

# *SERVICE MANUAL*

*RMP1660S*

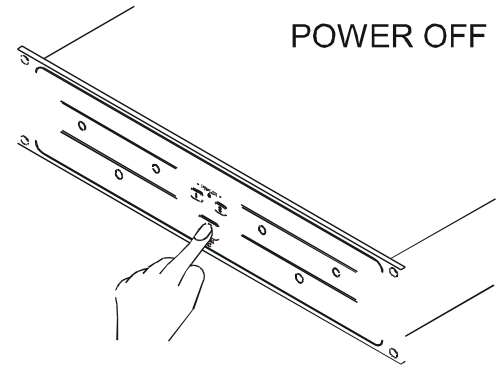
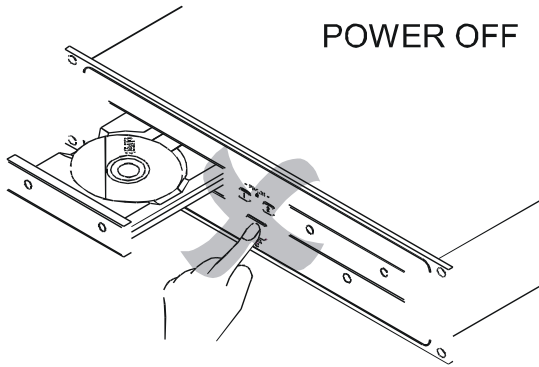
*MODEL NO.: RMP1660S*

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## Caution

**1:** Do not forcibly close the CD door when the power is off.

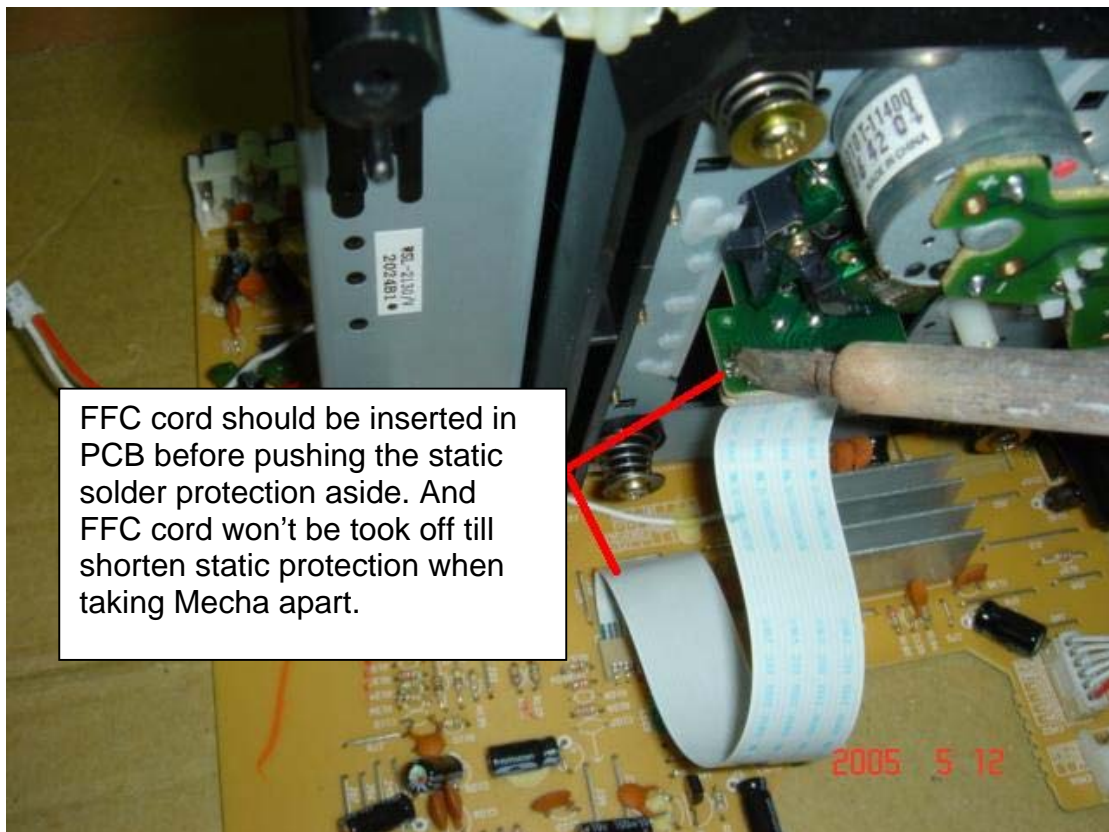


- Do not switch off the power when the CD door is open.

- To avoid damage, please don't switch off the power until "no disc" or "time code" is read on the display, always using the open/close button to close the CD Door

**2:** To prevent destroying the anti-static protection for the mechanism, please kindly be noted of the following important instruction for installing/disassembling the mechanism:

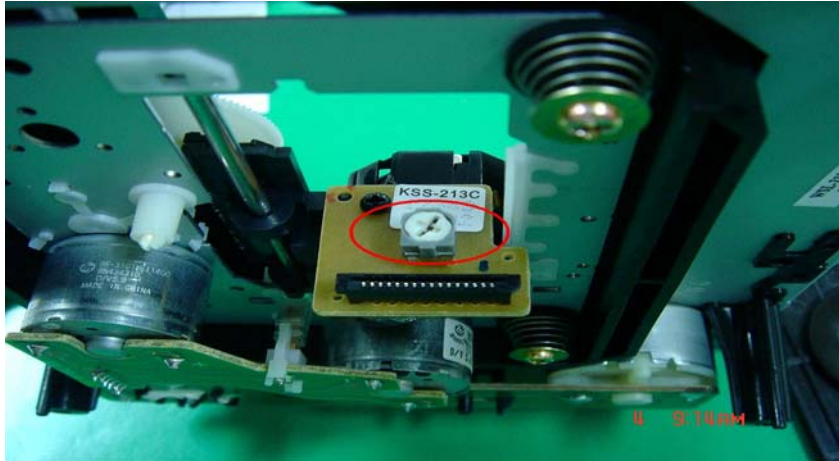
- When disassembling the mechanism, please make sure to turn off power and short the Anti-static protection welding point before removing the FFC cable.
- When assembling the mechanism, please make sure to connect the FFC cable and PCB before removing the Anti-static welding point, then, turn on the power.



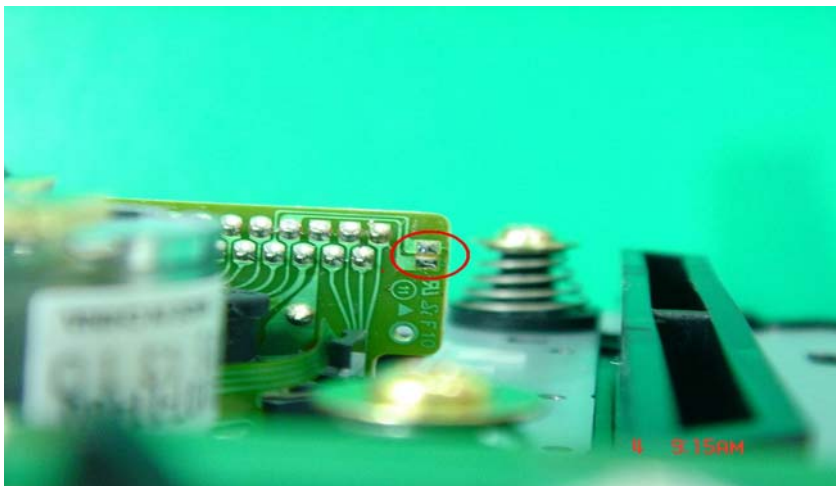
FFC cord should be inserted in PCB before pushing the static solder protection aside. And FFC cord won't be took off till shorten static protection when taking Mecha apart.

## Caution

- 3:** 3-1. Please be aware of wearing an anti-static ring before repairing  
3-2. It is forbidden to adjust the laser pick up VR.



- 3-3. To protect the mechanism; always short the Anti-static protection welding point before removing the mechanism.



## General Specification

1. MODEL MCD-2270D, CD/MP3 player.
2. POWER SOURCE AC 115/230V, 50/60Hz, 14 Watts
3. DIMENSIONS 482(W)x 88.8(H)x 268(D)mm
4. WEIGHT 4.4Kgs

### 5. FEATURES

- (1) 8 times over sampling 1 bit D/A converter.
- (2) Auto cue.
- (3) Pitch display.
- (4) +10 Track skip search.
- (5) Digital out
- (6) Pitch range: +/-8%, +/-12%, +/-16%
- (7) Selectable elapsed, remain and total remain time display
- (8) Single/Continuous
- (9) Frame search
- (10) 4 fast search mode
- (11) Transport protection
- (12) 20 tracks program play
- (13) 10 sec Anti-shock
- (14) MP3 playback

### 6. AUDIO CHARACTERISTICS (TEST DISC: TCD-782, LOAD=47KOHM)

ITEM	TYPICAL	LIMIT	CONDITION
(1) OUTPUT LEVEL	2Vrms +/-0.5dB	2Vrms +/-1dB	1KHz, 0dB
(2) CHANNEL BALANCE	WITHIN 0.1dB	WITHIN 1dB	1KHz, 0dB
(3) FREQUENCY RESPONSE	20-20KHz +/-0.4dB	20-20KHz +/-1dB	0dB OUTPUT
(4) DE-EMPHASIS	-17.6~-20dB	-17~-20dB	16KHz,-20dB
(5) CHANNEL SEPARATION (*2)	100dB	90dB	1KHz, 0dB
(6) THD+N (*1)	0.006%	0.01%	1KHz, 0dB
(7) S/N (*2)	102dB	90dB	1KHz, 0dB

Note: \*1: WITH 20KHz LOW PASS FILTER.

\*2: WITH 20KHz LOW PASS FILTER AND "IHF-A" WEIGHTED.

### 7. SEARCHING TIME (TEST DISC: TCD-792)

ITEM	TYPICAL	LIMIT	CONDITION
(1) SHORT ACCESS TIME	2Sec	4Sec	PLAY NEXT TRACK
(2) LONG ACCESS TIME	4Sec	6Sec	TRACK 1 TO 20,20 TO 1

### 8. PLAYABILITY

ITEM	TYPICAL	LIMIT	CONDITION
(1) INTERRUPTION	1mm	0.7mm	TCD-725
(2) BLACK DOT	1mm	0.6mm	TCD-725
(3) FINGER PRINTS	75um	65um	TCD-725
(4) ECCENTRICITY	140um	140um	TCD-712 W/O TRACK JUMP
(5) VERTICAL DEVIATION	1mm	0.5mm	TCD-731R

9. FUNCTION SWITCHES

NAME	Q'TY	TYPE	NOTE
(1)PLAY/PAUSE	1	TACT	
(2)CUE	1	TACT	
(3)+10 TRACKS SKIP	1	TACT	
(4)F.SKIP/B.SKIP	2	TACT	
(5)REV-/FWD+	1	SHUTTLE	
(6)FRAME SEARCH	1	JOG WHEEL	
(7)SGL	1	TACT	
(8)TIME	1	TACT	
(9)PITCH ON/OFF	1	TACT	
(10)PITCH BEND	2	TACT	
(11)PITCH	1	6cm SLIDE VR	
(12)OPEN/CLOSE	1	TACT	
(13)POWER	1	PUSH	
(14)LOOP	1	TACT	
(15)PROG	1	TACT	

10. PICK-UP

(SONY KSM-213VCS)

- |                              |  |
|------------------------------|--|
| (1) System                   | Object lens drive system optical pick-up |
| (2) Object lens drive system | 2 dimensional parallel drive             |
| (3) Tracking detection       | 3 spot beam detection                    |
| (4) Optical source           | Semiconductor laser                      |
| (5) Wave length              | 780nm                                    |

11. GENERAL

- |                         |   |
|-------------------------|---|
| (1) System              | Compact Disc Digital Audio              |
| (2) Disc loading        | Front loading                           |
| (3) Display             | 12 Digital LCD Display                  |
| (4) Pitch control range | Within +/-8%, +/-12%, +/-16%            |
| (5) Pitch bend          | +/-16%                                  |
| (6) Pitch accuracy      | +/-0.15 %                               |
| (7) Digital out level   | 0.5V+/-0.1 p-p @ LOAD = 75 ohm (option) |

12. ENVIRONMENTAL

CONDITION

- |                           |                               |
|---------------------------|-------------------------------|
| (1) Operating Temperature | 5 to 35 deg. C                |
| (2) Humidity              | 25 to 85% RH (non-condensing) |
| (3) Storage Temperature   | -20 to 60 deg. C              |

13. ACCESSORIES

- |                           |             |
|---------------------------|-------------|
| (1) 2P RCA path cord      | L/R 1 pairs |
| (2) Operating Instruction | 1 pc        |
| (3) AC power cord         | 1 pc        |

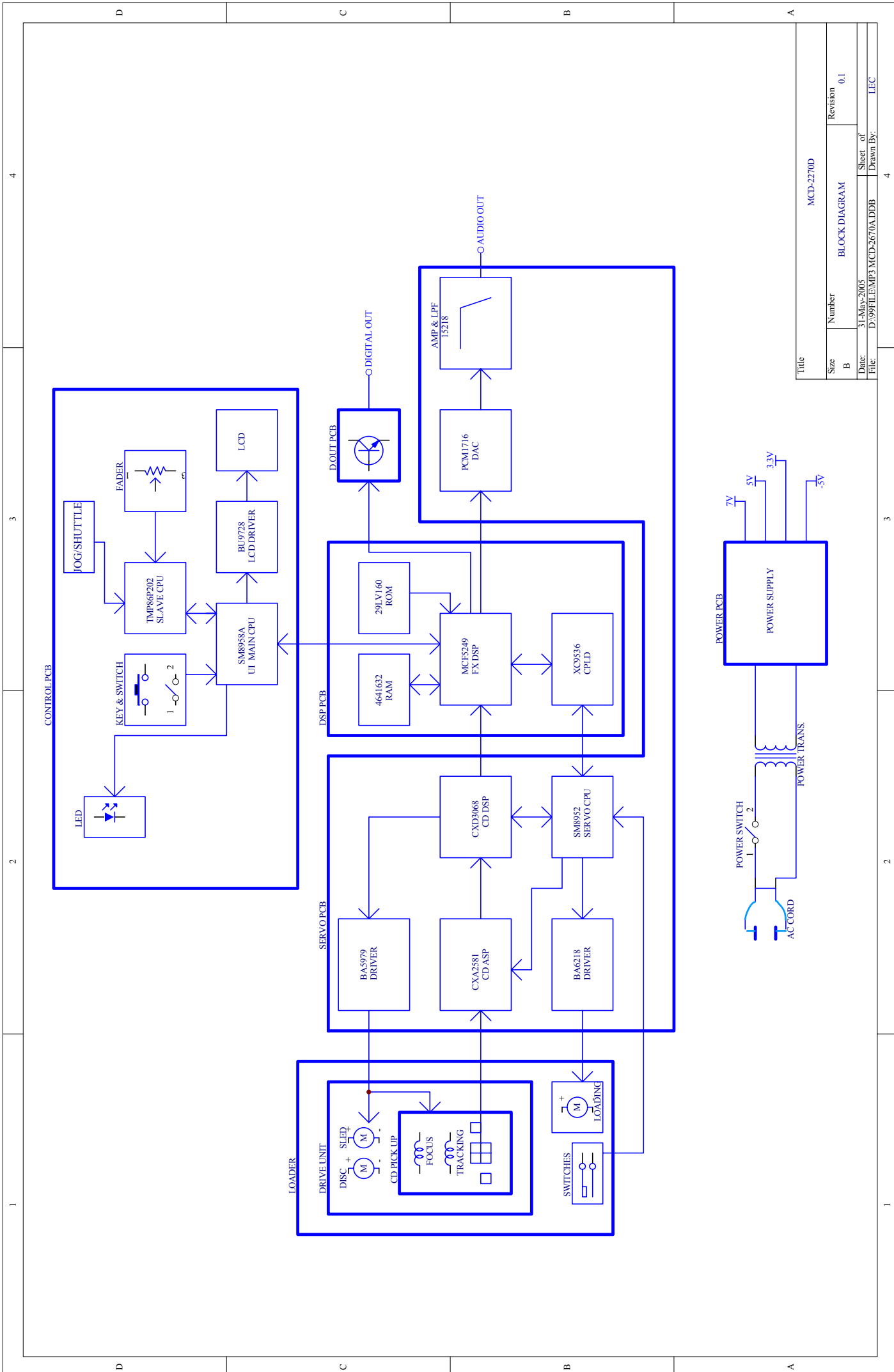
14. NOTES

- The specifications are subject to change to any improvement by negotiations in advance.
- The parts are subject to change to any improvement within the range of the specifications.

15. MP3 FORMAT

Disc Format	Applicable file extensions	mp3 . MP3 . mP3 . Mp3
	ISO9660	Level 1(max. 8"/8.3" character style)
		Level 2(max. 31/30 character style)
	Joliet	max. 64/64 character style
	CD-ROM sector format	mode-1 only
	Max. number of Folders	255
Max. number of files	max. 999 files (* note #1)	
MP3 Format	MPEG 1 Layer 3 standard (ISO/IEC 11172-3), which provides for single channel ('mono') and two-channel ('stereo') coding at sampling rates of 32, 44.1 and 48kHz.	
	MPEG 2 Layer 3 standard (ISO/IEC 13818-3), which provides for similar coding at sampling rates of 16, 22.05 and 24 kHz.	
	MPEG 2.5 Layer 3 standard, which provides for similar coding at sampling rates of 8, 11.025 and 12 kHz.	
Disc Writing Method	Disc at Once and Track at Once	
	Multi Session	If the 1 <sup>st</sup> session is CDDA, you can playback Only CDDA track, If the 1 <sup>st</sup> session is MP3, you can playback only MP3 file.

**Note #1:** max.255 files each folder



4

3

2

1

D

C

B

A

D

C

B

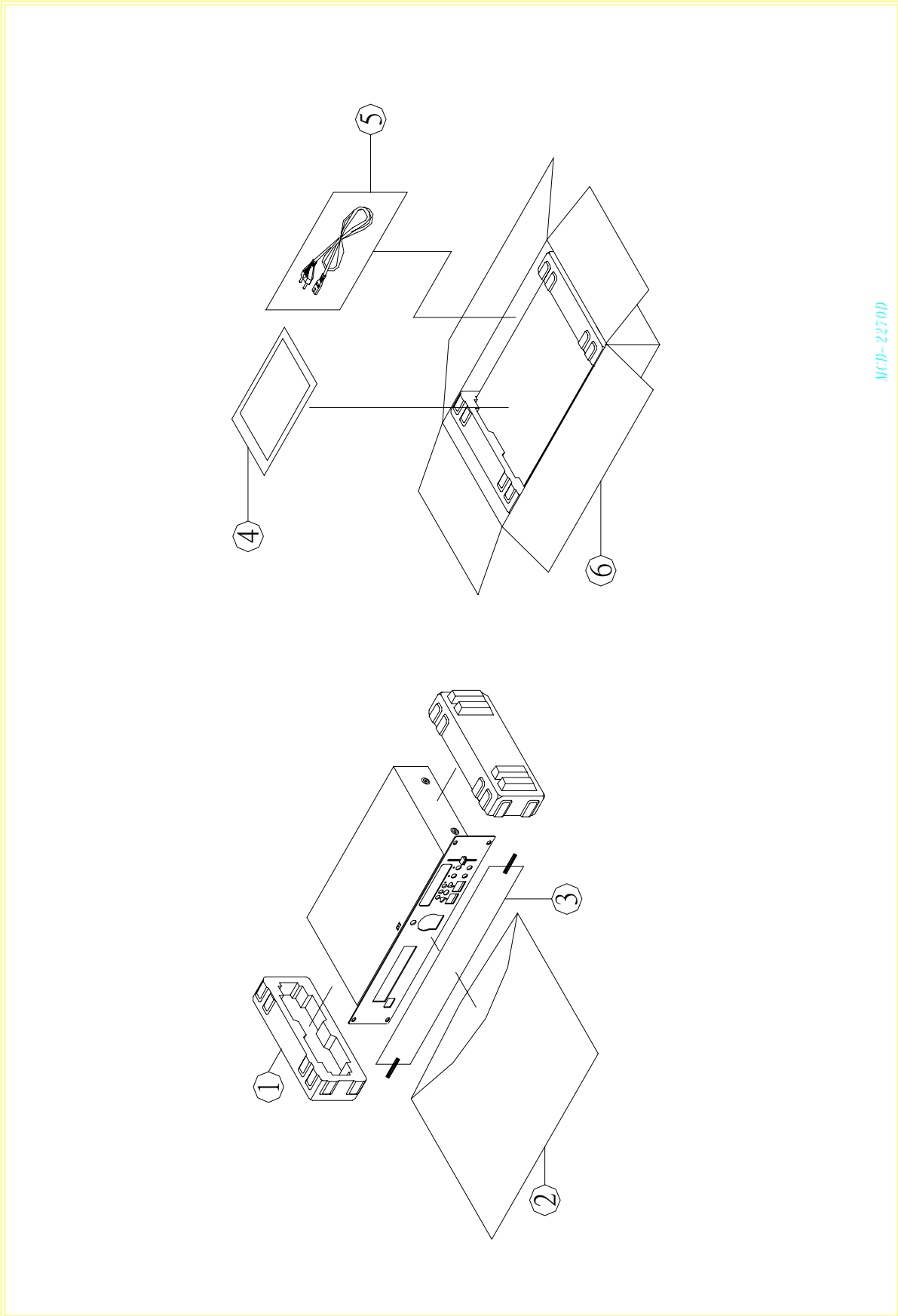
A

Title		MCD-2270D	
Size	Number	BLOCK DIAGRAM	Revision
B			0.1
Date:	31-May-2005	Sheet	of
File:	D:\99FILE\MP3 MCD-2670A.DDB	Drawn By:	LEC

3

2

1

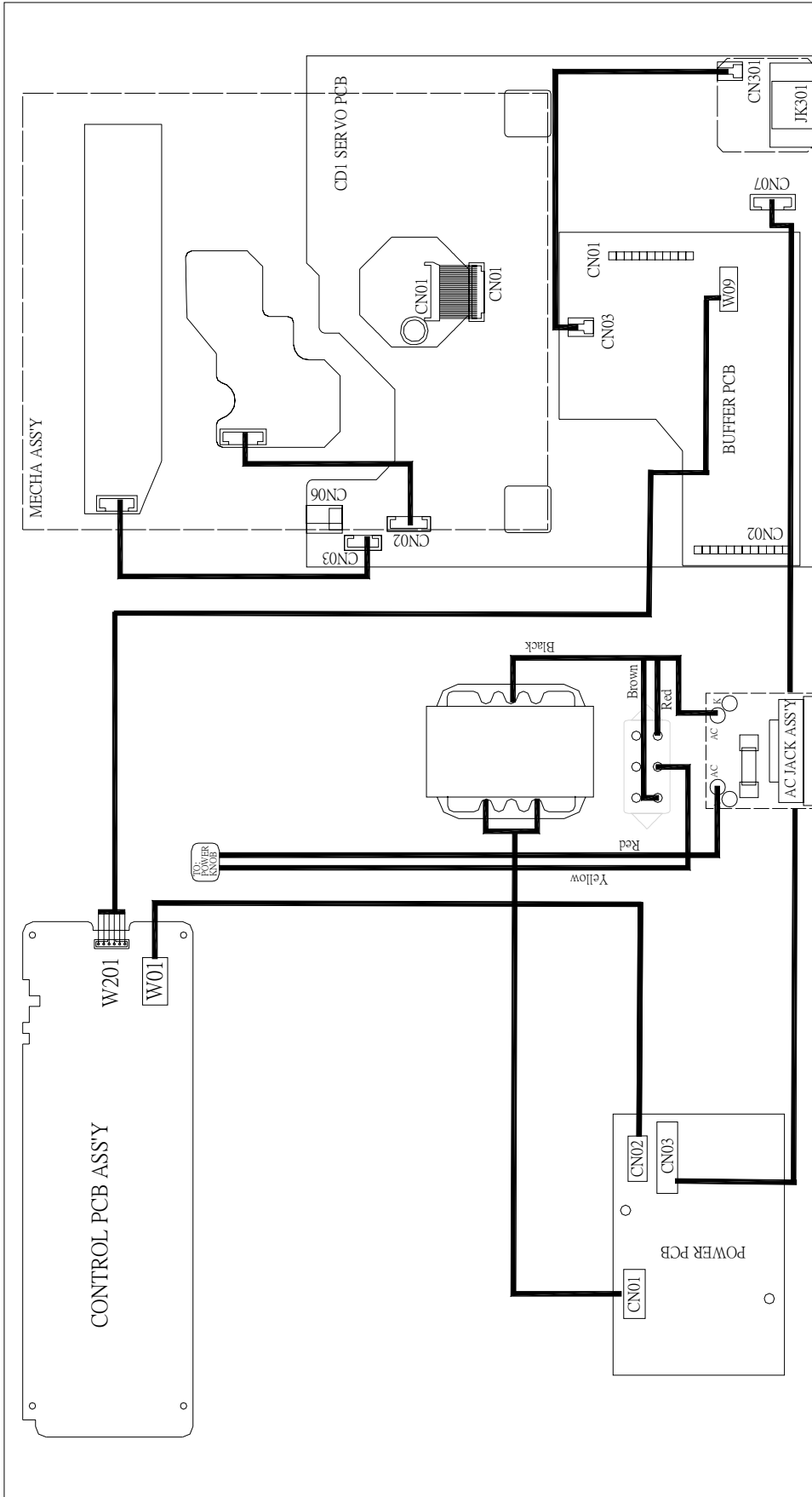


MCD-2270D





Point to Point Wiring Diagram





*Exploded View Part List*

REF NO.	DESCRIPTION	PART NO.	Q'TY	REMARK
1.	MAIN FRONT PANEL ASS'Y	703-M2270D-1026	1	
2.	MECHA ASS'Y	704-HDJ201-162	1	
3.	D-OUT PCB ASS'Y	704-DCD310-5482	1	
4.	SERVO PCB ASS'Y	704-M110-5517	1	
5.	POWER PCB ASS'Y	704-M110-5520	1	
6.	BUFFER PCB ASS'Y	704-M2450-5600	1	
7.	AC JACK ASS'Y	704-MCD110-5706	1	
8.	CONTROL PCB ASS'Y	704-M2270D-6297	1	
9.	POWER KNOB	100-HDJ2200N-984	1	
10.	CONTROLLER PITCH KNOB	100-2450R1-985	1	
11.	CD DOOR	100-HJ9200D-1223A	1	
12.	FRAME PLASTIC(ABS)	100-HDJ2400-1297	1	
13.	JOG TUNING KNOB	100-HDJ7200A-1298	1	
14.	SHUTTLE TUNING KNOB(SOURCE MATERIAL)	100-NCDS700-1299S	1	
15.	SLEEVE	200-HDJ7000-256	1	
16.	MAIN UNIT COVER	300-HDJ200-342A	1	
17.	BRACKET TRANSFORMER	300-DV300B-443	2	
18.	POWER SWITCH BRACKET	300-HDJ7000-478	1	
19.	BUTTON BASE	300-HDJ2200-487	1	
20.	BACK BOARD(1t)	300-M2270D-526G	1	
21.	POWER SW(SDDL1017U-HF,2PIN)	403-A100-005	1	
22.	AC POWER CORD( L=1900+-50mm,VDE TYPE )	409-DJ2-070A	1	
23.	TRANSFORMER(AC115/230V,EI-48)	411-110-440	1	
24.	13,Y5V)	413-1431-104	1	
25.	DECORATIONS	501-M2270D-1160	1	
26.	SPACER SUPPORT(SCB-8,WHITE,H=8mm)	504-HDJ7000-031	3	
27.	NUT(4mm,P=0.7 ISO)	601-F200-001	2	
28.	KNOB(SILICA )	604-2450R1-129A	1	
29.	KNOB(SILICA GEL)	604-2450R1-130	1	
30.	WASHER	606-B300-039	1	
31.	SPRING	606-STR830-141	2	
32.	MAT FORBASE	612-HDJ201-053	4	
33.	VR CUSHION(75.5*8.5*0.3t)	612-HDJ7000-056A	1	
34.	STICKER(CLASS 1)(48*22mm,t=0.1mm)	501-1420SRD-867	1	
35.	LABEL(BARE,36*8mm,t=1.2mm)	501-DV300-1067	1	
36.	RATING LABEL(58*26mm,t=0.08mm)	501-M2270D-1124	1	
37.	SCREW(3*8mm BTP)	602-2002-077	12	
38.	SCREW(2.6*8 PTP)	602-SL24F-099	6	
39.	SCREW(3*5mm,BLACK)	602-KE200-145	15	
40.	SCREW(M3*P0.5*L8)	602-HP1010K-178	1	
41.	SCREW(4*6mm TTB BLACK)	602-HDJ200-214	4	
42.	SCREW(W.STN,4*10,ZS)	602-HDJ9700-426	2	
43.	SCREW(PTB, $\phi$ 3*8,ZB)	602-DJ5500-452	4	
44.	PLASTIC SCREW(S-306-N66)	602-SPANDMK2-536	3	
45.	SCREW (M3*P0.5*8L)	602-2002-085	2	
46.	POWER EXCHANGE SWITCH(L21-22A8,6PIN)	403-HS100-042	1	

*Servo & Buffer PCB Ass'y Part List*

REF NO.	DESCRIPTION	PART NO.	Q'TY	REMARK
	SERVO & BUFFER PCB ASS'Y	704-M2270-6003	1	
	PLASTIC SCREW(S-306-N66)	602-SPANDMK2-536	3	
	SERVO PCB ASS'Y	704-M110-5517	1	
CN03	5P SOCKET(B5B-PH-K,P=2mm,JST,180 DEGREE)(Pb,Cd)	404-1210S-094	1	
CN02	6P SOCKET((B6B-PH-K-S,P=2mm,JST,180 DEGREE)	404-3113-052	1	
CN01	16P FFC CONNECTOR(P=1.0mm,16PIN)(Pb,Cd)	404-HDJ201-599	1	
W09	3P SOCKET(B3B-XH-A,P=2.5mm,JST,180 DEGREE)	404-HV3500K-623	1	
IC103	IC SOCKET(PLCC-44)	404-MPG100-384	1	
CN07	8P CONNECTOR WIRE	404-RCC1055-1569	1	
RB101	THICK FILM RESISTOR NETWORKS(10K OHM,1/8W J,RA TYPE,7R8P)	412-DJ1-420	1	
C101,C108,C102	ELEC. CAPACITOR(100uF/10V,M,105°C,TAPING 5*11)(Cd,Pb,Hg,Cr)	413-3113-046	3	
J78	BEAD CORE(86-019-A TAPING)	415-HV3500K-090	1	
IC106	IC(BA5979S,DIP-32)	417-DCM280-596	1	
IC107	REVERSIBLE MOTOR DRIVER(BA6218/BA6418N)	417-KC720-049	1	
JK101	2P RCA JACK(RJ-1078B-10-0320A)	420-HDJ7000-045	1	
CN04	6P STRIP PIN HEADER(L=31mm,P=2.54mm,180 DEGREES)	424-HDJ7500-058	2	
CN05	11P2.54 STRIP PIN HEADER(L=31mm,180°)	424-T2-075	1	
IC106	HEAT SINK	425-CDN88A3-066	1	
X102	QUARTZ CRYSTAL(24MHZ)	427-DRM120-095	1	
X101	CRYSTAL(33.8688MHZ)	427-DV330-043	1	
	SPACER SUPPORT(H-20)	504-RMX30-157	3	
	PLASTIC SCREW(S-306-N66)	602-SPANDMK2-536	3	
IC106	CLIP FOR HEAT SINK	603-CDN88-291	2	
C115,C177,C178	CERAMIC CAPACITOR(1000PF/50V,K,TAPING,Y5P)	413-1430-071	3	
C171,C172	CERAMIC CAPACITOR(180pF/50V,K,TAPING,Y5P)	413-3113-030	2	
C110,C112,C145,C146,C147	CERAMIC CAPACITOR(220pF/50V,K,TAPING,Y5P)	413-3113-032	5	
C103,C105,C106,C111,C113,C114,C127,C128,C142,C143,C144,C163,C176	CERAMIC CAPACITOR(0.1uF/50V,Z,TAPING,Y5V)	413-3113-035	13	
C126,C104,C109,C130,C179	ELEC. CAPACITOR(100uF/10V,M,105°C,TAPING 5*11)(Cd,Pb,Hg,Cr)	413-3113-046	5	
C181,C182,C107,C140,C161,C165,C166,C167,C168	ELEC. CAPACTIOR(10uF/25V,M,105°C,TAPING 5*11)(Cd,Pb,Hg,Cr)	413-3113-052	9	
C125	POLYESTER CAPACITOR(0.01uF/50V,J,TAPING)	413-3113-057	1	
C122,C169,C170	POLYESTER CAPACITOR(0.0015uF/50V,J,TAPING)	413-HT7016-219	3	
C135,C137,C160,C162	ELEC. CAPACITOR(220uF/10V,M,105°C,TAPING 6.3*11)(Cd,Pb,Hg,Cr)	413-KC220-119	4	
C121	POLYESTER CAPACITOR(0.047uF/50V,J,TAPING)	413-KT300-099	1	
C132	POLYESTER CAPACITOR(0.0033uF/100V,J,TAPING)	413-KT300-103	1	
C124	ELEC. CAPACITOR(0.47uF/50V,M,105°C,TAPING 5*11)Cd,Pb,Hg,Cr)	413-KT350-093	1	
Q101	TRANSISTOR( 2SA933SR TAPING OR 2SA608G)	416-3113-008	1	
Q105,Q106	TRANSISTOR(2SD1468 TAPING)	416-3113-009	2	
Q102	TRANSISTOR(DTA124ES TAPING OR 2SA1346)	416-KC710-038	1	
Q104	TRANSISTOR(DTA124TS/2SA1589/DTA124TSATP,TAPING)	416-KE200S-024	1	
R110,R134	CARBON FILM RESISTOR(150K OHM,1/6W,J,T-26)	412-3113-046	2	
R107,R112,R131,R159,R160,R170	CARBON FILM RESISTOR(100K OHM,1/6W,J,T-26)	412-3113-047	6	

Servo & Buffer PCB Ass'y Part List

REF NO.	DESCRIPTION	PART NO.	Q'TY	REMARK
R108	CARBON FILM RESISTOR(2.2K OHM,1/6W,J,T-26)	412-3113-048	1	
R101,R102	CARBON FILM RESISTOR(12K OHM,1/6W,J,T-26)	412-3113-051	2	
R113,R114,R129	CARBON FILM RESISTOR(15K OHM,1/6W,J,T-26)	412-3113-053	3	
R109	CARBON FILM RESISTOR((27K OHM,1/6W,J,T-26)	412-3113-054	1	
R155,R156	CARBON FILM RESISTOR(4.7K OHM,1/6W,J,T-26)	412-3113-055	2	
R104	CARBON FILM RESISTOR(470 OHM,1/6W,J,T-26)	412-3113-056	1	
R117	CARBON FILM RESISTOR((3.3K OHM,1/6W,J,T-26)	412-3113-057	1	
R197,R198,R123,R125,R126,R143,R173,R174,R175,R176,R177	CARBON FILM RESISTOR(220 OHM,1/6W,J,T-26)	412-3113-058	11	
R185,R186,R187,R188,R189,R190,R191,R192,R193,R194,R195,R196	CARBON FILM RESISTOR(100 OHM,1/6W,J,T-26)	412-3113-060	12	
R105	CARBON FILM RESISTOR(120K OHM,1/6W,J,T-26)	412-3113-062	1	
R130,R135,R136,R137	CARBON FILM RESISTOR((47K OHM,1/6W,J,T-26)	412-3113-063	4	
R119,R138,R153,R154	CARBON FILM RESISTOR(10K OHM,1/6W,J,T-26)	412-3113-068	4	
R163,R164	CARBON FILM RESISTOR((2.7K OHM,1/6W,J,T-26)	412-3113-073	2	
R118,R133,R161,R162	CARBON FILM RESISTOR(1K OHM,1/6W,J,T-26)	412-3113-078	4	
R169	CARBON FILM RESISTOR(22 OHM,1/4W,J,T-52)	412-3113-089	1	
R132	CARBON FILM RESISTOR(30K OHM,1/6W,J,T-26)	412-DV300-291	1	
R106	CARBON FILM RESISTOR(4.3K OHM,1/6W,J,T-26)	412-HC1421FR-245	1	
R103	CARBON FILM RESISTOR(15 OHM,1/6W,J,T-26)	412-HDJ7150-709	1	
R124,R142,R184	CARBON FILM RESISTOR(10 OHM,1/6W,J,T-26)	412-KC220-132	3	
R183	CARBON FILM RESISTOR(470K OHM,1/6W,J,T-26)	412-KT300-108	1	
R141	CARBON FILM RESISTOR((560 OHM,1/6W,J,T-26)	412-KT346-112	1	
R157,R158	CARBON FILM RESISTOR(20K OHM,1/6W,J,T-26)	412-STR880-482	2	
D101,D103,D104	SWITCHING DIODE(1SS132/1SS133,300mw,55V,T-77)	414-3113-005	3	
ZD101	ZENER DIODE(MTZJ5.1-B,1/2W,T-77)	414-HDJ200-056	1	
L105,L109	BEAD CORE(86-019-A TAPING)	415-HV3500K-090	2	
L101,L103,L104,L107,L108	INDUCTOR(10uH TAPING 52mm)	415-MPG100-047	5	
L102	MICRO INDUCTOR(33uH)	415-RCC955A-094	1	
	SERVO PCB	405-MCD2450-1238	1	
R181	CHIP RESISTOR(220K OHM,1/8W,0805,J,TP ,150V)	412-DFX1-569	1	
R121,R171,R178	CHIP RESISTOR(10K OHM,1/8W,0805,J,TP 150V)	412-DV330-306	3	
R122	CHIP RESISTOR(100K OHM,1/8W, 0805,J,TP 150V)	412-DV330-307	1	
R139,R116	CHIP RESISTOR(1M OHM,1/8W, 0805,J,TP 150V)	412-DV330-308	2	
R111	CHIP RESISTOR(33K OHM,1/8W,0805,J,TP 150V)	412-DV330-318	1	
R199	CHIP RESISTOR( 220 OHM,1/8W,0805,J,TP 150V )	412-DV330-333	1	
R120	CHIP RESISTOR(820K OHM,1/8W,0805,J,TP ,150V)	412-HDJ11-712	1	
R179	CHIP RESISTOR (1.5K OHM,1/8W, 0805,J,TP,150V )	412-QMX1-035	1	
R115,R182	CHIP RESISTOR((470K OHM,1/8W, 0805,J,TP 150V)	412-QMX2-120	2	
R180	CHIP RESISTOR (470 OHM,1/8W, 0805,J,TP,150V)	412-VCDG3-395	1	
C123	CHIP CAPACITOR(220pF/50V,J,0805 TYPE,NPO)	413-AMC110D-5104	1	
C139	CHIP CAPACITOR(100pF/50V,J,0805 TYPE,NPO)	413-DV330-310	1	

Servo & Buffer PCB Ass'y Part List

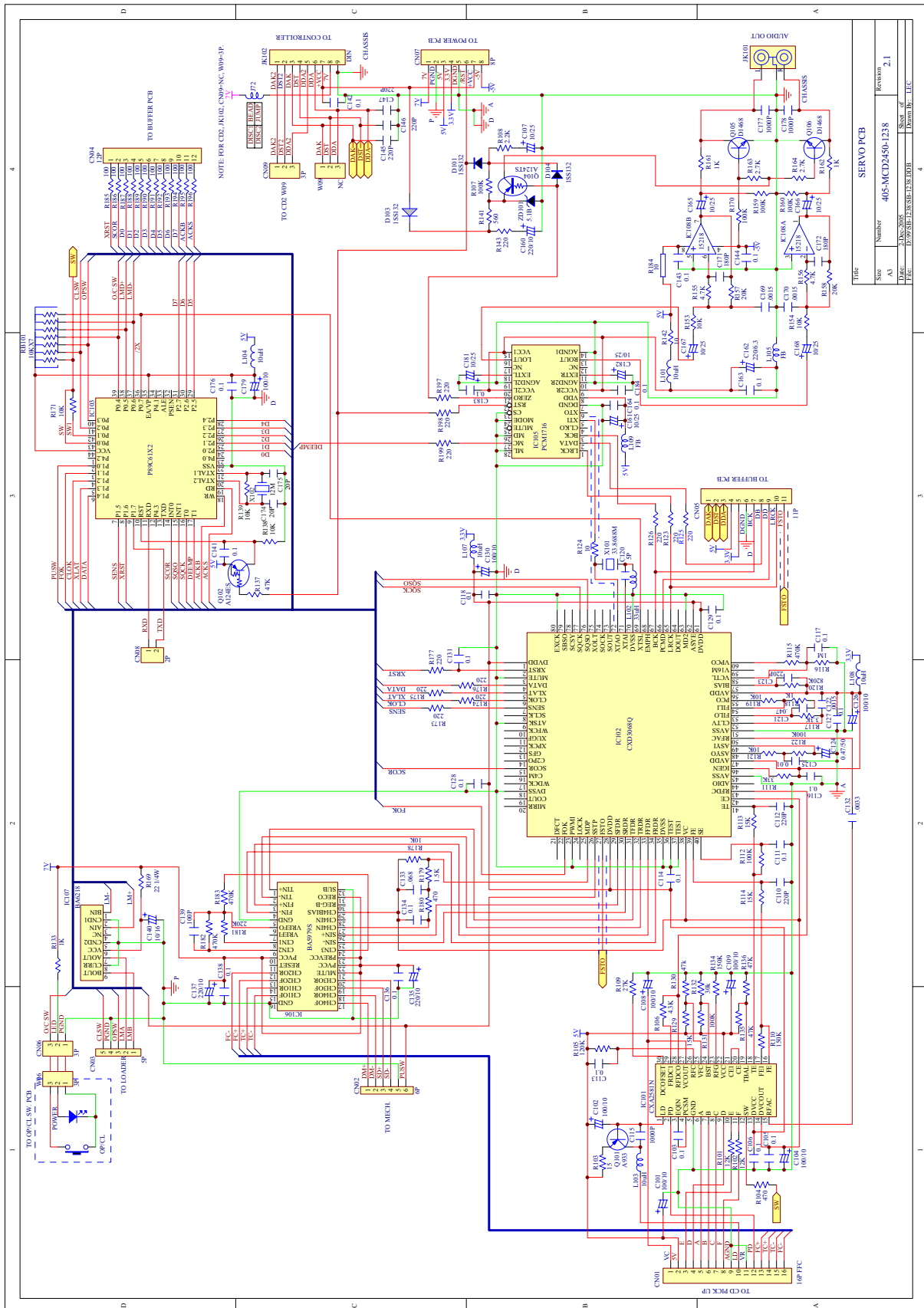
REF NO.	DESCRIPTION	PART NO.	Q'TY	REMARK
C164,C183,C184,C116,C117,C118,C129,C131,C134,C136,C138,C141	CHIP CAPACITOR(0.1uF/ 50V,Z,0805 TYPE,Y5V)	413-DV330-313	12	
C174,C175	CHIP CAPACITOR(20pF/ 50V,J,0805 TYPE,NPO)	413-DV330-315	2	
C120	CHIP CAPACITOR(5pF/50V,J,0805 TYPE,NPO)	413-DV330-325	1	
C133	CHIP CAPACITOR(0.068uF)	413-SMX701-755	1	
IC105	IC(PCM1716E,28PIN,SOP)	417-DCM270X-327A	1	
IC102	IC(CXD3068Q,QFP-80,SMD)	417-DCM280-587	1	
IC101	IC(CXA-2581N,SSOP-30,SMD)	417-DCM280-588	1	
IC108	IC(BA15218F/BA15218FE2,SOP-8)	417-QMX2-167	1	
IC103	SERVO IC ASS'Y(CHECK SUM:B430/30)	704-M510-5514	1	
	IC(SM8952AC25J,PLCC-44)	417-HDJ2450-693C	1	
	BUFFER PCB ASS'Y	704-M2450-5600	1	
CN01	11P CONNECTOR(P=2.54mm,SHD106-A03 TYPE)(Pb,Cd)	404-EP1000-1331	1	
CN02	12P CONNECTOR(P=2.54mm,SHD106-A03 TYPE)	404-HDJ7500-1336	1	
CN03	2P SOCKET(CKM2501WV-2P 180°WHITE)(Cd,Pb,Hg,Cr)	404-KMD1500-608A	1	
RB01	THICK FILM RESISTOR NETWORKS(10K OHM,1/8W J,RA TYPE,7R8P)	412-DJ1-420	1	
C26,C28	ELEC. CAPACITOR(220uF/10V,M,105°C,TAPING 6.3*11)(Cd,Pb,Hg,Cr)	413-KC220-119	2	
L01	BEAD CORE(86-019-A TAPING)	415-HV3500K-090	1	
X1	CRYSTAL( 16.9344MHz )	427-KC710-019	1	
	BUFFER PCB(FR4,115.1*74*1.6t)	405-MCD2450-1239B	1	
R29	CHIP RESISTOR(270 OHM 1/8W 0805 J TP 150V )	412-CDN88-014	1	
R19,R26,R27	CHIP RESISTOR(10K OHM,1/8W,0805,J,TP 150V)	412-DV330-306	3	
R01	CHIP RESISTOR(1M OHM,1/8W, 0805,J,TP 150V)	412-DV330-308	1	
R02,R03	CHIP RESISTOR(4.7K OHM,1/8W,0805,J,TP 150V )	412-DV330-320	2	
R04,R07,R08,R09,R10,R11,R12,R13,R16	CHIP RESISTOR( 220 OHM,1/8W,0805,J,TP 150V )	412-DV330-333	9	
R30	CHIP RESISTOR (0 OHM,1/8W,0805,J,TP 150V)	412-HV3500K-367	1	
R15	CHIP RESISTOR(300 OHM,1/8W,J,TP 0805,150V)	412-QFX19-555	1	
C36,C35,C34,C01,C02,C03,C04,C05,C06,C07,C08,C09,C10,C11,C12,C13,C14,C18,C19,C20,C21,C22,C23,C25,C27,C29,C30,C31	CHIP CAPACITOR(0.1uF/ 50V,Z,0805 TYPE,Y5V)	413-DV330-313	28	
C17,C16	CHIP CAPACITOR(15pF/ 50V,J,0805 TYPE,NPO)	413-DV330-314	2	
U2	IC(K4S641632E-TC/K4S641632F/K4S641632H-TC75,TSOP-54)	417-CDN88-501	1	
U5	IC(74HC04/74HC04DT,SOP-14)	417-DCM370E3-378	1	
U1	IC(SCF5249LPV120,SMD)	417-MCDS4-736	1	
U7	IC(BA18BC0FP-E2,3PIN,TO252-3,SMD)	417-MCDS4-737	1	
U3	IC ASS'Y(CHECK SUM:5473/34)	704-M2450-5601	1	
	IC(M29W800B70N6.SMD)	417-MCDS4-735	1	
U8	BUFFER IC ASS'Y(CHECK SUM:73E4/1)	704-M510-5564	1	
	IC(XC9536XL-10VQ44C,SMD)	417-MCDS4-738	1	



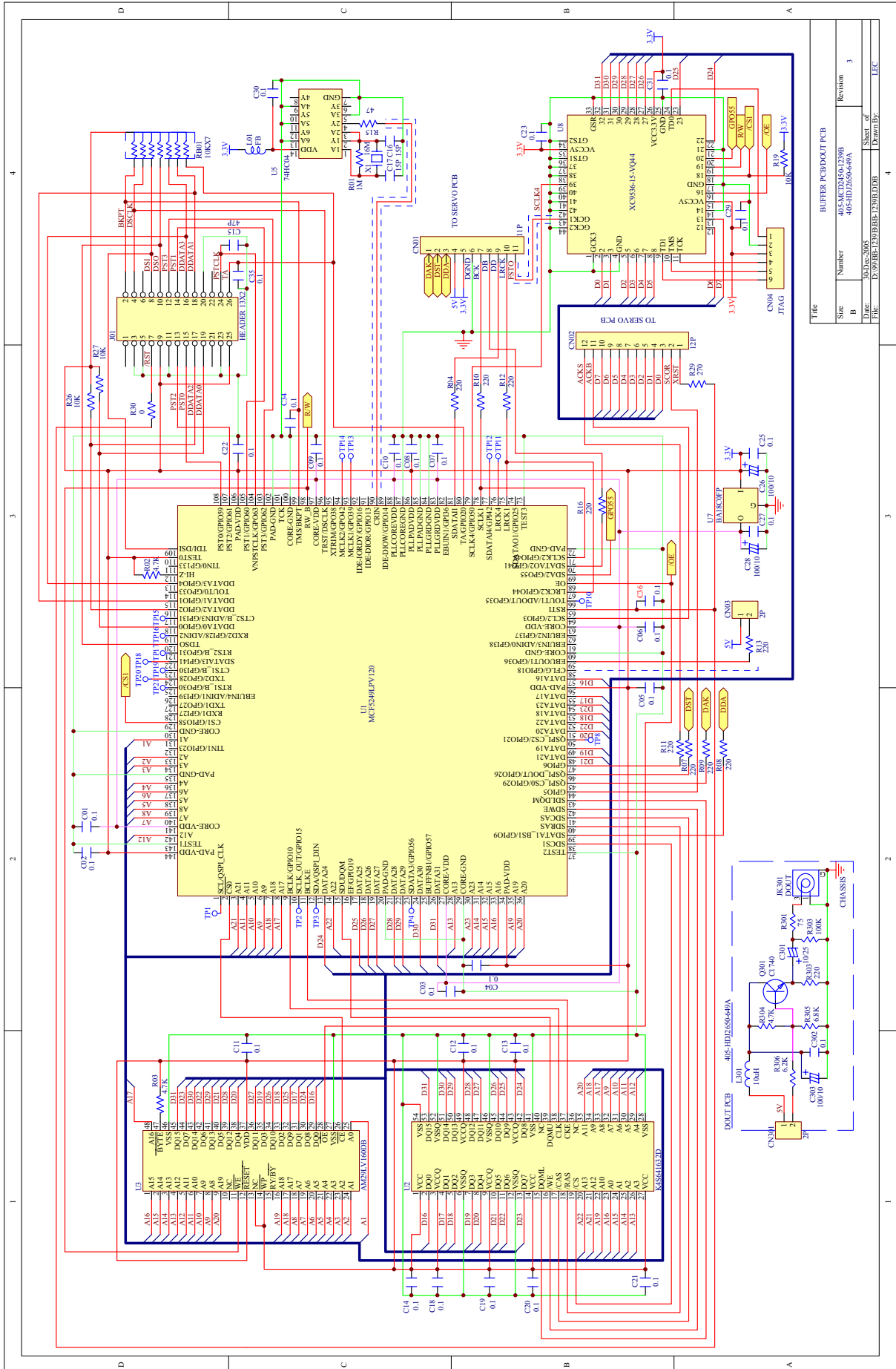


REF NO.	DESCRIPTION	PART NO.	Q'TY	REMARK
	CONTROL PCB ASS'Y	704-M2270D-6297	1	
JOG201	SRGP SW(SRGP TYPE)	403-HDJ7000-086	1	
W02	3P 2.0 CONNECTOR WIRE(L=300mm)	404-110-2000	1	
W201	3P 2.0/2.5 CONNECTOR WIRE(L=340mm,AWM1007,AWG26)	404-110-2014	1	
D207,D209,D206	LED ( RED )	410-CD6000-122	3	
D208	LED ( GREEN )	410-CD6000-124	1	
LED201	BACKLIGHT( BCS-002353BN )	410-HDJ2400W-194	1	
LCD201	LCD(UTN-H406EV)	410-HDJP2450-273	1	
D205	LED ( LTL42UB5N,BLUE )	410-NT2000-149	1	
R211	CARBON FILM RESISTOR((47K OHM,1/6W,J,T-26)	412-3113-063	1	
RB202,RB203	THICK FILM RESISTOR NETWORKS(10K OHM, 1/8W J,RA TYPE,3R4P)	412-CDN24-427	2	
J20	CHIP RESISTOR(0 OHM,1/8W,1206,J,TP ,150V)	412-DJ3000-414	1	
RB204	THICK FILM RESISTOR NETWORKS(10K OHM,J,RA TYPE,8R9P)	412-DV300-5143	1	
R239	CARBON FILM RESISTOR(100 OHM,1/4W,J,T-52)	412-PMSE1-279	1	
C202,C217	ELEC. CAPACITOR(100uF/10V,M,105°C,TAPING 5*7,MINI)(Cd,Pb,Hg,	413-HMA2200-5017	2	
L201	BEAD CORE(86-019-A TAPING)	415-HV3500K-090	1	
VR201	SLIDE RESISTOR(10KB*2)	418-CD1000-052	1	
X202	CRYSTAL 8MHZ	427-DV300-5017	1	
X201	CRYSTAL(18.432MHZ)	427-DV330-042	1	
D205,D206,D207, D208,D209	LED HOLDER(LED-7,H=7mm,WHITE)	504-CDN34A-042	5	
SW201,SW202,S W203,SW204,SW 205,SW206,SW2 07,SW208,SW20 9,SW210,SW211, SW212,SW213	TACT SW(H=5mm,TAPING)	403-DCM270X-101A	13	
IC201	PLCC IC SOCKET(44PIN,SMD)	404-HDJ7100-788	1	
	CONTROL PCB	405-2270-1561	1	
R230	CHIP RESISTOR(1K OHM,1/8W, 0805,J,TP 150V)	412-DV330-305	1	
R202,R212	CHIP RESISTOR(10K OHM,1/8W,0805,J,TP 150V)	412-DV330-306	2	
R201	CHIP RESISTOR(1M OHM,1/8W, 0805,J,TP 150V)	412-DV330-308	1	
R204,R205,R206	CHIP RESISTOR( 220 OHM,1/8W,0805,J,TP 150V )	412-DV330-333	3	
R229	CHIP RESISTOR((470K OHM,1/8W, 0805,J,TP 150V)	412-QMX2-120	1	
R214,R215,R216,R217,R218	CHIP RESISTOR (470 OHM,1/8W, 0805,J,TP,150V)	412-VCDG3-395	5	
C233,C234	CHIP CAPACITOR(30pF/50V,J,0805 TYPE,NPO)	413-BJ2300E-628	2	
C213,C214	CHIP CAPACITOR(0.01uF/50V,K,0805 TYPE,X7R)	413-DV330-312	2	
C208,C201,C203, C207,C218,C232	CHIP CAPACITOR(0.1uF/ 50V,Z,0805 TYPE,Y5V)	413-DV330-313	6	
C204,C205	CHIP CAPACITOR(20pF/ 50V,J,0805 TYPE,NPO)	413-DV330-315	2	
D222,D223,D224,D225	SWITCHING DIODE(1SS355,UMD2,SMD,TAPING)	414-CD1000-075	4	
Q203	TRANSISTOR(DTA124EKA-T146,SMT3)	416-CTB200-178	1	
IC203	IC(BU9728AKV,SQFP-48)	417-P22-741	1	
IC202	IC ASS'Y(CHECK SUM:670C/4)	704-P22NS-5474	1	
	IC(TMP86P202M/TMP86P202P/M,SOP20)	417-P22-733	1	
IC201	CONTROL IC ASS'Y(CHECK SUM:FE5A/8)	704-M2270-5746	1	
	IC(SM8958AC25J,PLCC-44)	417-HDJ2450-693A	1	

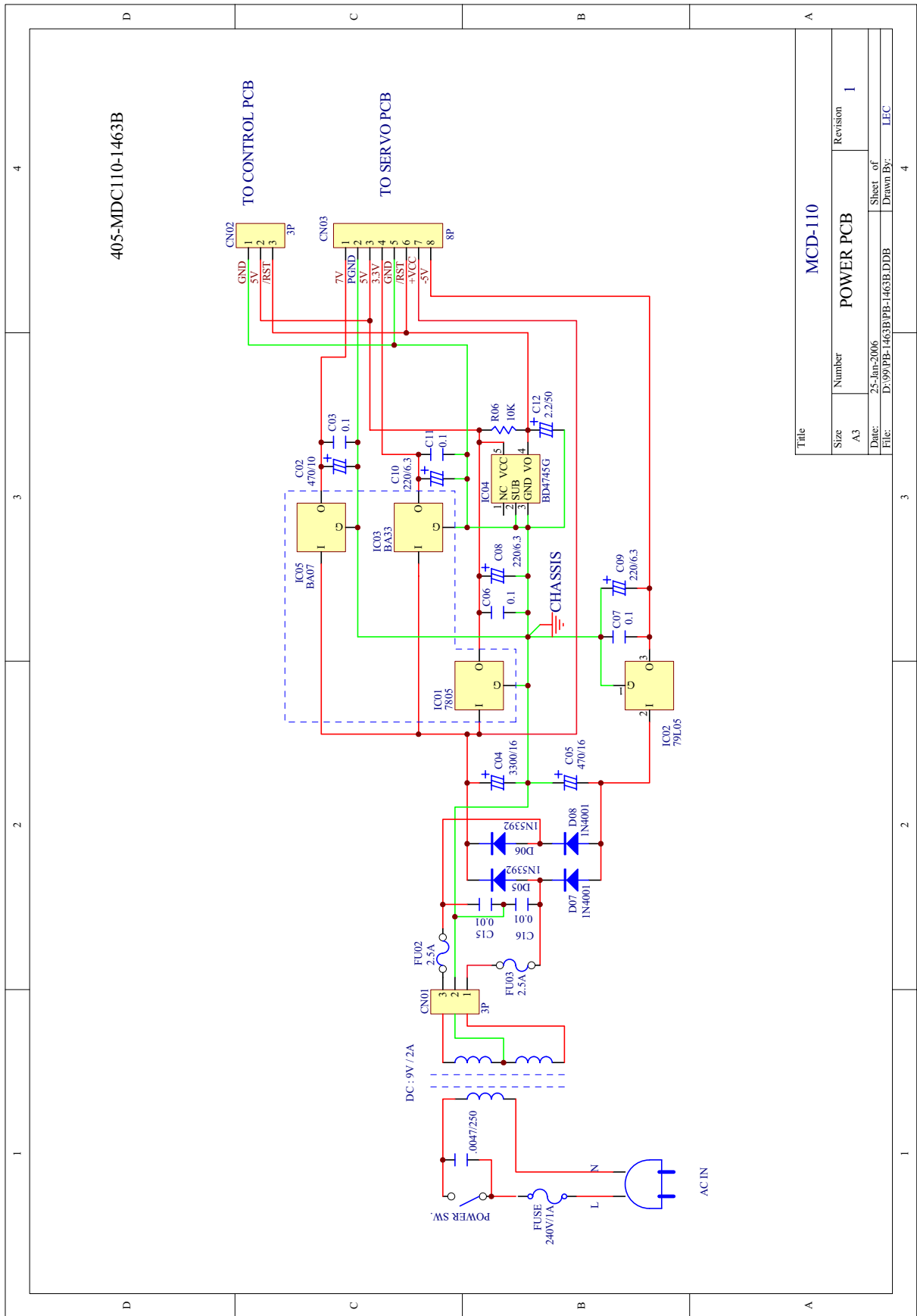


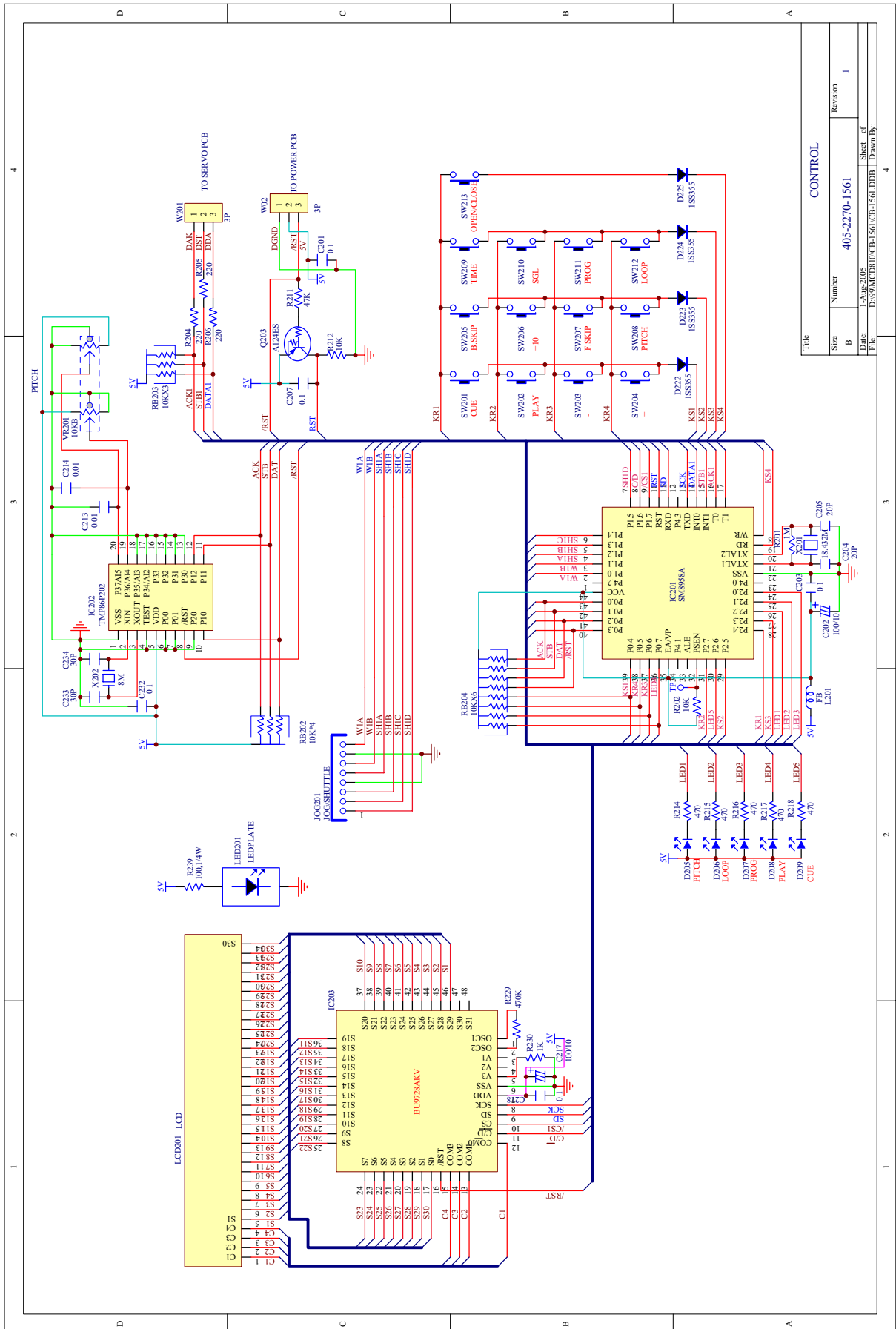


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	405-MCD2450-1238	2.1
Size	A3	
DATE	24NOV2005	
FILE	D:\925H173\831735.DDB	Sheet of Drawn By: TFC



Title	BUFFER PCB/DOOT PCB		
Size	Number	Revision	3
B	405-HD2LS5649A		
Date	30Dec-2005	Sheet of	3
File	D:\92\PCB\ESD\BPP_E30R.DDB	Drawn by	LEC





Title		CONTROL	
Size	Number	405-2270-1561	Revision
B			1
File	Sheet of	D:\99\ACDK\10\CB-1561.DDB	Sheet of
File	Drawn By:		

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2

3

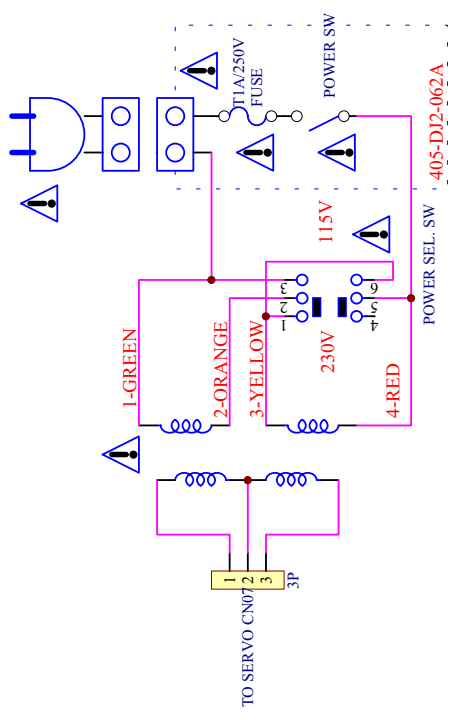
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D

C

B

A



電源座基板

Title		電源座基板	
Size	A4	Number	405-DJ2-062A
Date:	19-Jul-2001	Revision	1
File:	E:\網路文件夾\405-062A\405-062A.DJ2 Drawn By:		

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2

3

4

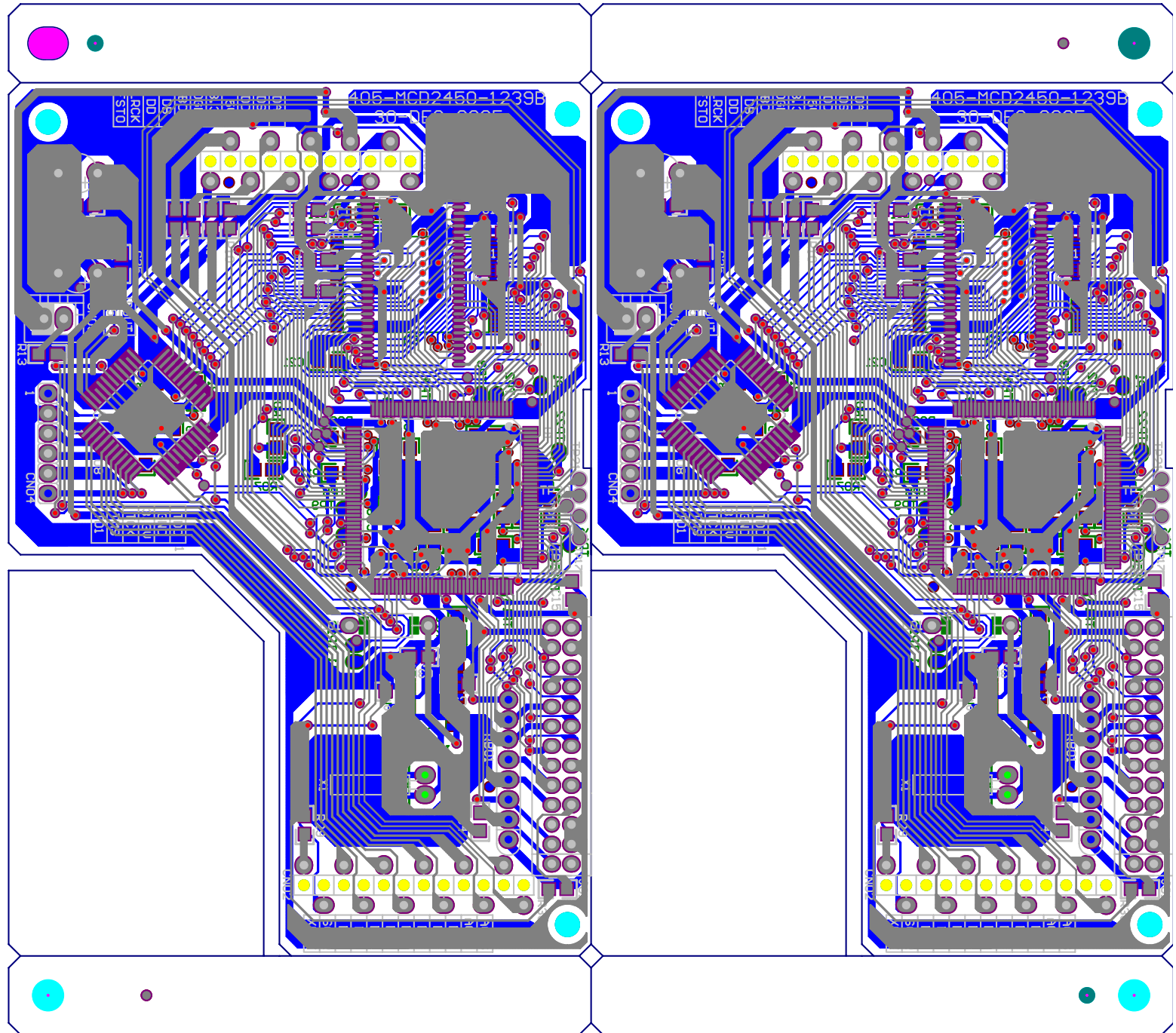
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C

B

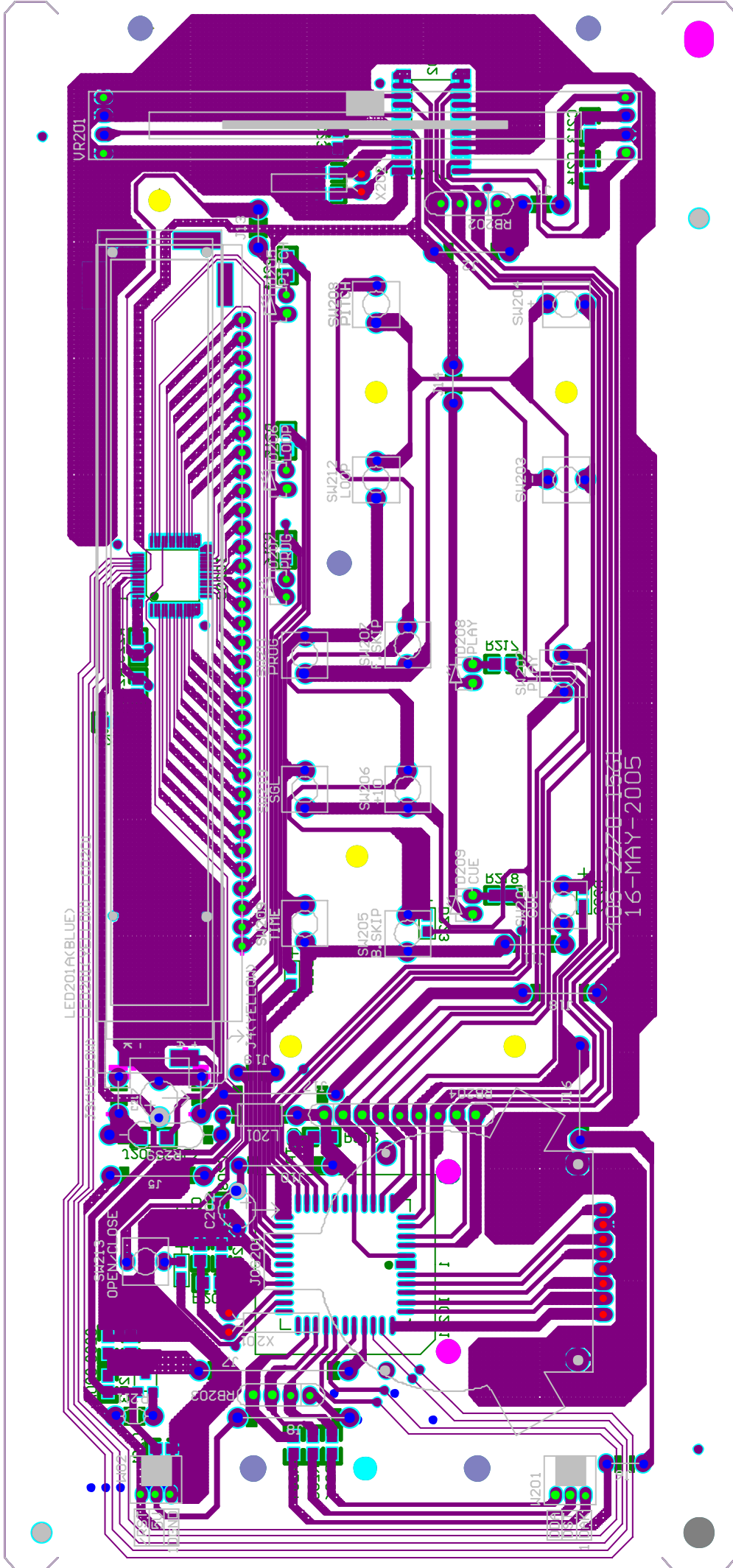
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### 405-MCD2450-1239B BUFFER PCB





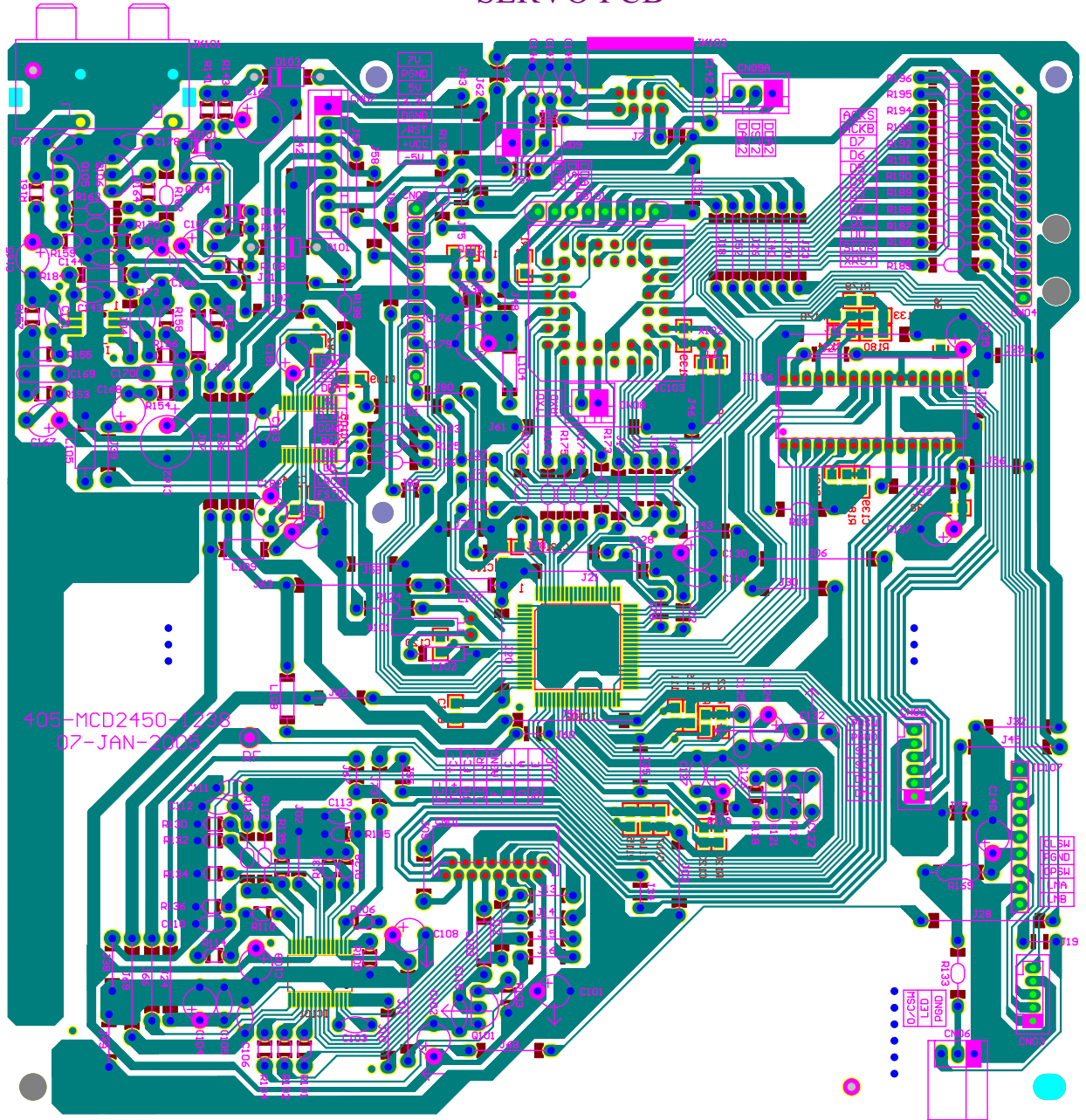
405-2270-1561  
CONTROL PCB



405-2270-1561  
16-MAY-2005

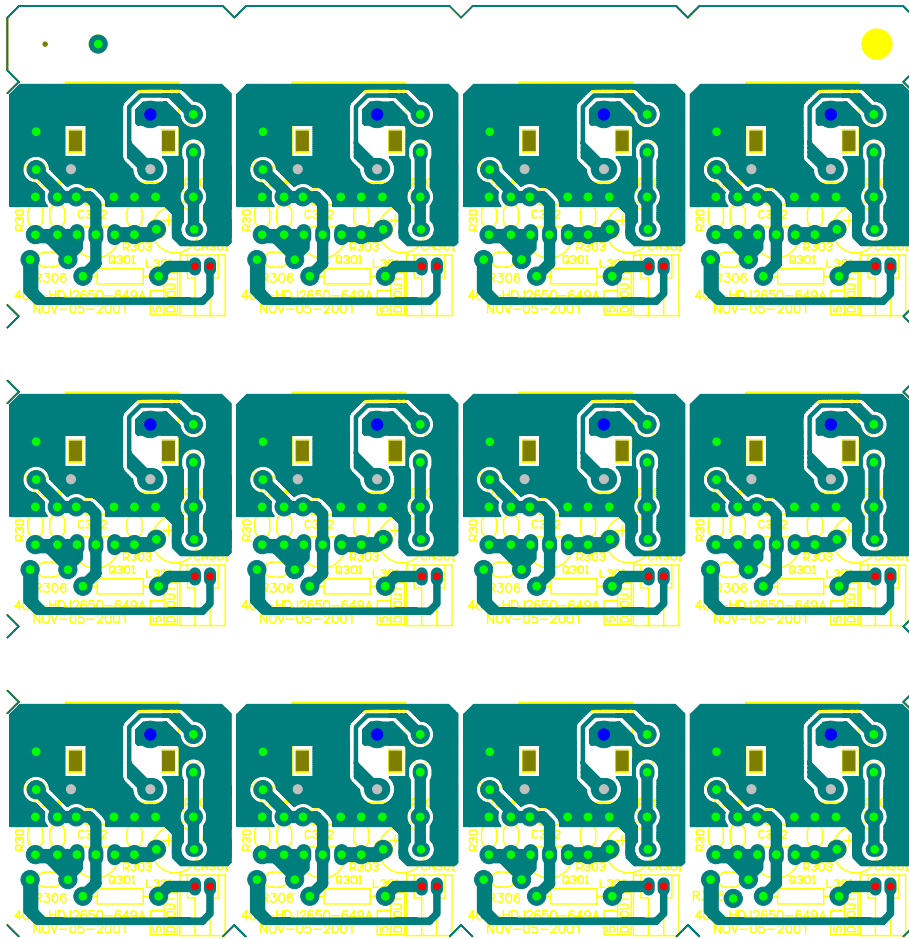


405-MCD2450-1238  
SERVO PCB

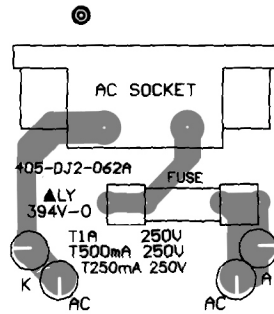


405-MCD2450-1238  
07-JAN-2005

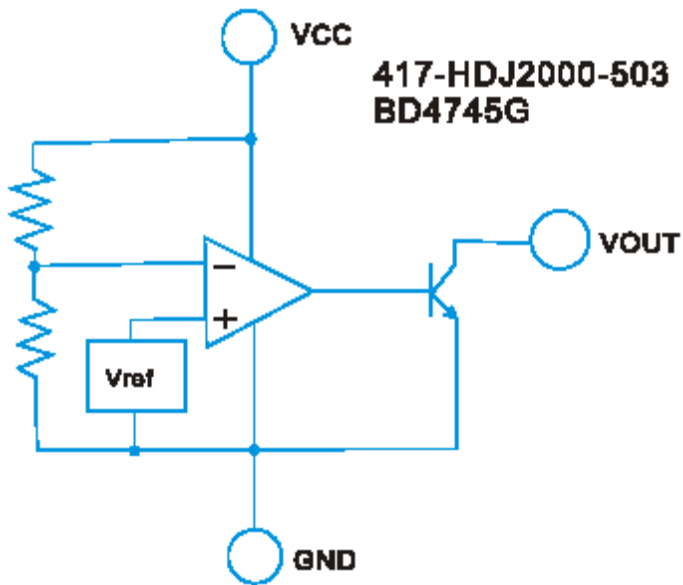
### 405-HDJ2650-649A/405-DJ2-062A D-OUT / AC JACK PCB



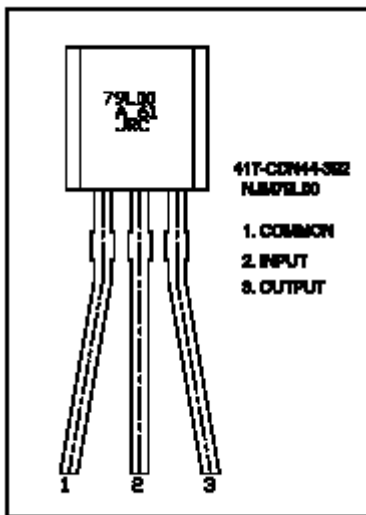
#### AC JACK PCB



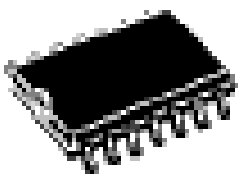
1. 417-HDJ2000-503 IC(BD4745G/BD4745G-TR)



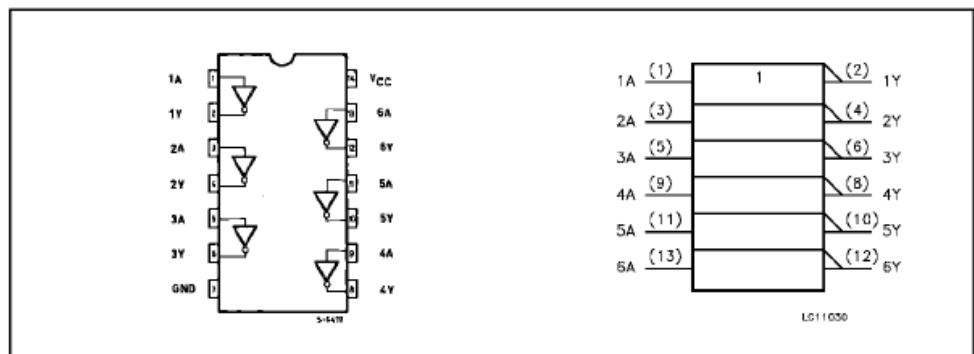
2. 417-CDN44-392 IC(79L05A,TAPING,TO-92)



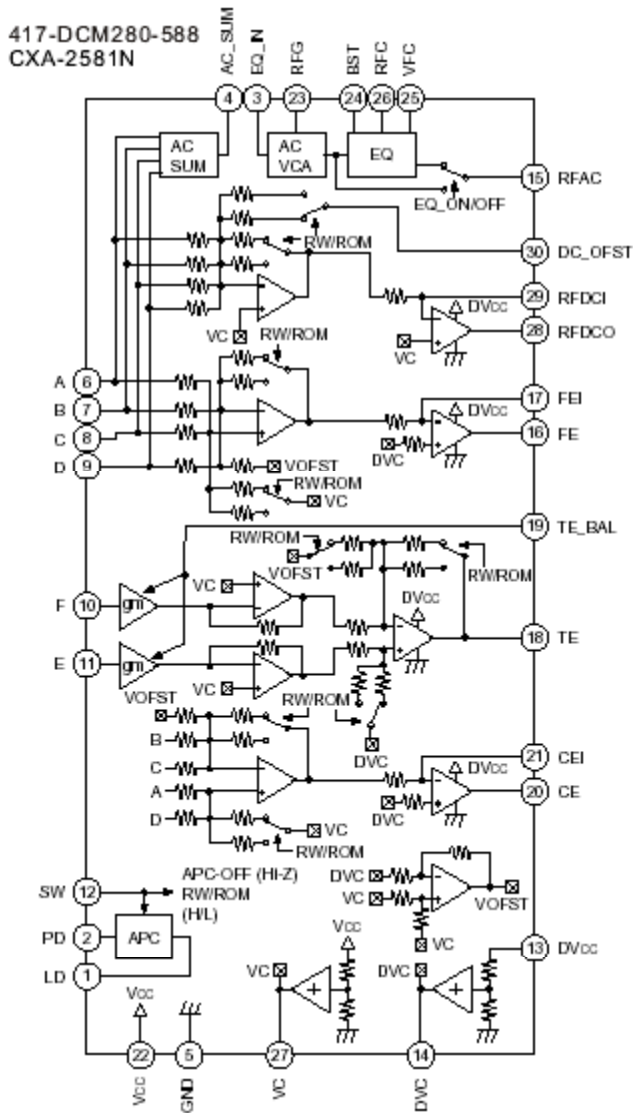
3. 417-DCM370E3-378 IC(74HC04/74HC04DT,SOP-14)



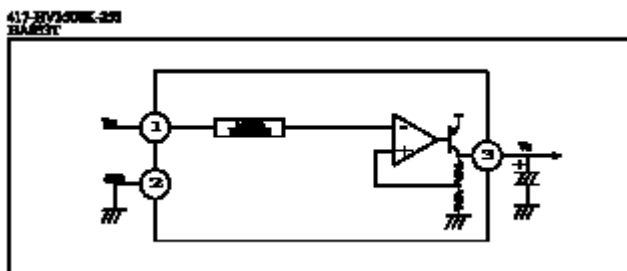
SOP



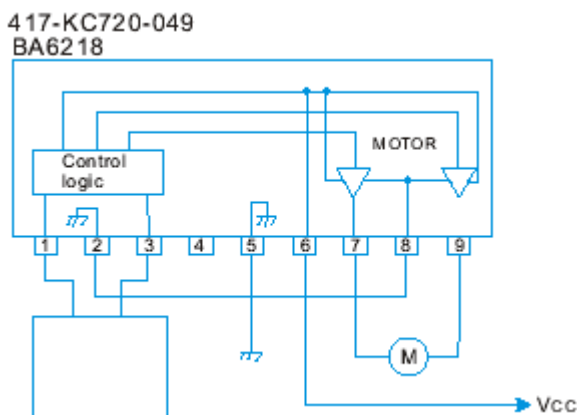
4. 417-DCM280-588 IC(CXA-258IN,SSOP-30,SMD)



5. 417-HV3500K-253 IC(BA033T/FP 3.3V TO220FP 3PIN)

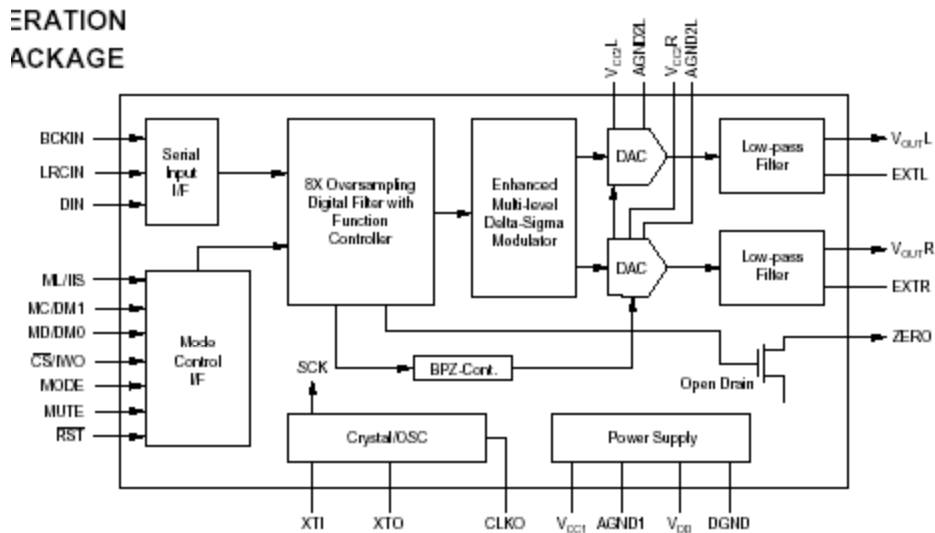


6. 417-KC720-049 工作放大器(BA6218/BA6418N)

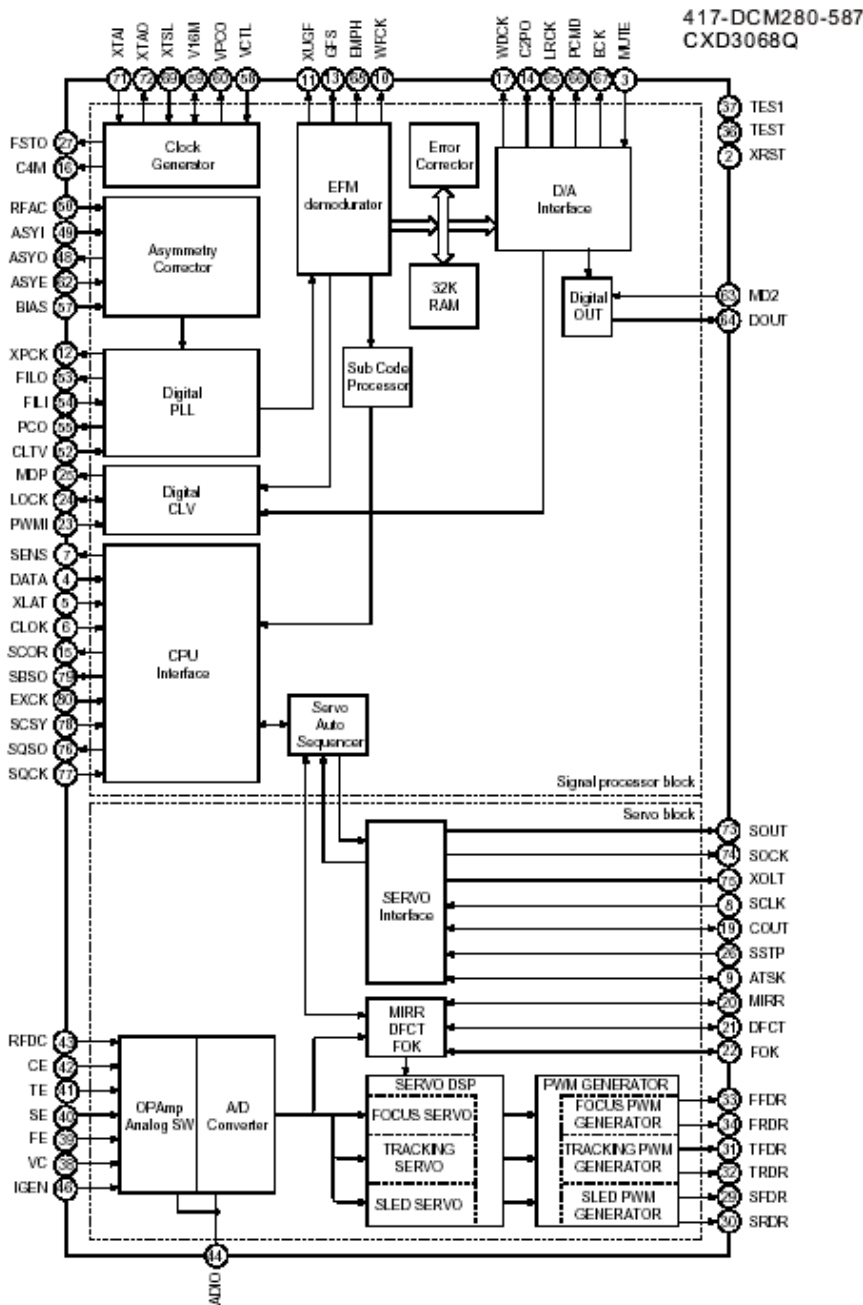




10. 417-DCM270X-327A IC(PCM1716E,28PIN,SOP)



11. 417-DCM280-587 IC(CXD3068Q,QFP-80,SMD)



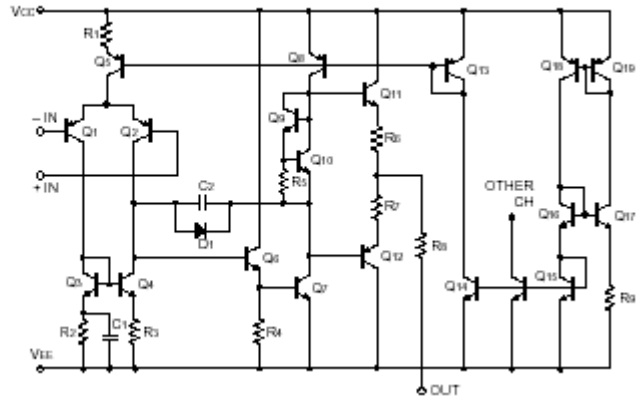
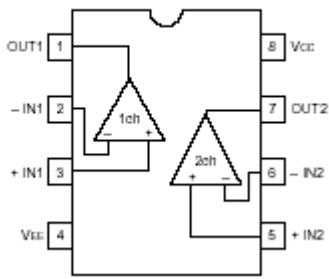


12. 417-QMX2-167

IC(BA15218F/BA15218FE2,SOP-8)

● Internal circuit configuration

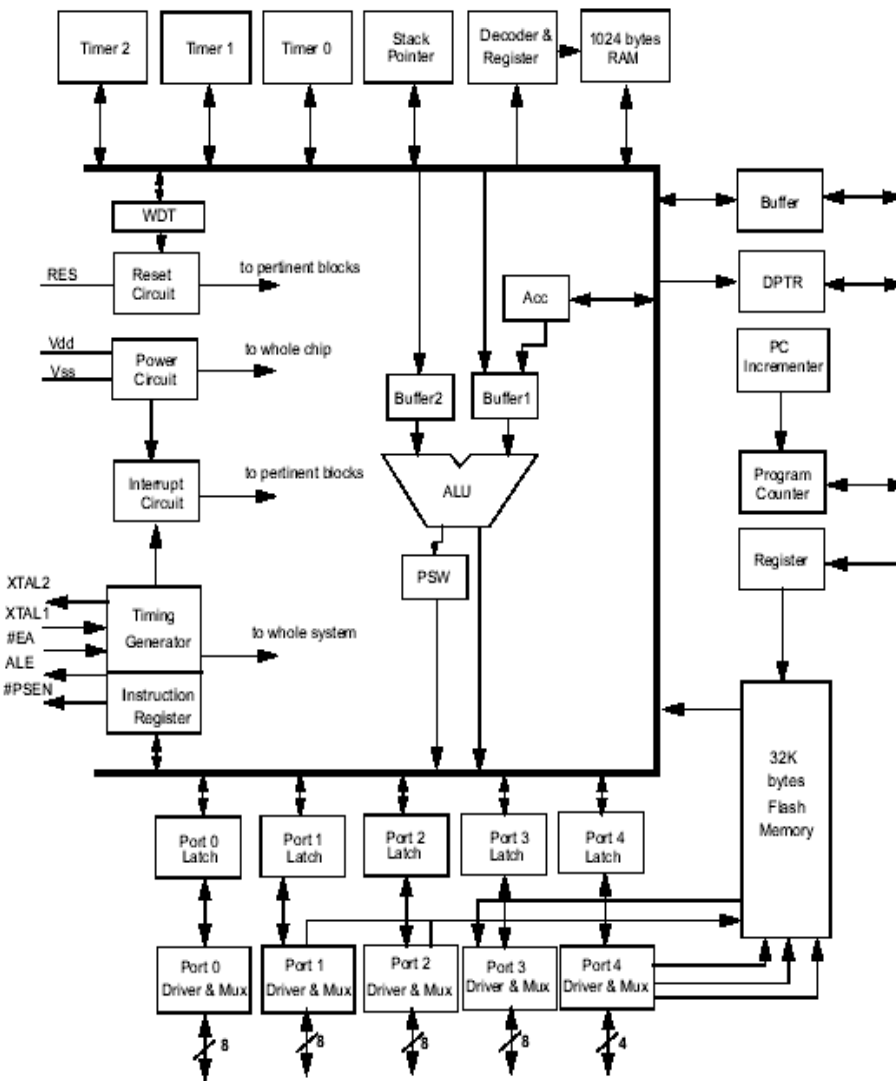
BA15218 / BA15218F



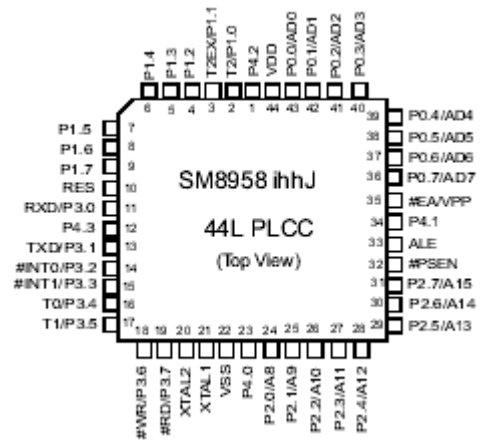
13. 417-HDJ2450-693A

IC(SM8958AC25J PLCC-44)

Block Diagram



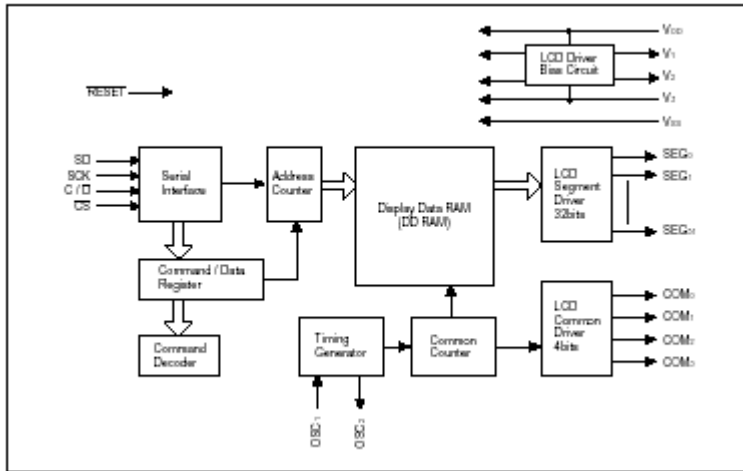
PIN ASSIGNMENTS



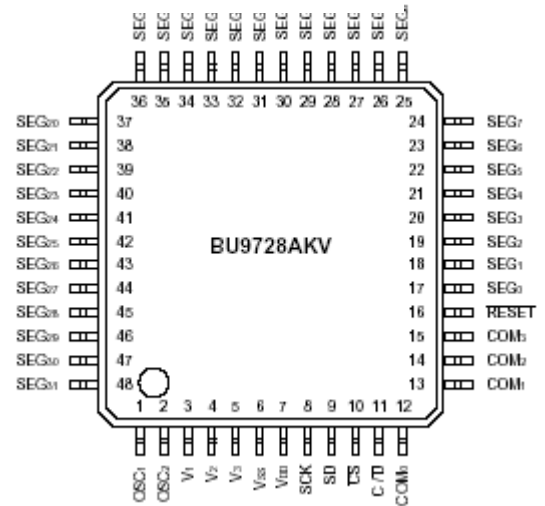
14. 417-P22-741

IC(BU9728AKV,SQFP-48)

●Block diagram



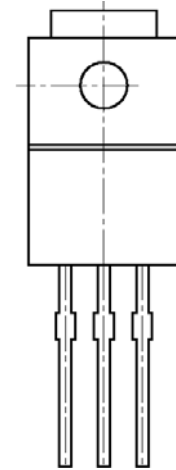
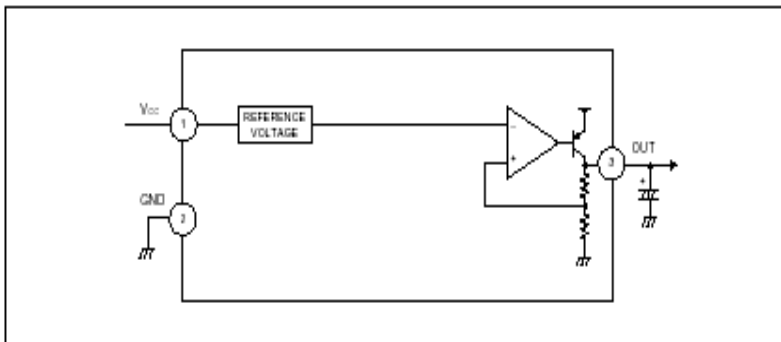
PIN ASSIGNMENTS



15. 417-CDN24-341

IC(BA07T,3PIN)

●Block diagram



(1) (2) (3)

- (1) V<sub>CC</sub>
- (2) GND
- (3) OUT

16. 417-KC730-123

穩壓 IC (7805)

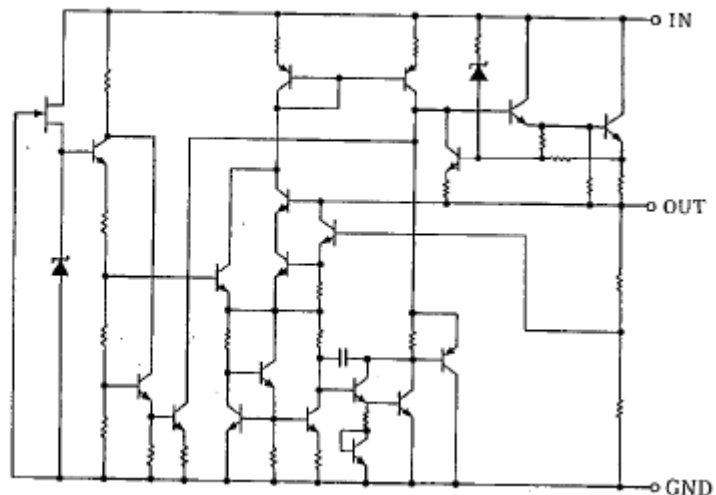
■ EQUIVALENT CIRCUIT

(TO-220F)

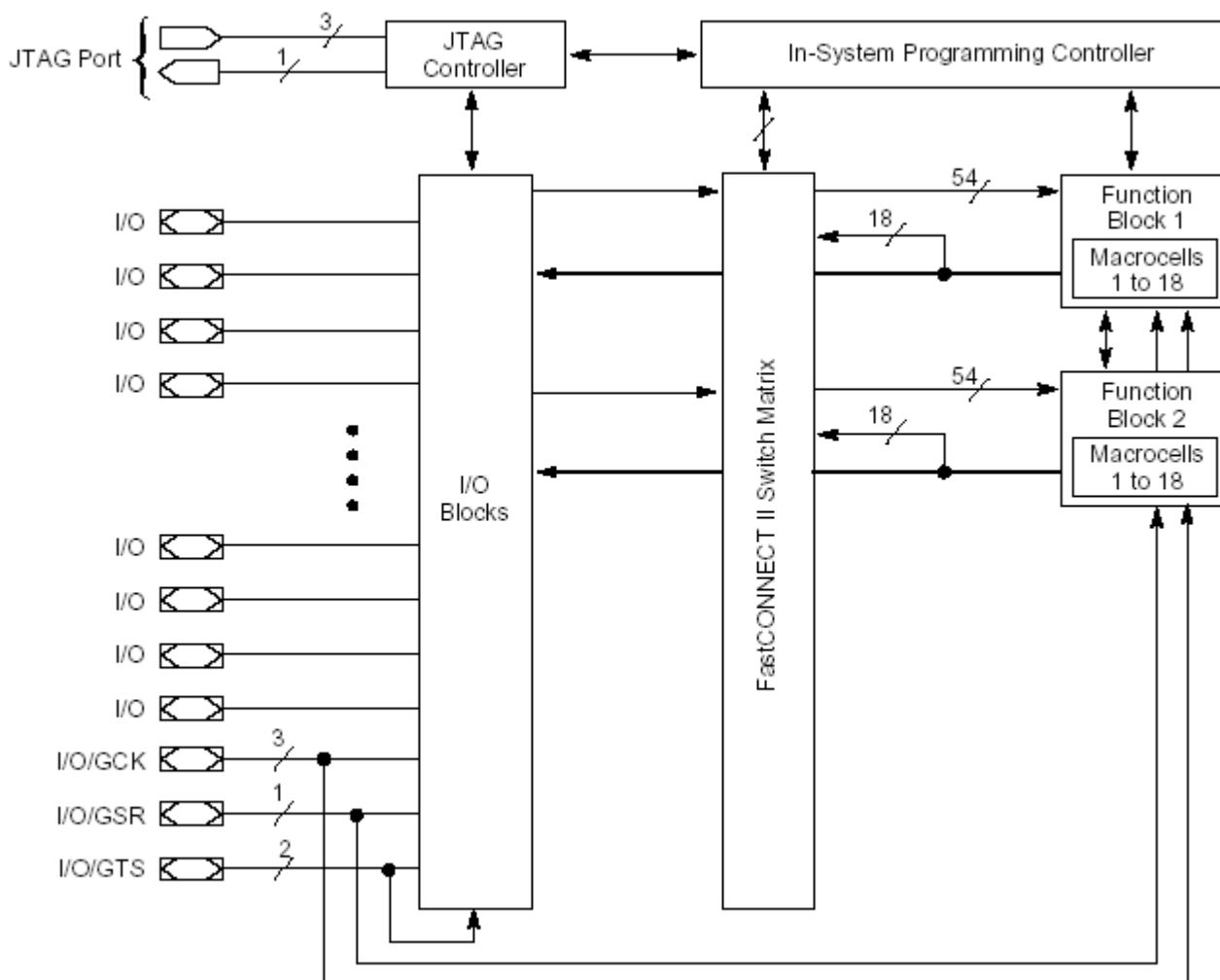


NJM7805FA

- 1. IN
- 2. GND
- 3. OUT

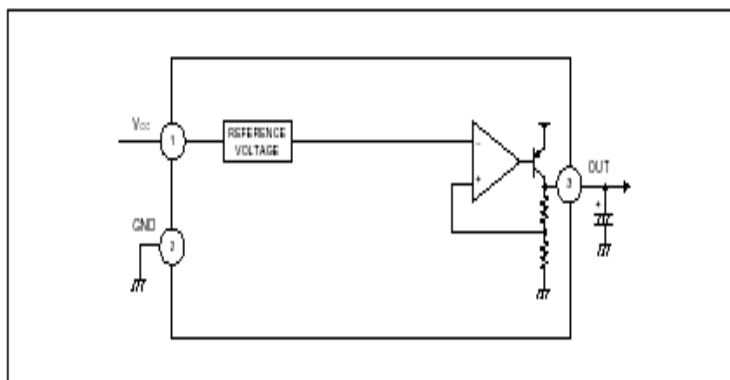


17. 417-MCDS4-738 IC(XC9536XL-10VQ44C,SMD)

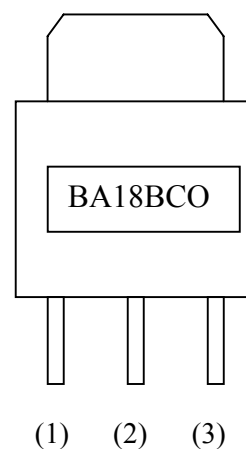


18. 417-MCDS4-737 IC(BA18BCOFP-E2,SMD)

Block diagram



- (1) Vcc
- (2) GND
- (3) OUT



19. 417-MCDS4-735 IC(M29W800B70N6.SMD)

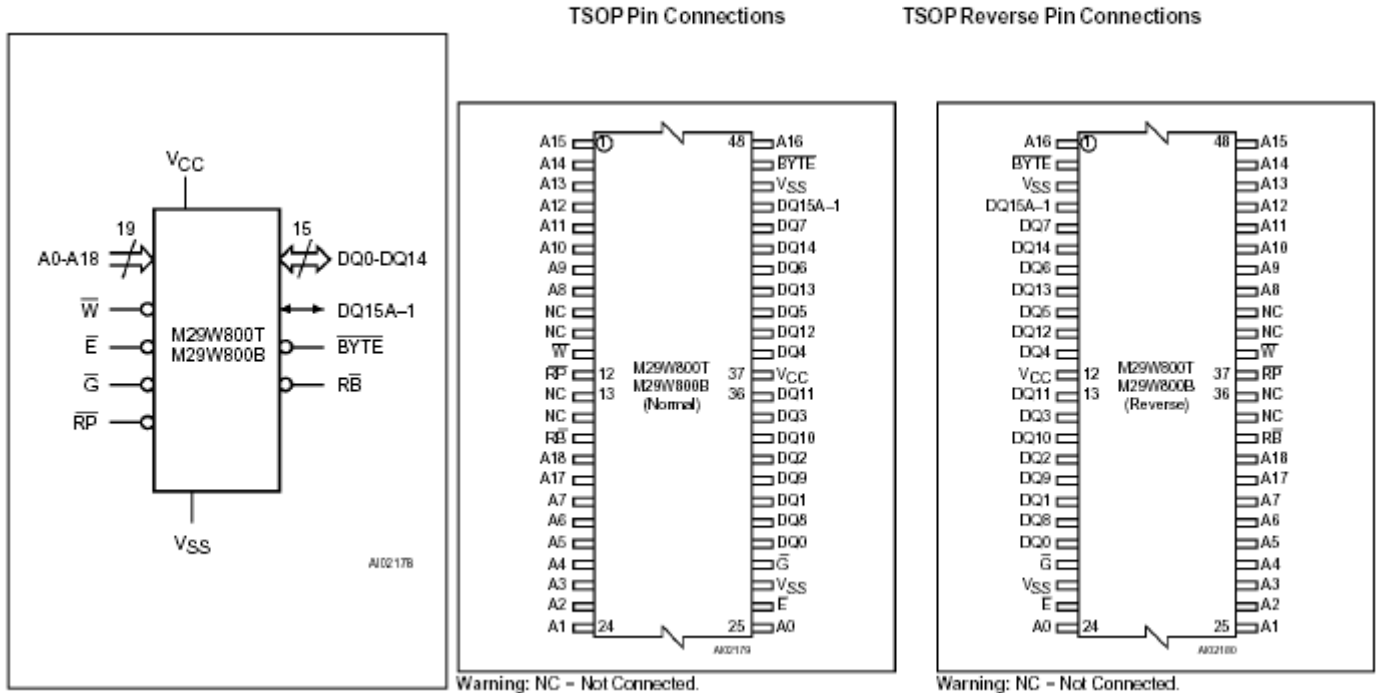


Table 1. Signal Names

A0-A18	Address Inputs
DQ0-DQ7	Data Input/Outputs, Command Inputs
DQ8-DQ14	Data Input/Outputs
DQ15A-1	Data Input/Output or Address Input
$\bar{E}$	Chip Enable
$\bar{G}$	Output Enable
$\bar{W}$	Write Enable
$\bar{R}\bar{P}$	Reset / Block Temporary Unprotect
$\bar{R}\bar{B}$	Ready/Busy Output
BYTE	Byte/Word Organisation
V <sub>CC</sub>	Supply Voltage
V <sub>SS</sub>	Ground

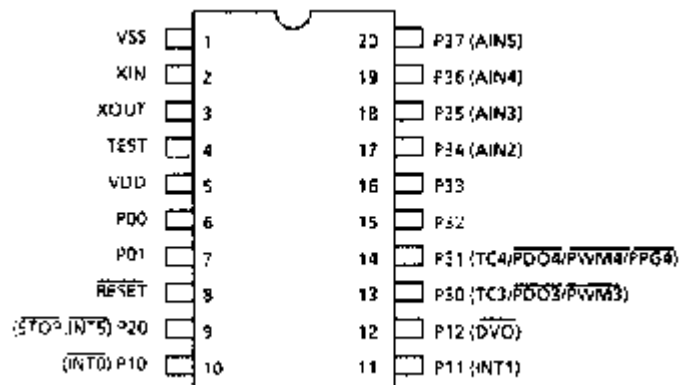


TSOP48 (N)  
12 x 20 mm

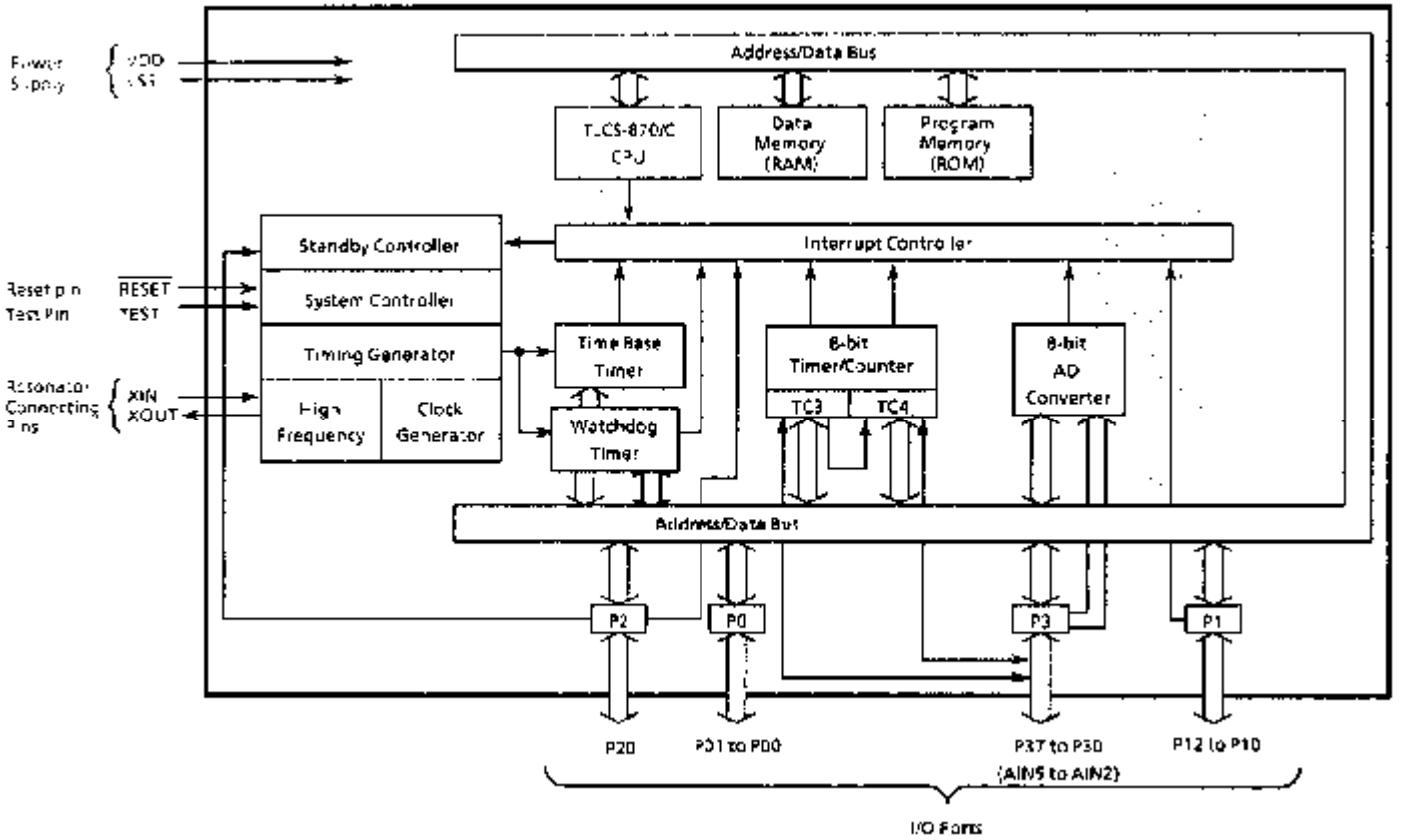
20. 417-P22-733 IC(TMP86P202M SOP20)

PIN ASSIGNMENTS

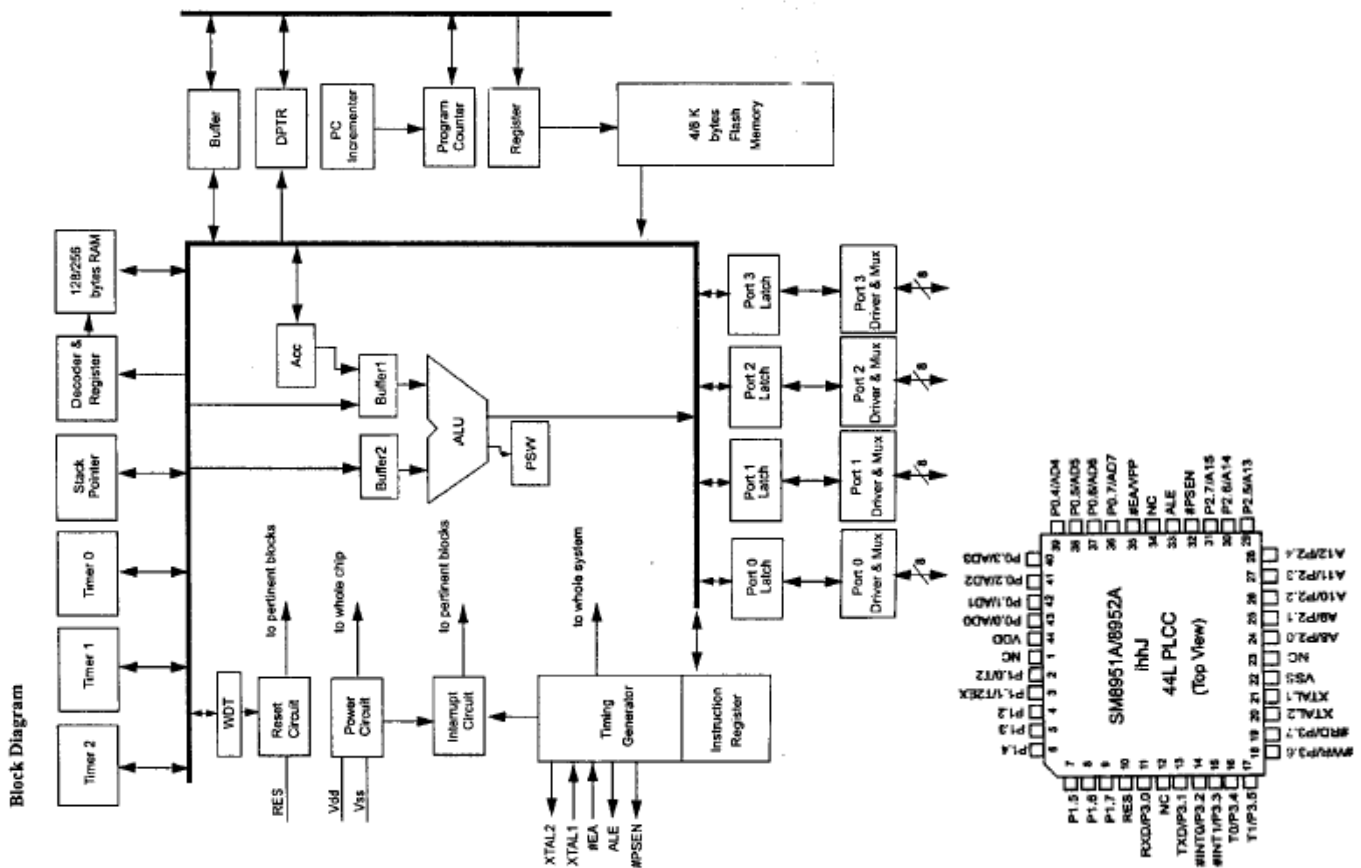
P-SOP20-300-1.27  
TMP86P202M  
(under Development)



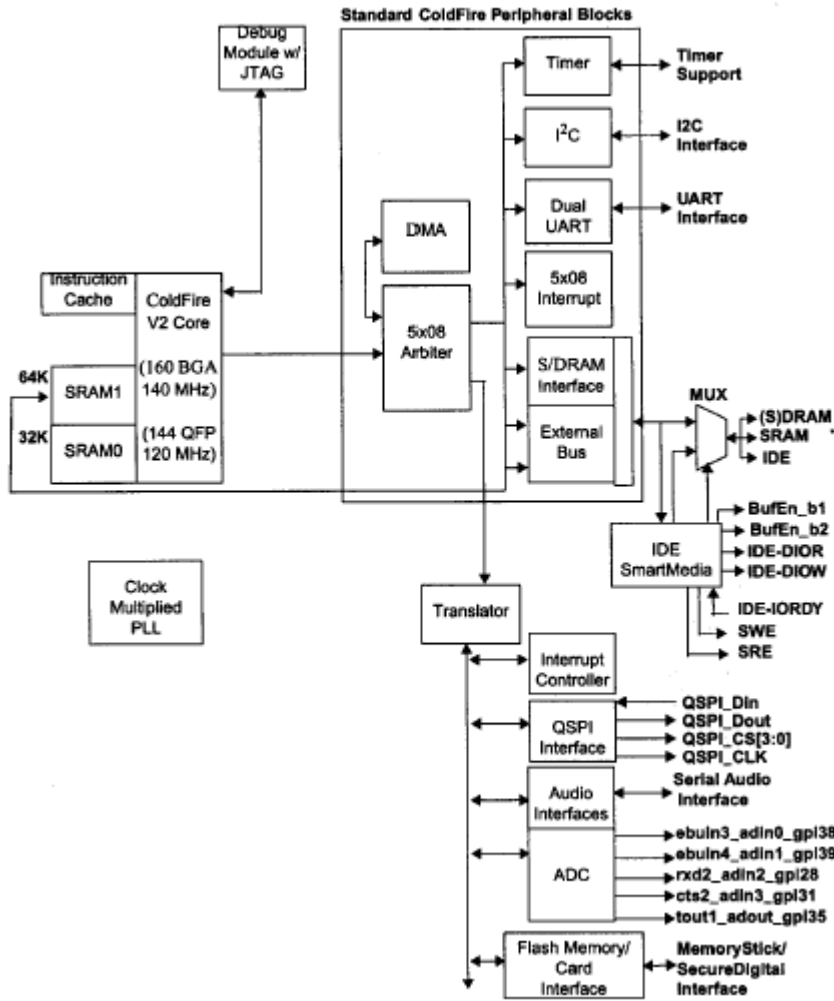
Block Diagram



21. 417-HDJ2450-693C IC(SM8952AC25J PLCC-44)



22. 417-MCDS4-736 IC(SCF5249LPV120.SMD)



SYMPTOM	POSSIBLE CAUSE	CORRECTION ACTION
Device dose not react when switching on	Connection to main disrupted	Check AC plug and AC connection
Player does not start operation	CD is badly positioned or dirty	Reposition CD with label atop or clean with a dry and soft cloth
No sound	Check the mixer and amplifier connections inappropriate	Possibly exchange connections
Does not read properly	The device is exposed to vibrations	Place the device on a more stable stand, rack etc.
Does not read the program	The player is in normal playback mode	Press the Play-Pause button and re-program
Pop noise	Mixer and amplifier connections inappropriate	Check cable and jack quantity