SAMSUNG

SERVICE MANUAL

S630/S730

SAMSUNG
TECHWIN

CONTENTS

Ⅴ. CIRCUIT DIAGRAM

Ⅵ. SERVICE INFORMATION ···103

Ⅰ. SPECIFICATION

1. CAMERA SPECIFICATION

Image Sensor

- Type : 1/2.5" CCD
- Effective Pixel : · S730-Approx. 7.2 Mega-pixel
   · S630-Approx. 6.0 Mega-pixel
- Total Pixel : · S730-Approx. 7.4 Mega-pixel
   · S630-Approx. 6.1 Mega-pixel

Lens

- Focal Length : SHD Lens f = 5.8 ~ 17.4mm (35mm film equivalent : 35~105mm)
- F No. : F2.8~F7.1 (wide), F4.9~F12.4 (Tele)
- Digital Zoom : · Still Image mode : 1.0X ~ 5.0X
   · Play mode : S730: 1.0X ~ 12.0X (depends on image size)
   S630: 1.0X ~ 11.0X (depends on image size)

LCD Monitor

- 2.5" color TFT LCD (S730:230K dots, S630:150K dots)

Focusing

- Type : TTL auto focus
- Range

	Normal	Macro	Auto Macro
Wide	80cm ~ infinity	5 ~ 80cm	40cm ~ infinity
Tele		40 ~ 80cm	40cm ~ infinity

Shutter

- Shutter Speed : 1 ~ 1/1,500 sec. (Manual : 8 ~ 1/1,500 sec.)

Exposure

- Control : Program AE
- Metering : Multi, Spot
- Compensation : ±2EV(1/3EV steps)
- ISO Equivalent : S730-Auto, 80, 100, 200, 400, 800, 1000
   S630-Auto, 80, 100, 200, 400

Flash

- Modes : Auto, Auto & Red-eye reduction, Fill-in flash, Slow sync, Flash off
- Range : Wide : 0.2m ~ 3.0m
   Tele : 0.4m ~ 2.5m (ISO AUTO)
- Recharging Time : Approx. 5 sec.

Sharpness   - Soft+, Soft, Normal, Vivid, Vivid+

Color Effect   - Normal, B&W, Sepia, Red, Green, Blue, Negative, User Set

White Balance

- Auto, Daylight, Cloudy, Fluorescent_H, Fluorescent_L, Tungsten, Custom

Voice Recording

- Voice Recording (max.10 hour)
- Voice Memo in Still Image (max. 10 sec.)

Date Imprinting

- Date, Date & Time, Off (user selectable)

Shooting   - Still Image : · Modes : Auto, Program, ASR, M, Scene

                                       · Scene : Night, Portrait, Landscape, Text, Children, Close-up, Sunset, Dawn, Backlight, Fireworks, Beach & Snow

                                       · Shooting : Single, Continuous, AEB, Wise Shot (S730 only)

                                       · Self-timer : 2 sec.,10 sec., Double (10 sec., 2 sec.)

           - Movie Clip : · With Audio or without Audio (user selectable, recording time : memory capacity dependent)

                              ※ The maximum file size of continuous movie clip is 2GB.

                            · Size : 640X480, 320X240

                            · Frame rate : 30 fps, 15 fps

                            · Optical zoom: Max. 3X

Storage   - Media : · Internal memory : Approx.16MB flash memory

                         · External memory : SDHC / MMC / SD card (Up to 4GB Guaranteed)

          - File Format : · Still Image : JPEG (DCF), EXIF 2.2, DPOF 1.1, PictBridge 1.0

                         · Movie Clip : AVI (MJPEG)

                         · Audio : WAV

         - Image Size

           · S730

7ᴹ	6ᴹ	5ᴹ	5ᴹ	3ᴹ	🖼
3072X2304	3072X2048	3072X1728	2592X1944	2048X1536	1024X768

           · S630

6ᴹ	5ᴹ	4ᴹ	3ᴹ	🖼	–
2816X2112	2784X1856	2816X1584	2048X1536	1024X768	–

         - Capacity (256 MB MMC)

           · S730

	7ᴹ	6ᴹ	5ᴹ	5ᴹ	3ᴹ	🖼
Super Fine	67	80	95	95	150	558
Fine	128	157	183	183	284	710
Normal	197	223	269	269	400	822

           · S630

	6ᴹ	5ᴹ	4ᴹ	3ᴹ	🖼
Super Fine	80	95	124	150	558
Fine	157	183	233	284	710
Normal	223	269	306	400	822

※ These figures are measured under Samsung's standard conditions and may vary depending on shooting conditions and camera settings.

"E" Button   - Effect : Color, Image Adjust, Fun (Highlight, Composite ,Photo Frame)
               - Editing : Resize, Rotate, Color, Special Color, Image Adjust (Brightness, Contrast, Saturation, Add
                      Noise), Fun (Cartoon, Highlight, Composite, Photo Frame, Sticker)

Image Play   - Single image, Thumbnails, Slide show, Movie Clip

Interface   - Digital output connector : USB 2.0 High Speed
             - Audio : Mono
             - Video output : NTSC, PAL (user selectable)

Power Source
             - Primary Battery : 2 x AA Alkaline
             - Rechargeable battery (0ptional) : SNB-2512B KIT (2xAA 2500mAh Ni-MH Battery & Charger)
             ※ Included battery may vary depending on sales region.

Dimensions (WxHxD)
             - 99.8x 62.8x25.7mm (excluding protrusions)

Weight   - Approx. 136g (without batteries and card)

Operating Temperature
             - 0 ~ 40° C

Operating Humidity
             - 5 ~ 85%

Software   - Camera Driver : Storage Driver : (Windows98/98SE/2000/ME/XP, Mac OS 9.2 ~ 10.3)
             - Special Features : Digimax Master, Adobe Reader

2. System Requirements

For Windows	For Macintosh
PC with processor better than Pentium II 450MHz (Pentium 700MHz recommended)	Power Mac G3 or later
Windows 98/98SE/2000/ME/XP	Mac OS 9.2~10.3
Minimum 64MB RAM 200MB of available hard disk space	Minimum 64MB RAM 110MB of available hard-disk space
USB port	USB port
CD-ROM drive	CD-ROM drive
1024x768 pixels, 16bit color display compatible monitor (24bit color display recommended) MicroSoft DirectX 9.0C	

3. LCD monitor indicator

■ Recording mode
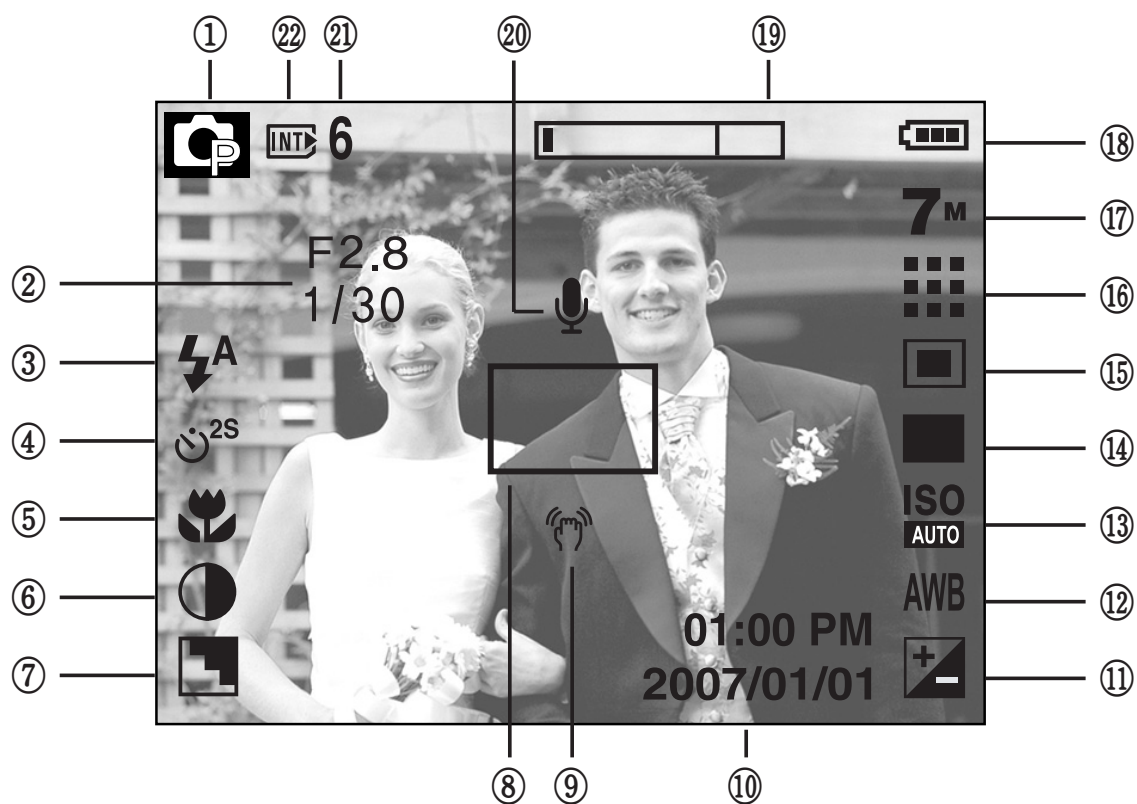
[Image & Full Status]

No.	Description		Icons
1	Recording mode		🔲 🔲 🔲 M 🔲 🔲 🔲 🔲 🔲 🔲 🔲 🔲 🔲 🔲 🔲 🔲
2	Aperture Value/ Shutter Speed		**F2.8, 1/30**
3	Flash/ Without Sound		⚡ᴬ 👁 ⚡ ⚡ˢ ⚡ / 🎤
4	Self-timer		⏱²ˢ ⏱ ⏱
5	Macro		🌷 🌷
6	Contrast		◖
7	Sharpness		🔲 🔲 🔲 🔲 🔲
8	Auto focus frame		⬜ ⸬
9	Camera shake warning		🖐
10	Date/ Time		**2007/01/01 01:00 PM**
11	Exposure compensation		±
12	White Balance		AWB ☀ ☁ 🔅 🔅 💡 ⬇
13	ISO	S730	ISO AUTO ISO 80 ISO 100 ISO 200 ISO 400 ISO 800 ISO 1000
		S630	ISO AUTO ISO 80 ISO 100 ISO 200 ISO 400
14	Continuous shot	S730	⬜ 🗗 AEB / W
		S630	⬜ 🗗 AEB
15	Metering		◼ ⊡
16	Image quality		⠿ ⠿ ⠿ 30 15
17	Image size	S730	7ᴹ 6ᴹ 5ᴹ 5ᴹ 3ᴹ ⊡ 640 320
		S630	6ᴹ 5ᴹ 4ᴹ 3ᴹ ⊡ 640 320
18	Battery		🔋 🔋 🔋 🔋
19	Optical/ Digital Zoom bar / Digital Zoom rate		▭▭▭ **x 5.0**
20	Voice memo		🎤
21	Number of available shots remaining		**6**
	Movie / Voice recording time		**00:00:00**
22	Card inserted indicator		🗂 INT

■ Play mode

No.	Description	Icon
1	Play mode icon	▶
2	Voice Memo	🎤
3	Protect	O┰
4	DPOF	▶
5	Recording date	2007/01/01
6	Image size	3072X2304 ~ 256X192
7	Flash	ON/OFF
8	Shutter speed	1 ~ 1/1500
9	Aperture value	F2.8 ~ F12.4
10	ISO	80 ~ 1000
11	Battery	⬚ ⬚ ⬚ ⬚
12	Folder name & File name	100-0031
13	Memory card indicator	⬚ INT

I. SPECIFICATION

4. CONNECTION DIAGRAM

SD Card

Card Reader

USB Cable

AV Cable

AC Adaptor

Lap top

IBM / MAC

TV Monitor
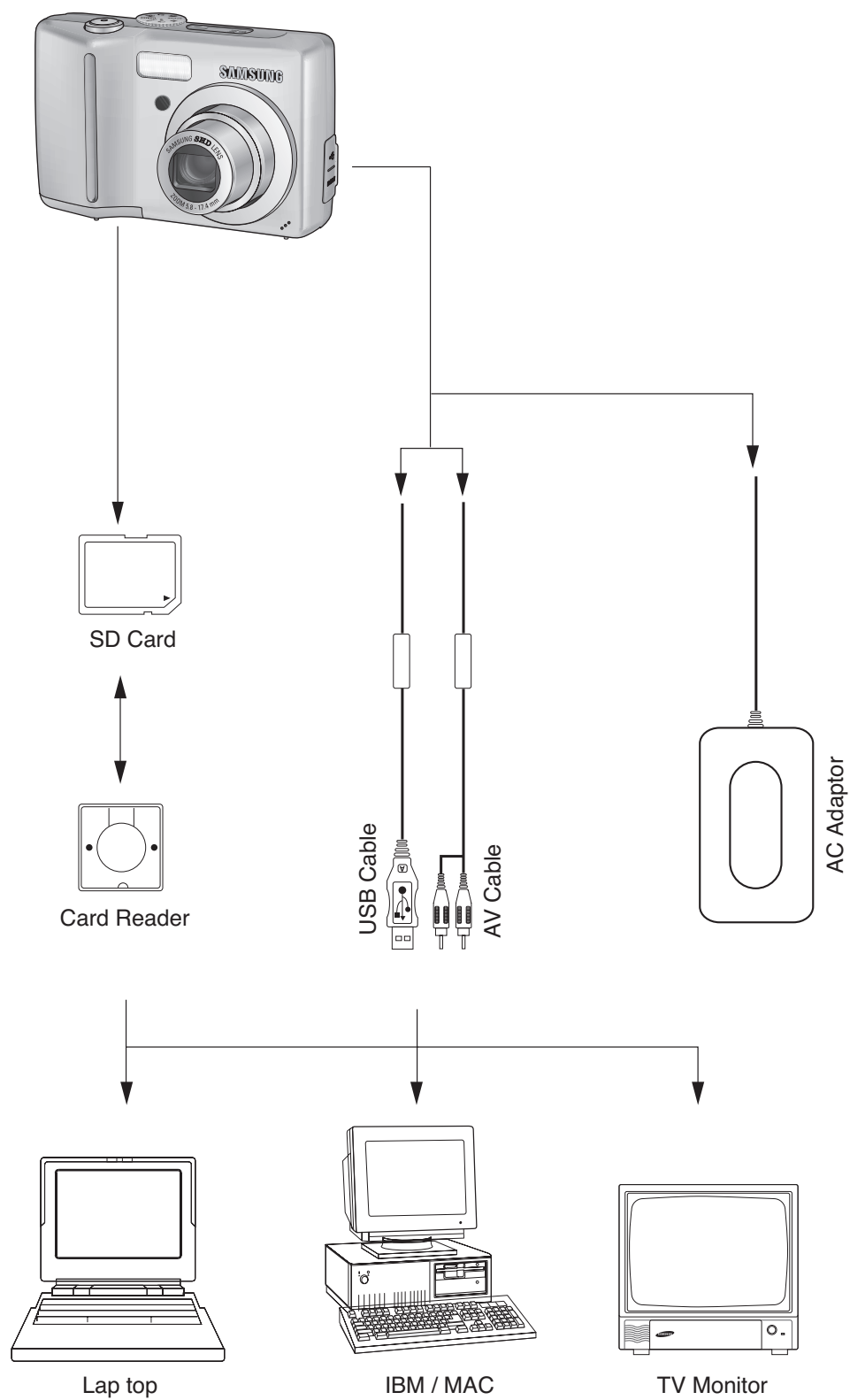
5. IDENTIFICATION OF FEATURES

Front & Top

Mode dial

Shutter button

Flash

Self-timer lamp /
Auto focus lamp

Lens / Lens cover

Power button

Speaker

USB / AV connection terminal

DC input connection port

Microphone

Back & Bottom

Camera status lamp

Zoom T button
(Digital zoom)

Zoom W button
(Thumbnail)

E (Effects) button

Strap eyelet

LCD monitor

Tripod socket

+ / - button, Delete button

5 function button

Play mode / Printer button
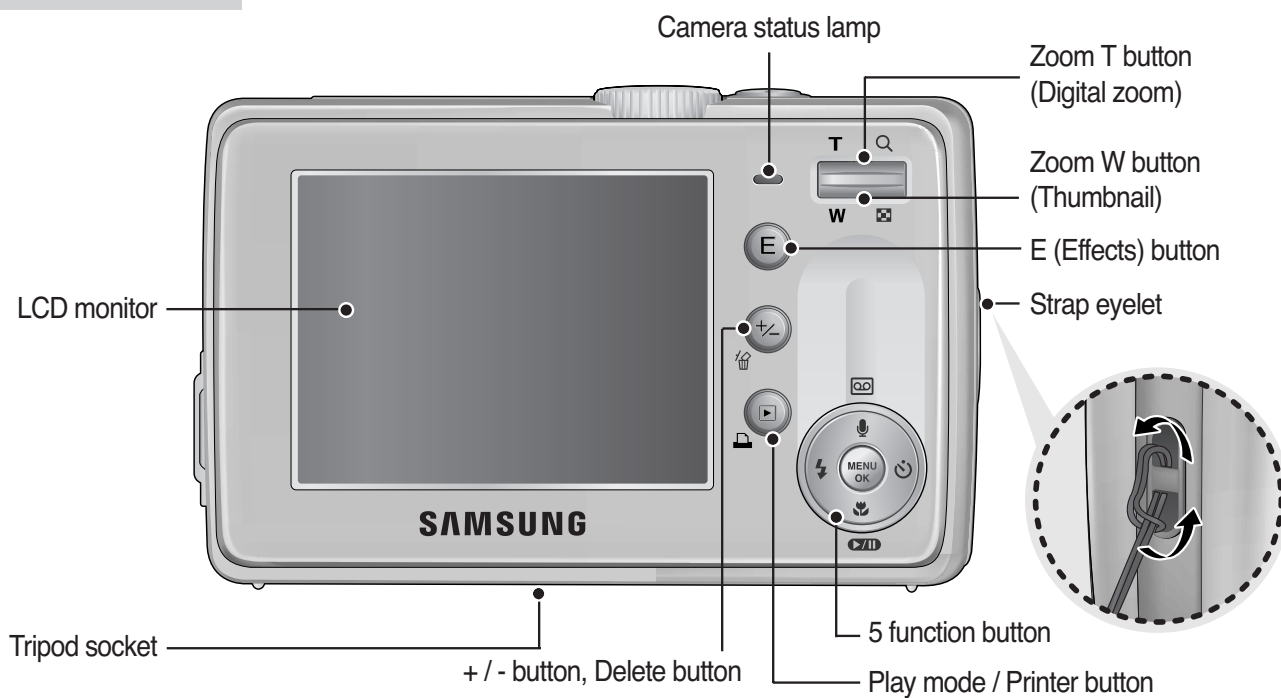
Bottom/ 5-function button

Battery chamber cover

Memory card slot

Battery chamber

Voice memo/ Voice Recording/ Up button

Menu/ OK button

Flash/
Left button

MENU
OK

Self-timer/
Right button

Macro/ Down button
Play & Pause button

Ⅱ. EXPLODED VIEW AND PART LIST
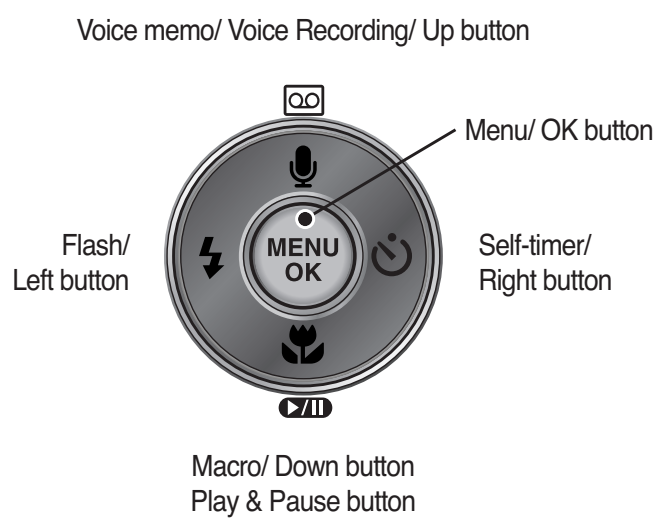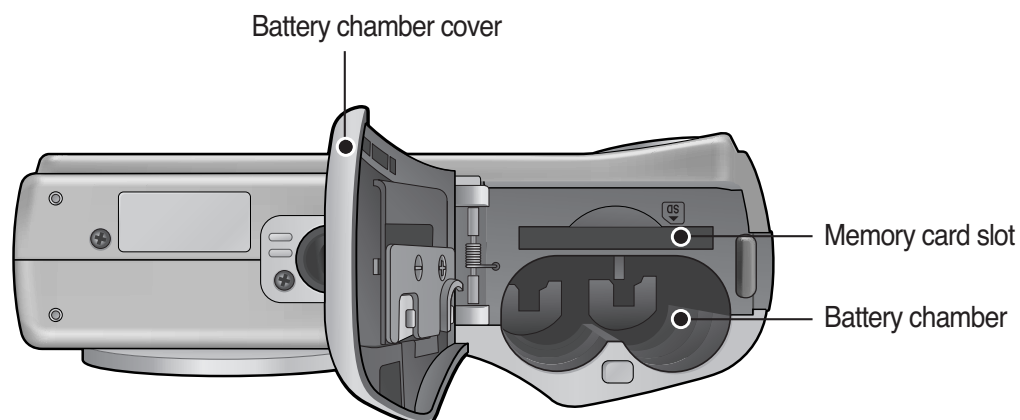
1. MAIN ASSEMBLY

2. BODY ASSEMBLY
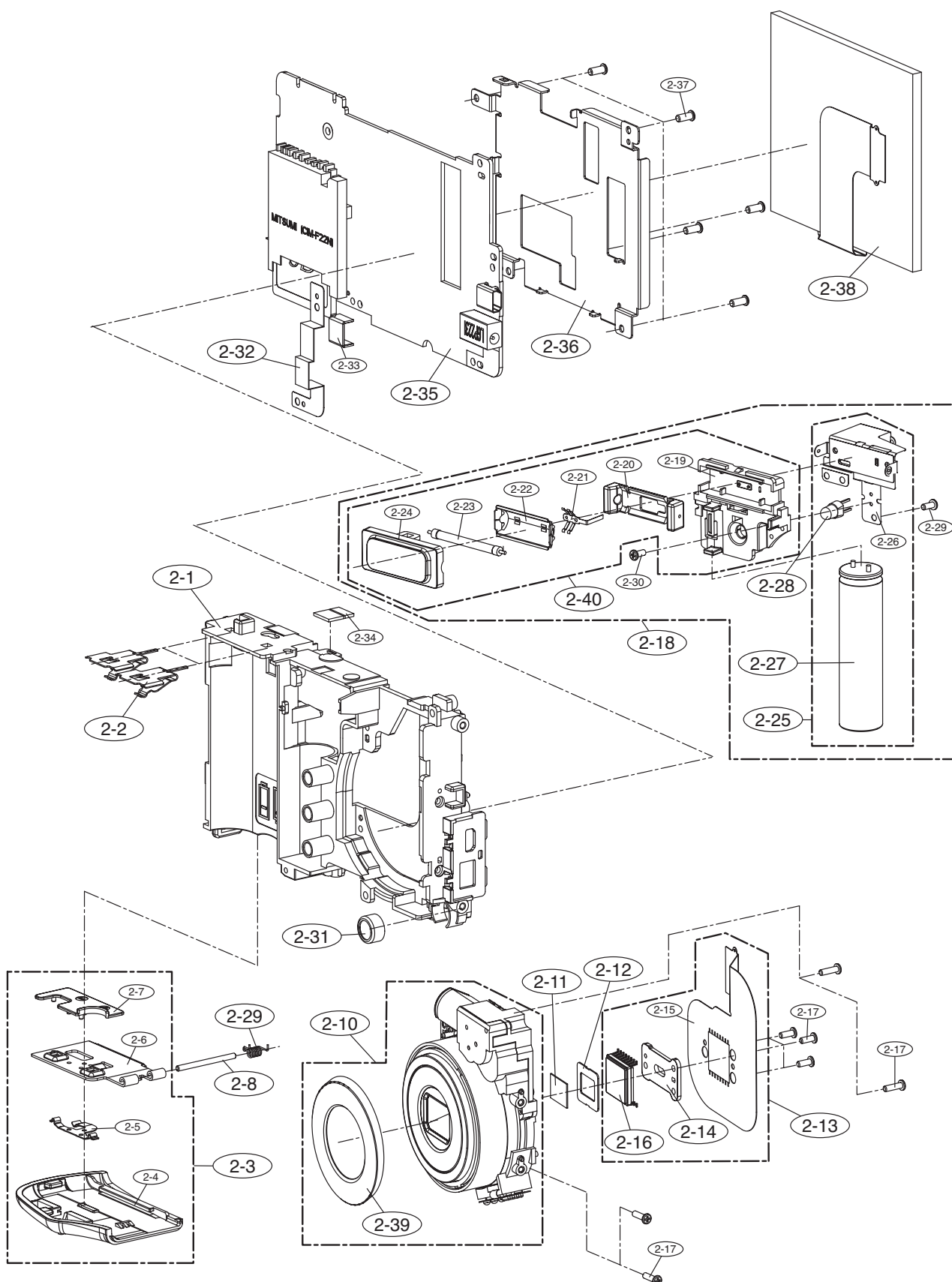
3. BARREL ASSEMBLY
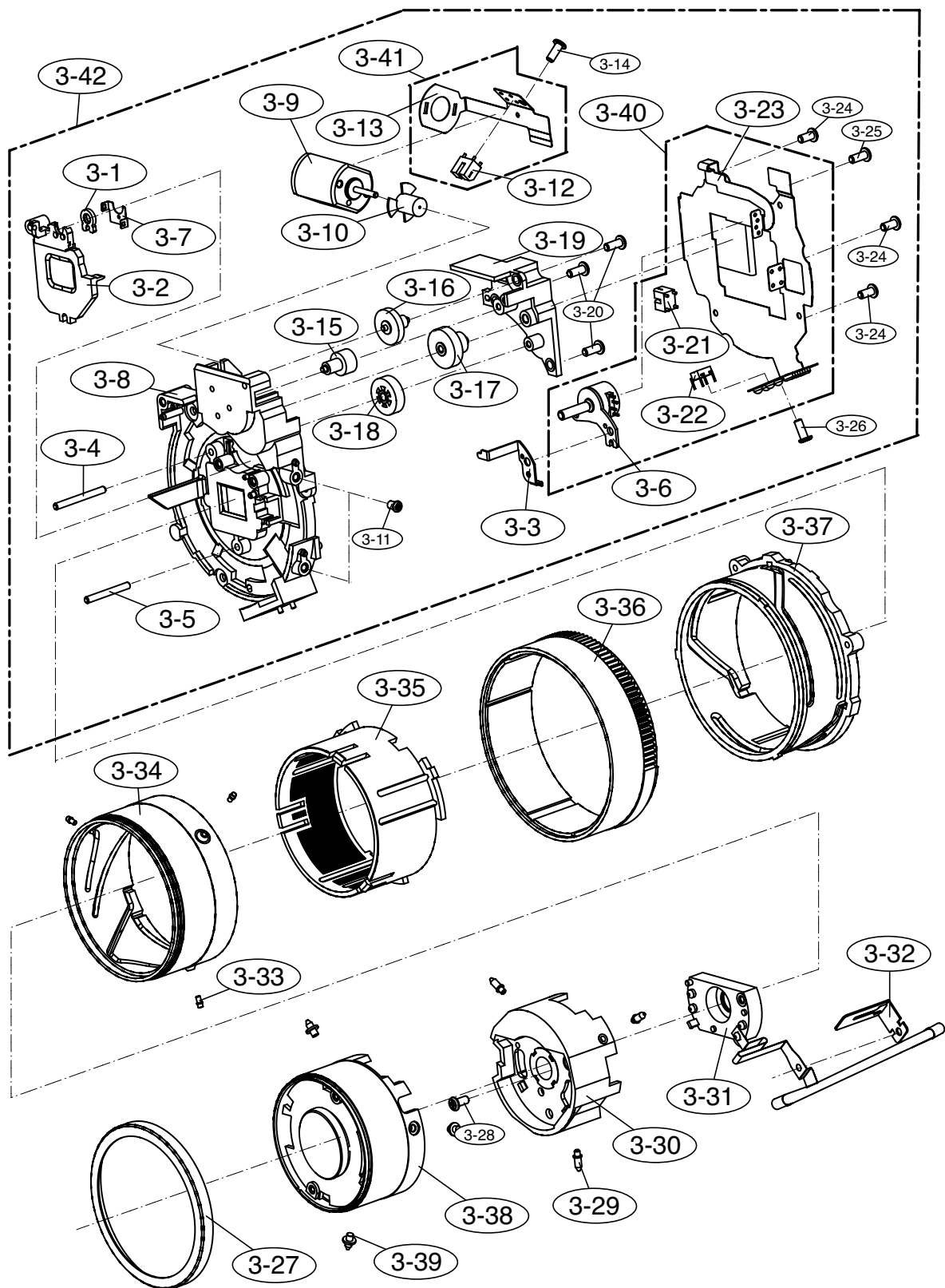
4. BARREL ASSEMBLY
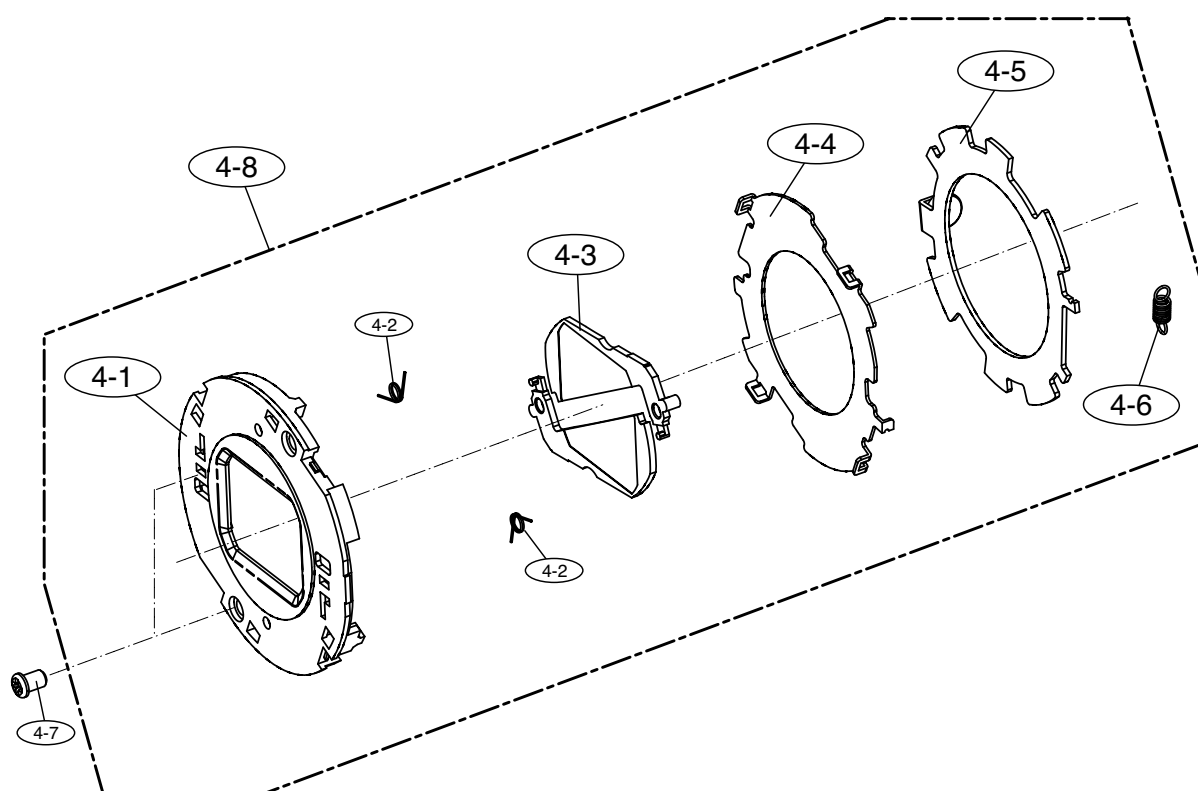
5. FRONT COVER ASSEMBLY
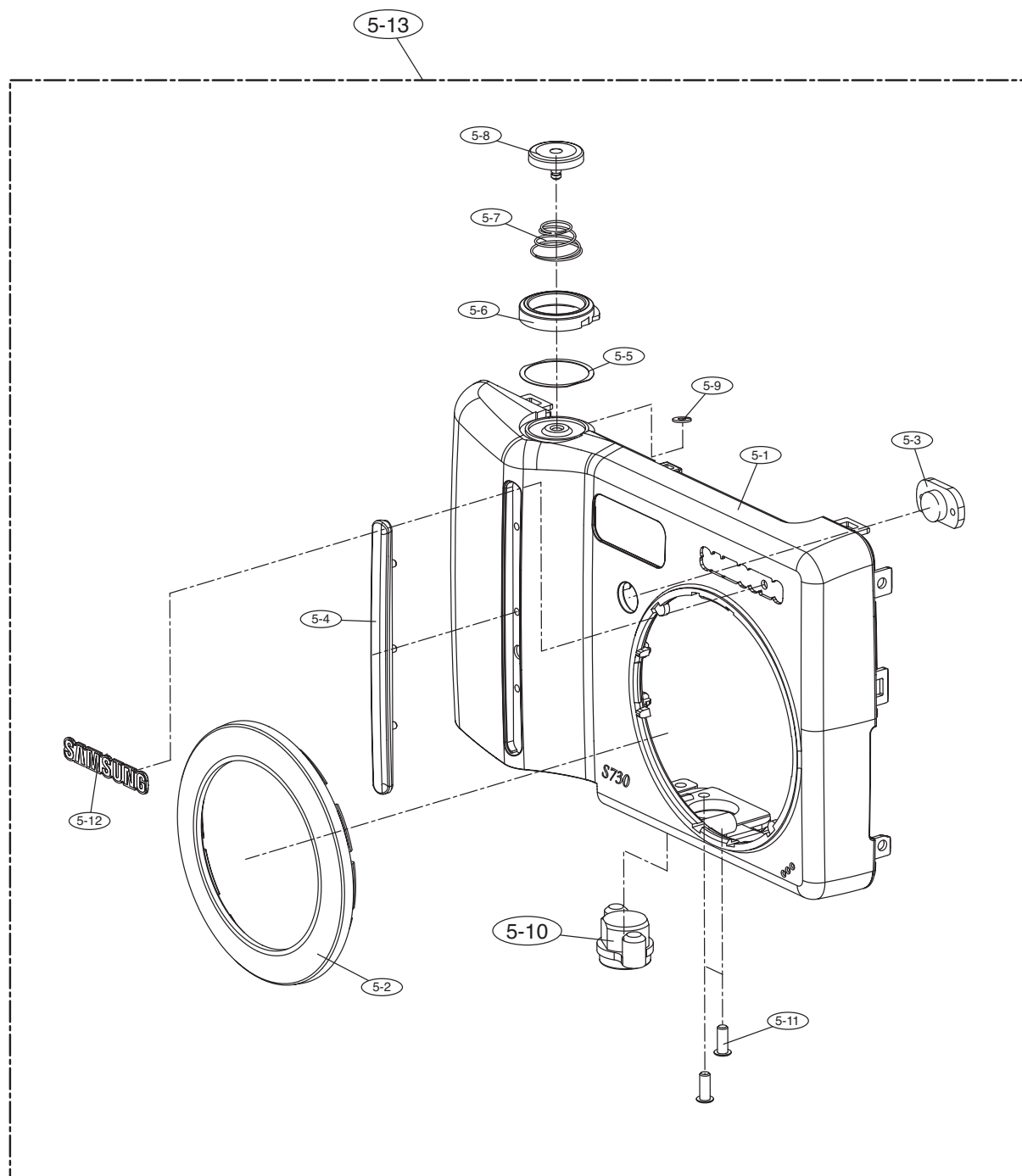
6. MIDDLE COVER ASSEMBLY
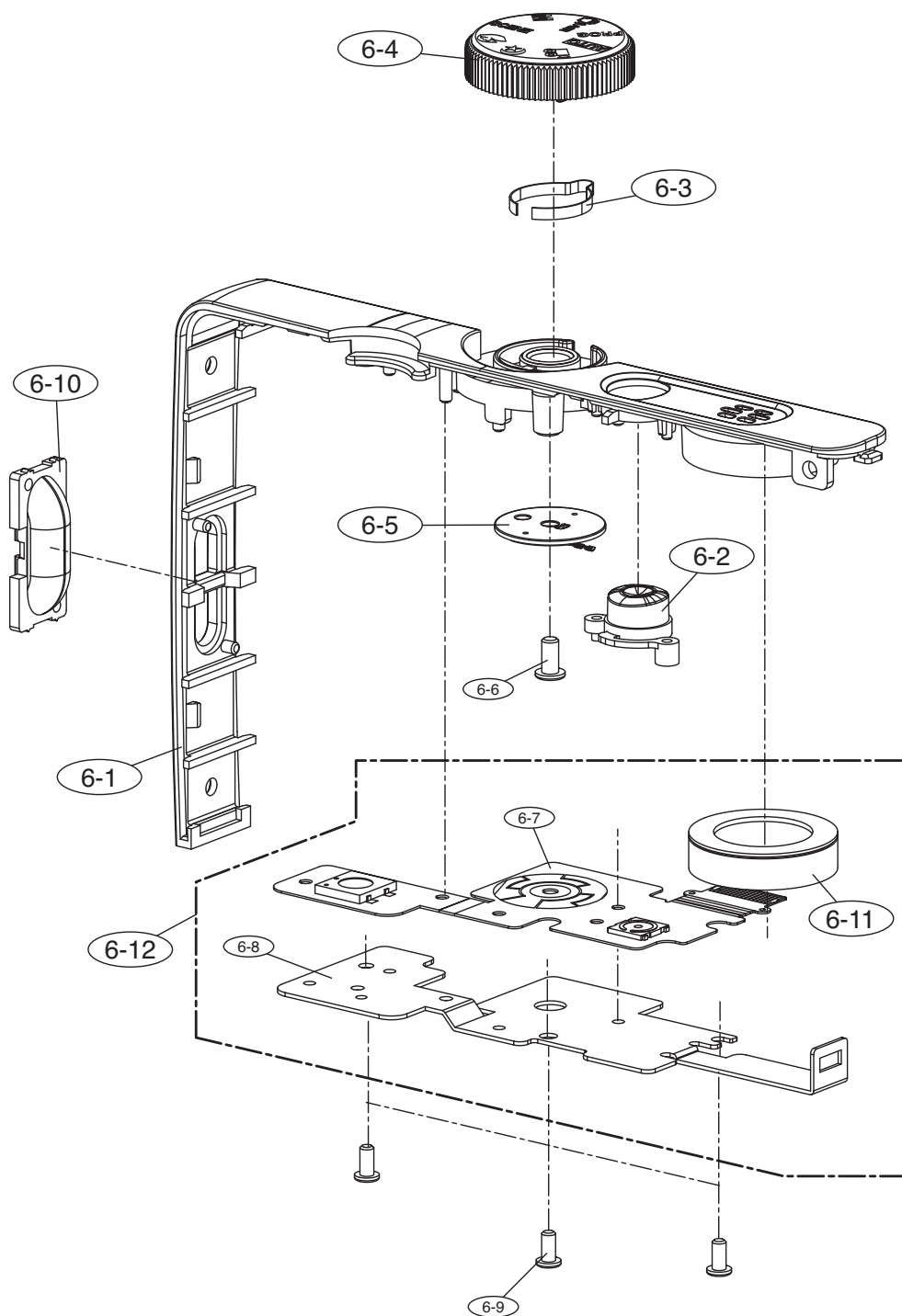
7. BACK COVER ASSMEBLY
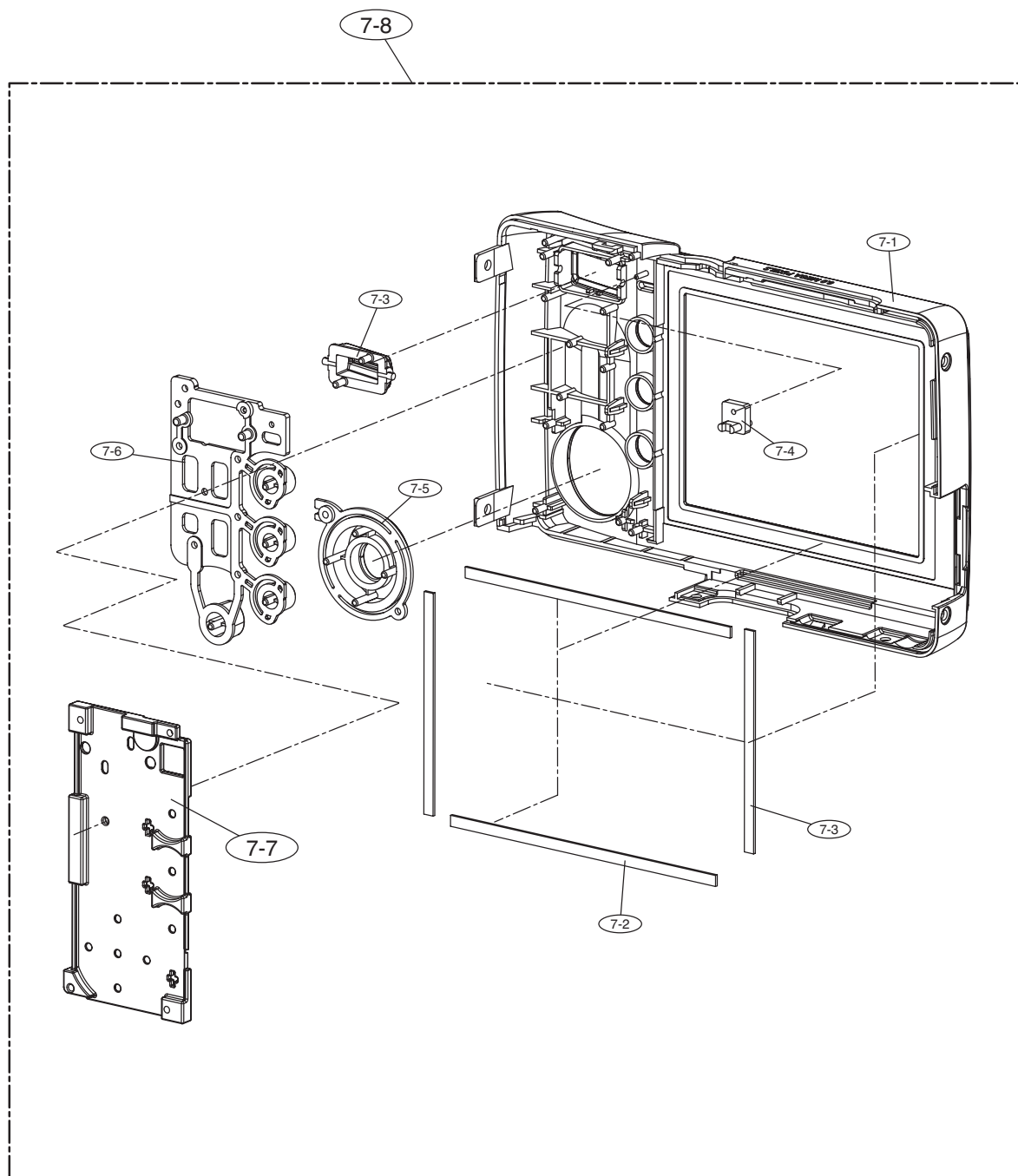
8. PACKING ITEM

OLD S630(D60)

STS3-63 SHARP(6 I)

FW VER : 705181 654.171C

QA-6M

FAST BOOT

D0 : 59764 OK
D1 : 5340 OK
L0 : 812 OK
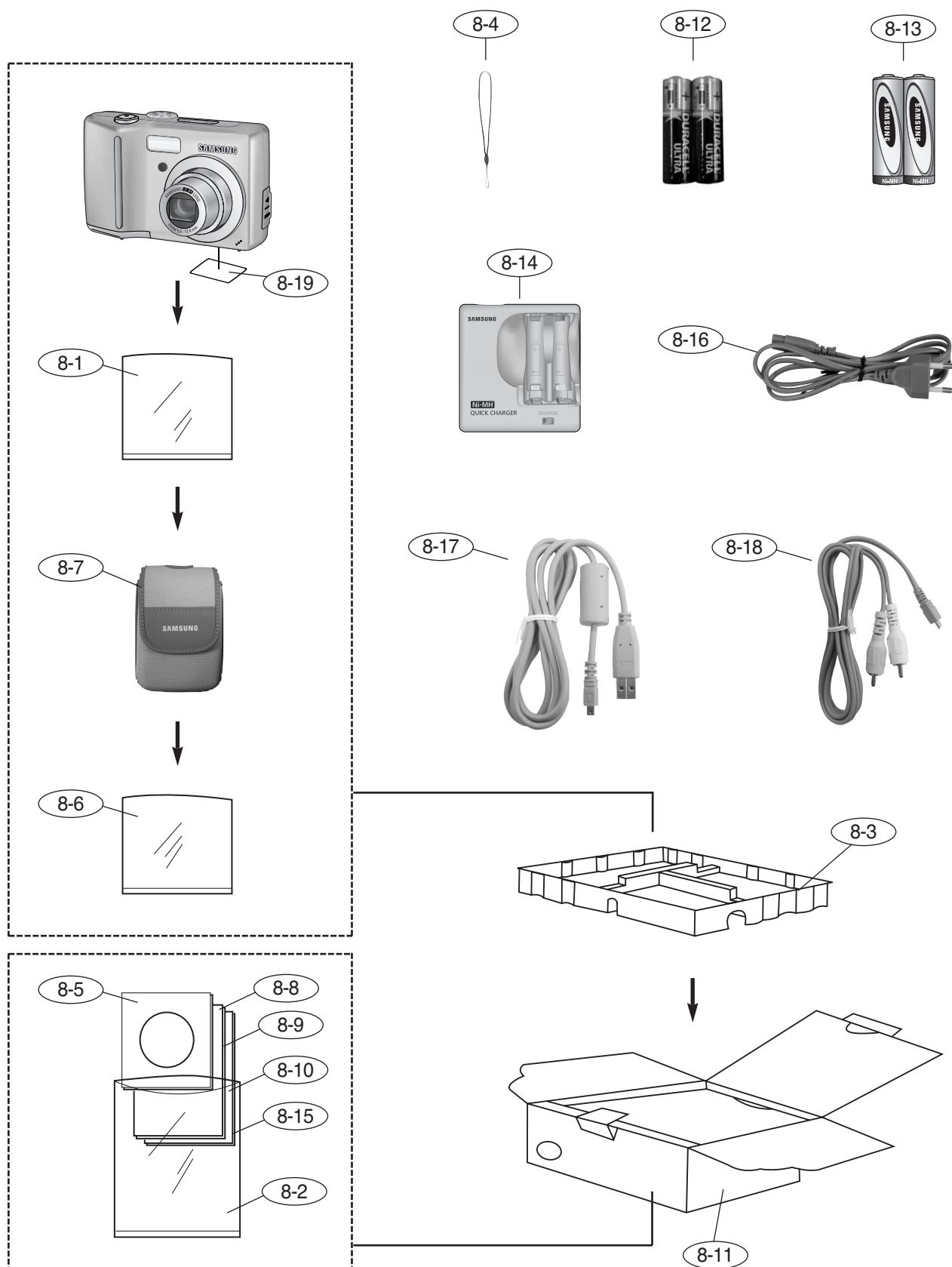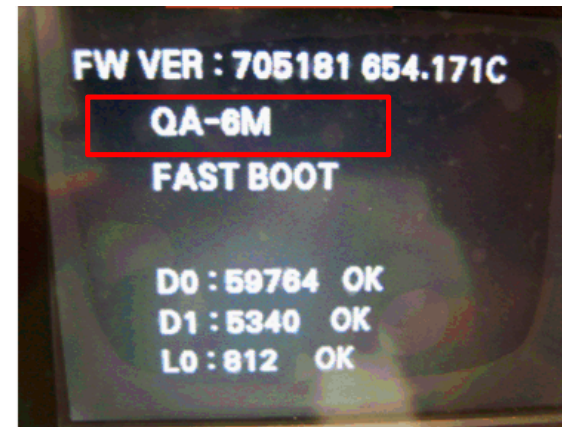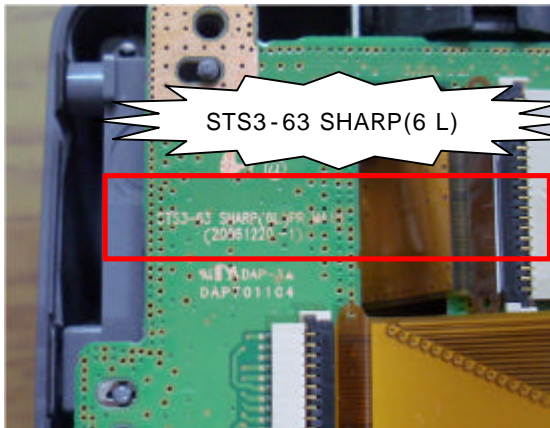
PART	CODE
MAIN_PCB	AD92-00367A
LCD	AD81-00217A
LCD_FRAME	AD81-02817A

NEW S630(D60)

STS3 VE SEC

FW VER : 705141 654.171F

QA-6M VE

FAST BOOT

D0 : 8748 OK
D1 : 4844 OK
L0 : 812 OK
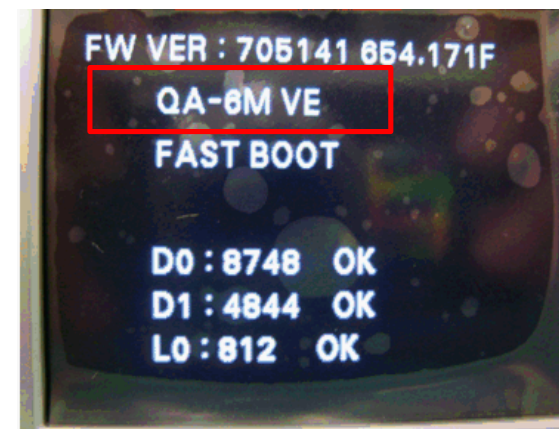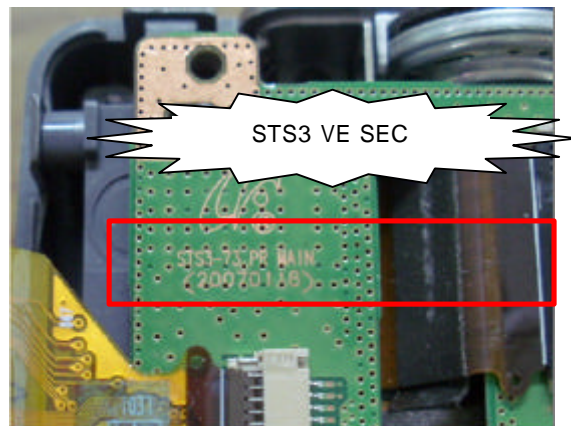
PART	CODE
MAIN_PCB	AD92-00368A
LCD	AD07-00076A
LCD_FRAME	AD97-13896A

OLD S730(D70)

STS3-73

PV2단계를 의미
(아직 미 양산)

FW VER : 705231 654.171C

QA-7M-PV2

FAST BOOT

D0 : 14900 OK
D1 : 16604 OK
L0 : 812 OK
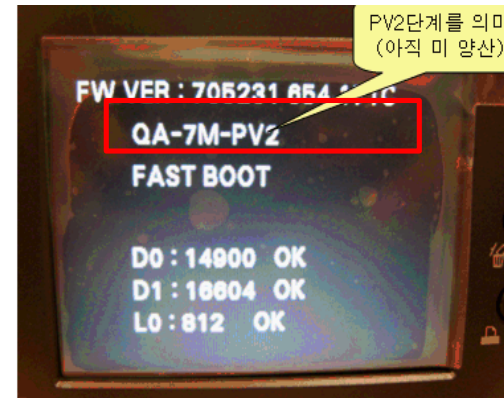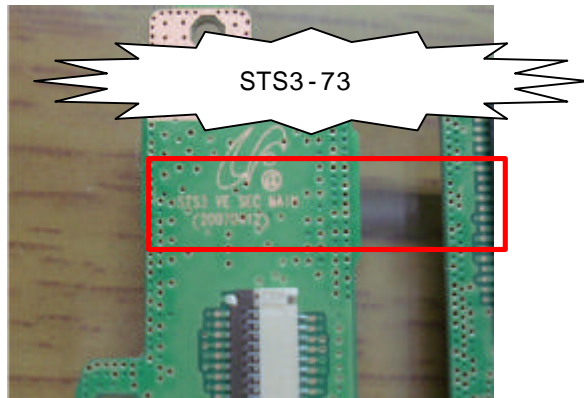
Parts Name	Parts Code
MAIN PCB	AD92-00333A
LCD	AD07-00069A
LCD_FRAME	AD61-03156A
CCD	0605-001128
CCD_FPCB ASSY	AD92-00363A

NEWS750(S730VE, D70VE, D75)

STS3 VE SEC

FW VER : 706131 654.171F

QA-7M-SecLcd-VE

FAST BOOT

D0 : 9788 OK
D1 : 5348 OK
L0 : 812 OK
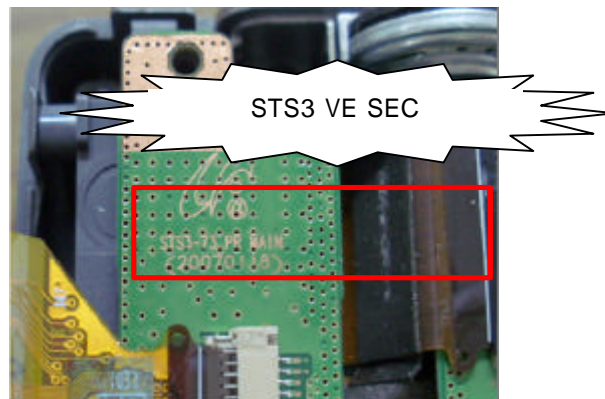
Parts Name	Parts Code
MAIN PCB	AD92-00334A
LCD	AD07-00076A
LCD_FRAME	AD97-13896A
CCD	0605-001134
CCD_FPCB ASSY	AD92-00364A

Fig. No	Old Parts Code	New Parts Cod	Parts Name	Q'ty	Supply	Remarks
1. MAIN ASSEMBLY					
1-1	Q7304000201A	AD63-01886A	DC_USB_COVER	1	O	BLACK
	Q7304000201B	AD63-01887A	DC_USB_COVER	1	O	SILVER
	Q7304000201C	AD63-01888A	DC_USB_COVER	1	O	RED
	Q7304000201D	AD63-01889A	DC_USB_COVER	1	O	PINK
	Q7304000201E	AD63-01890A	DC_USB_COVER	1	O	GREEN
	Q7304000201F	AD63-01891A	DC_USB_COVER_S73	1	O	GREEN
	Q7304000201G	AD63-01892A	DC_USB_COVER_S73	1	O	BLUE
	Q7304000201H	AD63-01893A	DC_USB_COVER_S73	1	O	FUNKY PINK
1-2	Q6003001602A	DNA	SC_1745	6	X	
2. BODY ASSEMBLY					
2-1	Q7211086902A	AD62-00061A	BATTERY_CHAMBER	1	O	
2-2	Q7011055603A	AD67-00621A	BATTERY_CONTACT	2	O	
2-3	Q9007278001A	AD97-14492A	BATTERY_COVER_ASSY	1	O	BLACK
	Q9007278001B	AD97-14493A	BATTERY_COVER_ASSY	1	O	SILVER
	Q9007278001C	AD97-14494A	BATTERY_COVER_ASSY	1	O	RED
	Q9007278001D	AD97-14495A	BATTERY_COVER_ASSY	1	O	PINK
	Q9007278001E	AD97-14496A	BATTERY_COVER_ASSY	1	O	GREEN
	Q9007278001G	AD97-14498A	BATTERY_COVER_ASSY_S73	1	O	GREEN
	Q9007278001H	AD97-14499A	BATTERY_COVER_ASSY_S73	1	O	BLUE
	Q9007278001I	AD97-14500A	BATTERY_COVER_ASSY_S73	1	O	FUNKY PINK
	Q9007285601A	AD97-14672A	BATTERY_COVER_ASSY_D60/D70/D60VE/D75	1	O	BLACK
	Q9007285601B	AD97-14673A	BATTERY_COVER_ASSY_D60/D70/D60VE/D75	1	O	SILVER
2-4	Q7217394501A	AD81-04635A	BATTERY_COVER	1	X	
2-5	Q7011055701A	DNA	BATTERY_CONTACT_C	1	X	
2-6	Q7017055101A	DNA	BATTERY_PLATE	1	X	
2-7	Q7217368403A	AD61-03463A	BATTERY_EP_PLATE	1	X	
2-8	Q7004002501A	AD61-03137A	BATTERY_HINGE	1	O	
2-9	Q6107074501A	6107-001449	BATTERY_HINGE SPRING	1	O	
2-10	Q9002161801A	AD97-13555A	BARREL_BLACK	1	O	BLACK
	Q9002146501B	AD97-13454A	BARREL_SILVER	1	O	SILVER
2-11	Q2904004301A	AD63-01252A	IR CUT FILTER	1	O	
2-12	Q7309048601A	AD81-04785A	OLPF CUSHION_S630/D60	1	O	
	Q7309048602B	AD81-04786A	OLPF CUSHION_S730/D70	1	O	
2-13	Q9008099402A	AD92-00260A	CCD FPCB ASSY_S630/D60	1	O	
	Q9008116401A	AD92-00363A	CCD FPCB ASSY_S730/D70	1	O	
	Q9008116402A	AD92-00364A	CCD FPCB ASSY_S730VE/S750/D70VE/D75/S73	1	O	
2-14	Q7111002602A	AD61-03360A	CCD_PLATE_S630/D60	1	O	
	Q7101002901A	AD61-03334A	CCD_PLATE_S730/D70	1	O	
	Q7111002602A	AD61-03360A	CCD_PLATE_S730VE/S750/D70VE/D75/S73	1	O	
2-15	Q4102005401A	DNA	CCD_FPCB_S630/D60	1	X	
	Q4102015101A	DNA	CCD_FPCB_S730/D70	1	X	
2-16	Q0604007301A	0605-001131	CCD_S630/D60	1	O	
	Q0604006901A	0605-001128	CCD_S730/D70	1	O	
	Q0604007901A	0605-001134	CCD_S730VE/S750/D70VE/D75/S73	1	O	
2-17	Q0961900301A	6003-001630	SC_1435	4	X	
2-18	Q9004008901A	DNA	STROBO_ASSY	1	O	
2-19	Q7211087001A	DNA	REFLECTOR_HOLDER	1	X	
2-20	Q7309048001A	DNA	XE_TUBE_RUBBER	1	X	
2-21	Q7011056002A	AD67-00623A	TRIG_CONTACT	1	X	
2-22	Q7014004801A	AD67-00634A	GM_REFLECTOR_D3	1	X	
2-23	Q0611003101A	AD47-00012A	REF_XE_TUBE_D3	1	X	
2-24	Q7214090701A	AD67-00757A	FRESNEL LENS	1	X	
2-25	Q9008113701A	DNA	STROBO_FPCB_ASSY	1	O	
2-26	Q4102014801A	DNA	STROBO_FPCB	1	X	
2-27	Q2401008501A	DNA	MAIN_CONDENCER	1	O	
2-28	Q0408001101A	DNA	AF_LED_LAMP	1	O	
2-29	Q6003027501A	6003-001666	SC_1435	1	X	
2-30	Q6003027501A	6003-001666	SC_1435	1	X	
2-31	Q3003001201A	3003-001123	MIC	1	O	
2-32	Q7011058901A	AD61-03155A	DC_USB_PLATE	1	O	
2-33	Q7409295901A	DNA	DC_USB_SHIELD_FORM	1	X	

2- 34	Q7409261901A	DNA	TOP_PLATE_SHIELD_FORM	1	X	
	Q9008116801A	AD92- 00367A	MAIN_PCB_S630/D60	1	O	
2- 35	Q9008113301A	AD92- 00333A	MAIN_PCB_S730/D70	1	O	
	Q9008116802A	AD92- 00368A	MAIN_PCB_S630VE/D60VE	1	O	
	Q9008113302A	AD92- 00334A	MAIN_PCB_S730VE/S750/D75/D70VE/S73	1	O	
	Q7011061701A	AD81- 02817A	LCD_FRAME_S630	1	O	
2- 36	Q7011059001A	AD61- 03156A	LCD_FRAME_S730	1	O	
	Q9001130001A	AD97- 13896A	LCD_FRAME_SEC_S630VE/S730VE/D70VE/D60VE/	1	O	
2- 37	Q9761174007	DNA	SC_1740	5	X	
	Q0704014101A	AD81- 00217A	LCD_S630/D60	1	O	
2- 38	Q0704013601A	AD07- 00069A	LCD_S730/D70	1	O	
	Q0704014501A	AD07- 00076A	LCD_S630VE/S730VE/D60VE/D70VE/S750/D75/S7	1	O	
2- 39	Q7012094701A	AD81- 02888A	FRONT_DECORING_BLACK	1	O	
	Q7012087203A	AD64- 01754A	FRONT_DECORING_SILVER	1	O	
2- 40	Q9004089301A	DNA	REFLECTOR_ASSY	1	O	
3 BARREL ASSEMBLY						
3- 1	Q7012083901B	AD61- 03232A	AF CLIP	1	O	
3- 2	Q9002138701A	AD97- 13414A	3rd LENS ASS'Y	1	O	
3- 3	Q7012084602A	AD61- 03234A	AF GUIDE HOLDER	1	O	
3- 4	Q7411119702A	AD66- 00526A	AF GUIDE BAR- A	1	O	
3- 5	Q7411119801A	AD66- 00527A	AF GUIDE BAR- B	1	O	
3- 6	Q9002137701A	AD97- 13406A	AF MOTOR ASS'Y	1	O	
3- 7	Q7012085702A	AD61- 03235A	AF CLIP HOLDER	1	O	
3- 8	Q7212187405A	AD81- 03650A	LENS BASE	1	O	
3- 9	Q3107002401A	AD31- 00067A	ZOOM MOTOR	1	O	
3- 10	Q7212187803A	AD66- 00498A	ZOOM MOTOR GEAR	1	O	
3- 11	Q9611142007A	DNA	SCREW	1	X	
3- 12	Q0608001001A	0604- 001374	PHOTO INTERRUPTER	1	O	
3- 13	Q4101033601A	AD41- 00956A	ZOOM MOTOR PCB	1	O	
3- 14	Q0961900101A	6003- 001629	SCREW	1	X	
3- 15	Q7212187901A	AD66- 00499A	ZOOM GEAR- A	1	O	
3- 16	Q7212188001A	AD66- 00500A	ZOOM GEAR- B	1	O	
3- 17	Q7212188101A	AD66- 00501A	ZOOM GEAR- C	1	O	
3- 18	Q7212188201A	AD66- 00502A	ZOOM GEAR- D	1	O	
3- 19	Q7212187702A	AD63- 01513A	ZOOM COVER	1	O	
3- 20	Q6003000201A	6003- 001633	SCREW	3	X	
3- 21	Q0608001001A	0604- 001374	PHOTO INTERRUPTER	1	O	
3- 22	Q0608000701A	0604- 001373	PHOTO REFLECTOR	1	O	
3- 23	Q4101035001A	AD41- 00959A	MAIN F PCB	1	O	
3- 24	Q0961900301A	6003- 001630	SCREW	3	X	
3- 25	Q6003000201A	6003- 001633	SCREW	1	X	
3- 26	Q0994913101A	6003- 001631	SCREW	1	X	
3- 27	Q7012094401A	AD64- 01764A	SUS CAM DECORING_BLACK	1	O	
	Q7012086105A	AD64- 01749A	SUS CAM DECORING_SILVER	1	O	
3- 28	Q0961900101A	6003- 001629	SCREW	1	X	
3- 29	Q7411119604A	AD81- 05340A	2nd MOVE PIN	3	O	
3- 30	Q9002139001A	AD97- 13415A	2nd LENS ASSY	1	O	
3- 31	Q9005018002A	AD97- 13734A	SHUTTER ASSY	1	O	
3- 32	Q7012083802A	AD61- 03231A	F- PCB GUIDE	1	O	
3- 33	Q7411120101A	AD66- 00528A	OCB PIN	3	O	
3- 34	Q7212201601A	AD67- 00699A	CAM BARREL_BLACK	1	O	
	Q7212191102A	AD67- 00670A	CAM BARREL_SILVER	1	O	
3- 35	Q7212187001A	AD81- 03649A	GUIDE PLATE	1	O	
3- 36	Q7212187302A	AD67- 00658A	OUTER GUIDE BARREL	1	O	
3- 37	Q7212187202A	AD67- 00657A	OUTER CAM BARREL	1	O	
3- 38	Q9002161201A	AD97- 13550A	1st LENS ASSY_BLACK	1	O	
	Q9002147001A	AD97- 13459A	1st LENS ASSY_SILVER	1	O	
3- 39	Q7411119504A	AD66- 00524A	1st MOVE PIN	3	O	
3- 40	Q9008095201A	AD92- 00248A	MAIN FPCB ASSY	1	O	
3- 41	Q9008086201A	AD92- 00215A	ZOOM MOTOR F PCB ASSY	1	O	
3- 42	Q9002146601A	AD97- 13455A	LENS BASE ASSY	1	O	
4 BARREL ASSEMBLY						
4- 1	Q7212191201A	AD64- 01836A	FRONT PANEL	1	O	
4- 2	Q6107064103A	6107- 001416	BARRIER CLOSE SPRING	2	O	
4- 3	Q7212187601A	AD63- 01512A	BARRIER- A	2	O	
4- 4	Q7012084201A	AD61- 03233A	BARRIER BASE	1	O	

4-5	Q9002139601A	AD97-13418A	BARRIER LEVER ASS'Y	1	O	
4-6	Q6107064202A	AD81-07593A	BARRIER OPEN SPRING	1	O	
4-7	Q6003047001A	DNA	BARRIER SCREW	2	X	
4-8	Q9002146701A	AD97-13456A	BARRIER ASSY	1	O	
5. FRONT COVER ASSEMBLY						
5-1	Q7217395801A	DNA	FRONT_COVER_S630	1	X	
	Q7217393601A	DNA	FRONT_COVER_S730	1	X	
	Q7217404001A	DNA	FRONT_COVER_D60	1	X	
	Q7217403901A	DNA	FRONT_COVER_D60	1	X	
5-2	Q7117017401A	DNA	FRONT_DECO_S630/S730	1	X	
	Q7104002601A	DNA	FRONT_DECO_D60/D70	1	X	
5-3	Q7217372502A	AD64-01850A	AF_LED_WINDOW	1	X	
5-4	Q7217395701A	AD64-01908A	GRIP_DECO	1	X	
5-5	Q7409261801A	DNA	RELEASE_DECO_TAPE	1	X	
5-6	Q7217396701A	DNA	RELEASE_DECO	1	X	
5-7	Q6107070901A	AD81-07604A	RELEASE_SPRING	1	X	
5-8	Q7217395201A	AD64-01906A	RELEASE_BUTTON	1	X	
5-9	Q7409111601A	DNA	RELEASE_WASHER	1	X	
5-10	Q7211059101A	AD61-03371A	TRIPOD_CONNECTOR	1	O	
5-11	Q6003001602A	DNA	SC_1745	2	X	
5-12	Q7017052401A	AD61-03292A	LOGO_PLATE	1	X	
5-13	Q9007279501A	AD97-14551A	FRONT_COVER_SUB_ASSY_S630	1	O	BLACK
	Q9007279501B	AD97-14552A	FRONT_COVER_SUB_ASSY_S630	1	O	SILVER
	Q9007279501E	AD97-14555A	FRONT_COVER_SUB_ASSY_S630	1	O	RED
	Q9007279501F	AD97-14556A	FRONT_COVER_SUB_ASSY_S630	1	O	PINK
	Q9007279501G	AD97-14557A	FRONT_COVER_SUB_ASSY_S630	1	O	GREEN
	Q9007279501C	AD97-14553A	FRONT_COVER_SUB_ASSY_KENOX_S630	1	O	BLACK
	Q9007279501D	AD97-14554A	FRONT_COVER_SUB_ASSY_KENOX_S630	1	O	SILVER
	Q9007279001A	AD97-14516A	FRONT_COVER_SUB_ASSY_S730	1	O	BLACK
	Q9007279001B	AD97-14517A	FRONT_COVER_SUB_ASSY_S730	1	O	SILVER
	Q9007279001C	AD97-14518A	FRONT_COVER_SUB_ASSY_KENOX_S730	1	O	BLACK
	Q9007279001D	AD97-14519A	FRONT_COVER_SUB_ASSY_KENOX_S730	1	O	SILVER
	Q9007279001E	AD97-14520A	FRONT_COVER_SUB_ASSY_S730	1	O	RED
	Q9007279001F	AD97-14521A	FRONT_COVER_SUB_ASSY_S730	1	O	PINK
	Q9007285501A	AD97-14668A	FRONT_COVER_SUB_ASSY_D70	1	O	BLACK
	Q9007285501B	AD97-14669A	FRONT_COVER_SUB_ASSY_D70	1	O	SILVER
	Q9007285501C	AD97-14670A	FRONT_COVER_SUB_ASSY_KENOX_D70	1	O	BLACK
	Q9007285501D	AD97-14671A	FRONT_COVER_SUB_ASSY_KENOX_D70	1	O	SILVER
	Q9007285901A	AD97-14678A	FRONT_COVER_SUB_ASSY_D60	1	O	BLACK
	Q9007285901B	AD97-14679A	FRONT_COVER_SUB_ASSY_D60	1	O	SILVER
	Q9007285901C	AD97-14680A	FRONT_COVER_SUB_ASSY_KENOX_D60	1	O	BLACK
	Q9007285901D	AD97-14681A	FRONT_COVER_SUB_ASSY_KENOX_D60	1	O	SILVER
	Q9007295901A	AD97-14815A	FRONT_COVER_SUB_ASSY_S750	1	O	SILVER
	Q9007295901B	AD97-14816A	FRONT_COVER_SUB_ASSY_S750	1	O	BLACK
	Q9007295901C	AD97-14817A	FRONT_COVER_SUB_ASSY_S750	1	O	RED
	Q9007295901D	AD97-14818A	FRONT_COVER_SUB_ASSY_S750	1	O	PINK
	Q9007296101A	AD97-14819A	FRONT_COVER_SUB_ASSY_D75	1	O	SILVER
	Q9007296201A	AD97-14821A	FRONT_COVER_SUB_ASSY_D75	1	O	BlACK
	Q9007279501K	AD97-14561A	FRONT_COVER_ASSY_S73	1	O	SILVER
	Q9007279501l	AD97-14562A	FRONT_COVER_ASSY_S73	1	O	GREEN
	Q9007279501M	AD97-14563A	FRONT_COVER_ASSY_S73	1	O	BLUE
	Q9007279501N	AD97-14564A	FRONT_COVER_ASSY_S73	1	O	FUNKY PINK
	Q9007279501O	AD97-14565A	FRONT_COVER_ASSY_S73	1	O	BLACK
	Q9007279501P	AD97-14566A	FRONT_COVER_ASSY_S73	1	O	PINK
	Q9007279501Q	AD97-14567A	FRONT_COVER_ASSY_S73	1	O	RED
6. MIDDLE COVER ASSEMBLY						
6-1	Q7217393901A	AD63-01610A	MIDDLE_COVER	1	O	BLACK
	Q7217393901B	AD63-01611A	MIDDLE_COVER	1	O	SILVER/RED
	Q7217393901C	AD63-01612A	MIDDLE_COVER	1	O	PINK/GREEN/BLUE
6-2	Q7217395001A	AD64-01903A	POWER_BUTTON	1	O	BLACK
	Q7217395001B	AD64-01904A	POWER_BUTTON	1	O	SILVER/RED
	Q7217395001C	AD64-01905A	POWER_BUTTON	1	O	PINK/GREEN
6-3	Q7017039003A	AD61-03284A	MODE_CLICK_SPRING	1	O	
6-4	Q7217394701A	AD64-01897A	MODE_DIAL	1	O	BLACK
	Q7217394702B	AD64-01899A	MODE_DIAL	1	O	SILVER/RED
	Q7217394701C	AD64-01898A	MODE_DIAL	1	O	PINK/GREEN

6-5	Q9007272001A	AD97-14371A	MODE_CONTACT_ASSY_SL73	1	O	
6-6	Q9761173007A	DNA	SC_1730	1	X	
6-7	Q9008113401A	DNA	MODE_FPCB_ASSY	1	X	
6-8	Q7011059101A	DNA	TOP_KEY_PLATE	1	X	
6-9	Q0961900301A	6003-001630	SC_1430	3	X	
6-10	Q7217395101A	AD61-03470A	STRAP_INNER_HOLDER	1	O	
6-11	Q3001001302A	AD81-00527A	SPEAKER	1	O	
6-12	Q9007278201A	AD97-14502A	TOP_KEY_ASSY	1	O	

7. BACK COVER ASSMEBLY

7-1	Q7217397201A	DNA	BACK_COVER_S630/D60	1	X	
	Q7217393701A	DNA	BACK_COVER_S730/D70	1	X	
7-2	Q7409275201A	AD63-02201A	LCD_SPONGE_A	2	X	
7-3	Q7409275302A	AD63-02202A	LCD_SPONGE_B	2	X	
7-4	Q7211087801A	DNA	ZOOM_LEVER	1	X	
7-5	Q7217394901A	AD64-01900A	NAVI_KEY	1	X	
7-6	Q7217394601A	AD64-01893A	FUNCTION_BUTTON	1	x	
7-7	Q7304000301A	AD61-03527A	RUBBER_KEY_PLATE	1	O	
7-8	Q9007279401A	AD97-14542A	BACK_COVER_ASSY_S630/D60/S630VE/D60VE	1	O	BLACK
	Q9007279401B	AD97-14543A	BACK_COVER_ASSY_S630/D60/S630VE/D60VE	1	O	SILVER
	Q9007279401C	AD97-14544A	BACK_COVER_ASSY_S630/S630VE	1	O	RED
	Q9007279401D	AD97-14545A	BACK_COVER_ASSY_S630/S630VE	1	O	PINK
	Q9007279401E	AD97-14546A	BACK_COVER_ASSY_S630/S630VE	1	O	GREEN
	Q9007277901A	AD97-14488A	BACK_COVER_ASSY_S730/S750/D70/D75/S73	1	O	BLACK
	Q9007277901B	AD97-14489A	BACK_COVER_ASSY_S730/S750/D70/D75/S73	1	O	SILVER
	Q9007277901C	AD97-14490A	BACK_COVER_ASSY_S730/S750/S730VE/S73	1	O	RED
	Q9007277901D	AD97-14491A	BACK_COVER_ASSY_S730/S750/S730VE/S73	1	O	PINK
	Q9007279401I	AD97-14550A	BACK_COVER_ASS_S73	1	O	FUNKY PINK
	Q9007279401H	AD97-14549A	BACK_COVER_ASS_S73			BLUE
	Q9007279401G	AD97-14548A	BACK_COVER_ASS_S73			GREEN

8 PACKING ITEM

|						
8-1	QP960210101A	DNA	PE BAG (FOR CAMERA)	1	X	
8-2	Q6909018202A	6902-000921	PE BAG (FOR ACCESSORY)	1	O	
8-3	Q6901258701A	AD81-02533A	PULP_MOLD_Digimax_EXP	1	O	
	Q6901258401A	AD81-02532A	PULP_MOLD_KENOX_KOR	1	O	
8-4	Q7409271401A	AD63-02596A	STRAP_KENOX_S730_KOR/EXP	1	O	
8-5	Q4609017401A	AD81-01039A	DRIVER + DIGIMAX MASTER_S630/S730	1	O	
	Q4609018101A	AD46-00137A	DRIVER_DIGIMAX MASTER_D70_D60	1	O	
8-6	Q6909019801A	DNA	AIR BAG_Samsung_S730(FOR BODY)	1	X	
8-6	Q6904031201A	AD81-02621A	POUCH_KOR_EXP_BLACK	1	O	
	Q6904031301A	AD81-02622A	POUCH_KOR_EXP_SILVER	1	O	
8-7	Q6806358201A	DNA	U_MANUAL_KENOX_S730_S630_KOR	1	X	
	Q6806363901A	DNA	U_MANUAL_Samsung_S730_ENG	1	X	
	Q6806364001A	DNA	U_MANUAL_Samsung_S730_GER	1	X	
	Q6806364101A	DNA	U_MANUAL_Samsung_S730_FRA	1	X	
	Q6806364201A	DNA	U_MANUAL_Samsung_S730_SPA	1	X	
	Q6806364301A	DNA	U_MANUAL_Samsung_S730_ITA	1	X	
	Q6806364401A	DNA	U_MANUAL_Samsung_S730_CHI(T)	1	X	
	Q6806364501A	DNA	U_MANUAL_Samsung_S730_DUT	1	X	
	Q6806364601A	DNA	U_MANUAL_Samsung_S730_POR	1	X	
	Q6806364701A	DNA	U_MANUAL_Samsung_S730_SWE	1	X	
	Q6806364801A	DNA	U_MANUAL_Samsung_S730_DEN	1	X	
	Q6806364901A	DNA	U_MANUAL_Samsung_S730_FIN	1	X	
	Q6806365001A	DNA	U_MANUAL_Samsung_S730_RUS	1	X	
	Q6806365101A	AD81-02167A	U_MANUAL_Samsung_S730_CHI(S)	1	O	
	Q6806365201A	DNA	U_MANUAL_Samsung_S730_TK	1	X	
	Q6806365301A	DNA	U_MANUAL_Samsung_S730_IND	1	X	
	Q6806365401A	DNA	U_MANUAL_Samsung_S730_ARA	1	X	
	Q6806365501A	DNA	U_MANUAL_Samsung_S730_THA	1	X	
	Q6806378401A	DNA	U_MANUAL_KENOX_D70_D60_KOR	1	X	
	Q6806378601A	DNA	U_MANUAL_Samsung_D70_D60_ENG	1	X	
	Q6806378701A	DNA	U_MANUAL_Samsung_D70_D60_GER	1	X	
	Q6806378801A	DNA	U_MANUAL_Samsung_D70_D60_FRA	1	X	
	Q6806378901A	DNA	U_MANUAL_Samsung_D70_D60_SPA	1	X	
	Q6806379001A	DNA	U_MANUAL_Samsung_D70_D60_ITA	1	X	
	Q6806379101A	DNA	U_MANUAL_Samsung_D70_D60_CHI_T	1	X	
	Q6806379201A	DNA	U_MANUAL_Samsung_D70_D60_DUT	1	X	

	Q6806379301A	DNA	U_MANUAL_Samsung_D70_D60_POR	1	X
	Q6806379401A	DNA	U_MANUAL_Samsung_D70_D60_SWE	1	X
	Q6806379501A	DNA	U_MANUAL_Samsung_D70_D60_DEN	1	X
	Q6806379601A	DNA	U_MANUAL_Samsung_D70_D60_FIN	1	X
	Q6806379701A	DNA	U_MANUAL_Samsung_D70_D60_RUS	1	X
	Q6806379801A	DNA	U_MANUAL_Samsung_D70_D60_CHI_S	1	X
	Q6806379901A	DNA	U_MANUAL_Samsung_D70_D60_TK	1	X
	Q6806380001A	DNA	U_MANUAL_Samsung_D70_D60_IND	1	X
	Q6806380101A	DNA	U_MANUAL_Samsung_D70_D60_ARA	1	X
	Q6806380201A	DNA	U_MANUAL_Samsung_D70_D60_THA	1	X
	Q6806377701A	DNA	QS_MANUAL_KENOX_S730_S630	1	X
	Q6806365601A	AD81-02168A	QS/MANUAL_Samsung_S730_E/G/F/SP/I/DU/P_7	1	O
	Q6806365701A	AD68-01739A	QS/MANUAL_Samsung_S730_E/G/FI/SW/DA/RU_6	1	O
	Q6806365801A	DNA	QS/MANUAL_Samsung_S730_E/TU/CH/IN/AR_TH_(	1	X
8-8	Q6806377801A	DNA	QS_MANUAL_Samsung_S730_EN_SP_FR	1	X
	Q6806378501A	AD81-02182A	QS_MANUAL_KENOX_D70_D60	1	O
	Q6806380301A	DNA	QS_M_D70_D60_E_G_F_SP_I_DU_P_7	1	X
	Q6806380401A	DNA	QS_M_D70_D60_E_G_FI_SW_DA_RU_6	1	X
	Q6806380501A	DNA	QS_M_D70_D60_E_TU_CH_IN_AR_TH_6	1	X
	Q6806380601A	DNA	QS_M_D70_D60_EN_SP_FR_3	1	X
	QP955150101F	6801-001642	WARRANTY CARD_KOREA	1	O
	Q6807012301A	DNA	WARRANTY CARD_2 YERARS	1	X
	Q6807010903C	6801-001650	WARRANTY CARD_RUS(3 YEARS)	1	O
8-9	Q6807011301B	AD81-02236A	WARRANTY CARD_TSOE(CHINA)	1	O
	Q6807009502E	DNA	CARD_PRODUCT(Mexico)	1	X
	Q6807012101A	DNA	WARRANTY CARD_IRAN	1	X
	Q6807012401A	DNA	WARRANTY CARD_TURKEY	1	X
	Q6901260701A	AD81-02534A	G/T BOX_KENOX_S630_Ni-MH(SNB-2512)_Silver	1	O
	Q6901260801A	AD81-02535A	G/T BOX_S630_EXP_AUS_ALKALINE_Silver	1	O
	Q6901260901A	AD81-02536A	G/T BOX_S630_USA_CAN_ALKALINE_Silver	1	O
8-10	Q6901256301A	AD81-02526A	G/T BOX_KENOX_S730_Ni-MH(SNB-2512)_Silver	1	O
	Q6901256401A	AD81-02527A	G/T BOX_S730_EXP_AUS_ALKALINE_Silver	1	O
	Q6901256501A	AD81-02528A	G/T BOX_S730_USA_CAN_ALKALINE_Silver	1	O
	Q6901262701A	DNA	GT_D60_EXP_AUS_ALKALINE_Silver	1	X
	Q6901262801A	DNA	GT_D60_USA_CAN_ALKALINE_Silver	1	X
8-11	Q4301001801A	AD81-00867A	ALKALINE (1.5V, AA) 2EA - DURACEL ULTRA	1	O
8-12	Q4302000901A	AD81-00879A	BATTERY_SNB-2512(AA Type)	1	O
8-13	Q4309002301A	AD81-00898A	Ni-MH CHARGER(SBC-N2)	1	O
8-14	Q6806368001A	DNA	MANUAL_SNB-2512B KIT_KOR	1	X
	Q6806378101A	DNA	MANUAL_SNB-2512BKIT_CHI_S	1	X
8-15	Q3801003001A	AD81-00695A	AC CODE CABLE_KOR-D1	1	O
	Q3801003701A	AD81-00700A	AC CODE CABLE_TSOE-D1	1	O
8-16	Q3802006601A	AD81-00748A	USB CABLE_S730	1	O
8-17	Q3802006801A	AD81-00750A	AV CABLE_S630/D60	1	O
	Q3802006701A	AD81-00749A	AV CABLE_S730/D70	1	O
	Q7409276601A	DNA	MIC LABEL_KENOX S630(MADE IN CHINA)	1	X
	Q7409266001A	DNA	MIC LABEL_KENOX S730(MADE IN CHINA)	1	X
	Q7409276901A	DNA	FCC LABEL_Samsung_S630_EXP (MADE IN CHINA	1	X
	Q7409277001A	DNA	FCC LABEL_Samsung_S630_EXP (MADE BY SAMS	1	X
	Q7409266201A	DNA	FCC LABEL_Samsung_S730_EXP (MADE IN KOREA	1	X
8-18	Q7409266301A	DNA	FCC LABEL_Samsung_S730_EXP (MADE IN CHINA	1	X
	Q7409266401A	DNA	FCC LABEL_Samsung_S730_EXP (MADE BY SAMS	1	X
	Q7409278701A	DNA	MIC LABEL KENOX D70 (MADE IN CHINA)	1	X
	Q7409279101A	DNA	MIC LABEL KENOX D60 (MADE IN CHINA)	1	X
	Q7409278801A	DNA	FCC LABEL SAMSUNG D70 (MADE IN CHINA)	1	X
	Q7409279201A	DNA	FCC LABEL SAMSUNG D60 (MADE IN CHINA)	1	X
	Q7409278901A	DNA	FCC LABEL SAMSUNG D70 (MADE BY SAMSUNG)	1	X
	Q7409279301A	DNA	FCC LABEL SAMSUNG D60 (MADE BY SAMSUNG)	1	X

Ⅲ. ADJUSTMENT

1. FIRMWARE

1) RESTING CAMERA

1. Turn on the Camera

2. Press and hold the Up button and Shutter button and then press the Power off.
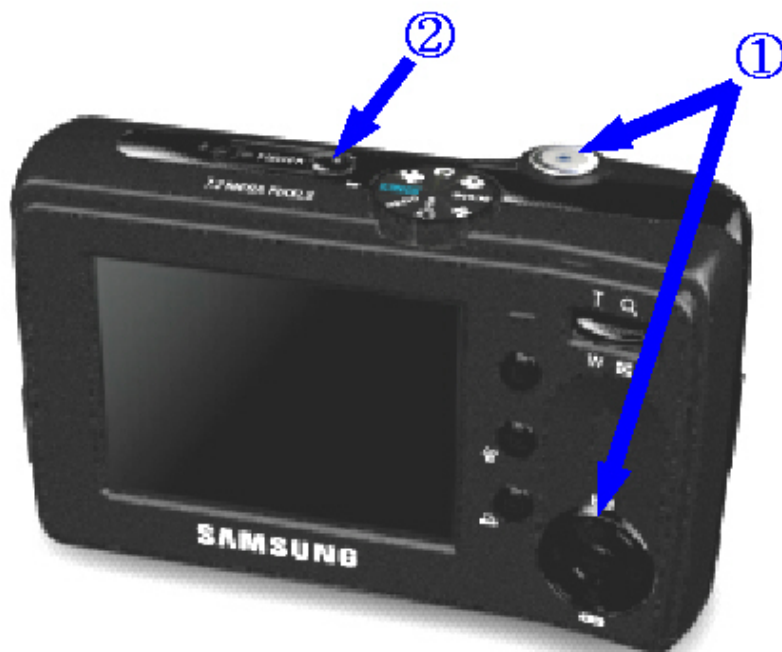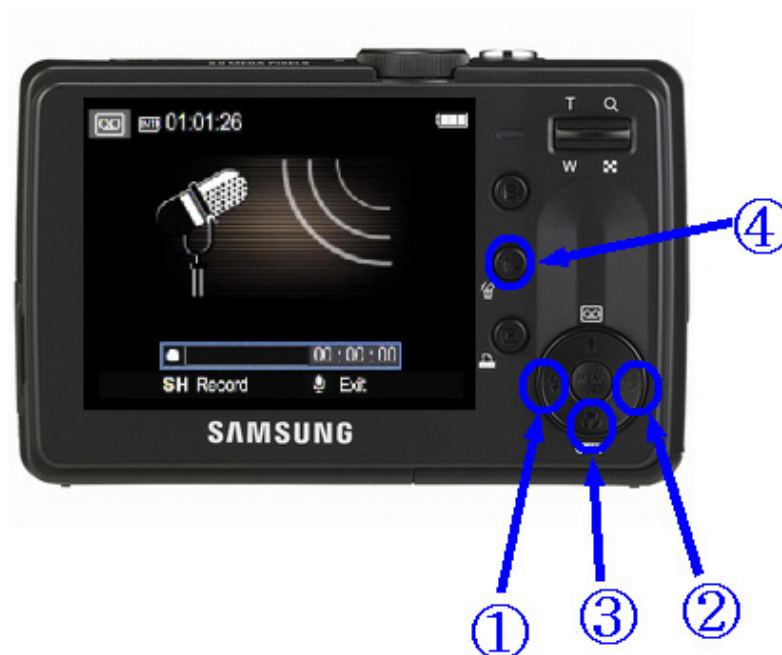

3. Turn on the camera and check whether the camera is reset or not.

2) CHECKING VERSION

1. Remove the memory card from the camera.

2. Turn on the camera.

3. Press the Up button twice to select the Voice Recording mode.

4. Press the 5 function button as following order. (Left button → Right button → UpÄbutton → +/- button)

5. Check the Firmware and turn off the camera.

3) UPGRADING

1. Insert the SD card that has the firmware.

* Updating the firmware will delete all data in the SD card. Be sure to download all data to your PC before updating the firmware.
The firmware file name must be " STS373.elf " and use the AC adapter or fully charged battery.

2. Use the AC adapter or fully charged battery.

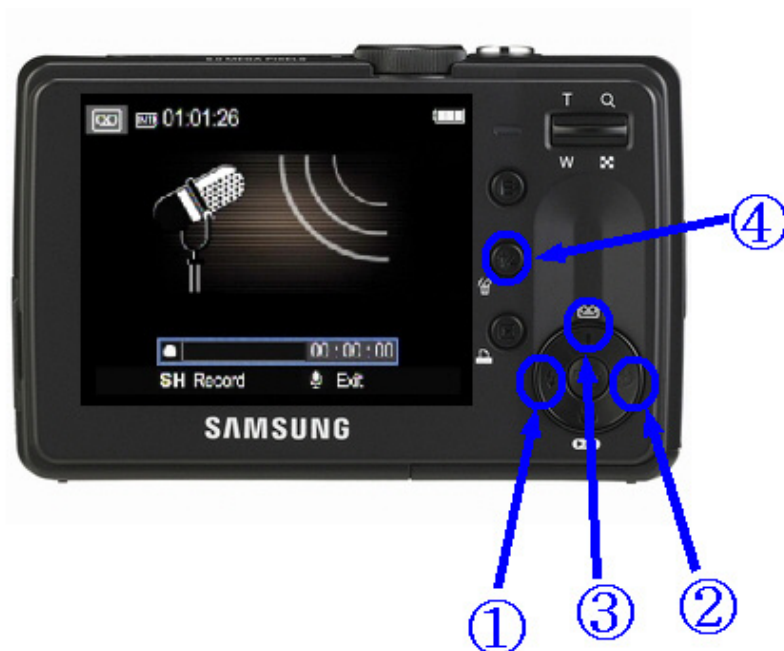To upgrade the Firmware, all of the battery level indicator on the LCD monitor must be displayed.

3. Turn on the camera.

4. Press the Up button twice to select the Voice Recording mode.

5. Press the 5 function button as following order. (Left button → Right button → Up button → +/- button)

6. 'UPGRADE (UP TYPE)' message will display and then the firmware will be upgraded.

7. After upgrading the firmware, the camera is turned off.

8. Turn on the camera and do the 'Reset' menu in the Setup menu.

4) FULL VERSION OF FIRMWARE

How to use the FULL firmware1

▷ **Camera Status** : When turning on the camera, the power consumption (Checking the POWER SUPPLY) is 200-300mA and the camera cant be operated.

▷ **Cause** : The data of 0 address in the FLASH MEMORY of the MAIN PCB is damaged.

▷ **Solution** : Recover the address by doing the FULL VERSION FIRMWARE shown below.

▷ **Additions** : After completing the upgrading of the FULL VERSION FIRMWARE, do the LENS SHADING and CCD DEFECT CELL adjustment.

1. Short the 3 point of the MAIN PCB as shown.
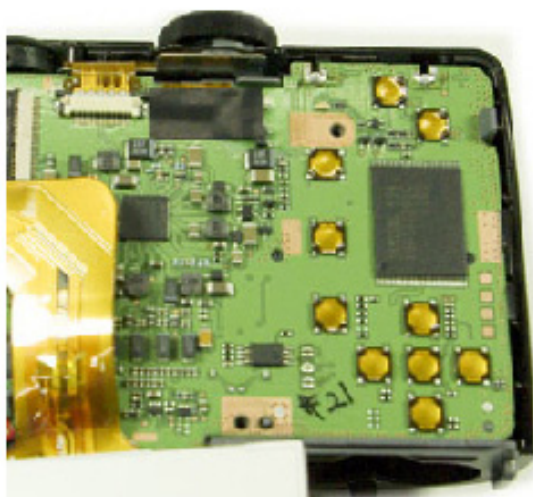
2. Assemble the camera correctly and insert the SD card that has the Full version of firmware.

3. Turn on the camera by using the Power Supply.
   To connect the camera and Power Supply, use the Battery Tool.

4. If the Current is up to 200mA and down to 0 on the POWER SUPPLY display, the upgrade is complete.

How to use the FULL firmware2

Depending on the camera status, do the full version upgrade.

▷ **Reference** :

- Delete all data in the memory card and upgrade with this firmware.

- When using the full version upgrade, back up the script file as the files will be deleted by the upgrade.

- If the full version upgrade is done by the following way, the script files are saved on the SD card. To upload the script files, do not remove the SD card and refer to instructions listed below.

- If there are LSCLUT0.BIN, DefectivePixel0.bin, DefectivePixel1.bin files on the SD card, the back up was complete.

1. Insert the SD card that has the Full version of firmware.

   * The firmware file name must be " STS373_full.elf "

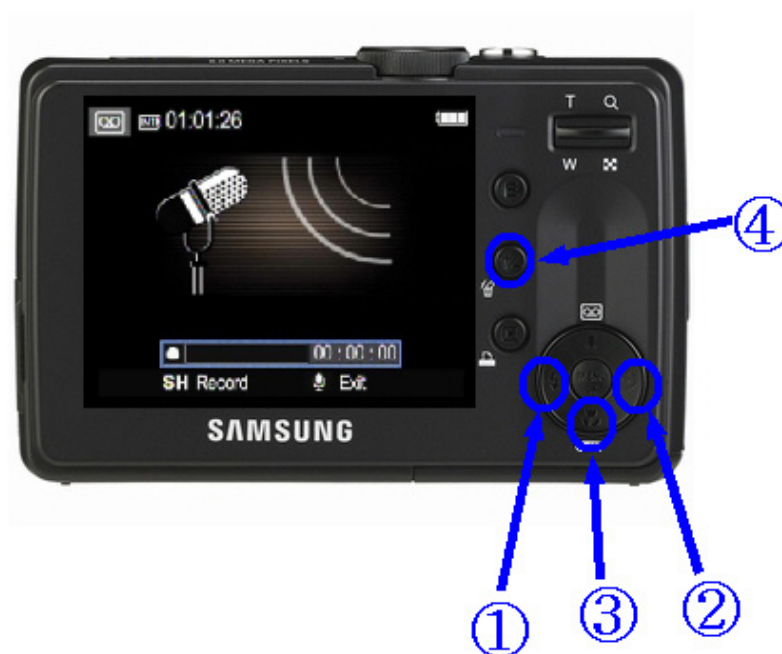2. Use the AC adaptor or fully charged battery.

   To upgrade the Firmware, all of the battery level indicator on the LCD monitor must be displayed.

3. Turn on the Camera.

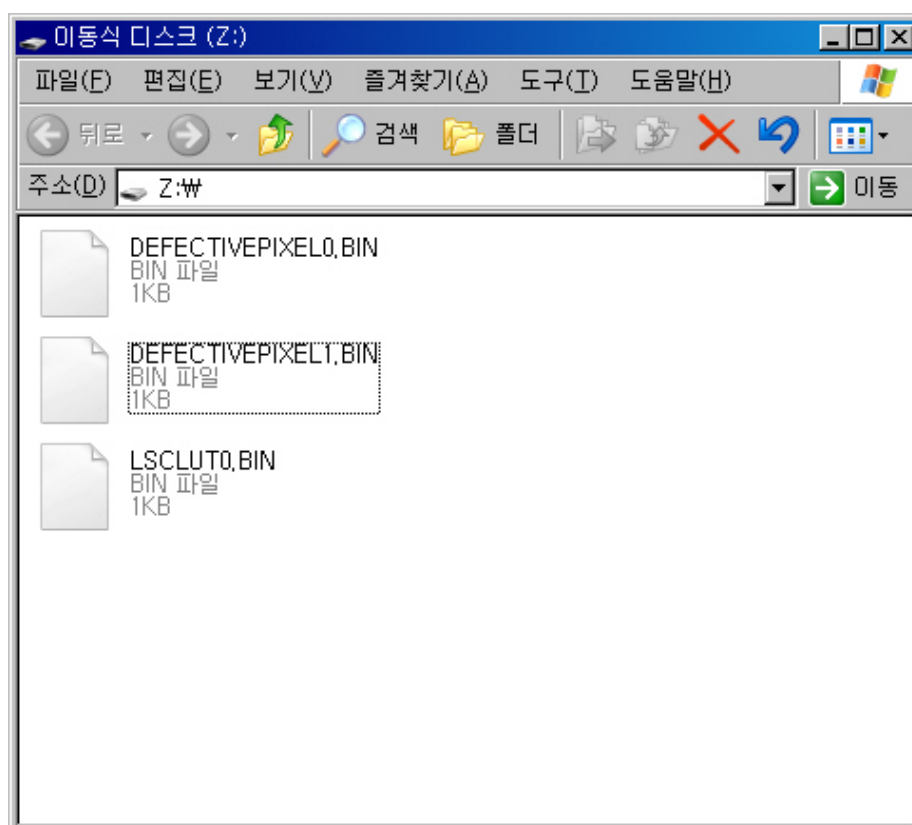4. Press the Up button twice to select the Voice Recording mode.

5. Press the 5 function button as following order. (Left button → Right button → Down button → +/- button)

6. 'UPGRADING!' message will display and then the firmware will be upgraded.

- After completing the upgrading,Äback upÄfiles will be made on the SD memory card.
  Backup file names areÄLSCLUT0.BIN, DefectivePixel0.bin and DefectivePixel1.bin .

7. After upgrading the Full version firmware, upload the script files.
   Turn on the camera and press the Up button twice to select the Voice Recording mode.
   Press the 5 function button as following order : Tele button → Wide button → Down button → OK button.

8. The following message will display and the upgrading is complete.

9. Turn off the camera.

2. ADJUSTMENT CAUTION

1) Basic Information of Adjustment

After changing the electronic parts of S730, the parts have to be adjusted in accordance withe the adjusted items.
The items listed on the table are have to be adjusted after changing.

1> To adjust the camera after changing the electronic parts, see the below table.

	MAIN PCB	POWER PCB	BARREL ASS' Y	CCD ASS' Y
FIRMWARE UPGRADE	●		●	
PUNT ADJ.	●		●	●
SHUTTER CLOSE TIME ADJ.	●		●	●
BACK LASH ADJ.	●		●	●
FLASH ADJ.	●	●		
BATTERY LEVEL ADJ.	●	●		
OB SETTING	●			●
BURNING TEST & CCD DEFECT CELL	●	●	●	●
EEPROM READ				
EEPROM WRITE				

2> Equipment

▶ Equipments
- AE TESTER : AE TESET can test up to LV 16.7.
- POWER SUPPLY : 3.3V / 2A

▶ Chart
- Focus Chart
- Gray Chart(31%..Reflection Paper)

3> Adjustment program file

To adjust all items, all kinds of code by items have to be inserted in program file and saved them to the SD card as TXT file type. The codes are listed below.

< Description of TXT file >

Use the Memo pad of Basic Windows program and save it as Ä"STS373ADJ.txt"

```
// PM Batch Test 8-process //


// adj control
adj_control check_process_id 65535
adj_control set_process_id 65534
adj_control save_e2prom 1 // save eeprom
adj_control save_data_file 1 // save csv...
adj_control save_process_pass 1
adj_control batch 1 // enable 8 adj...
adj_control osd_delay 0      // OSD Disable

adj_control signal 500// start signal
//adj_control signal 300// start signal
//adj_control signal 300// start signal


//=====================================#1. OB(63 OB ADJ SKIP)
delay 5
mode program
adj_ob preview_agc 96
adj_ob preview_target_rgb 0 0 0
adj_ob preview_luma_min_max 150 4000

adj_ob capture_agc 96
adj_ob capture_target_rgb 0 0 0
adj_ob capture_luma_min_max 150 4000
adj_ob run
delay 5

//adj_control signal 100// start signal
```

```
//====================================#2.LSC
//mode program
//adj_lens_shading repeat_num 1
adj_lens_shading ng_repeat 3
adj_lens_shading lut_load_percent 80
adj_lens_shading before_capture_skip 1
adj_lens_shading luma_min_max 75 120
adj_lens_shading run
delay 10
//adj_control signal 100


//====================================#3.Battery Level
adj_battery base 100 300

adj_battery half_1 175
adj_battery low_1 169
adj_battery empty_1 165
adj_battery lock_1 161
adj_battery start_1 165

adj_battery half_2 175
adj_battery low_2 168
adj_battery empty_2 164
adj_battery lock_2 157
adj_battery start_2 165
adj_battery run


//====================================#4.BackLash
mode program
adj_backlash adj_count 2
adj_backlash max_backlash 70
adj_backlash run


//====================================#5.Shutter Closing
mode program
ae evc 12
adj_sh_close max_count 20

adj_sh_close init_linedelay 13
adj_sh_close init_subdelay 0

adj_sh_close gain_skip1 0            //0:enable
adj_sh_close gain_skip2 0           //0:enable
adj_sh_close gain_setlvalue 208     // 208/16=13Lv
```

```
adj_sh_close gain_offset -5        //(5000K -> 3300K)
adj_sh_close gain_adjustrange1 15
adj_sh_close gain_adjustrange2 15
adj_sh_close run
delay 10
//adj_control signal 1500



//===================================#6.Strobe
Mode program
Ae metering 1
Ae iso 2
Ae evc 6
Ae preview_fnum 1
Ae preview_s_speed 058
Ae preview_gain 050
Ae lock
Zoom wide
Delay 20
adj_strobe_intensity param
adj_strobe_intensity stage PV2
adj_strobe_intensity flash_table_test 0
adj_strobe_intensity level_test_number 2
adj_strobe_intensity pre_table_index 14 0 0 0 0
adj_strobe_intensity Standard_Luma 200 310 400 620 725 1110
adj_strobe_intensity awb_gain 474 620 272 360
adj_strobe_intensity run
//Delay 20
//adj_control signal 4000
delay 5



====================================================// Punt
zoom close_to_open
mode program
coach idle
ae metering 0
ae iso 0
ae evc 6
ae preview_fnum 1
set wb auto
coach view
delay 25
adj_control save_e2prom 1
adj_control save_data_file 1
adj_punt zoomstep 0 7
```

```
adj_punt searching_min_short 80 80 80 80 90 90 50 50
adj_punt searching_max_short 160 160 160 160 165 170 170 170
adj_punt searching_min -7 31 23 21 27 29 18 32
adj_punt searching_max 245 248 240 238 244 246 235 230
adj_punt limit_min_short 85 85 85 85 95 95 55 55
adj_punt limit_max_short 155 155 155 155 160 165 165 165
adj_punt limit_min 13 51 43 41 47 49 38 52
adj_punt limit_max 225 228 220 218 224 226 215 210
adj_punt slop_min -100 -100 -90 -100 -130 -150 -170
adj_punt slop_max 60 80 100 120 140 160 180
adj_punt run

//adj_control signal 0
delay 5


// Current Consumption
mode program
delay 20
zoom wide
delay 30
zoom tele
delay 20
mode playback
delay 10
mode program
//set reset
poweroff zoom_close
```

```
//===============================#1. Burnin Test

adj_control check_process_id 65532
adj_control set_process_id 65528
adj_control save_e2prom 1
adj_control save_data_file 1
adj_control rePeat_CNT 20
adj_control override_tv_usb 1
adj_control do_check_process_id 1      //production check

adj_burnin delete_all
//adj_burnin format_keep
adj_burnin prog_mode
adj_burnin lcd_on
```

```
adj_burnin flash_cap
adj_burnin flash_off_cap
adj_burnin norm_cap
adj_burnin macro_cap

adj_burnin selftimer_cap
adj_burnin play_mode

adj_burnin prog_mode
adj_burnin avi_cap_5sec

adj_burnin easy_mode

adj_burnin aux_led_on
adj_burnin wait_2sec
adj_burnin aux_led_off

adj_burnin burnin_end


//===============================#2. CCD Defect Cell
//start adj_defective_pixel
//adj_control check_process_id 65535
//adj_control save_e2prom 1
//adj_control save_data_file 1


mode program
//ae metering multi
//ae iso 200
//ae ev 0
//ae iris 0
//awb wbal auto
//coach view
//delay 25

adj_defect integration
adj_defect ref_level_short 800
adj_defect ref_level_long 3500
adj_defect exp_time 6
adj_defect defect_max_num1 30000
adj_defect defect_max_num2 30000
//adj_defect run
//end adj_defect
//delay 10
//poweroff zoom_close
```

※ SD CARD SHOULD BE FORMATTED BEFORE USING.

2) OB SETTING

After changing the MAIN PCB, adjust the black color.

< How to adjust >

a...Download program and save it to SD memory card.

b...Insert the SD memory card that has the program file and turn on the camera.

c...Adjustment will be done automatically.

d...After completing the adjustment, the camera is turned off automatically.

< Description of TXT file >

When making or modifying the program, see the following program codes.
When modify the program, use the Memo Pad of Windows and save it as "STS373ADJ.txt"

```
// PM Batch Test 8 //


// adj control
adj_control check_process_id 65535
adj_control set_process_id 65534
adj_control save_e2prom 1 // save eeprom
adj_control save_data_file 1 // save csv...
adj_control save_process_pass 1
adj_control batch 1 // enable 8 adj...
adj_control osd_delay 0          // OSD Disable

adj_control signal 500// start signal
//adj_control signal 300// start signal
//adj_control signal 300// start signal
```

```
//====================================#1. OB
delay 5
mode program
adj_ob preview_agc 96
adj_ob preview_target_rgb 0 0 0
adj_ob preview_luma_min_max 150 4000

adj_ob capture_agc 96
adj_ob capture_target_rgb 0 0 0
adj_ob capture_luma_min_max 150 4000
adj_ob run
delay 5

//adj_control signal 100// start signal

poweroff zoom_close
```

3) LENS SHADING

The characteristic of Lens makes the outside of the image be dark.
This phenomenon is called "Lens Shading".
This adjustment is for compensating the brightness of the outside of the image.
After calculating the darkness, this adjustment will increase the brightness of the outside of the image up to 80%
of the center of the image.

[Standards for the Adjustment]

- Specification of the tools : Light source that can block the external light source

- Color temperature : 3200K±50

- Brightness : LV 8.2 ±0.1 (±0.05 recommended)

< How to adjust >

a...Prepare AE TESTER can be test up toLV8.2.

b...Download program file and save it to SD memory card.

c...Insert the SD memory card that has the program file and attach the camera to the Light box.

d...Attach the camera on the AE METER and set the LV as 8.2
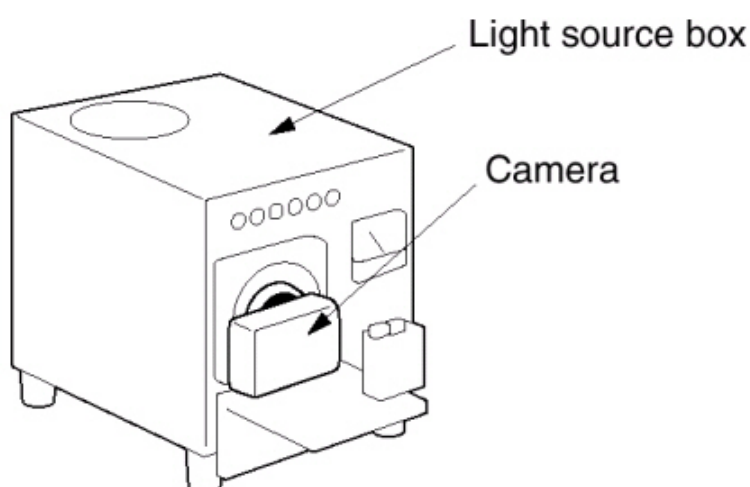
e...Turn on the camera.

f...Adjustment will be done automatically.

e...After completing the upgrade, the camera is turned off automatically.

< Description of TXT file >

When making or modifying the program, see the following program codes.
When modify the program, use the Memo Pad of Windows and save it as "STS373ADJ.txt"

```
// PM Batch Test 8 //


// adj control
adj_control check_process_id 65535
adj_control set_process_id 65534
adj_control save_e2prom 1 // save eeprom
adj_control save_data_file 1 // save csv...
adj_control save_process_pass 1
adj_control batch 1 // enable 8 adj...
adj_control osd_delay 0ÄÄÄÄÄ// OSD Disable

adj_control signal 500// start signal
//adj_control signal 300// start signal
//adj_control signal 300// start signal

//====================================#2.LSC
//mode program
//adj_lens_shading repeat_num 1
adj_lens_shading ng_repeat 3
adj_lens_shading lut_load_percent 80
adj_lens_shading before_capture_skip 1
adj_lens_shading luma_min_max 75 120
adj_lens_shading run
delay 10
//adj_control signal 100

poweroff zoom_close
```

4) B/T LEVEL ADJ

After changing the MAIN PCB, adjust WARNING LEVEL and LOCK LEVEL.

< How to adjust >

a...Prepare the POWER..SUPPLY.

b...Connect the camera to the POWER..SUPPLY.

c...Set the voltage to 2.71V.

d...Downloading the program file and save it to SD memory card.

e...Insert the SD memory card and turn on the camera.

f...The adjustment will be done automatically. There are no displays on the LCD.

g...After completing the upgrade, the camera is turned off automatically.

< Description of TXT file >

When making or modifying the program, see the following program codes.
When modify the program, use the Memo Pad of Windows and save it as"STS373ADJ.txt"

```
/ PM Batch Test 8 //


// adj control
adj_control check_process_id 65535
adj_control set_process_id 65534
adj_control save_e2prom 1 // save eeprom
adj_control save_data_file 1 // save csv...
adj_control save_process_pass 1
adj_control batch 1 // enable 8 adj...
adj_control osd_delay 0          // OSD Disable

adj_control signal 500// start signal
//adj_control signal 300// start signal
//adj_control signal 300// start signal
```

```
//====================================#3.Battery Level
adj_battery base 100 300

adj_battery half_1 175
adj_battery low_1 169
adj_battery empty_1 165
adj_battery lock_1 161
adj_battery start_1 165

adj_battery half_2 175
adj_battery low_2 168
adj_battery empty_2 164
adj_battery lock_2 157
adj_battery start_2 165
adj_battery run

poweroff zoom_close
```

5) BACK LASH ADJ

After changing the MAIN PCB, BARREL and CCD, adjust the BACK LASH.

< How to adjust >

a...Download the Program file and save it to SD memory card.

b...Insert the SD memory card that has program file and turn on the camera.

c...Adjustment will be done automatically.

d...After completing the upgrade, the camera is turned off automatically.

< Description of TXT file >

When making or modifying the program, see the following program codes.
When modify the program, use the Memo Pad of Windows and save it as"STS373ADJ.txt"

```
// PM Batch Test 8 //


// adj control
adj_control check_process_id 65535
adj_control set_process_id 65534
adj_control save_e2prom 1 // save eeprom
adj_control save_data_file 1 // save csv...
adj_control save_process_pass 1
adj_control batch 1 // enable 8 adj...
adj_control osd_delay 0          // OSD Disable

adj_control signal 500// start signal
//adj_control signal 300// start signal
//adj_control signal 300// start signal

//===================================#4.BackLash
mode program
adj_backlash adj_count 2
adj_backlash max_backlash 70
adj_backlash run

poweroff zoom_close
```

6) SHUTTER CLOSE TIME ADJ

After changing the MAIN PCB, BARREL and CCD, adjust the SHUTTER CLOSE TIME and CCD Gain.

[Standards for the Adjustment]

- Specification of the tools : Light source that can block the external light source

- Color temperature : 3200K ±50

- Brightness : LV 13 ±0.1 (±0.05 recommended)

< How to adjust >

a...Prepare AE TESTER that can be test up to LV 13.

b...Attach the camera to the AE TESTER.
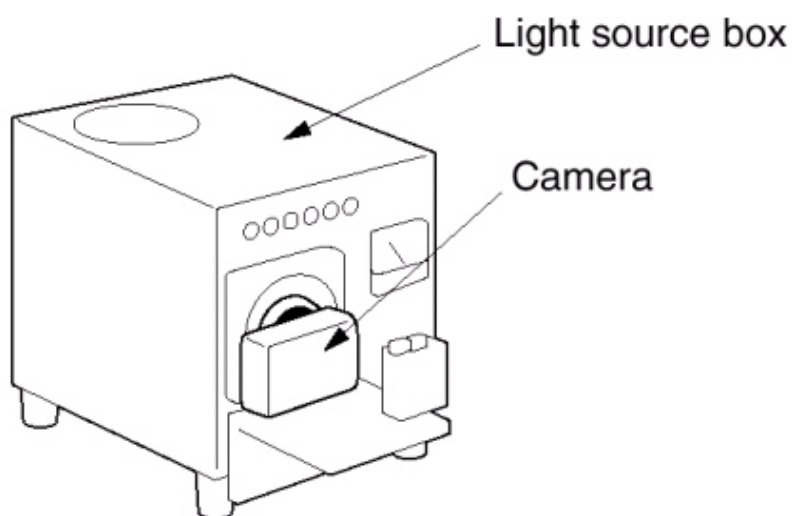
c...Set the LV to 13.

d...Download the program and save it to SD memory card.

e...Insert the SD memory card that has the program file and turn on the camera.

f... The adjustment will be done automatically.

g... After completing the upgrade, the camera is turned off automatically.

< Description of TXT file >

When making or modifying the program, see the following program codes.
When modify the program, use the Memo Pad of Windows and save it as"STS373ADJ.txt"

```
// PM Batch Test 8 //


// adj control
adj_control check_process_id 65535
adj_control set_process_id 65534
adj_control save_e2prom 1 // save eeprom
adj_control save_data_file 1 // save csv...
adj_control save_process_pass 1
adj_control batch 1 // enable 8 adj...
adj_control osd_delay 0          // OSD Disable

adj_control signal 500// start signal
//adj_control signal 300// start signal
//adj_control signal 300// start signal


//====================================#5.Shutter Closing
mode program
ae evc 12
adj_sh_close max_count 20

adj_sh_close init_linedelay 13
adj_sh_close init_subdelay 0

adj_sh_close gain_skip1 0            //0:enable
adj_sh_close gain_skip2 0         //0:enable
adj_sh_close gain_setlvalue 208       // 208/16=13Lv
adj_sh_close gain_offset -5       //    (5000K -> 3300K)
adj_sh_close gain_adjustrange1 15
adj_sh_close gain_adjustrange2 15
adj_sh_close run
delay 10
//adj_control signal 1500

poweroff zoom_close
```

7) FLASH ADJ

After changing the MAIN PCB and SUB PCB, adjust the FLASH.

< How to adjust >

a...Arrange a 18% reflect chart in a darkroom.

b...Arrange a camera in a darkroom. (Use TRIPOD)

c...The distance between the reflect chart and the camera should be 80cm.

d...Download the program and save it to SD memory card.

e...Insert the SD memory card that has the program file and turn on the camera.

f...The adjustment will be done automatically.

g...After completing the upgrade, the camera is turned off automatically.

< Description of TXT file >

When making or modifying the program, see the following program codes.
When modify the program, use the Memo Pad of Windows and save it as"STS373ADJ.txt"

```
// PM Batch Test 8 //


// adj control
adj_control check_process_id 65535
adj_control set_process_id 65534
adj_control save_e2prom 1 // save eeprom
adj_control save_data_file 1 // save csv...
adj_control save_process_pass 1
adj_control batch 1 // enable 8 adj...
adj_control osd_delay 0          // OSD Disable

adj_control signal 500// start signal
//adj_control signal 300// start signal
//adj_control signal 300// start signal

//====================================#6.Strobe
Mode program
Ae metering 1
Ae iso 2
Ae evc 6
Ae preview_fnum 1
Ae preview_s_speed 058
Ae preview_gain 050
Ae lock
Zoom wide
Delay 20
adj_strobe_intensity param
adj_strobe_intensity stage PV2
adj_strobe_intensity flash_table_test 0
adj_strobe_intensity level_test_number 2
adj_strobe_intensity pre_table_index 14 0 0 0 0
adj_strobe_intensity Standard_Luma 200 310 400 620 725 1110
adj_strobe_intensity awb_gain 474 620 272 360
adj_strobe_intensity run
//Delay 20
//adj_control signal 4000
delay 5

poweroff zoom_close
```

8) FOCUS ADJ

After changing the MAIN PCB and BARREL, adjust the PUNT.

< How to adjust >

a...Arrange a chart for adjust the FOCUS.

b...Attach the camera to the tripod.

c...The distance between the chart and the camera should be 80cm.

d...Download the program and save it to SD memory card.

e...Insert the SD memory card that has the program file and turn on the camera.

f...The adjustment will be done automatically.

g...After completing the upgrade, the camera is turned off automatically.

< Description of TXT file >

When making or modifying the program, see the following program codes.
When modify the program, use the Memo Pad of Windows and save it as"STS373ADJ.txt"

```
// PM Batch Test 8 //


// adj control
adj_control check_process_id 65535
adj_control set_process_id 65534
adj_control save_e2prom 1 // save eeprom
adj_control save_data_file 1 // save csv...
adj_control save_process_pass 1
adj_control batch 1 // enable 8 adj...
adj_control osd_delay 0          // OSD Disable

adj_control signal 500// start signal
//adj_control signal 300// start signal
//adj_control signal 300// start signal


===================================================// Punt
zoom close_to_open
mode program
coach idle
ae metering 0
ae iso 0
ae evc 6
ae preview_fnum 1
set wb auto
coach view
delay 25
adj_control save_e2prom 1
adj_control save_data_file 1
adj_punt zoomstep 0 7
adj_punt searching_min_short 80 80 80 80 90 90 50 50
adj_punt searching_max_short 160 160 160 160 165 170 170 170
adj_punt searching_min -7 31 23 21 27 29 18 32
adj_punt searching_max 245 248 240 238 244 246 235 230
adj_punt limit_min_short 85 85 85 85 95 95 55 55
adj_punt limit_max_short 155 155 155 155 160 165 165 165
adj_punt limit_min 13 51 43 41 47 49 38 52
adj_punt limit_max 225 228 220 218 224 226 215 210
adj_punt slop_min -100 -100 -90 -100 -130 -150 -170
adj_punt slop_max 60 80 100 120 140 160 180
adj_punt run
```

```
//adj_control signal 0
delay 5

poweroff zoom_close
```

9) CCD DEFECT ADJ

After changing the MAIN PCB and CCD, adjust the DEFECT CELL of CCD.

< How to adjust >

a...Download program file and save it to SD memory card.

b...Turn on the camera.

c...Adjustment will be done automatically.

d...After completing the upgrade, the camera is turned off automatically.

< Description of TXT file >

When making or modifying the program, see the following program codes.
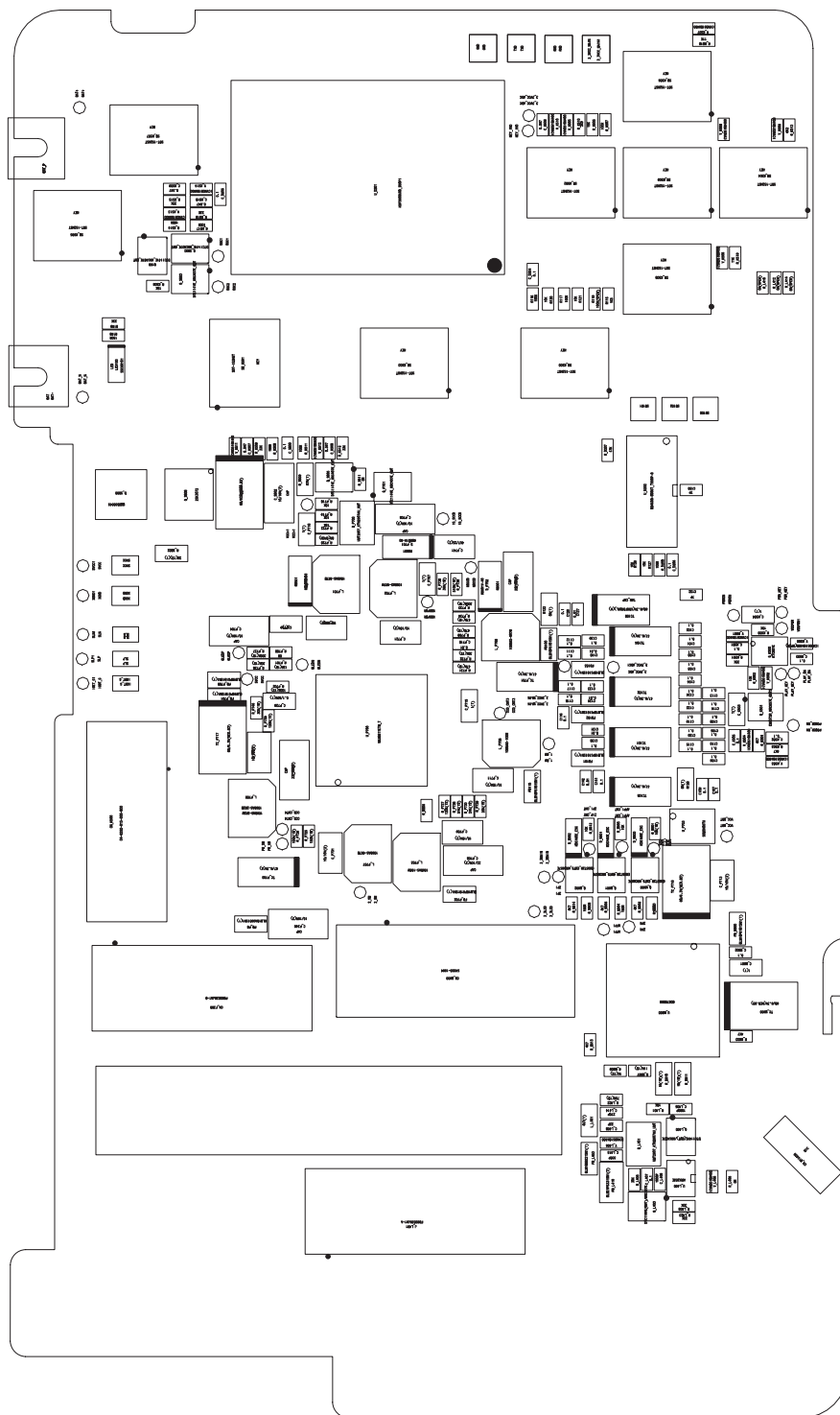When modify the program, use the Memo Pad of Windows and save it as "STS373ADJ.txt"

```
// PM Batch Test 8 //


// adj control
adj_control check_process_id 65535
adj_control set_process_id 65534
adj_control save_e2prom 1 // save eeprom
adj_control save_data_file 1 // save csv...
adj_control save_process_pass 1
adj_control batch 1 // enable 8 adj...
adj_control osd_delay 0          // OSD Disable

adj_control signal 500// start signal
//adj_control signal 300// start signal
//adj_control signal 300// start signal

//================================#2. CCD Defect Cell
//start adj_defective_pixel
//adj_control check_process_id 65535
//adj_control save_e2prom 1
//adj_control save_data_file 1
```

```
mode program
//ae metering multi
//ae iso 200
//ae ev 0
//ae iris 0
//awb wbal auto
//coach view
//delay 25

adj_defect integration
adj_defect ref_level_short 800
adj_defect ref_level_long 3500
adj_defect exp_time 6
adj_defect defect_max_num1 30000
adj_defect defect_max_num2 30000
adj_defect run
//end adj_defect
//delay 10
//poweroff zoom_close
```

10) BURNING ADJ

After changing the MAIN PCB and parts, check whether all of the camera functions work correctly.

< How to adjust >

a...Download program and save it to SD memory card.

b...Insert the SD memory card that has the program file and turn on the camera.

c...Adjustment will be done automatically.

d...After completing the adjustment, the camera is turned off automatically.

< Description of TXT file >

When making or modifying the program, see the following program codes.
When modify the program, use the Memo Pad of Windows and save it as"STS373ADJ.txt"

```
//===============================#1. Burnin Test

adj_control check_process_id 65535
adj_control set_process_id 65528
adj_control save_e2prom 1
adj_control save_data_file 1
adj_control rePeat_CNT 1
adj_control override_tv_usb 1
adj_control do_check_process_id 1

adj_burnin delete_all
//adj_burnin format_keep
adj_burnin prog_mode
adj_burnin lcd_on

adj_burnin flash_cap
adj_burnin flash_off_cap
adj_burnin norm_cap
adj_burnin macro_cap

adj_burnin selftimer_cap
adj_burnin play_mode
```

```
adj_burnin prog_mode
adj_burnin avi_cap_5sec

adj_burnin easy_mode

adj_burnin aux_led_on
adj_burnin wait_2sec
adj_burnin aux_led_off

adj_burnin burnin_end


//poweroff zoom_close
```

11) EEPROM READ

To read the data of EEPROM, refer to the below codes...

< How to read >

a...Download program and save it to SD memory card.

b...Insert the SD memory card that has the program file and turn on the camera.

c...Turn on the camera and the DATA in the EEPROM will be copied in the SD card.
     The codes from Start ADD. Äto End ADD. will display on the LCD monitor and the rest of codes will not
     display.

d...Turn off the camera after reading and saving the data.

e...If you read the SD card in your PC, you can find the STS3_73_E2PR.CSV file and you can check the
     EEPROM DATA.

< Description of TXT file >

When making or modifying the program, see the following program codes.
When modify the program, use the Memo Pad of Windows and save it as "STS373ADJ.txt".

```
dj_check e2p_read Stard ADD. End ADD.
```

※ You can change from start address to end address.

12) EEPROM WRITE

If you want to write the DATA of EEPROM, do as follows.

< How to read >

a...Insert the address and valueÄand save the program in the SD card.
Ex) adj_check e2p_writeÄ301, 113

b...Insert the SD card to the camera and turn on the camera.

c...Turn on the camera and the data of EEPROM will be copied to the camera.

d...When the copy is complete, the camera is turned off automatically.

< Description of TXT file >

When making or modifying the program, see the following program codes.
When modify the program, use the Memo Pad of Windows and save it as "STS373ADJ.txt".

```
adj_check e2p_writeÄADD, Value

adj_check e2p_writeÄADD, Value
```

Ⅳ. PATTERN DIAGRAM

1. PARTS ARRANGEMENT FOR EACH PCB ASS'Y

1) MAIN_TOP_S3-63
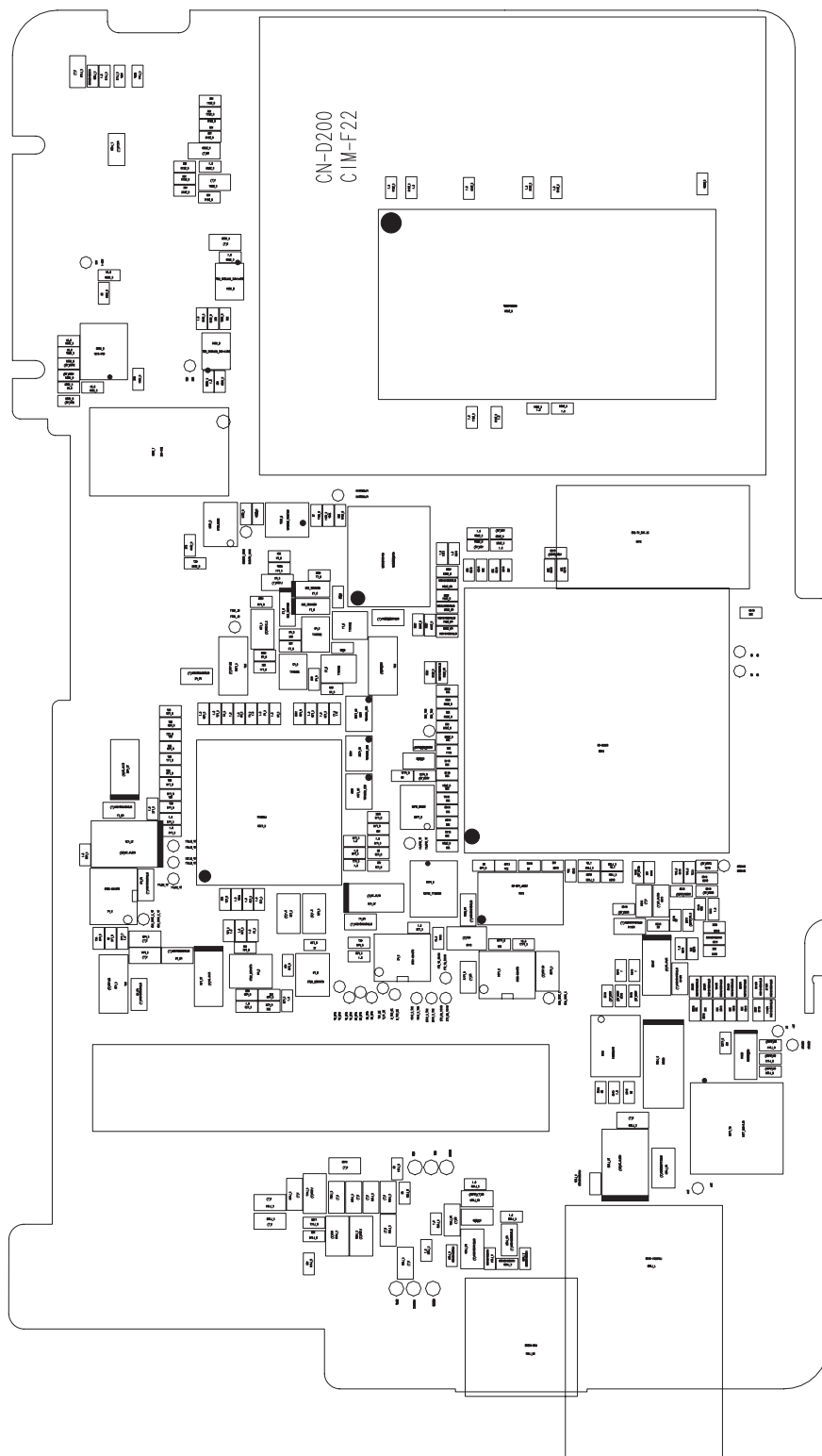
2) MAIN_BOTTOM_S3-63

3) CCD_TOP_S3-63
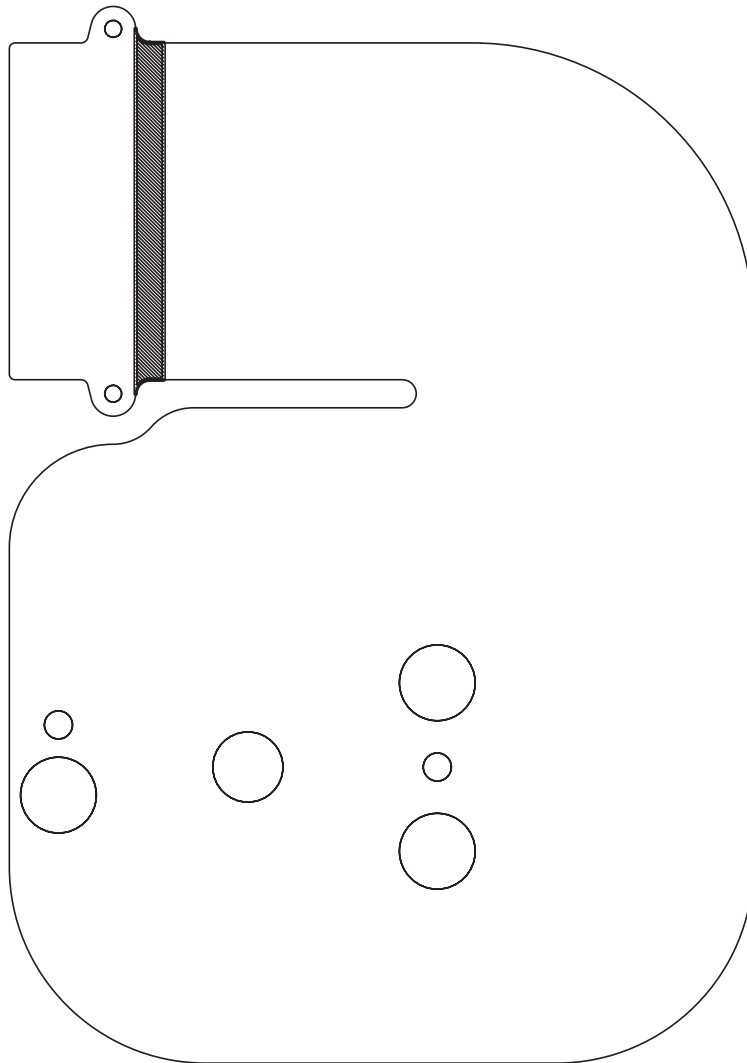
4) CCD_BOTTOM_S3-63

STS253-SHARP-PR
2006.03.28
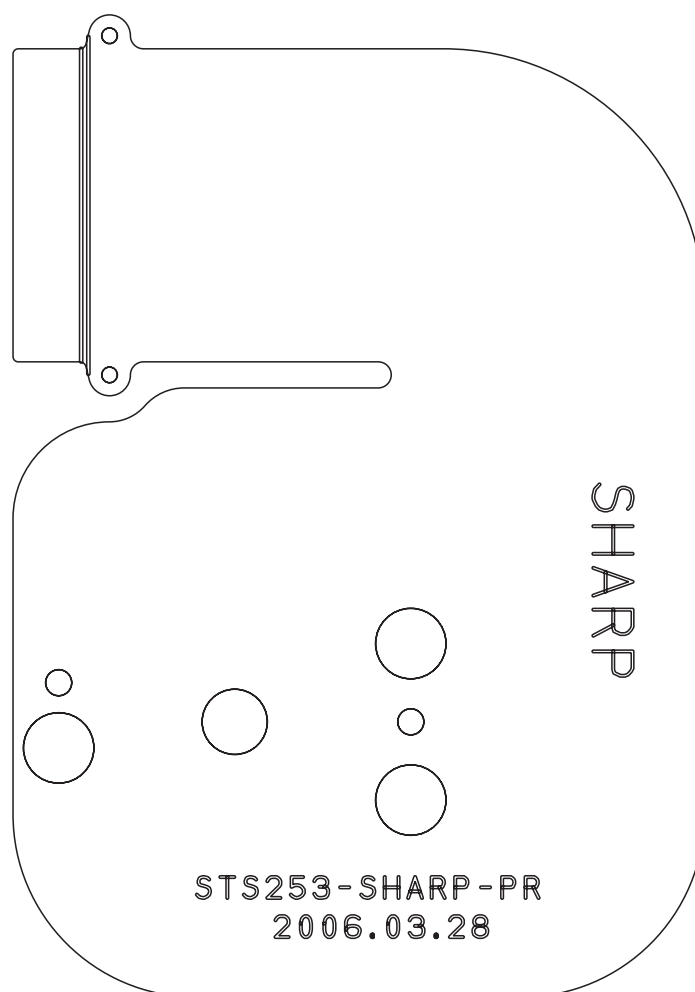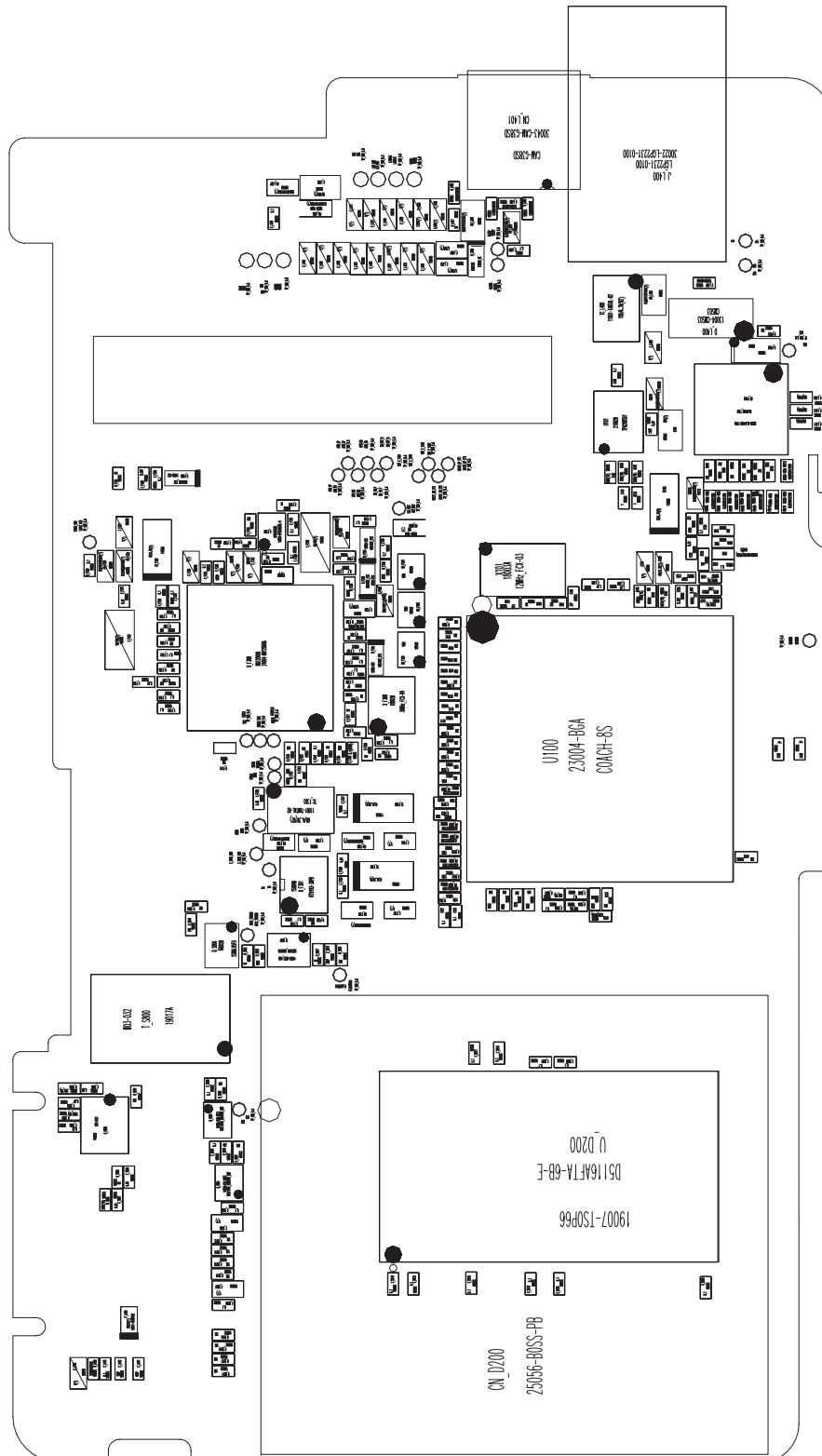
5) MAIN_BOTTOM_S3-73

6) MAIN_BOTTOM_S3-73

7) CCD_TOP_S3-73

CJ1

MN39600

CJ2
FB6S039JA1-1
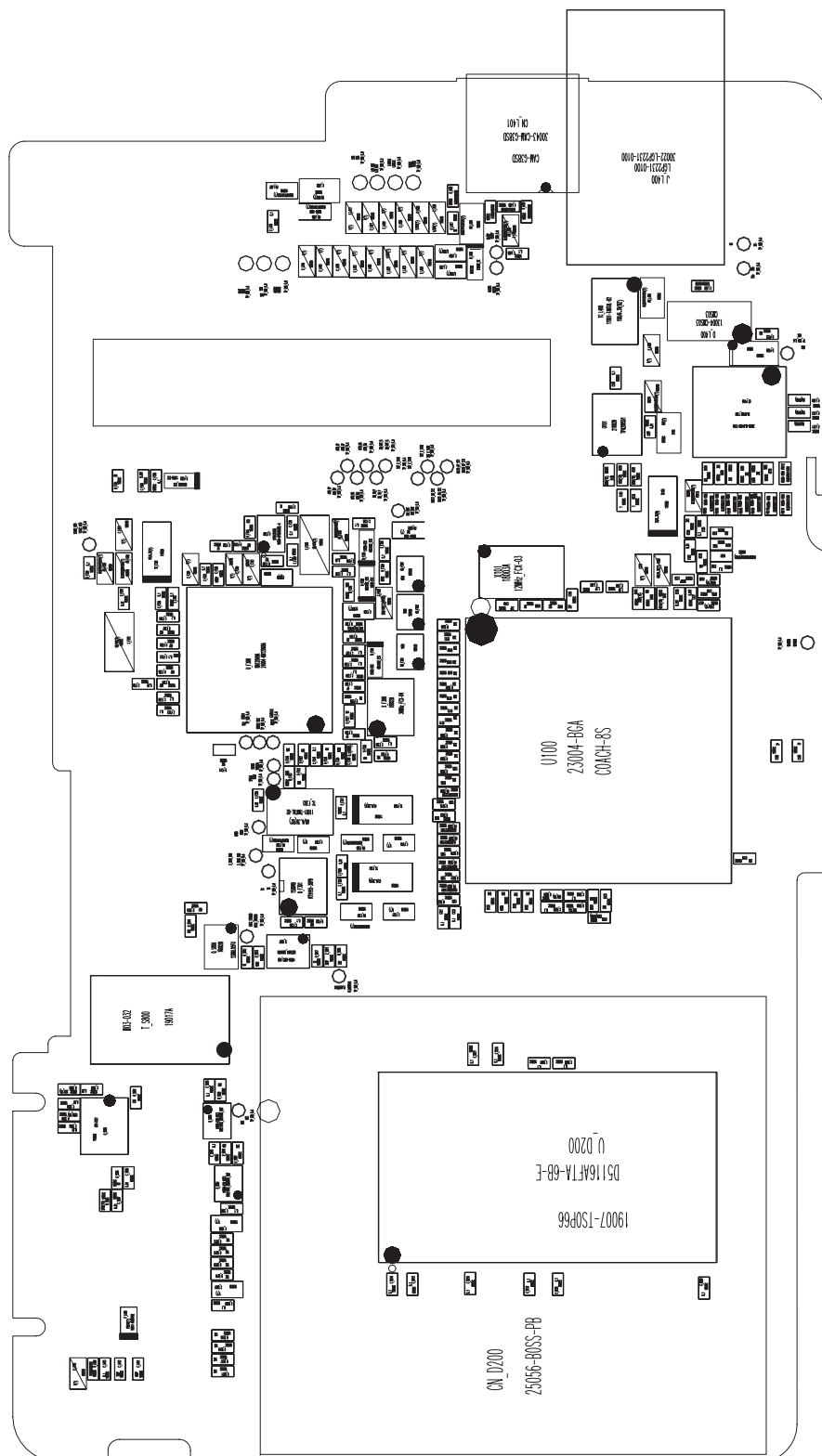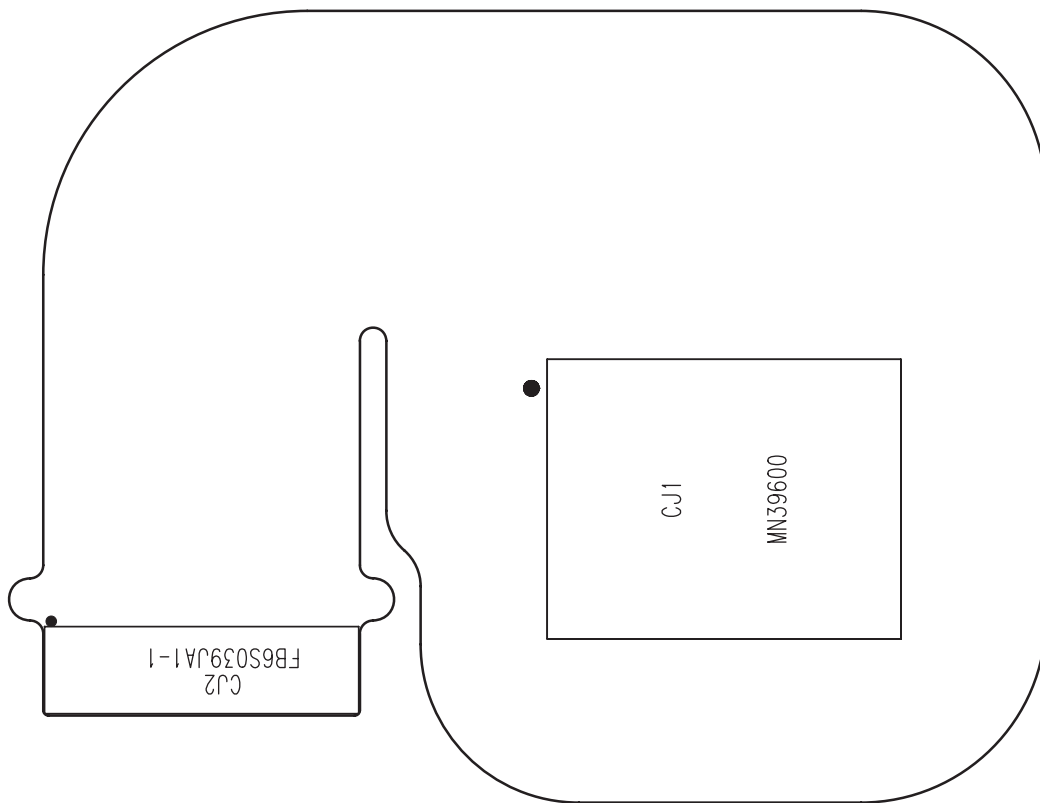
8) CCD_BOTTOM_S3-73
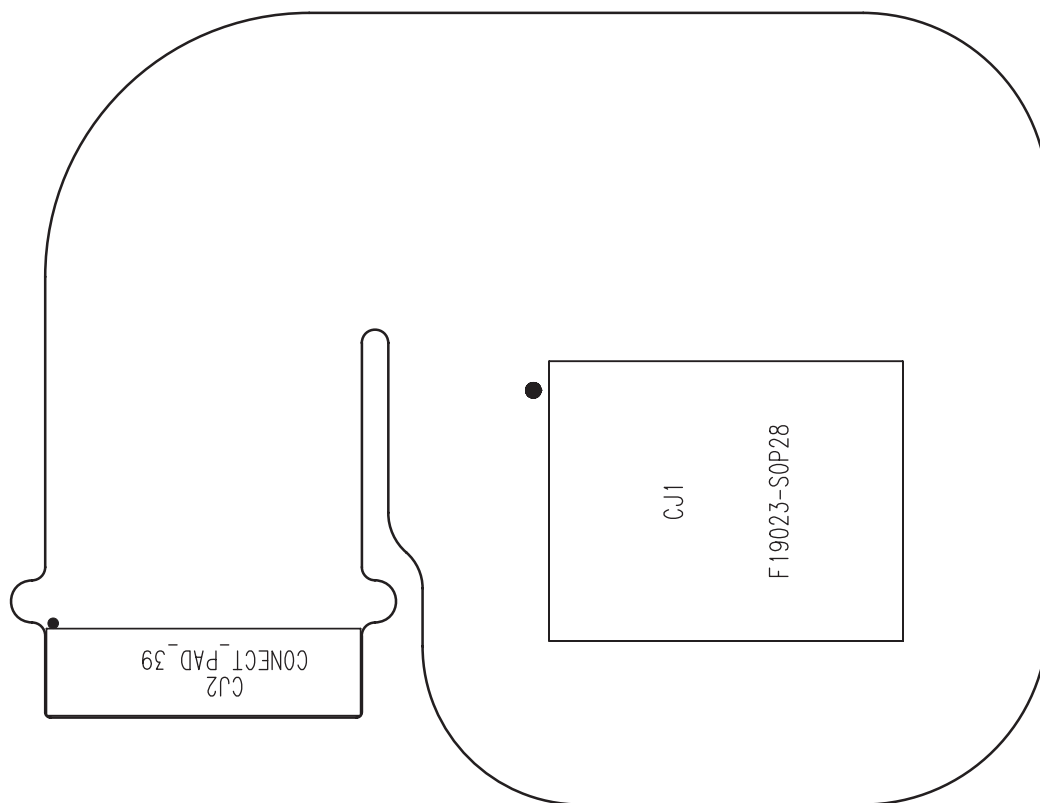
9) STROBO_TOP_S3-63/S3-73
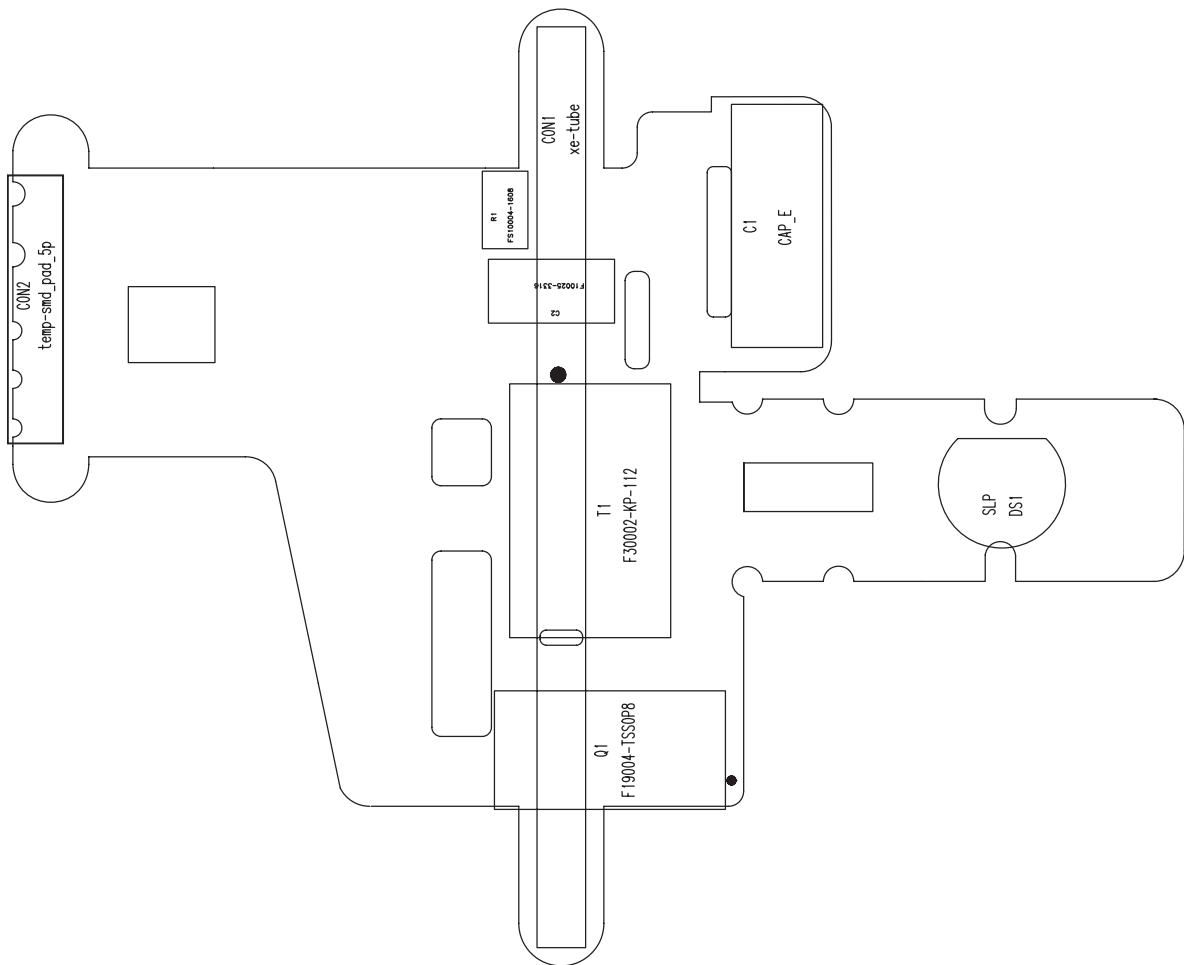
10) STROBO_BOTTOM_S3-63/S3-73
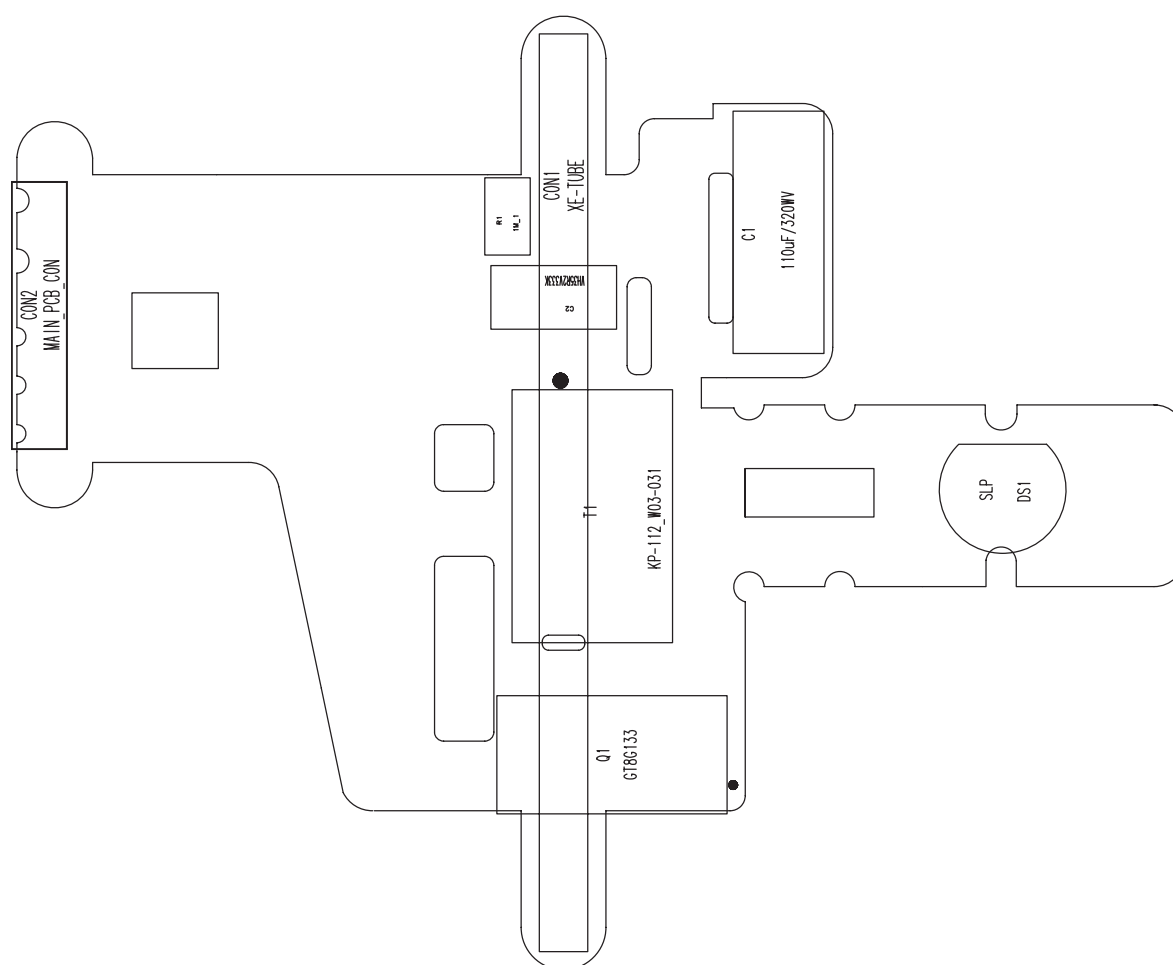
11) MODE_TOP_S3-63/S3-73
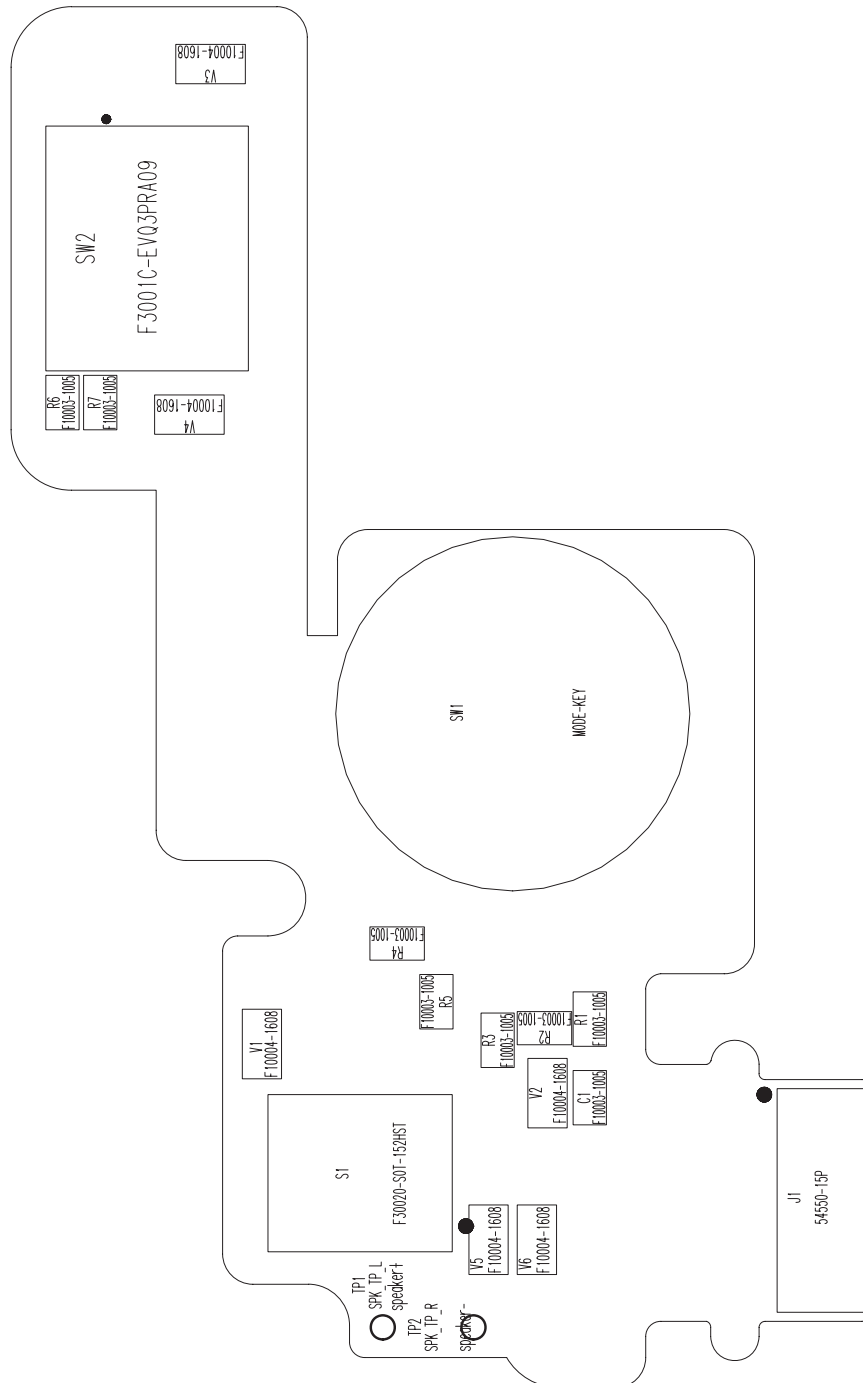
12) MODE_BOTTOM_S3-63/S3-73

Ⅴ. CIRCUIT DIAGRAM

1) MAIN_S3-63

2) MAIN_DDR_S3-63

3) MAIN_CCD_S3-63
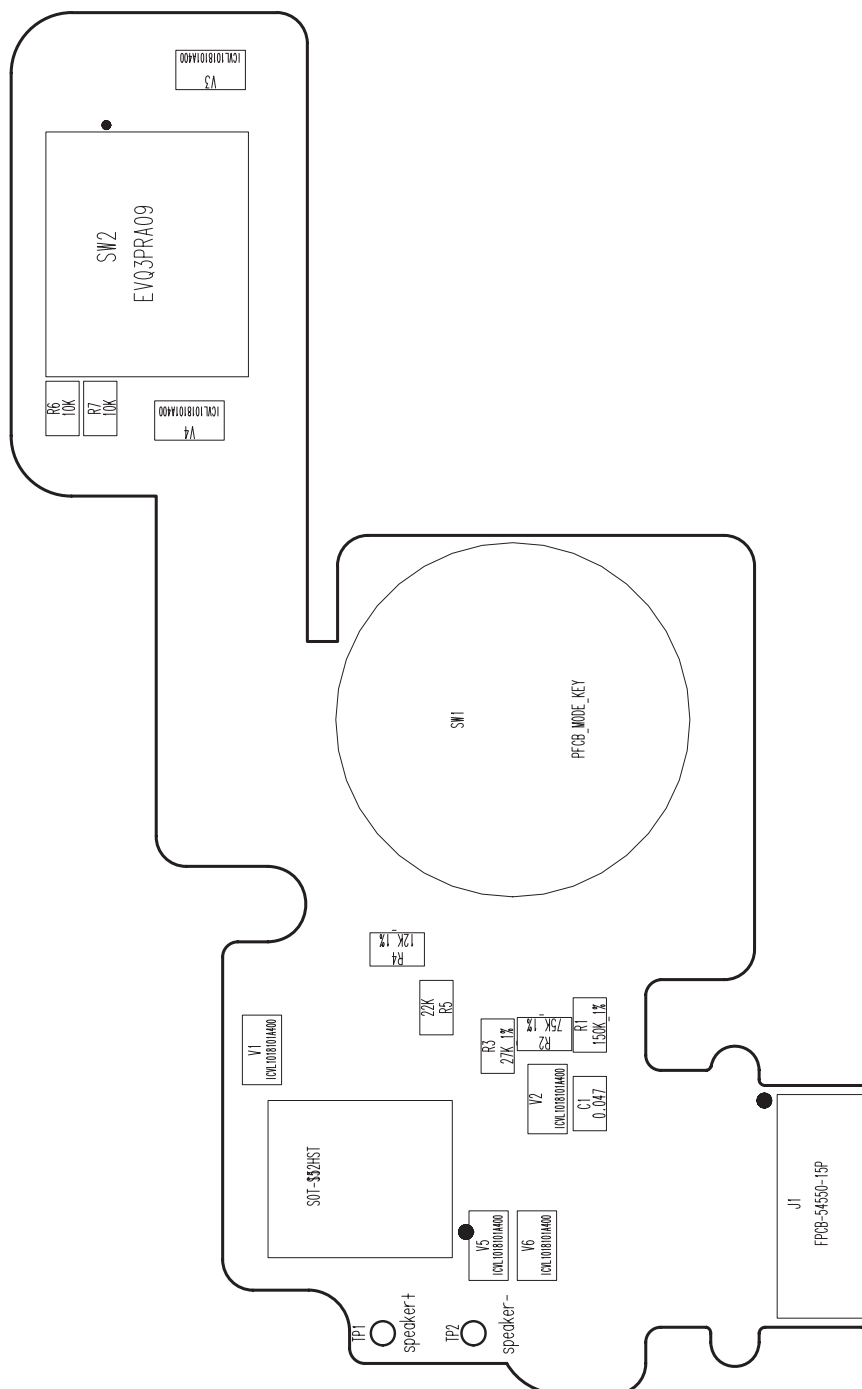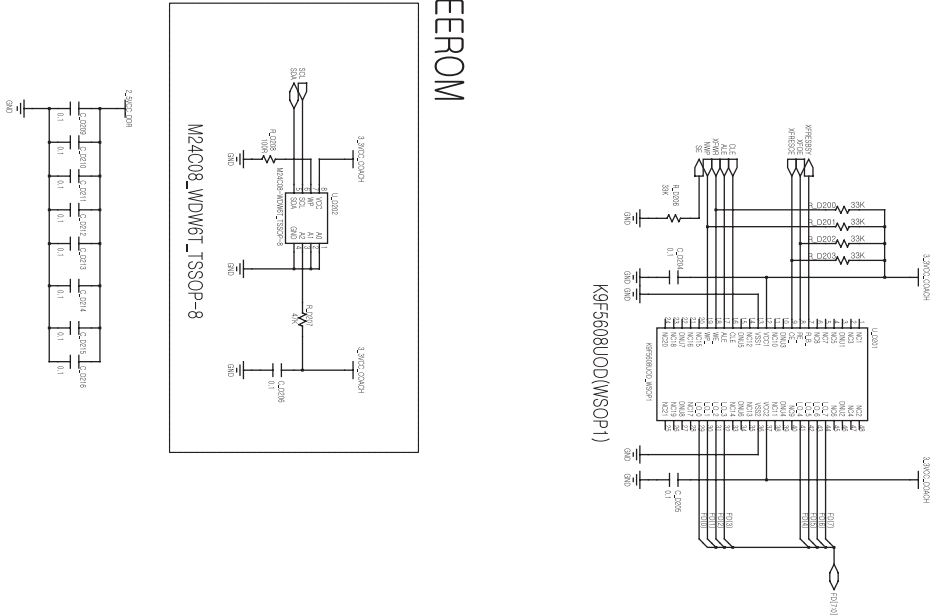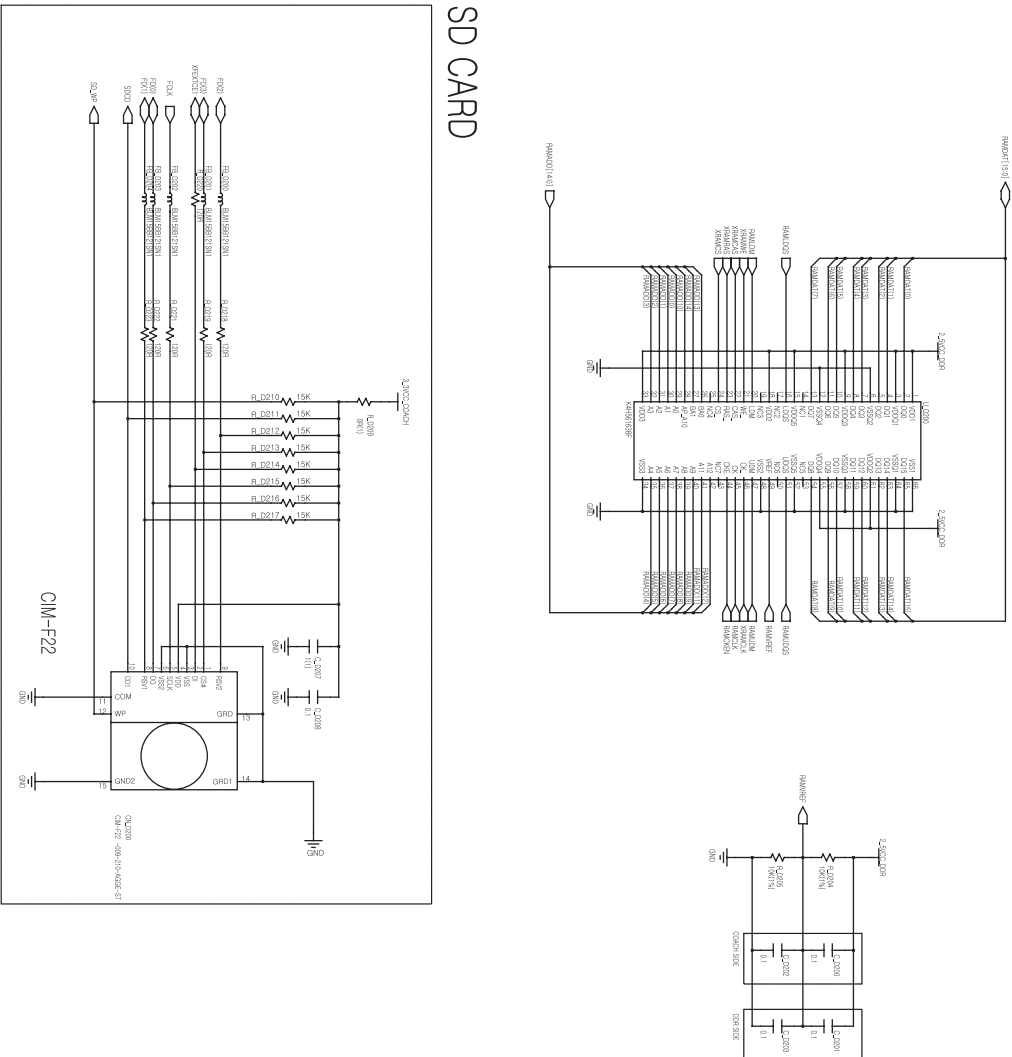
4) MAIN_I/O LCD_S3-63

5) MAIN_KEY_S3-63

6) MAIN_LENS(MOTOR)_S3-63

7) MAIN_POWER_S3-63
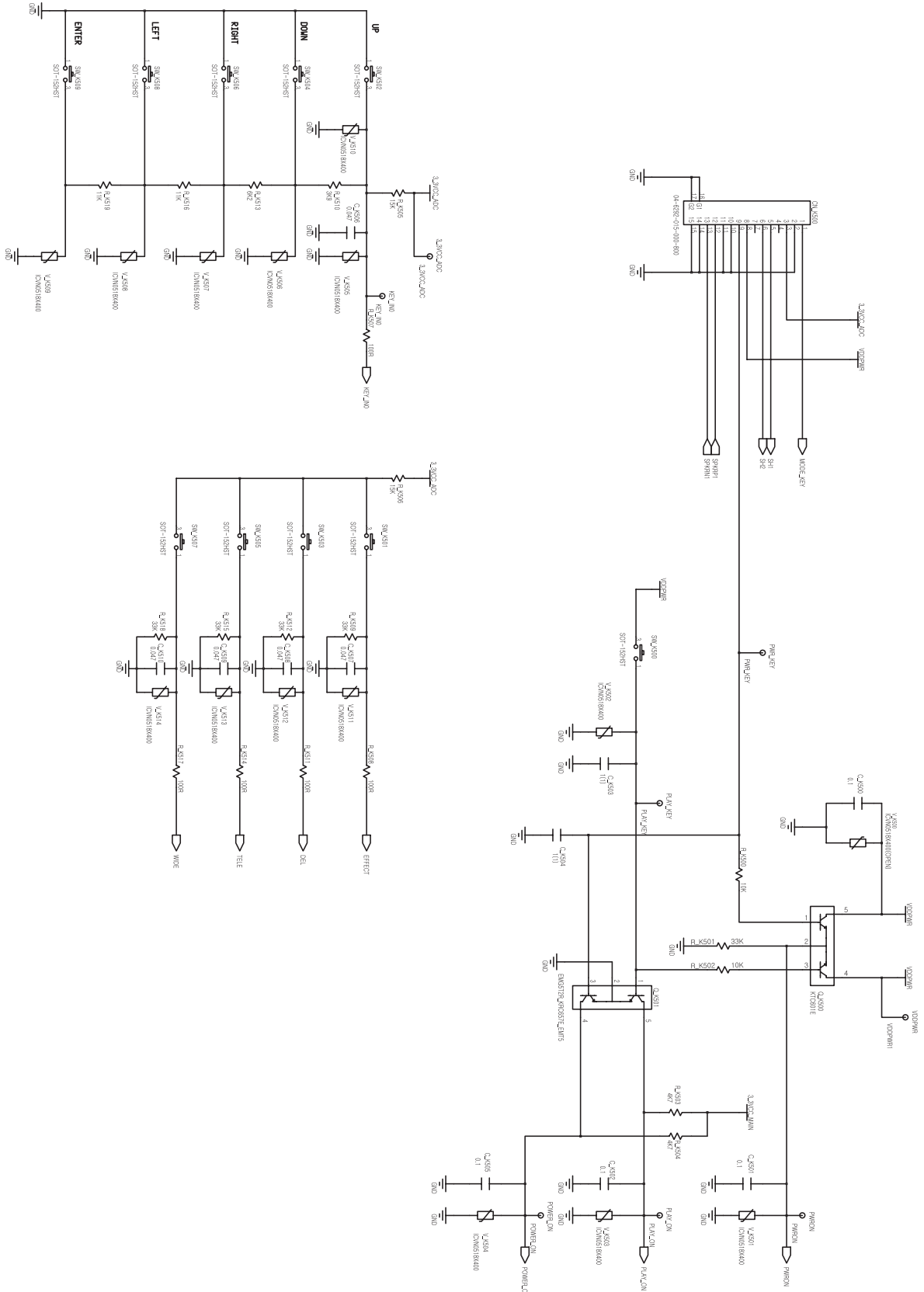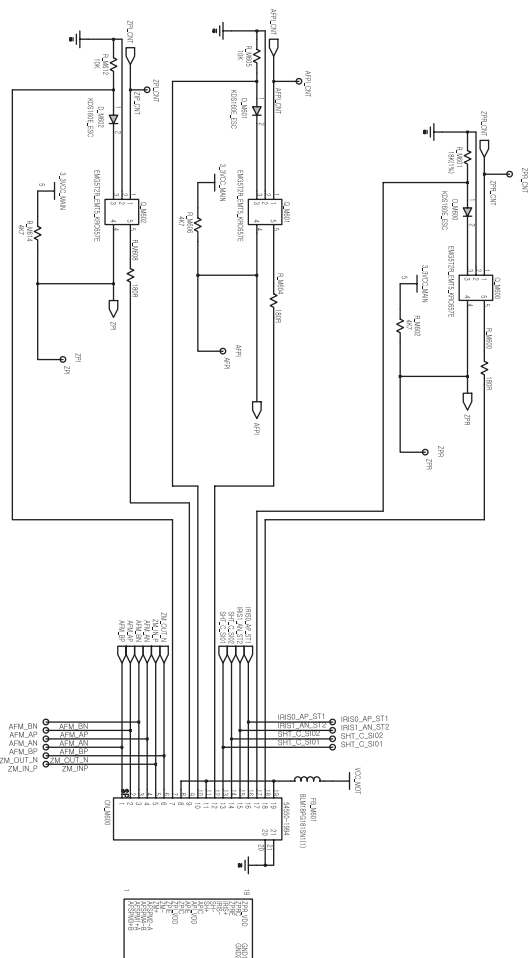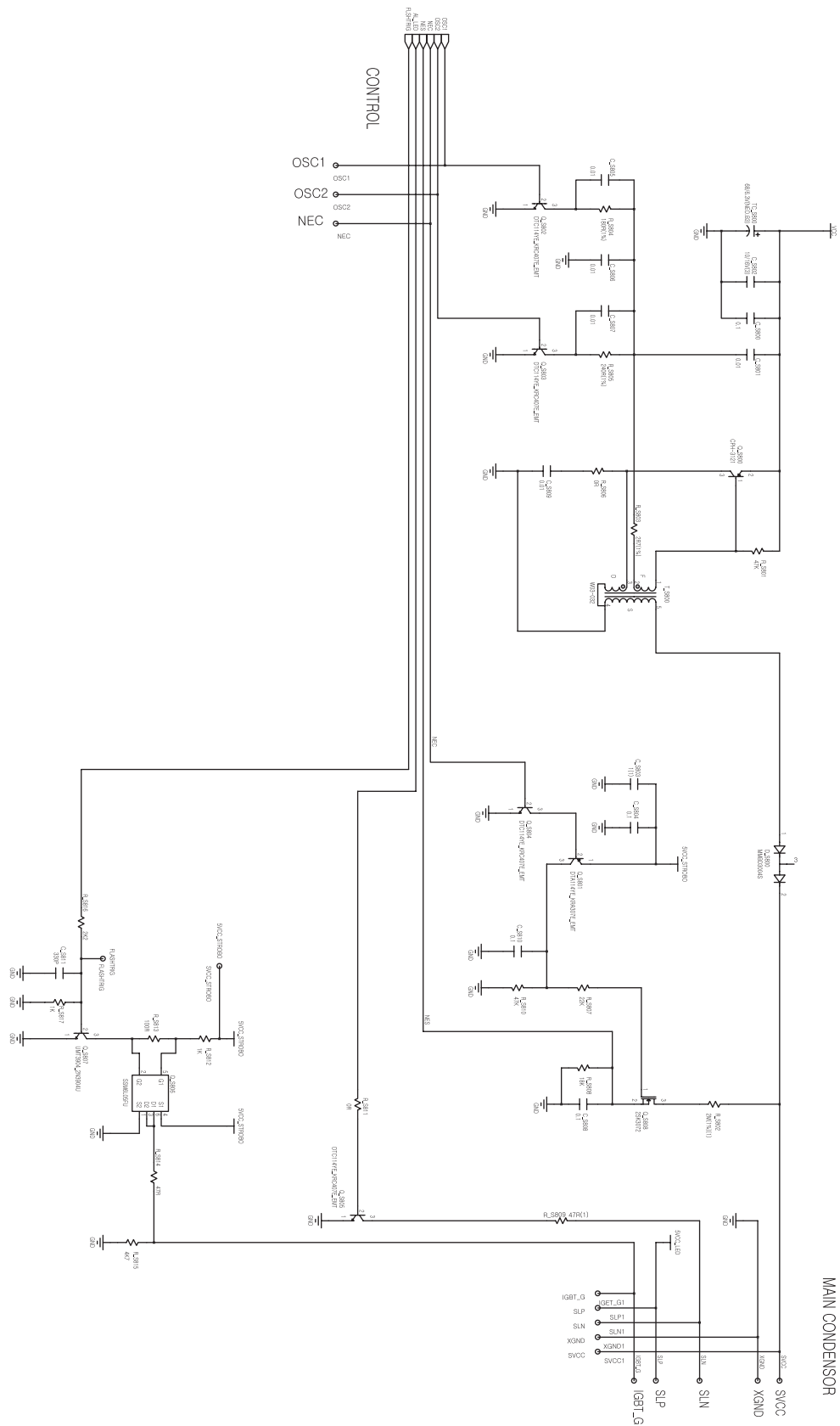
8) MAIN_STROBO_S3-63

9) MAIN_S3-73

10) MAIN_DDR_S3-73

11) MAIN_CCD_S3-73

12) MAIN_I/O LCD_S3-73

13) MAIN_KEY_S3-73

14) MAIN_LENS(MOTOR)_S3-73

15) MAIN_POWER_S3-73
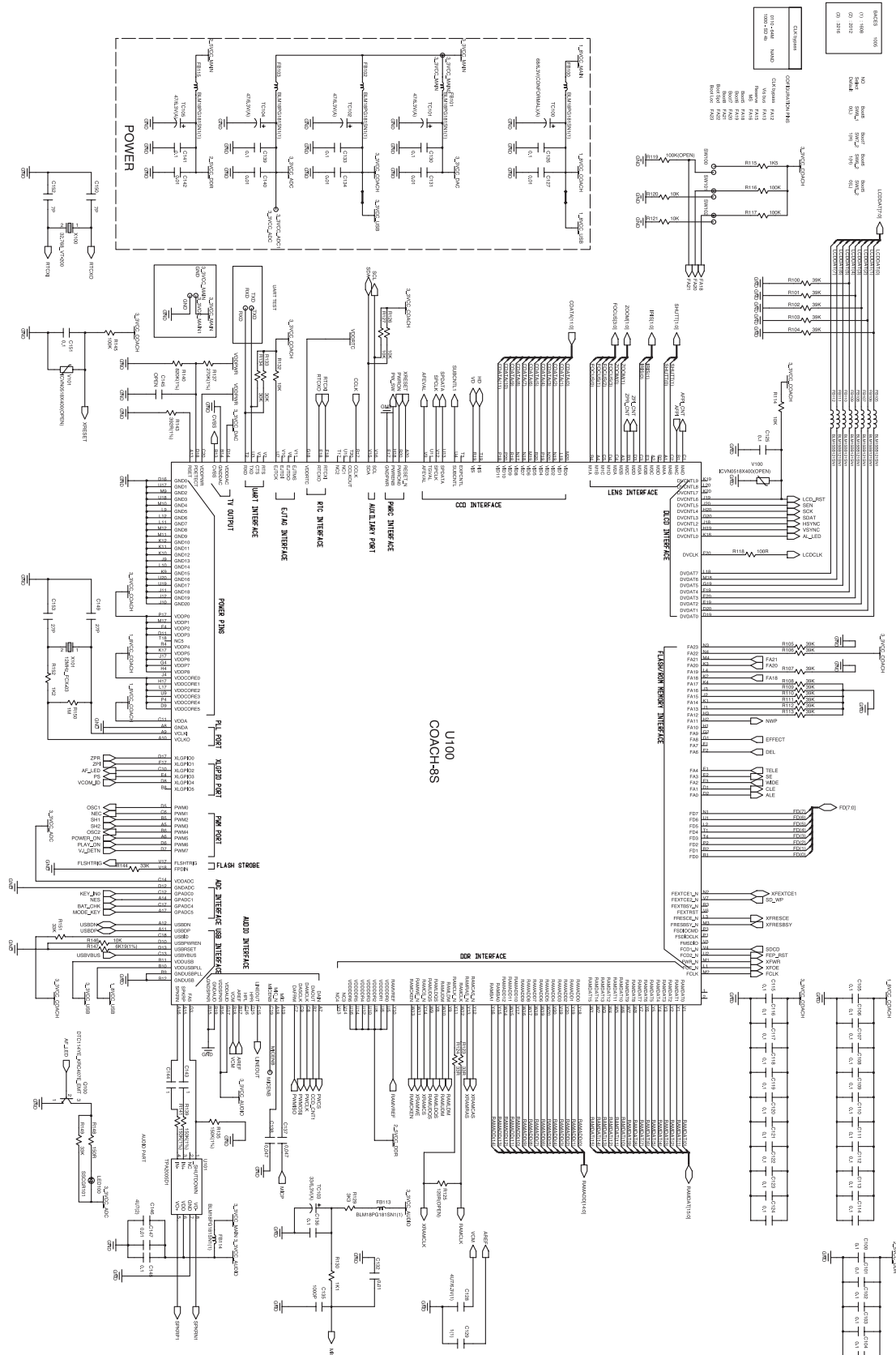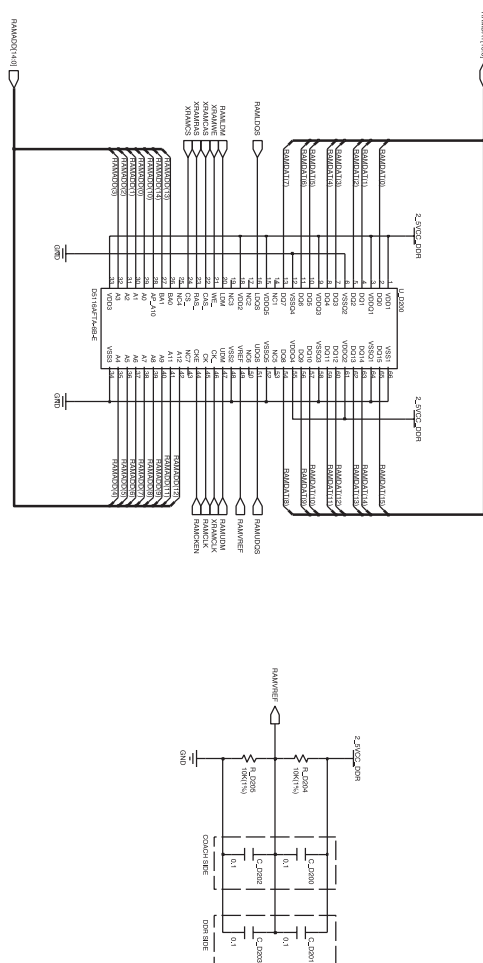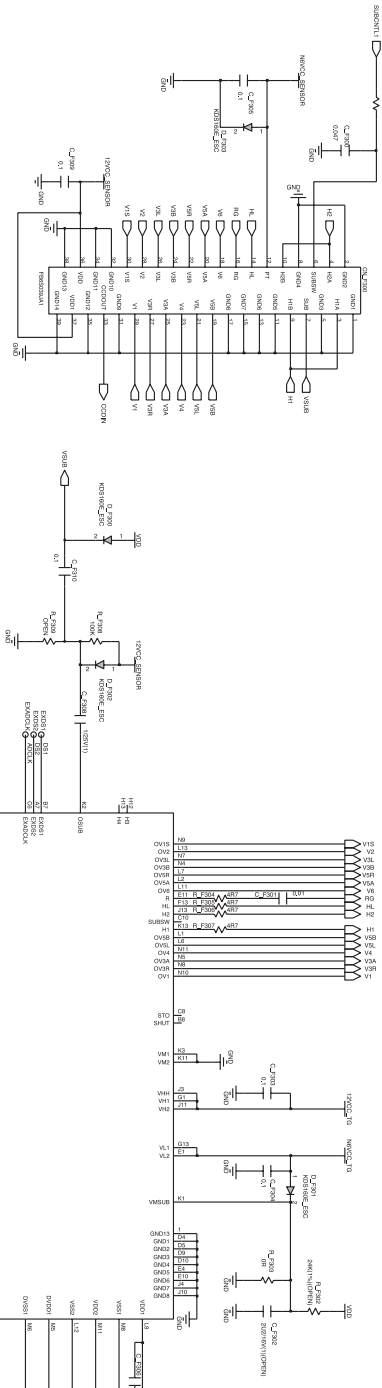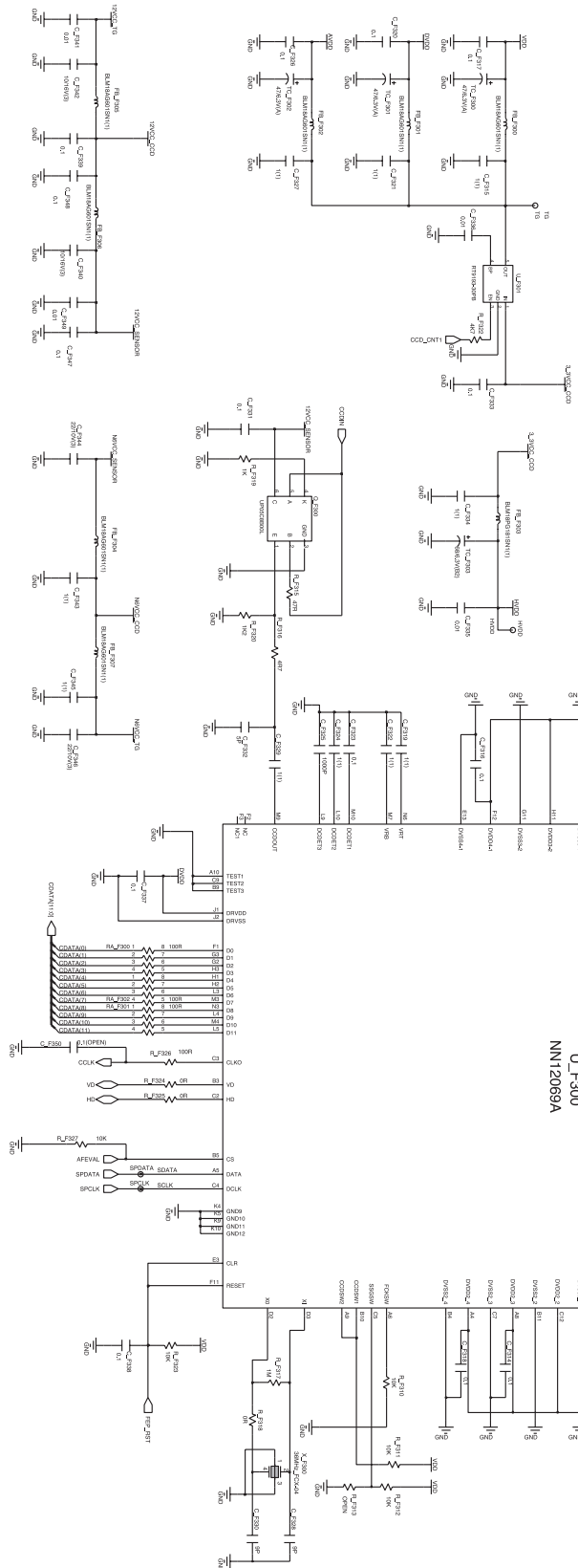
16) MAIN_STROBO_S3-73
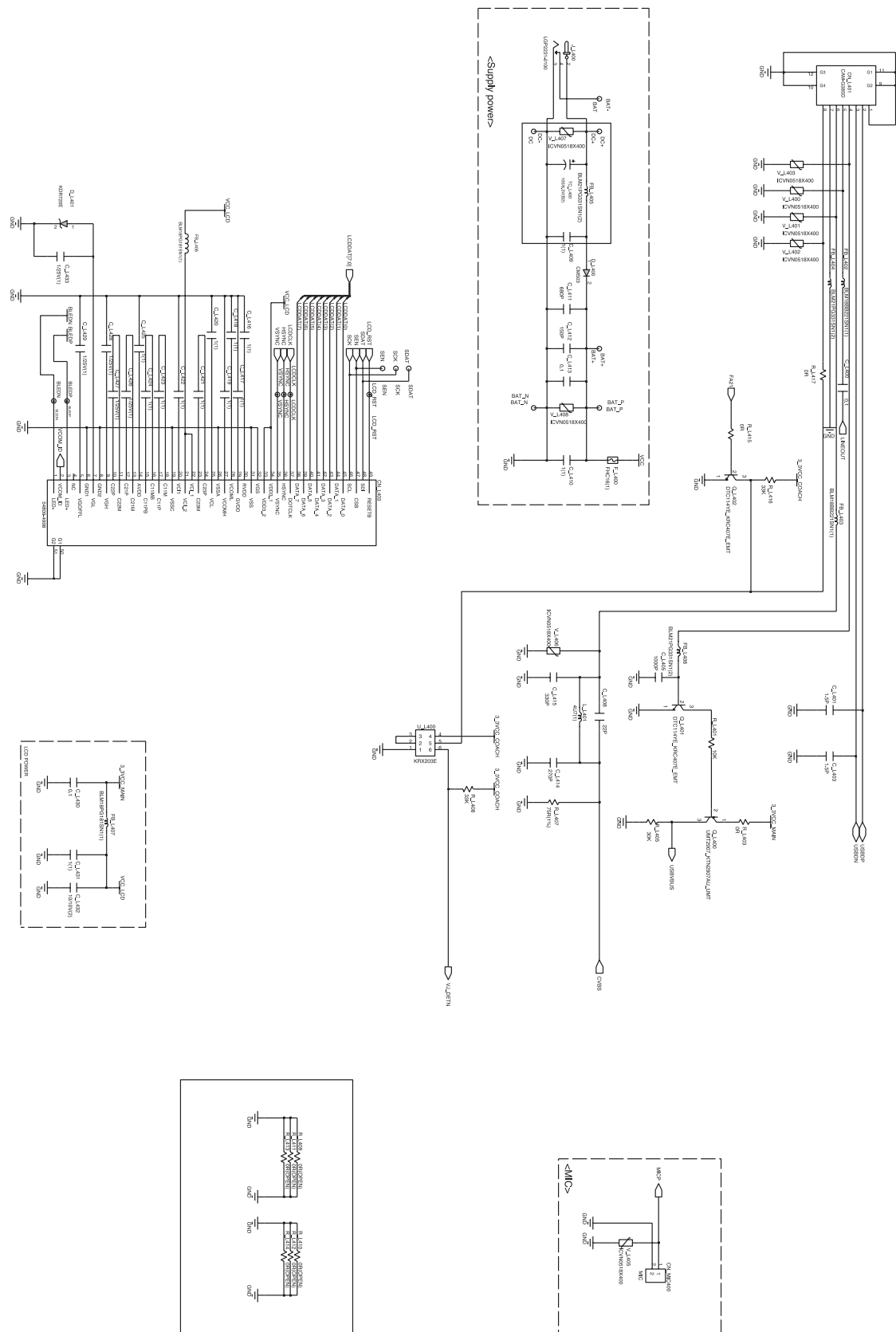
17) STROBO_S3-63/S3-73
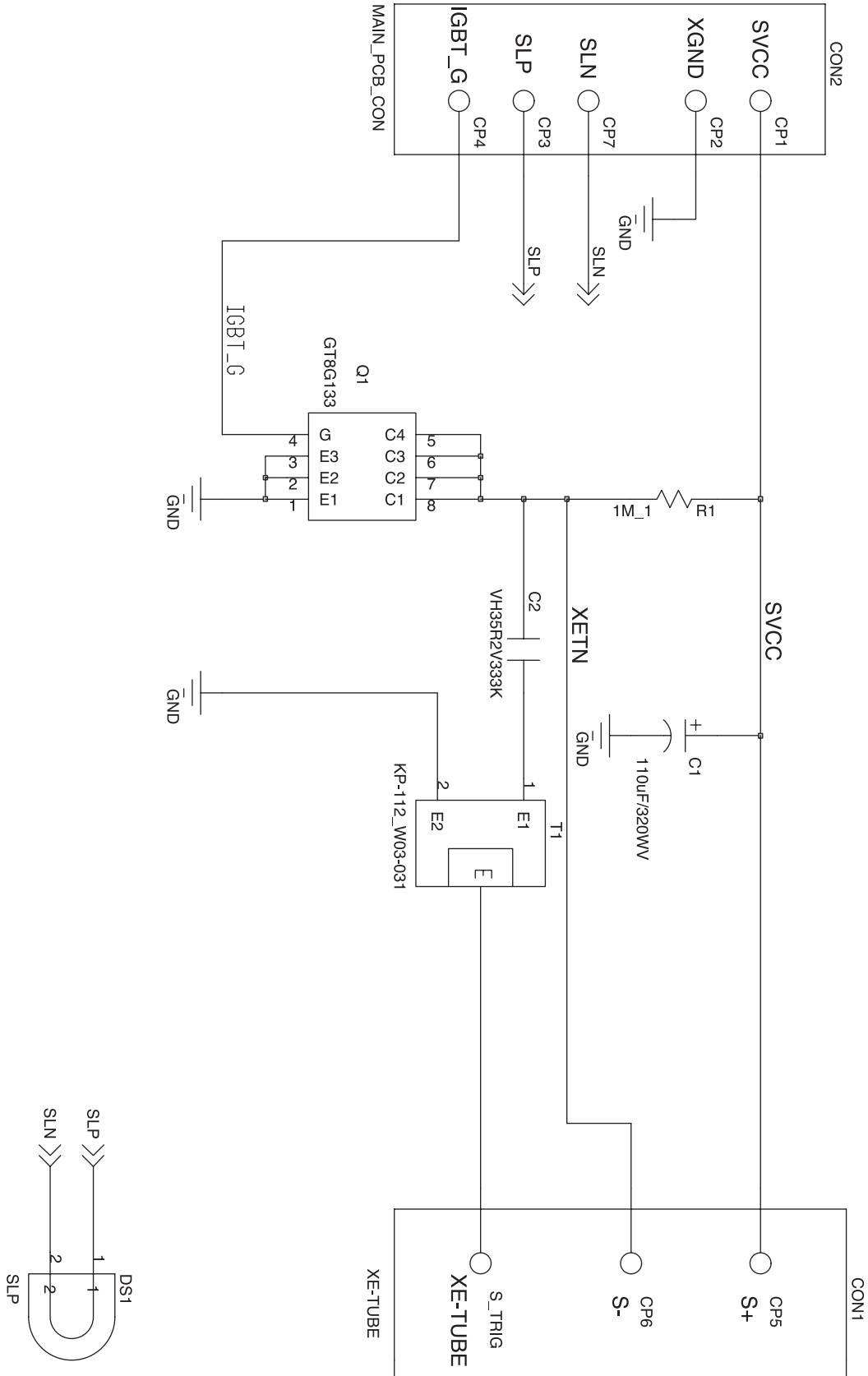
18) MODE_KEY_S3-63/S3-73
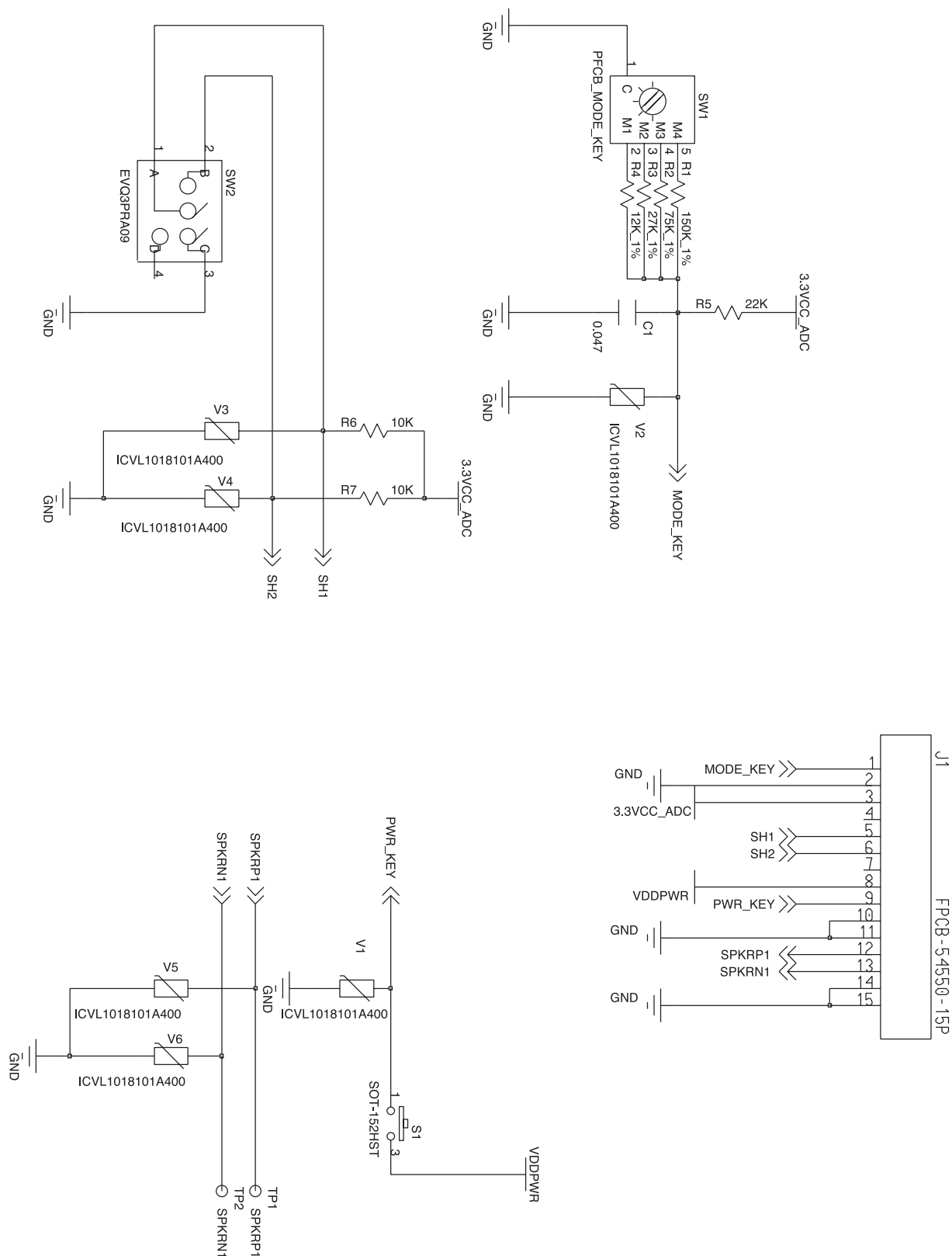
Ⅵ. SERVICE INFORMATION

1. The order of disassembly and assembly

■ Caution

1. Do the disassembling and assembling camera where the blocking static electricity mat is on the table.

2. When handling the major PCBs of camera, please wearing the band which cuts off the electric current on the wrist.

3. When handling the major parts, be careful of below caution.

Parts	Caution
F PCB type	When assembling the F PCB to the CONNECTOR by using pincette, be careful of tearing and hooking.
CCD & IR CUT	Be careful of the handprinting while handling them. Using the pincette which has soft tip. The spot will be shown by using normal alchol when cleaning them. Do the repairing where is no dust.
PCB type	Wearing the band which cuts off the electric current and do the reparing where the blocking static electricity mat is on by preventing the defect of parts.
CONTACT type	Be careful of defect and change by pincette.

■ Disassembly

1. Remove 2 screws.

2. Remove 2 screws.

3. Remove 4 screws.

4. Disassemble the BACK COVER.

5. Remove 1Äscrew.
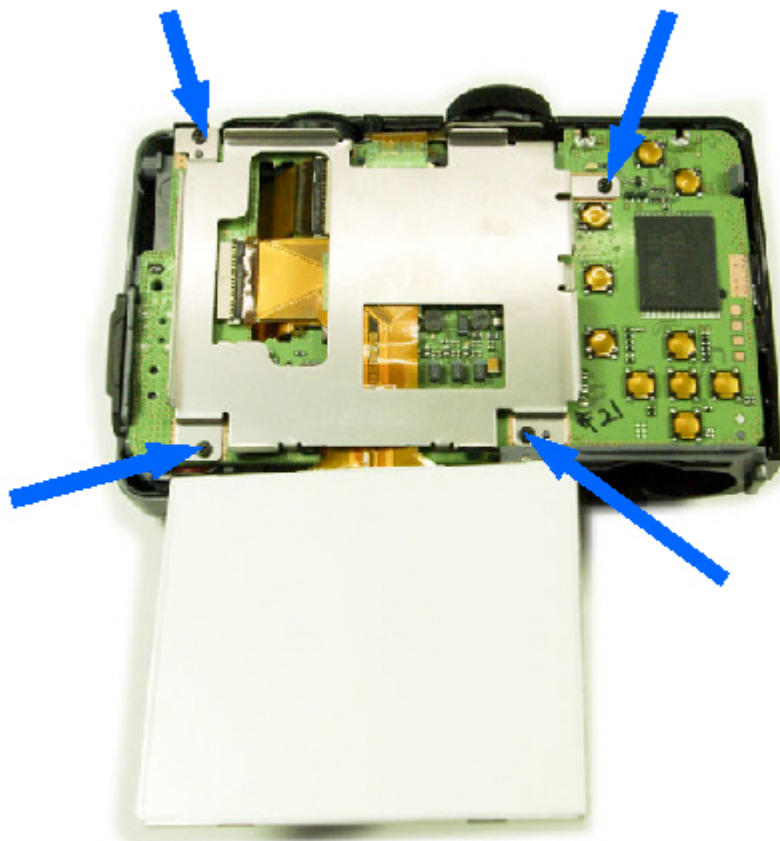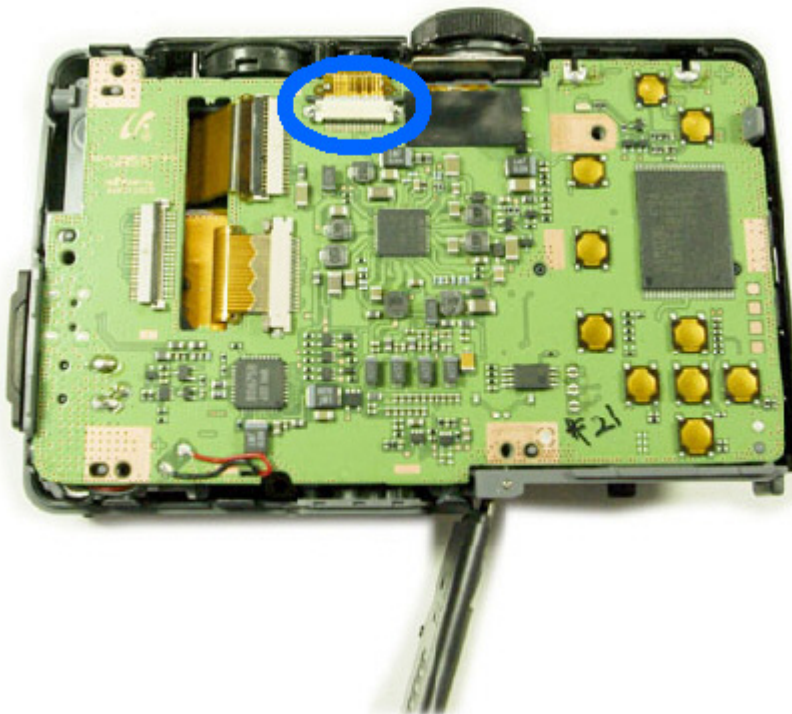
6. Disconnect the PCB from the connector.
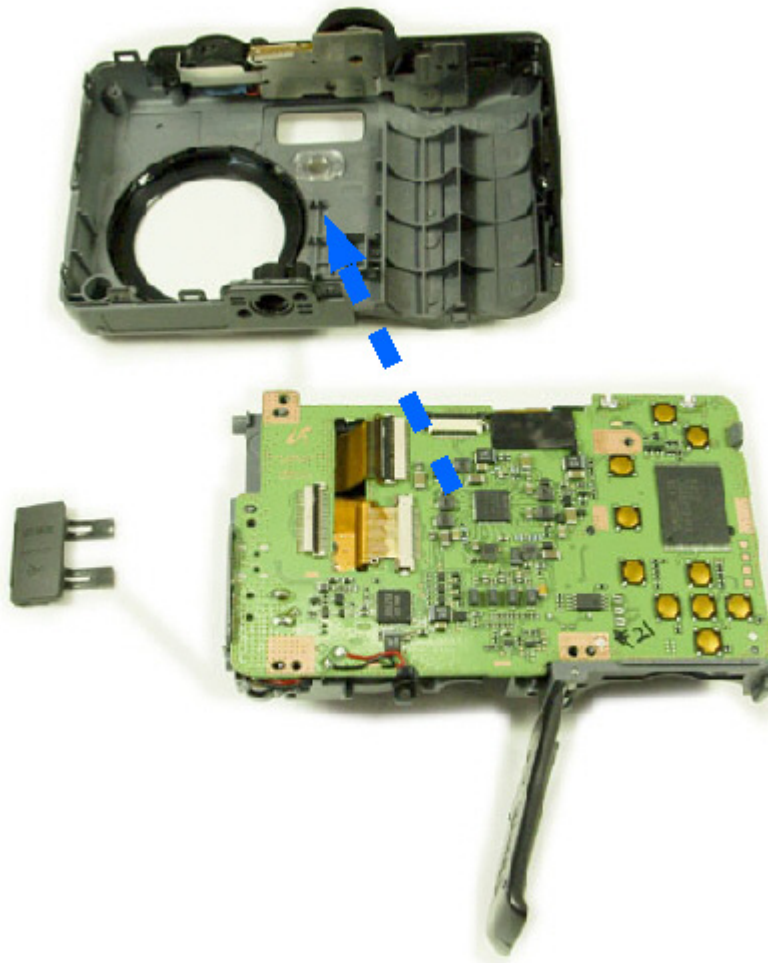

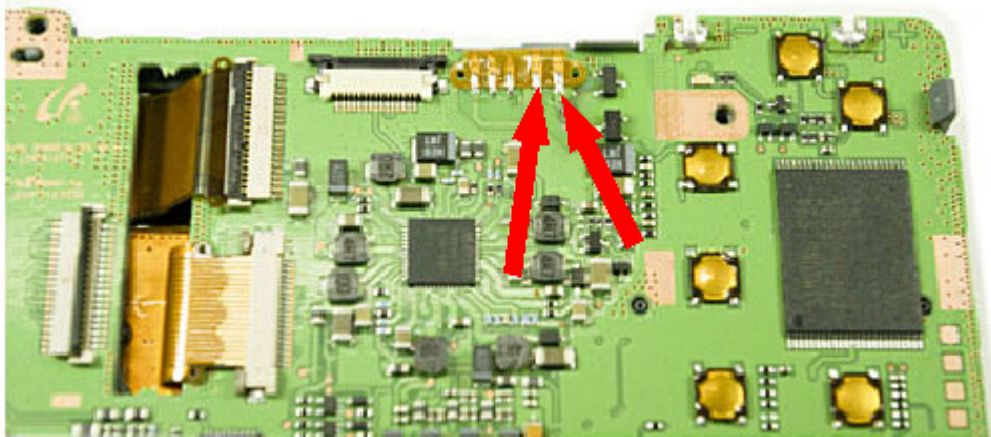7. Disassemble the LCD ASSY.
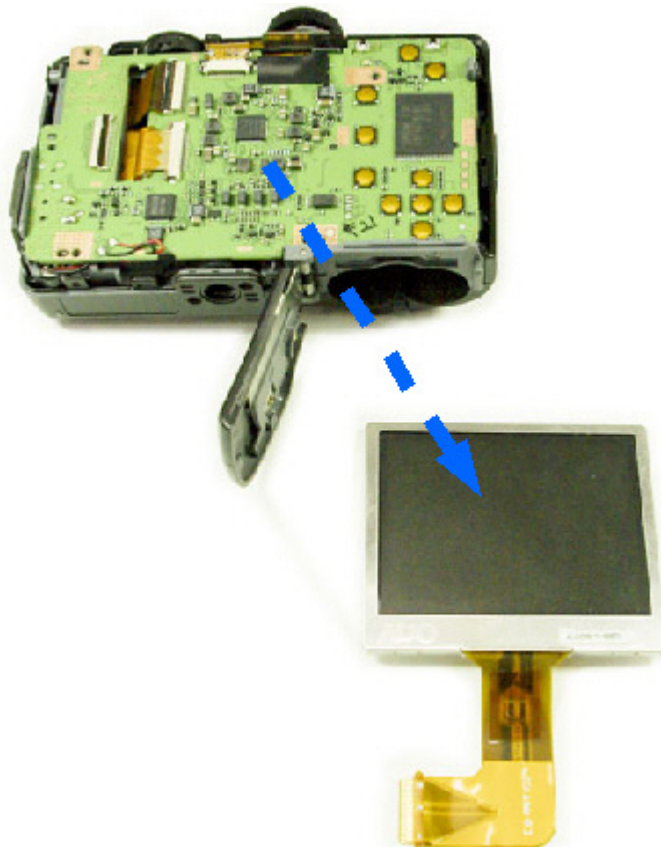
8. Remove 1Äscrew.
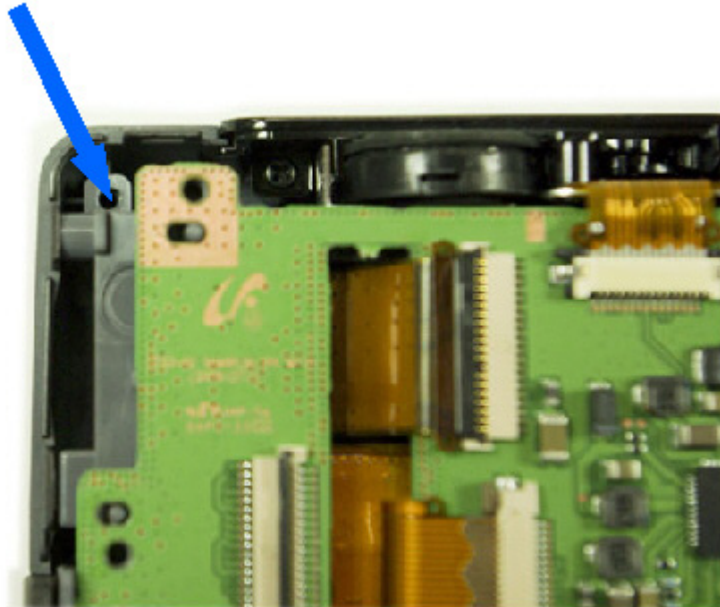
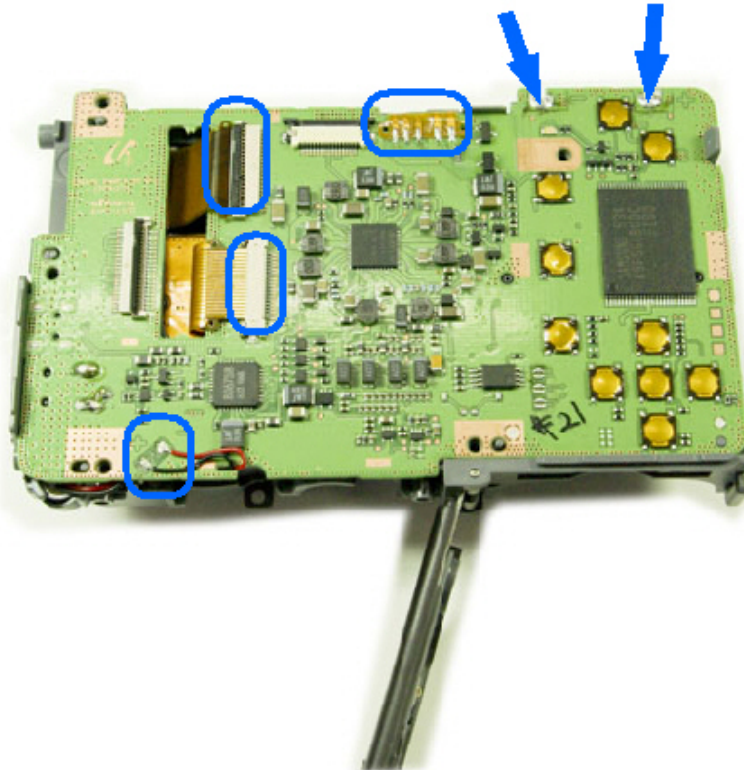9. Disconnect the PCB from the connector.
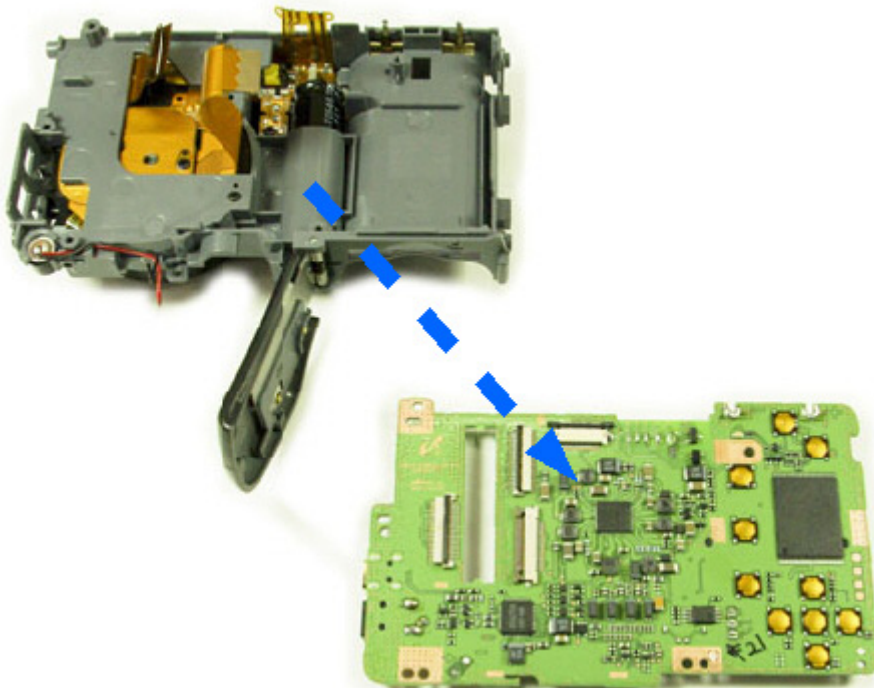
10. Disassemble the FRONT COVER.

11. **Discharging point** : Before removing the PCB soldering, discharge the main condenser.

12. 1st. Removing the PCB soldering and disassemble the 2 connectors.
      2nd. Remove the 2 soldering points of battery contacts.
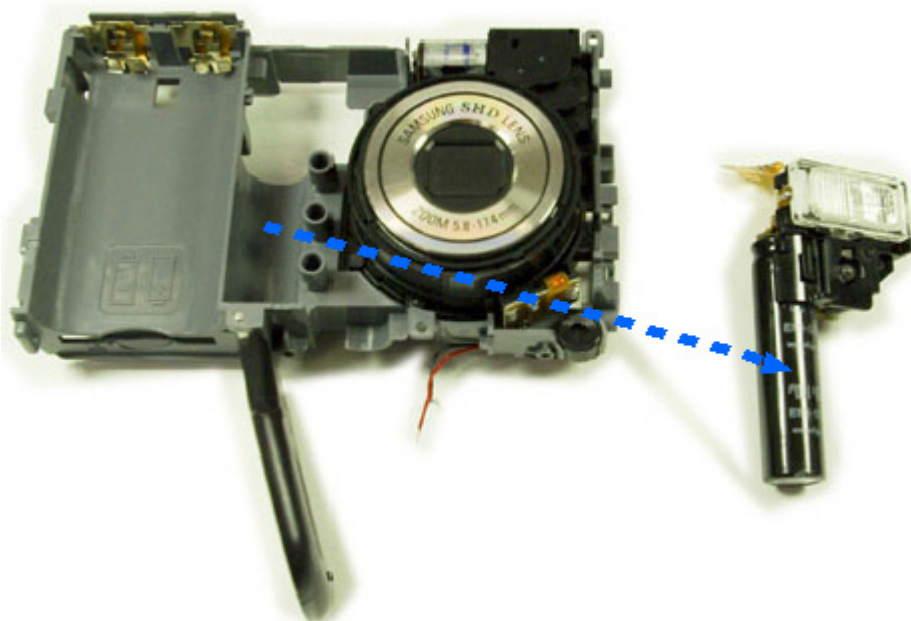   3rd. Disassemble the 2 wires.
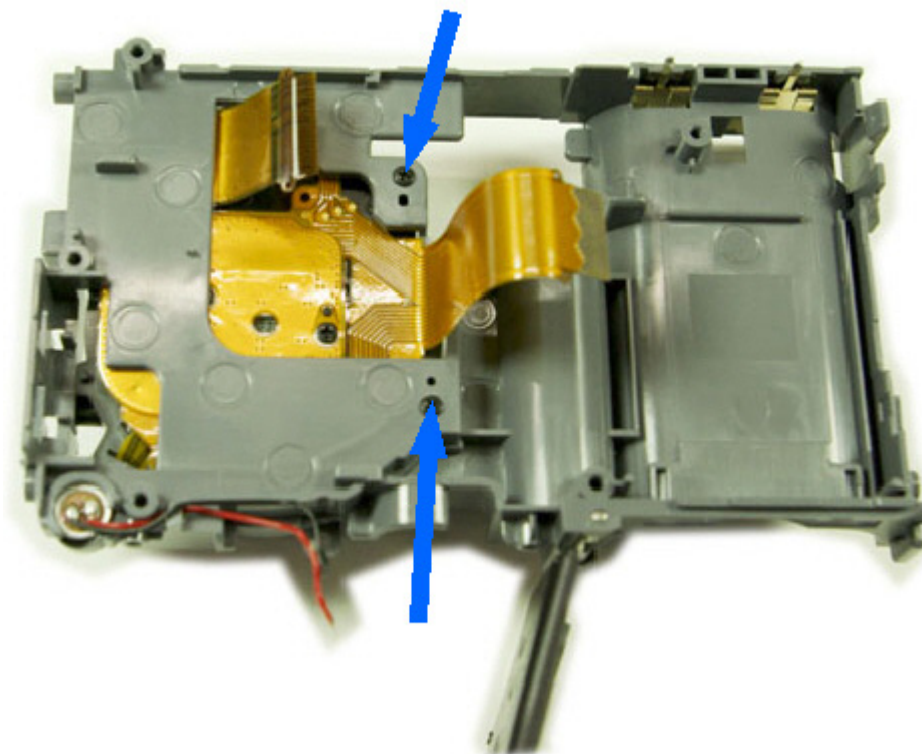

13. Disassemble the MAIN PCB.

14. Remove 1Äscrew.

15. Disassemble the STROBE PCB.

16. Remove 2 screws.

17. Remove 2 screws.
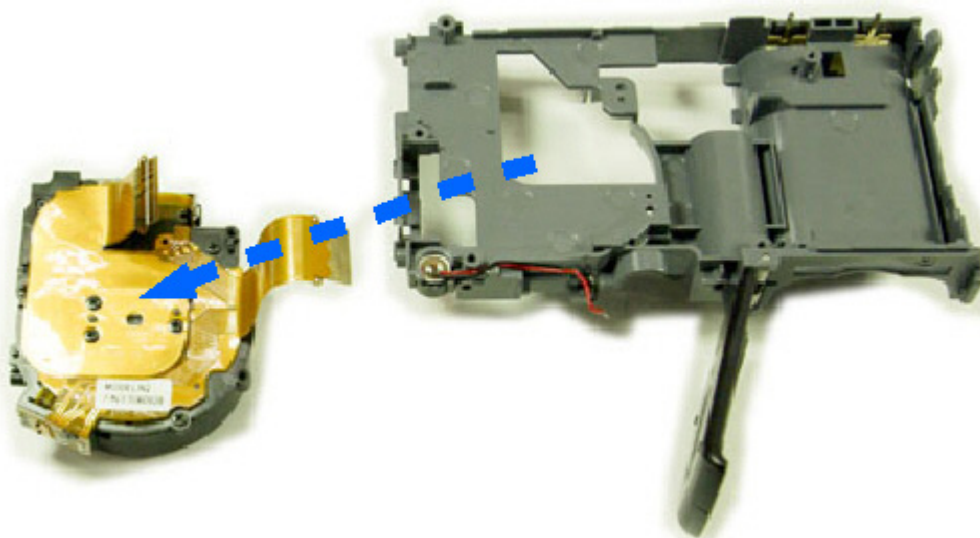
18. Disassemble the Barrel.

19. Complete.