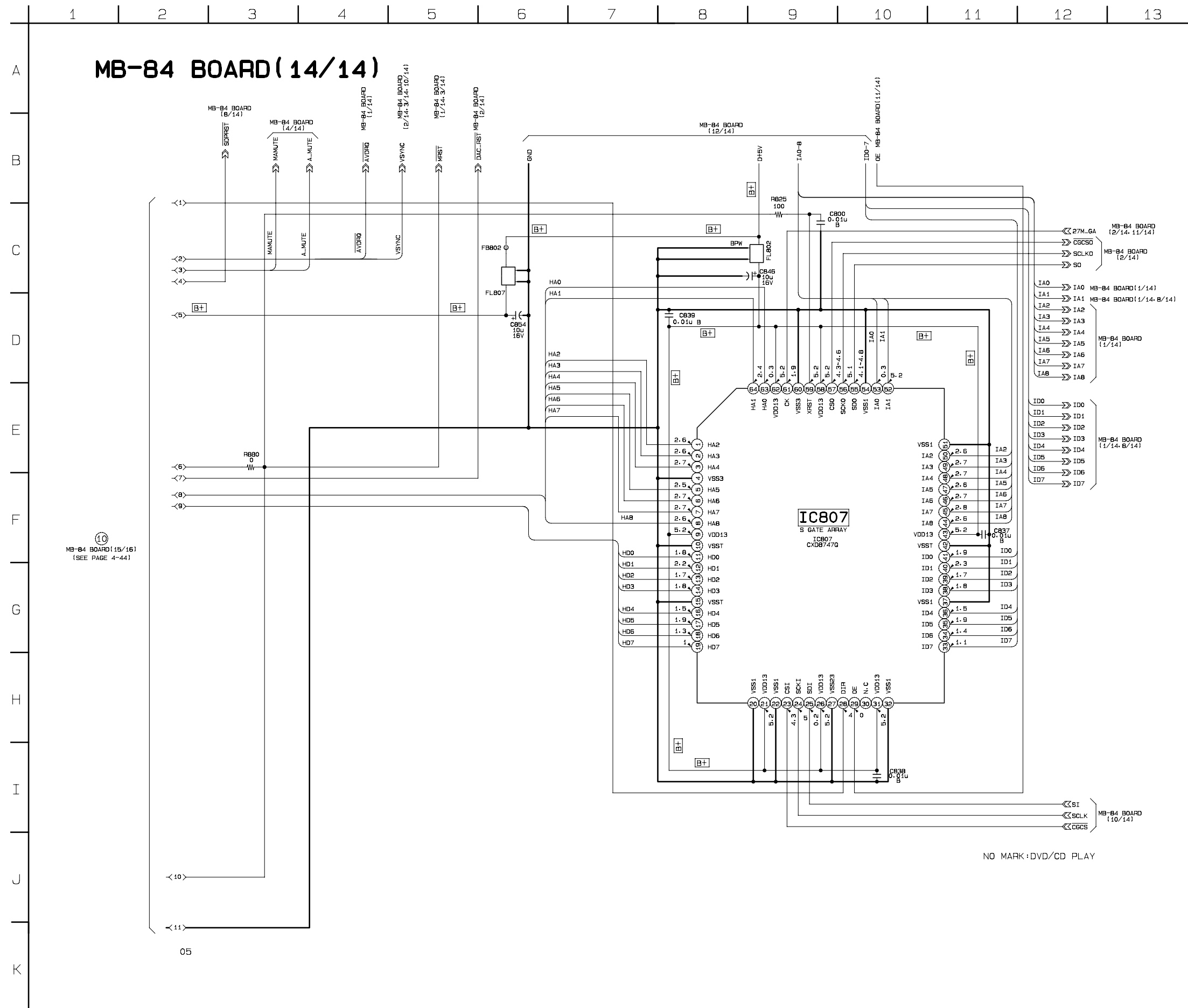
MB-84 (SYSTEM μ-COM) SCHEMATIC DIAGRAM • See page 4-15 to 4-18 for printed wiring board.

– Ref. No.: MB-84 board; 2,000 series –



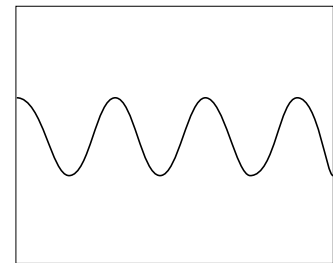
MB-84 (S GATE ARRAY) SCHEMATIC DIAGRAM • See page 4-15 to 4-18 for printed wiring board.

– Ref. No.: MB-84 board; 2,000 series –



- **Waveform**

① IC805 ⑦③



4.4 Vp-p 20 MHz

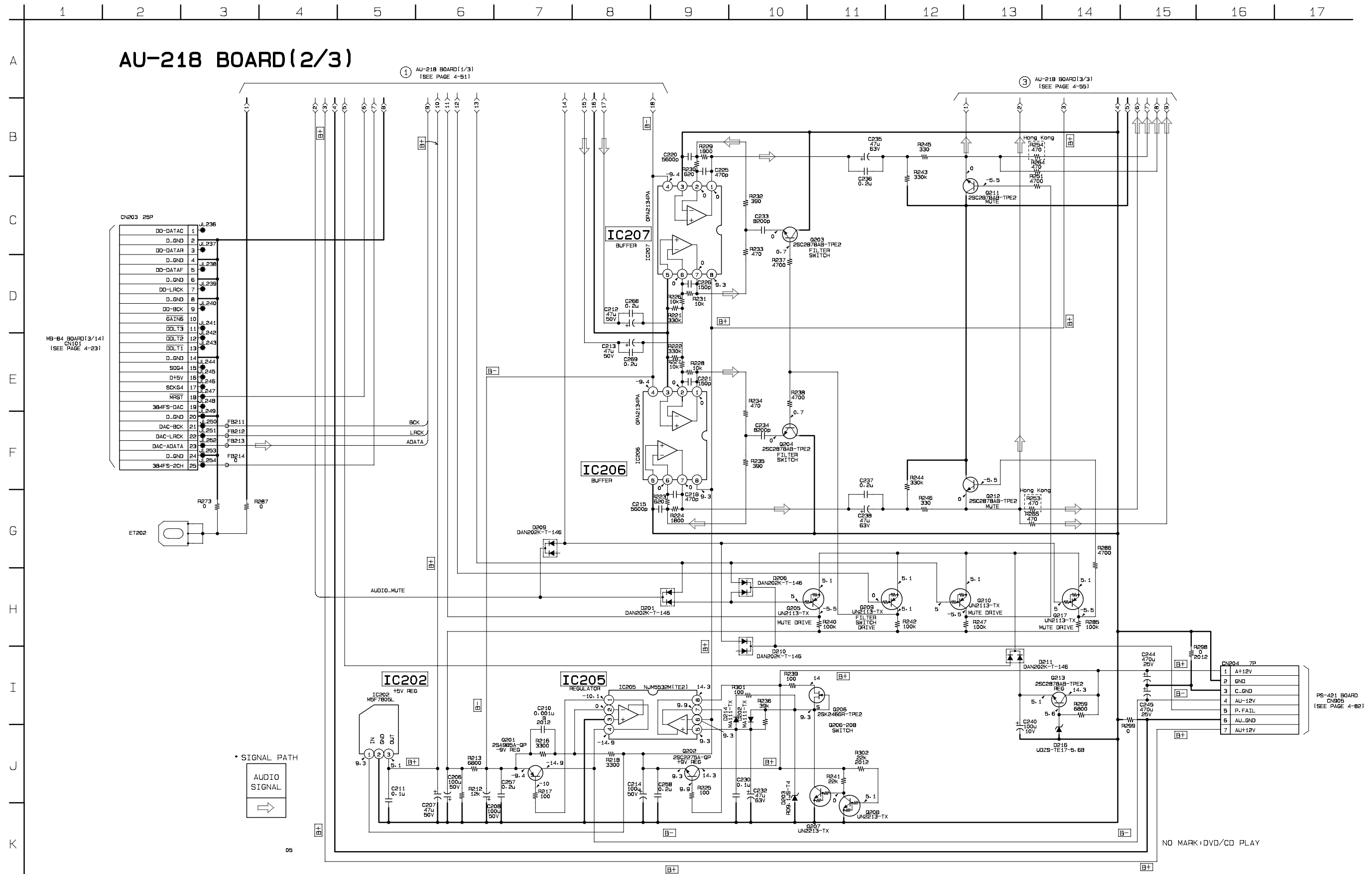
S GATE ARRAY
MB-84 (14/14)

– Ref. No.: AU-218 board; 3,000 series –



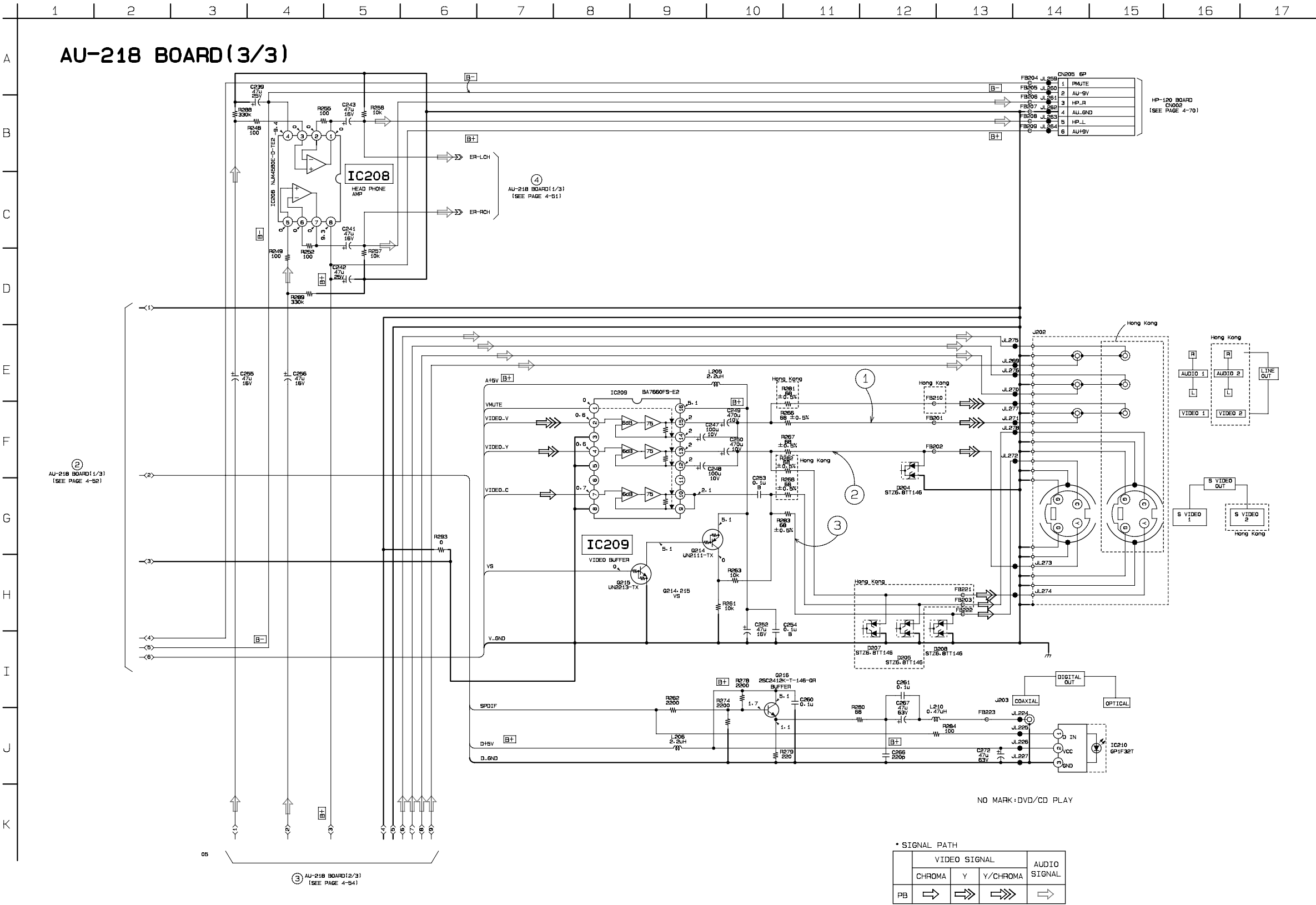
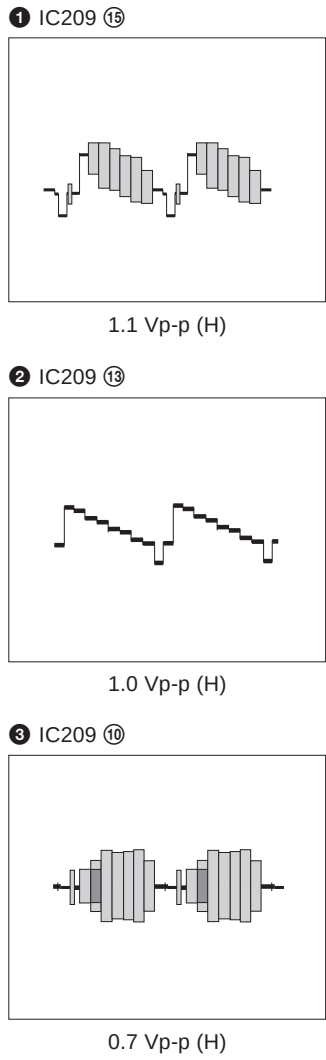
AU-218 (AUDIO 2) SCHEMATIC DIAGRAM • See page 4-47 to 4-50 for printed wiring board.

– Ref. No.: AU-218 board; 3,000 series –



AU-218 (VIDEO BUFFER) SCHEMATIC DIAGRAM • See page 4-47 to 4-50 for printed wiring board.
– Ref. No.: AU-218 board; 3,000 series –

• Waveforms

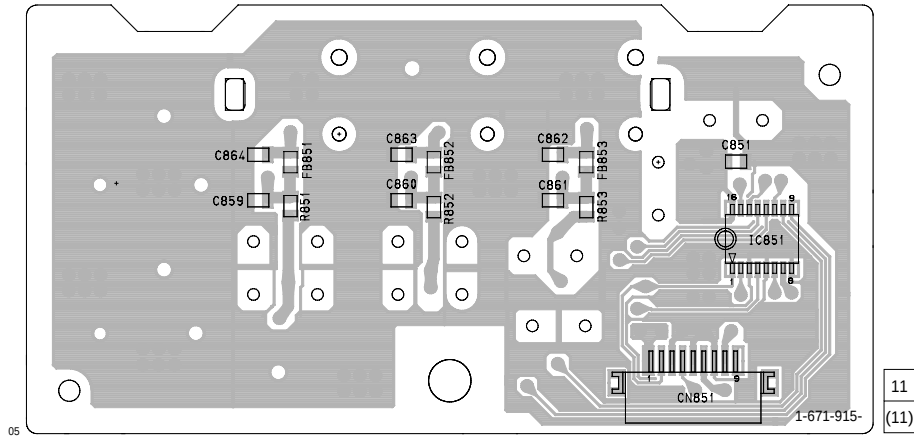


YS-19 (COMPONENT VIDEO) PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

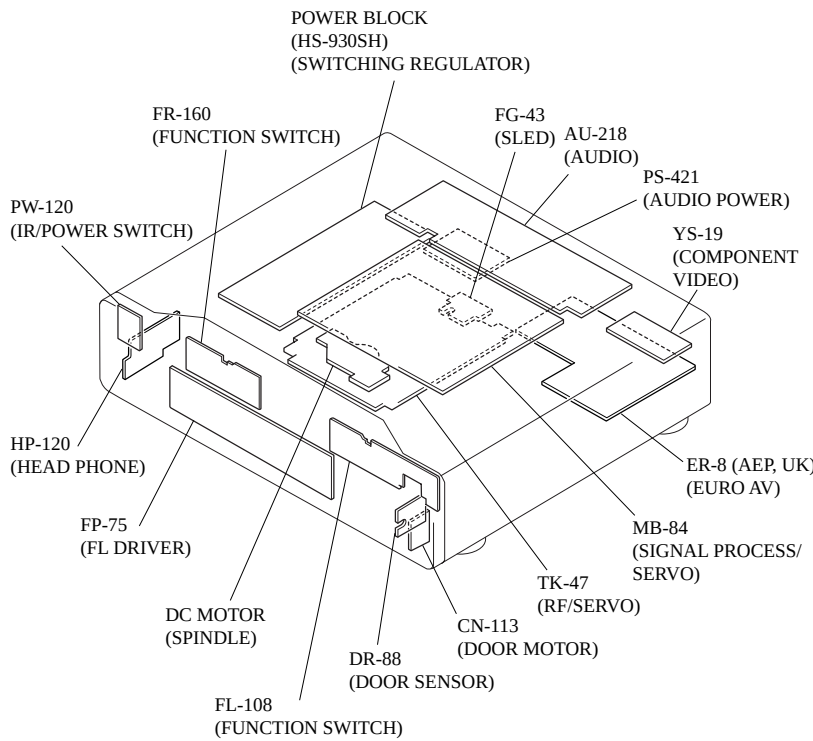
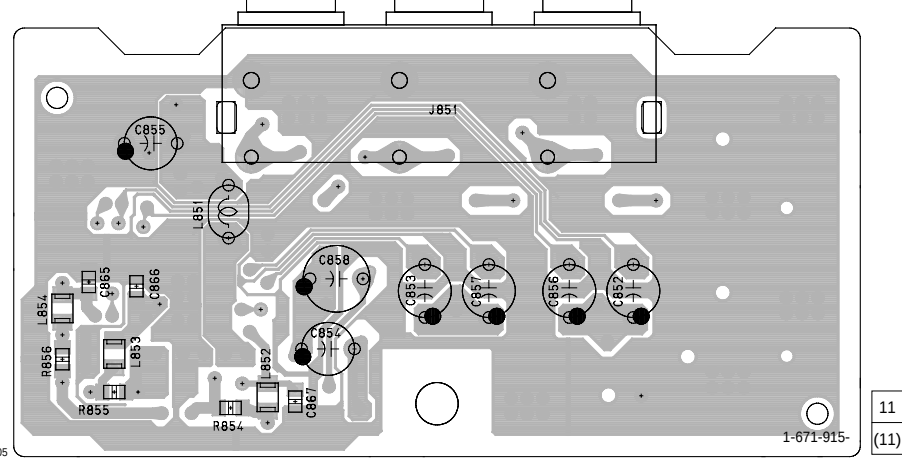
– Ref. No.: YS-19 board; 1,000 series –

There are few cases that the part isn't mounted in this model is printed on this diagram.

YS-19 BOARD(SIDE A)

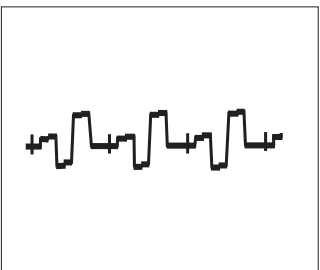


YS-19 BOARD(SIDE B)



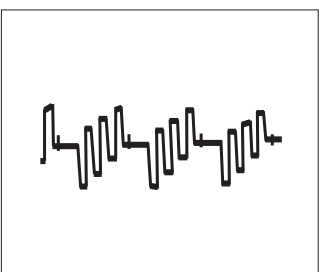
• Waveforms

① IC851 ⑮



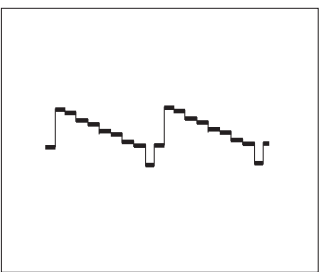
0.7 Vp-p (H)

② IC851 ⑬

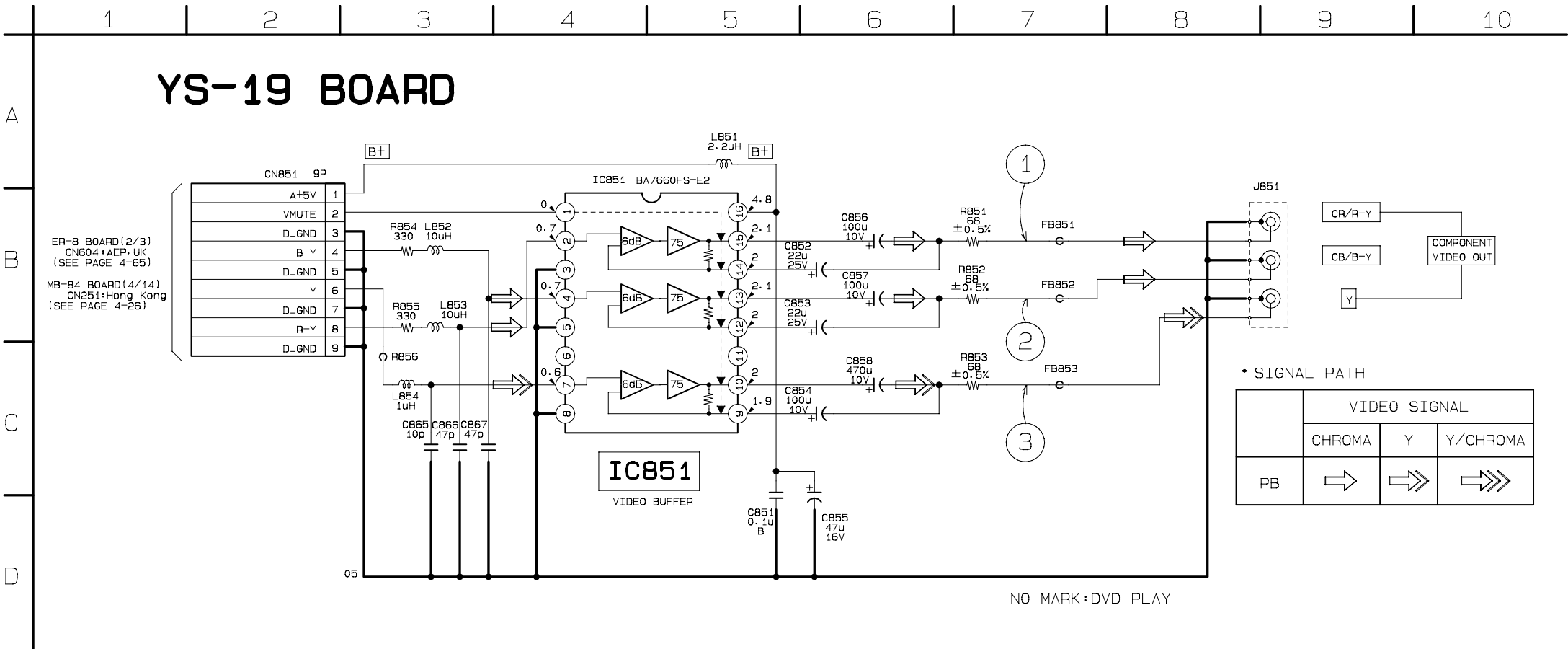


0.7 Vp-p (H)

③ IC851 ⑩



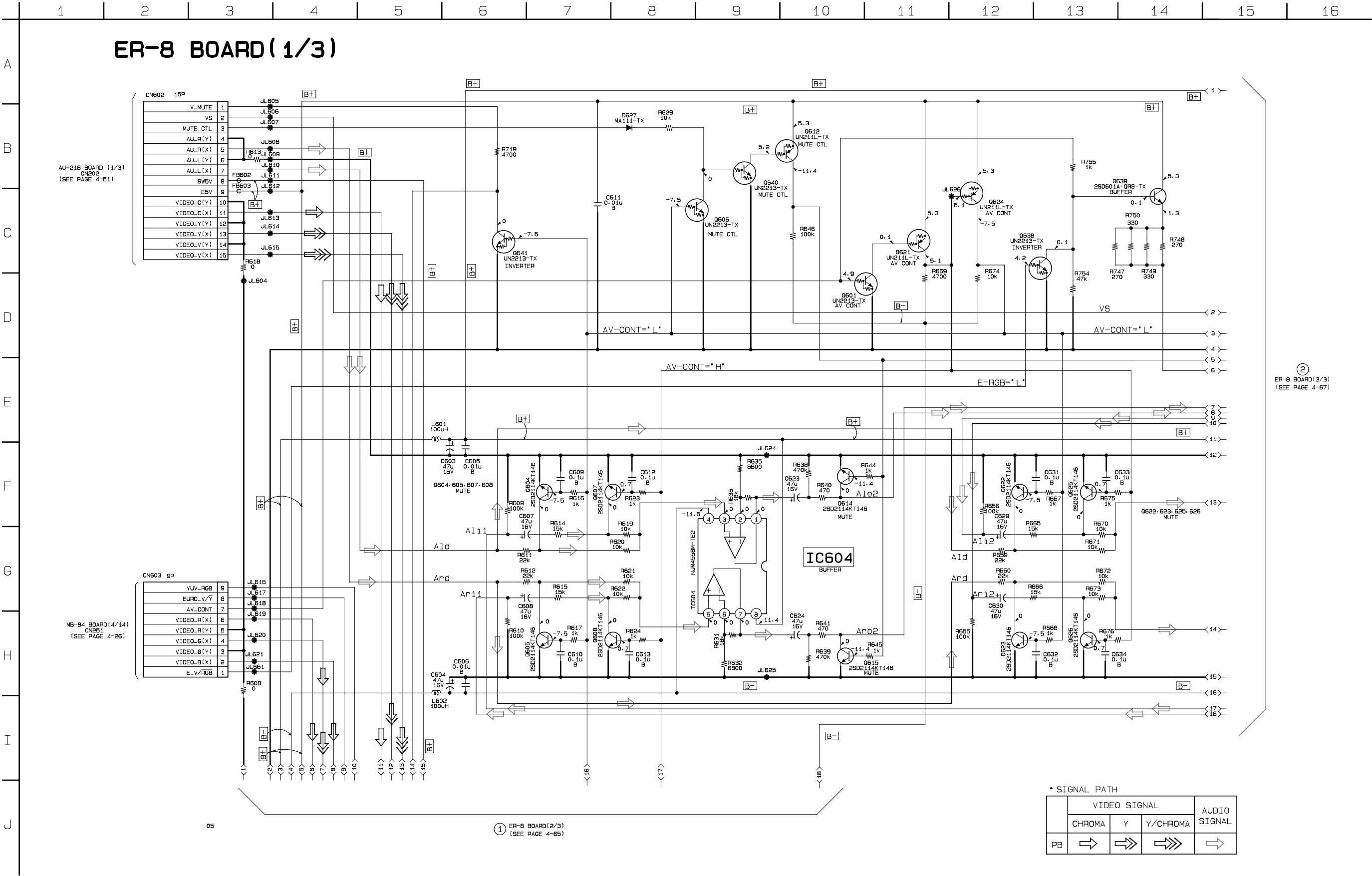
1.0 Vp-p (H)



NO MARK : DVD PLAY

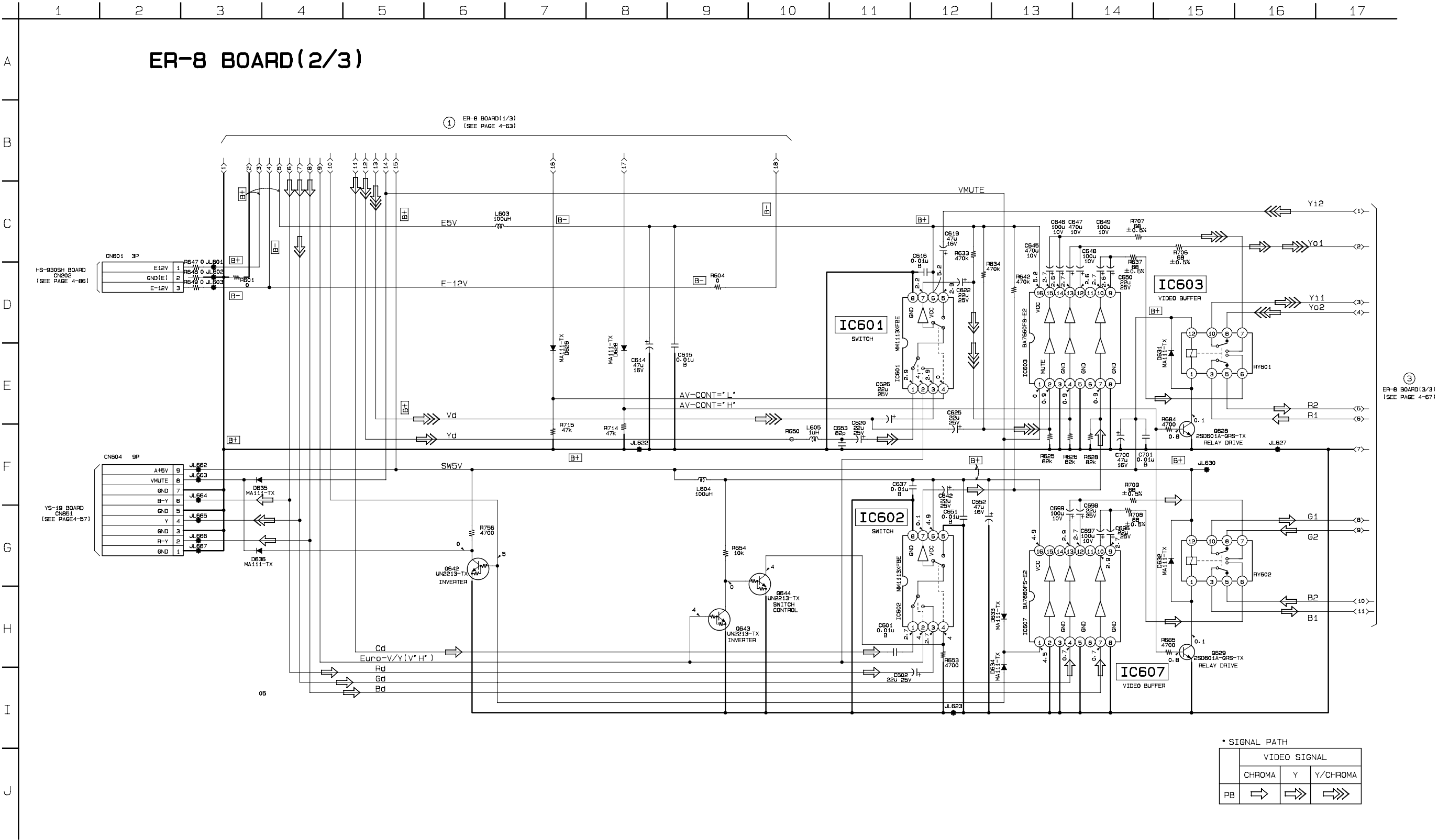
ER-8 (EURO AV 1) SCHEMATIC DIAGRAM • See page 4-59 to 4-62 for printed wiring board.
– Ref. No.: ER-8 board; 1,000 series –

– AEP, UK –



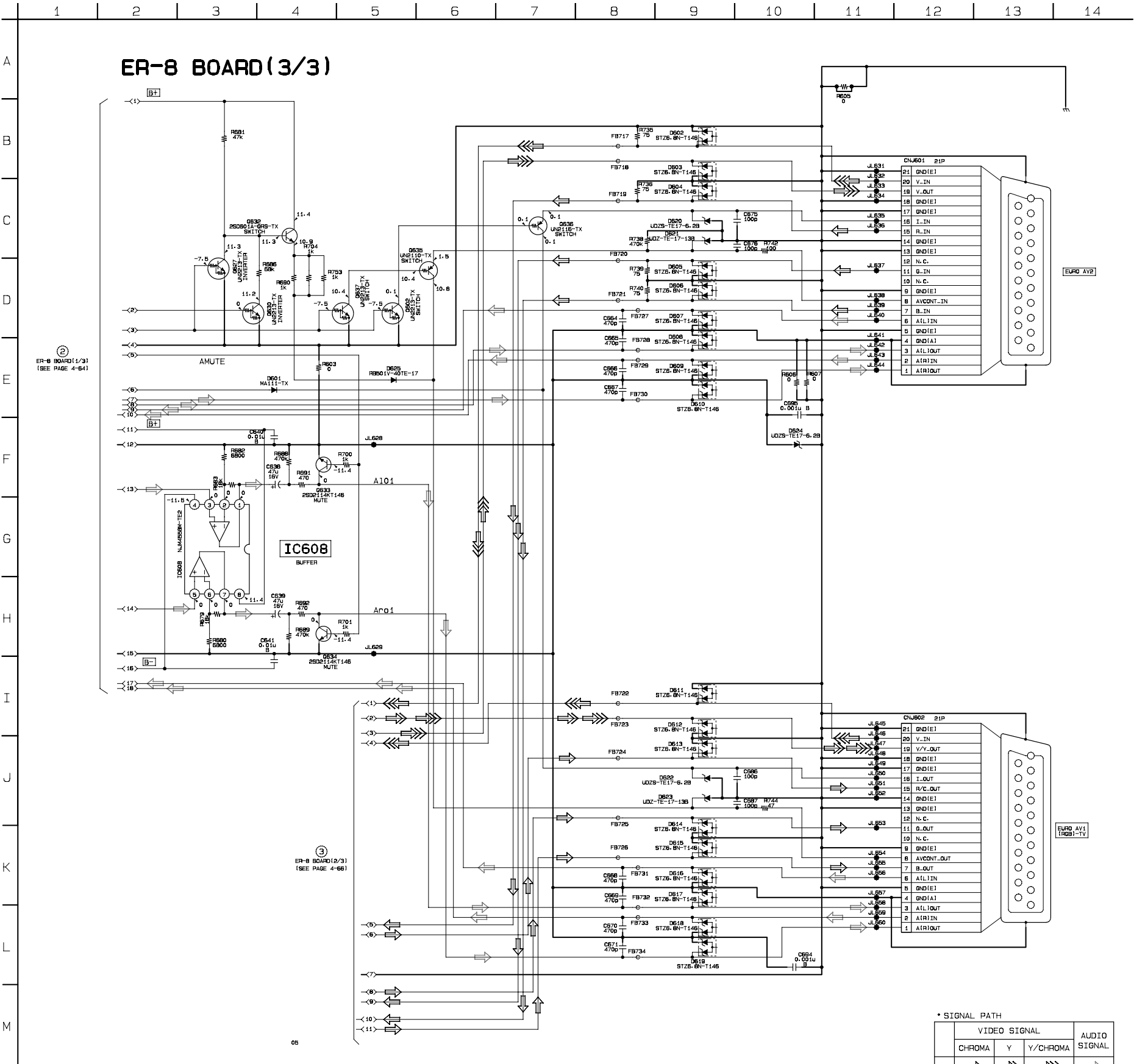
ER-8 (EURO AV 2) SCHEMATIC DIAGRAM • See page 4-59 to 4-62 for printed wiring board.
– Ref. No.: ER-8 board; 1,000 series –

– AEP, UK –



ER-8 (EURO AV 3) SCHEMATIC DIAGRAM • See page 4-59 to 4-62 for printed wiring board.
– Ref. No.: ER-8 board; 1,000 series –

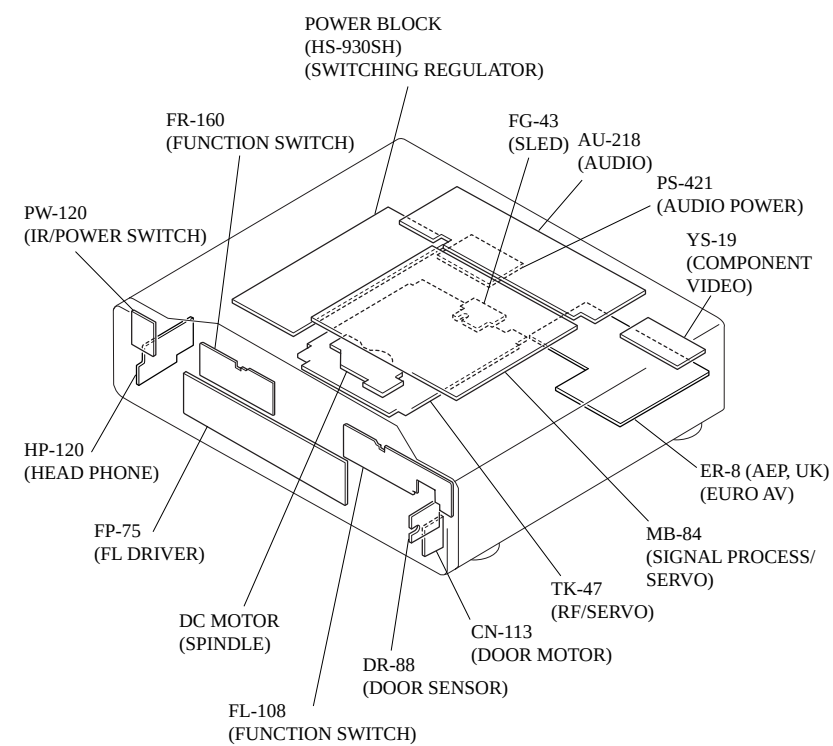
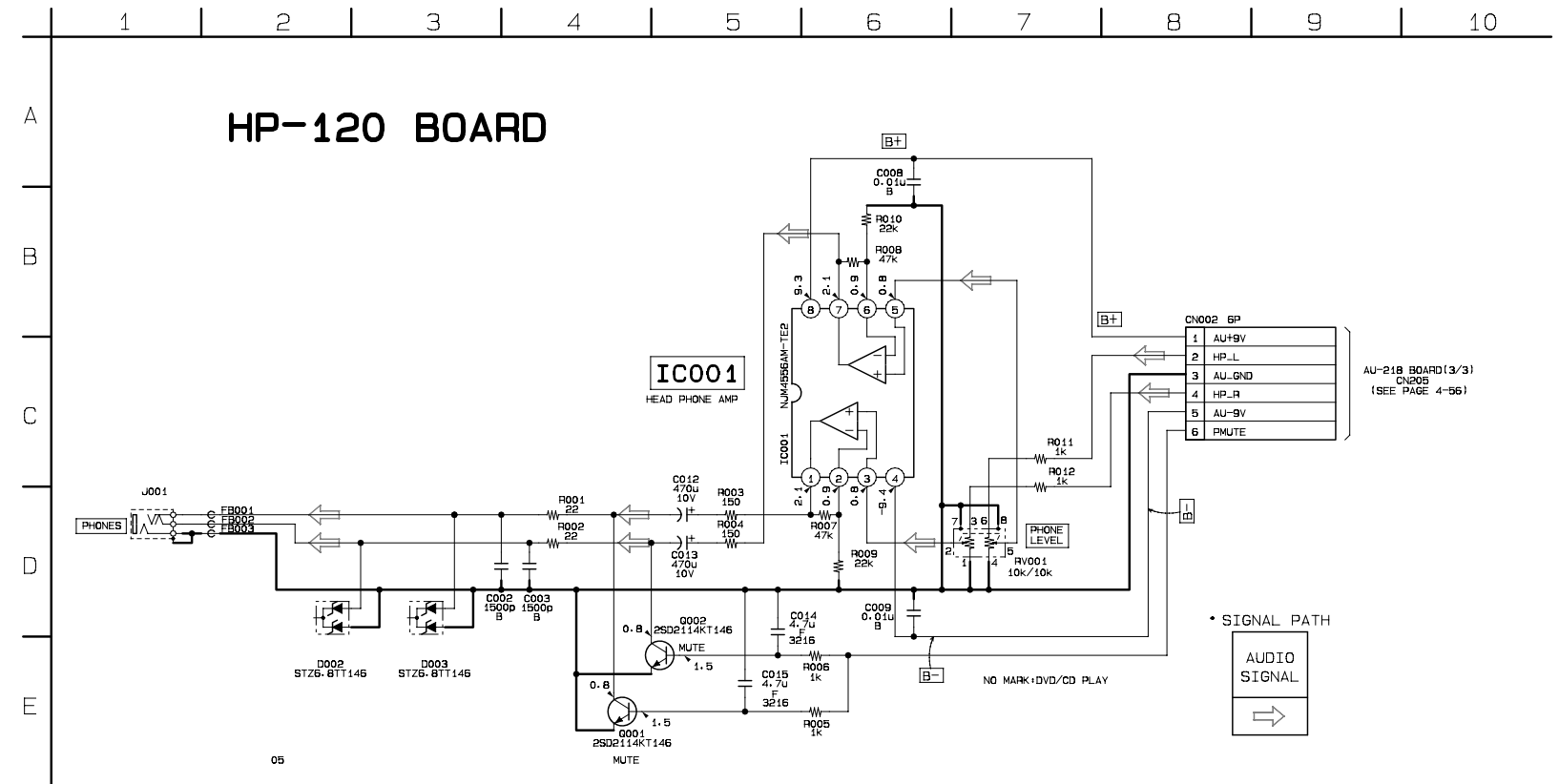
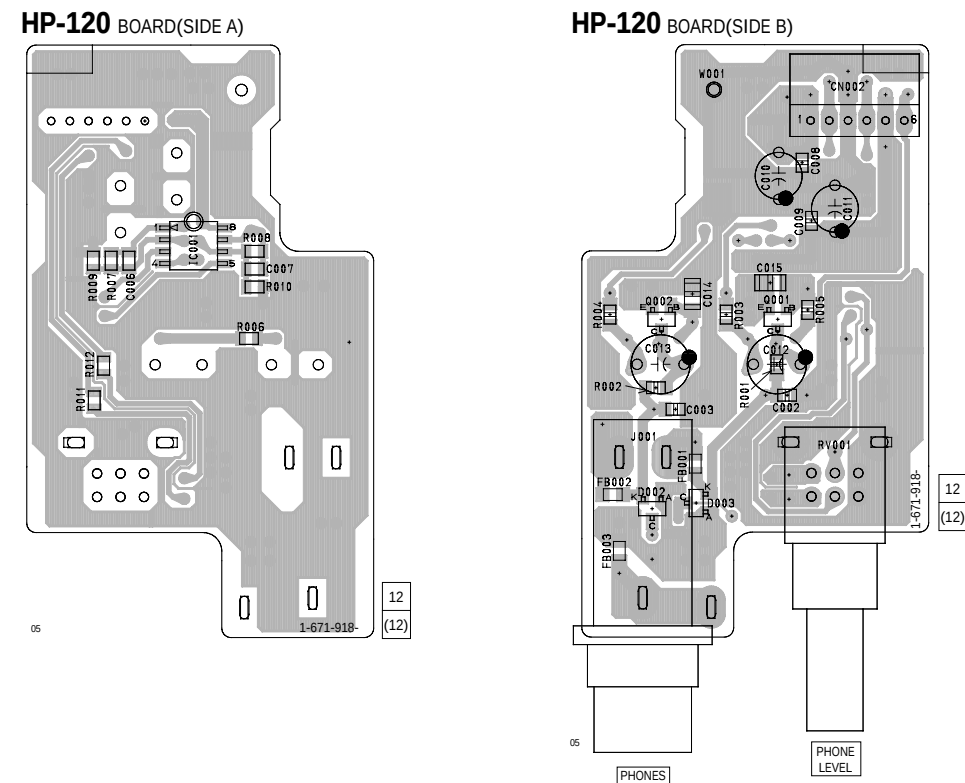
– AEP, UK –



HP-120 (HEAD PHONE) PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

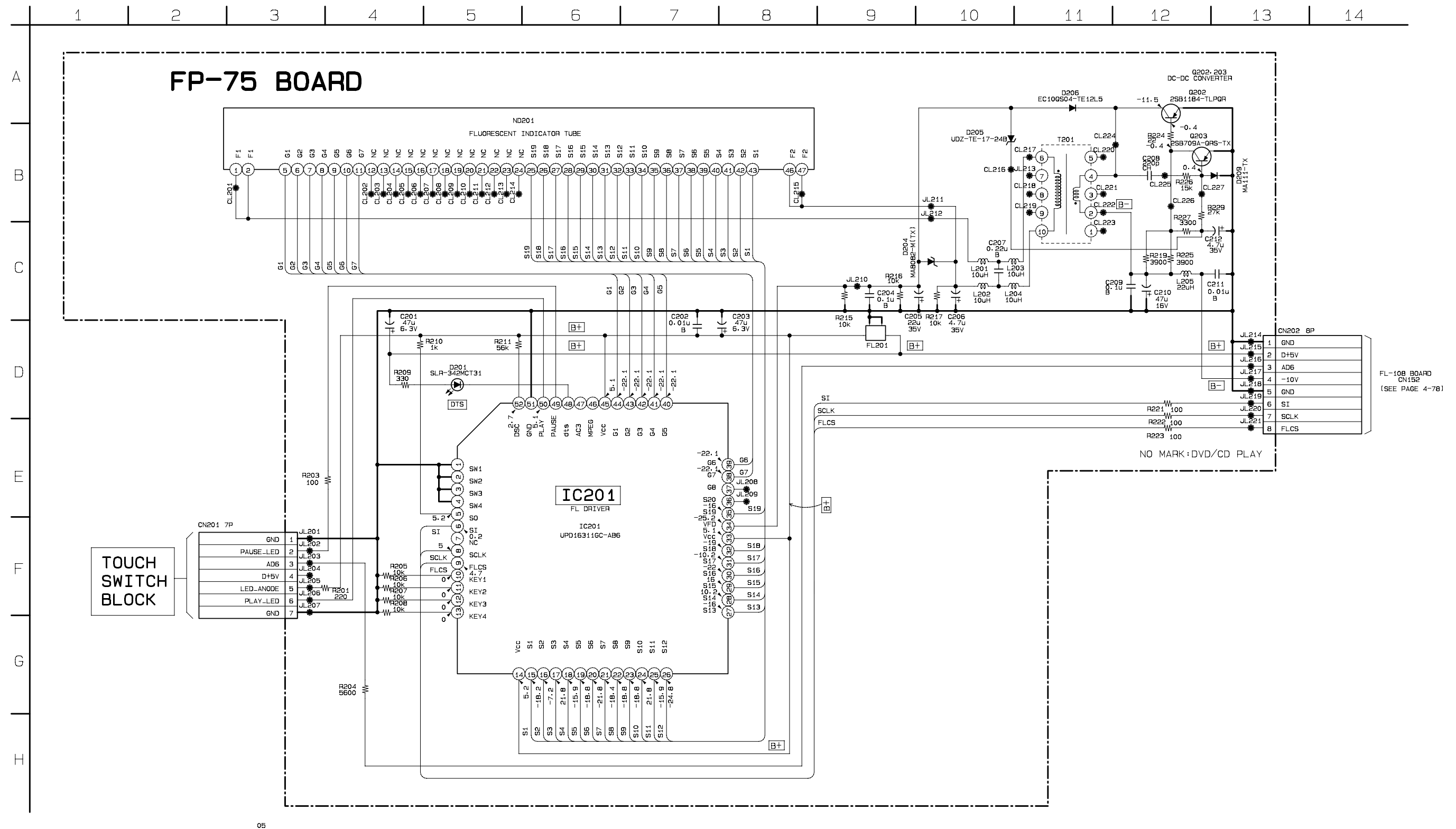
– Ref. No.: HP-120 board; 1,000 series –

There are few cases that the part isn't mounted in this model is printed on this diagram.

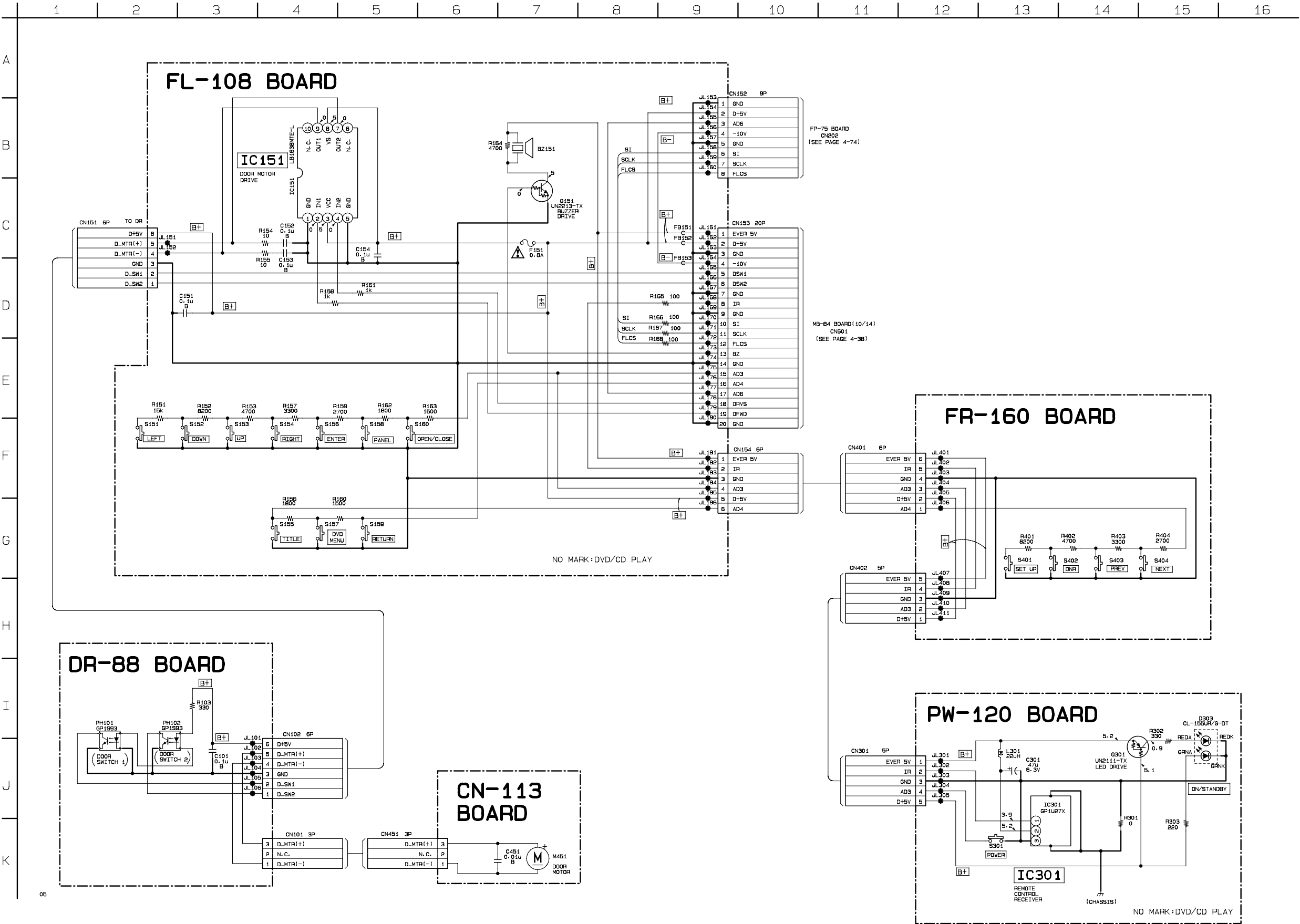


FP-75 (FL DRIVER) SCHEMATIC DIAGRAM

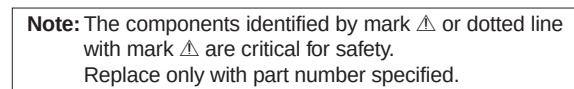
– Ref. No.: FP-75 board; 1,000 series –



CN-113 (DOOR MOTOR), DR-88 (DOOR SENSOR), FL-108 (FUNCTION SWITCH), FR-160 (FUNCTION SWITCH), PW-120 (IR/POWER SWITCH) SCHEMATIC DIAGRAMS
– Ref. No.: CN-113 board, DR-88 board, FL-108 board, FR-160 board, PW-120 board; 1,000 series –

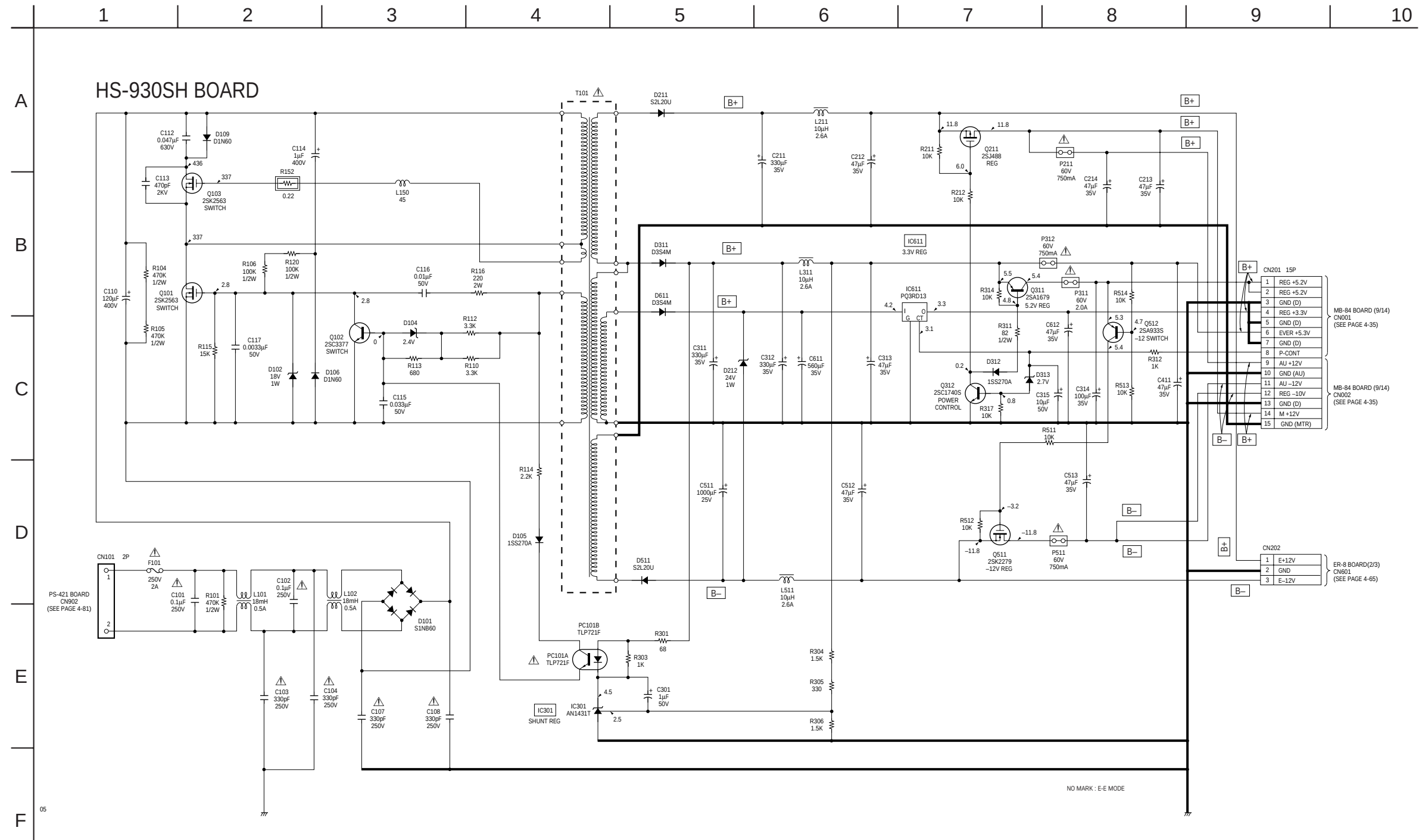


Note: The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety.
Replace only with part number specified.



POWER BLOCK (HS-930SH) (SWITCHING REGULATOR) SCHEMATIC DIAGRAM

– Ref. No.: HS-930SH board; 4,000 series –



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