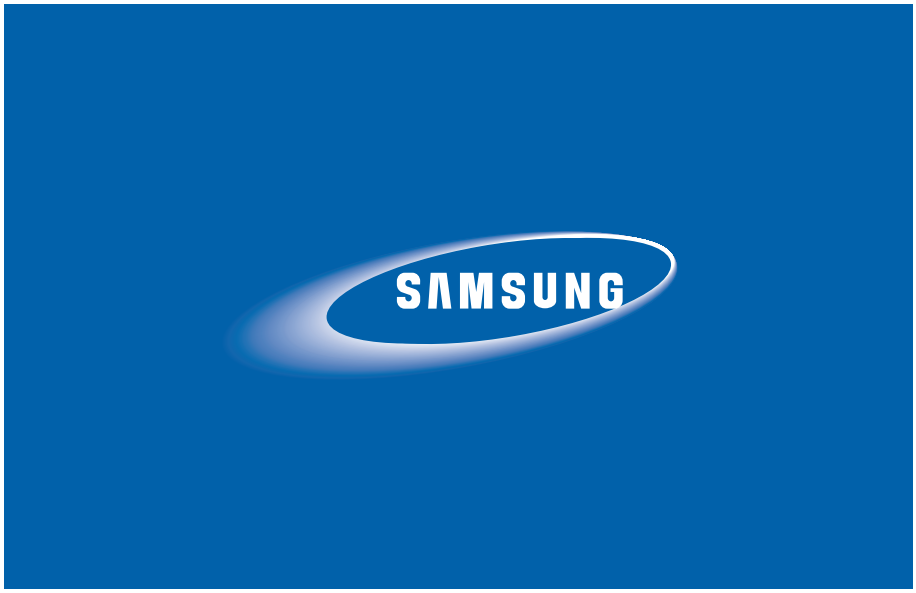


SERVICE MANUAL

S1050

SAMSUNG TECHWIN

C O N T E N T S

Ⅴ. CIRCUIT DIAGRAM

Ⅰ. SPECIFICATION

1. CAMERA SPECIFICATION

Image Sensor
- Type : 1/1.8" CCD
- Effective Pixel : Approx.10.1 Mega-pixel
- Total Pixel : Approx. 10.3 Mega-pixel

Lens
- Focal Length : SHD Lens f = 7.8~39mm (35mm film equivalent : 38~190mm)
- F No. : Wide : 2.8~7.4
  Tele : 4.5~11.7
- Digital Zoom : · Still Image mode : 1.0X ~ 5.0X
  · Play mode : 1.0X ~ 14.3X (depends on image size)

LCD Monitor
- 3.0" color TFT LCD (230,000 dots)

Focusing
- Type : TTL auto focus (Multi AF, Center AF, Face Recognition AF)
- Range

	Wide	Tele
Normal	80cm ~ Infinity	1.5m ~ Infinity
Macro	10cm ~ 80cm	50cm ~ 1.5m
Auto Macro	1cm~10cm (Wide Only)	
Super Macro	10cm ~ Infinity	50cm ~ Infinity
Manual Focus	1cm ~ Infinity	50cm ~ Infinity

Shutter
- Shutter Speed : 1 ~ 1/2,000sec. (Manual : 16 ~ 1/2,000 sec.)

Exposure
- Control : Program AE
- Metering : Multi, Spot, Center weighted, Face Recognition
- Compensation : ±2EV (1/3EV steps)
- ISO Equivalent : Auto, 80, 100, 200, 400, 800, 1600

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, A, S, M, ASR, Scene
  - · Scene : Night, Portrait, Children, Landscape, Close-up, Text, Sunset, Dawn, Backlight, Fireworks, Beach & Snow
  - · Shooting : Single, Continuous, AEB, Wise Shot, Motion capture
  - · 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 : 800X592, 720X480, 640X480, 320X240
    - ※ 30 FPS cannot be used in 800x592 size.
  - · Frame rate : 30 fps, 20fps,15 fps
  - · Optical zoom: Max. 5X
  - · Movie Stabilizer
  - · Movie Editing (Embedded): Pause during recording, Still Image Capture, Time Trimming

Storage

- Media :
  - · Internal memory : Approx.48MB 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

10M	9M	7M	7M	5M	3M	1M
3648x2736	3648x2432	3072x2304	3648x2052	2592x1944	2048x1536	1024x768

- Capacity (256 MB MMC)

10M	9M	7M	7M	5M	3M	1M
48	53	67	67	95	142	459
94	104	128	128	183	269	744
109	151	197	197	269	363	868

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

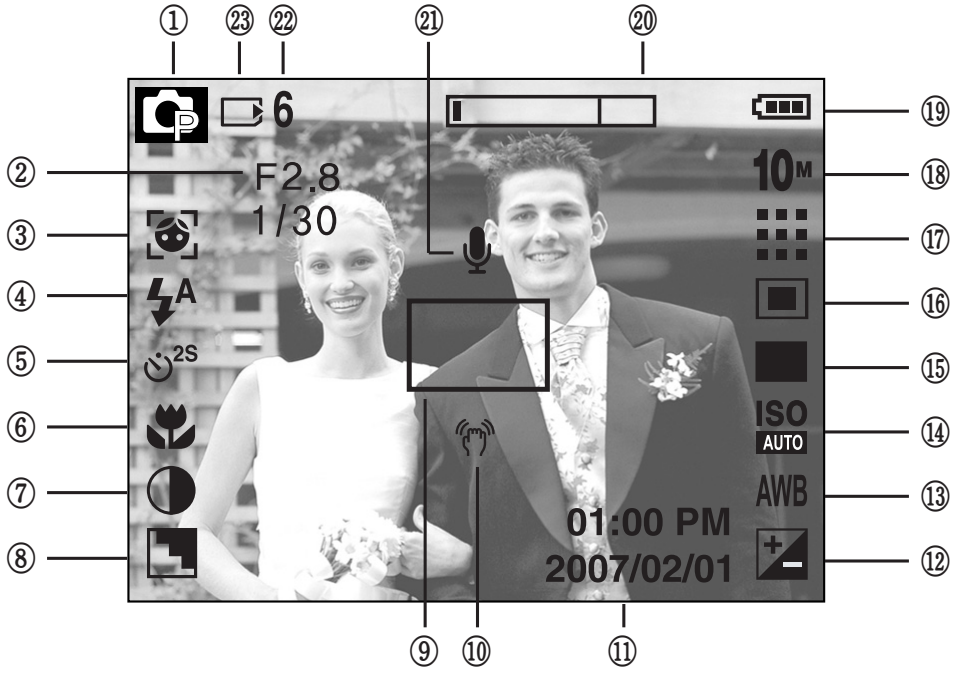
"E" Button	- Effect : Color, Image Adjust, Fun (Highlight, Composite, Photo Frame) - Editing : Resize, Rotate, Color, Special Color, Image Adjust (Red eye fix, Brightness, Contrast, Saturation, Add Noise), Fun (Cartoon, Highlight, Composite, Photo Frame, Sticker)
Image Play	- Single image, Thumbnails, 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 (2 x AA 2500mAh Ni-MH Battery & Charger) ※ Included battery may vary depending on sales region.
Dimensions (WxHxD)	- 104.5 x 64.2 x 25.5mm (excluding protrusions)
Weight	- Approx. 205g (without batteries and card)
Operating Temperature	- 0 ~ 40°C
Operating Humidity	- 5 ~ 85%
Software	- 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 98SE/2000/ME/XP/Vista	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

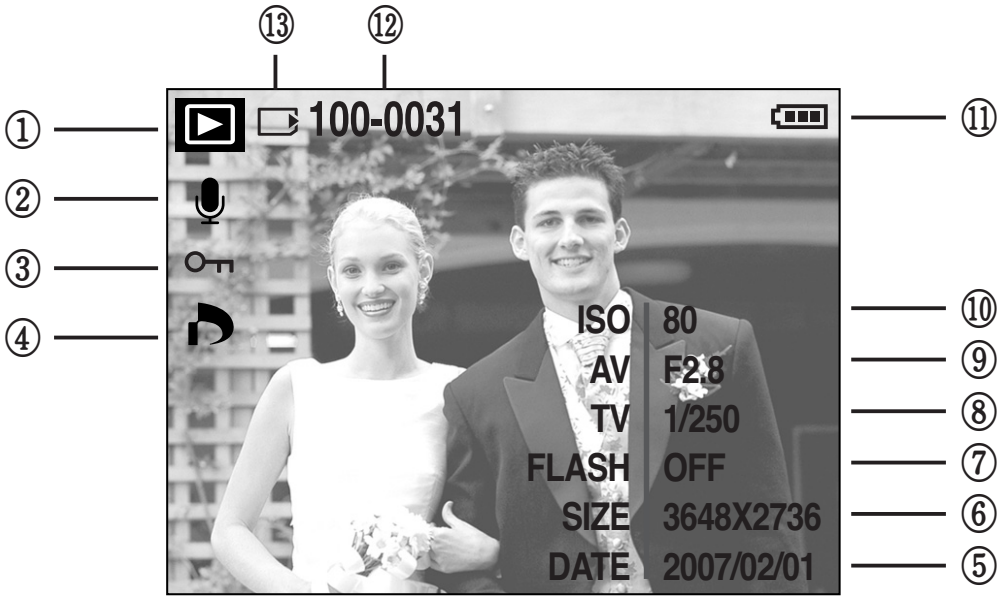
■ Recording mode



[Image & Full Status]

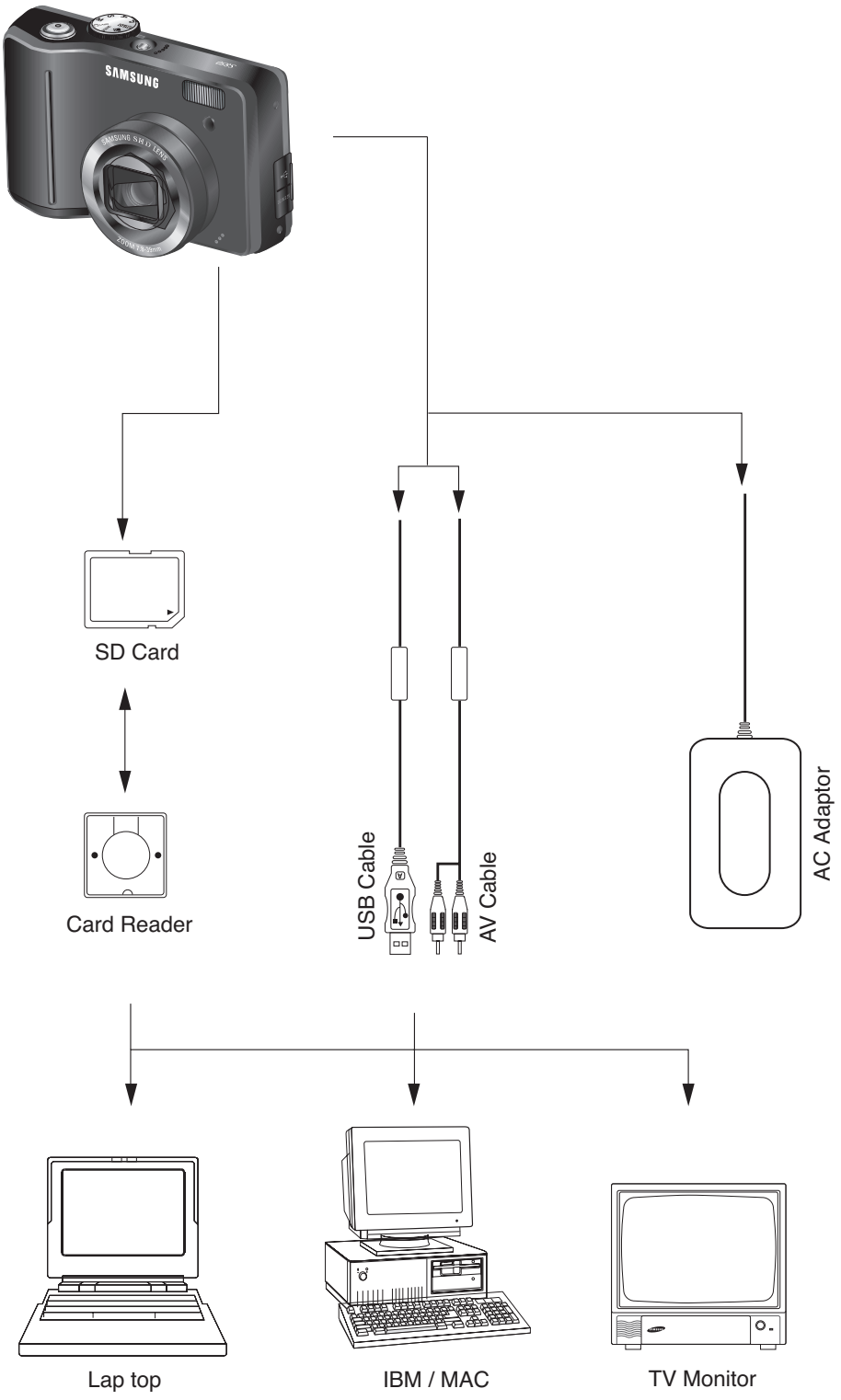
No.	Description	Icons
1	Recording mode	
2	Aperture Value/ Shutter Speed	F2.8, 1/30
3	Face Recognition	
4	Flash	
5	Self-timer	
6	Macro	MF
7	Contrast	
8	Sharpness	
9	Auto focus frame	
10	Camera shake warning	
11	Date/ Time	2007/02/01 01:00 PM
12	Exposure compensation	
13	White Balance	AWB
14	ISO	ISO AUTO ISO 80 ISO 100 ISO 200 ISO 400 ISO 800 ISO 1600
15	Continuous shot	AEB / W
16	Metering	
17	Image quality	30 20 15
18	Image size	10M 9M 7M 7M 5M 3M 1M 800 720 640 320
19	Battery	
20	Optical/ Digital Zoom bar/ Digital Zoom rate	x 5.0
21	Voice memo/ Without Sound	/
22	Number of available shots remaining	6
	Movie / Voice recording time	00:00:00
23	Card inserted indicator	INT

■ Play mode



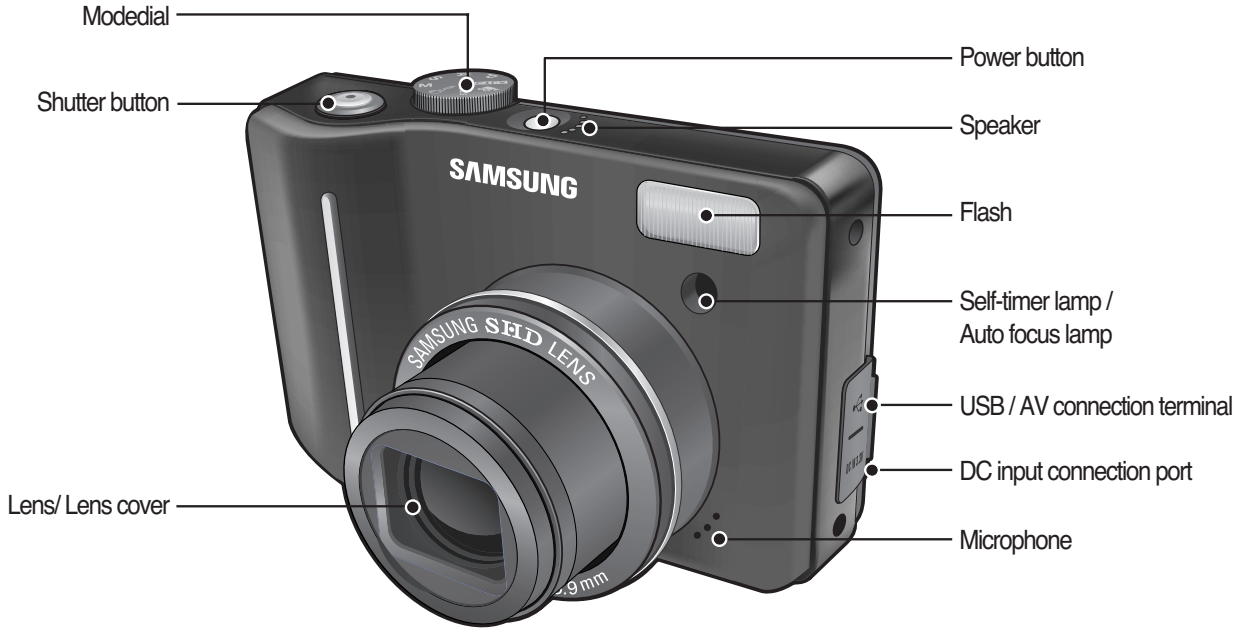
No.	Description	Icon
1	Play mode icon	
2	Voice Memo	
3	Protect	
4	DPOF	
5	Recording date	2007/02/01
6	Image size	3648X2736 ~ 256X192
7	Flash	ON/OFF
8	Shutter speed	16 ~ 1/2000
9	Aperture value	F2.8 ~ 11.7
10	ISO	80 ~ 1600
11	Battery	
12	Folder name & File name	100-0031
13	Memory card indicator	INT

4. CONNECTION DIAGRAM

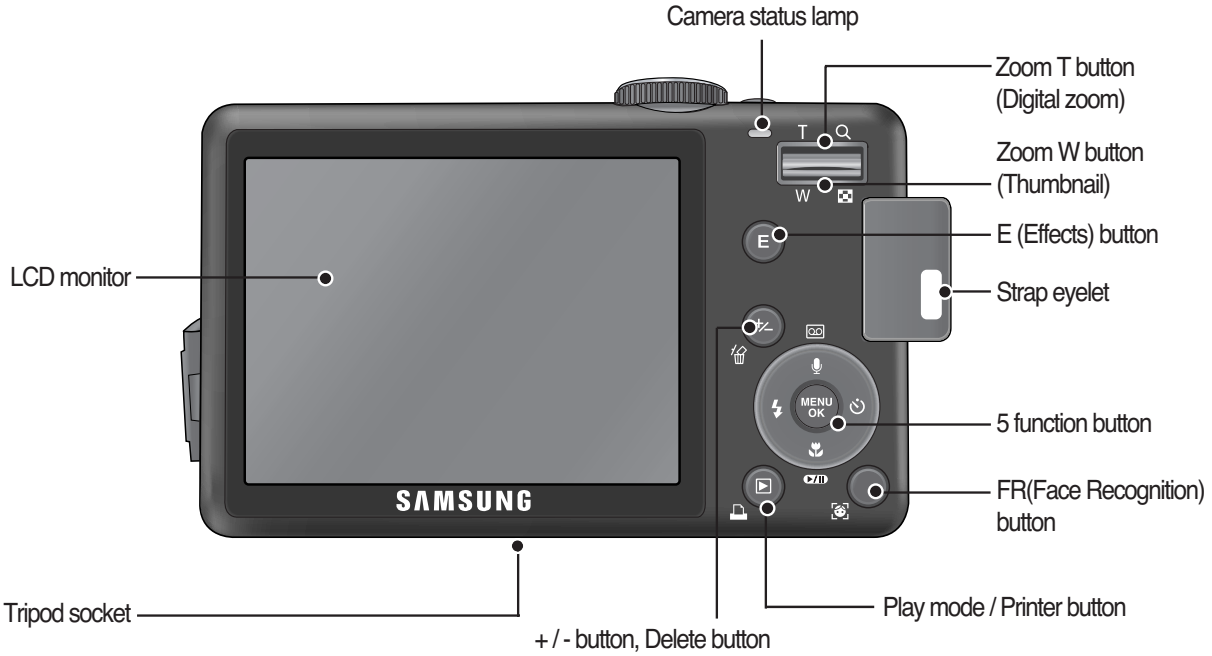


5. IDENTIFICATION OF FEATURES

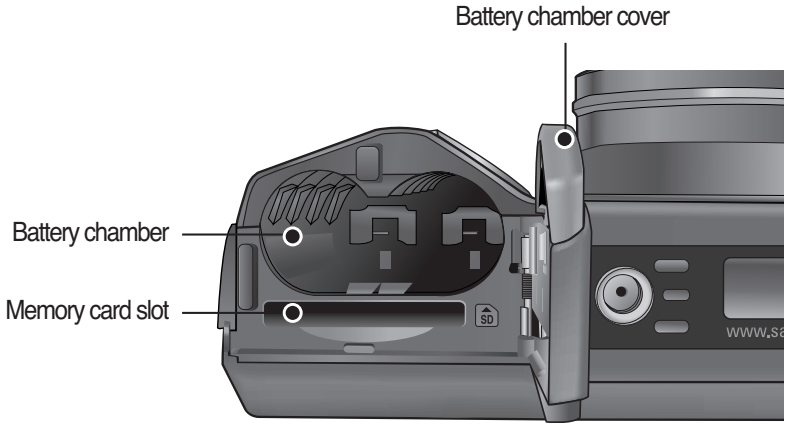
Front & Top



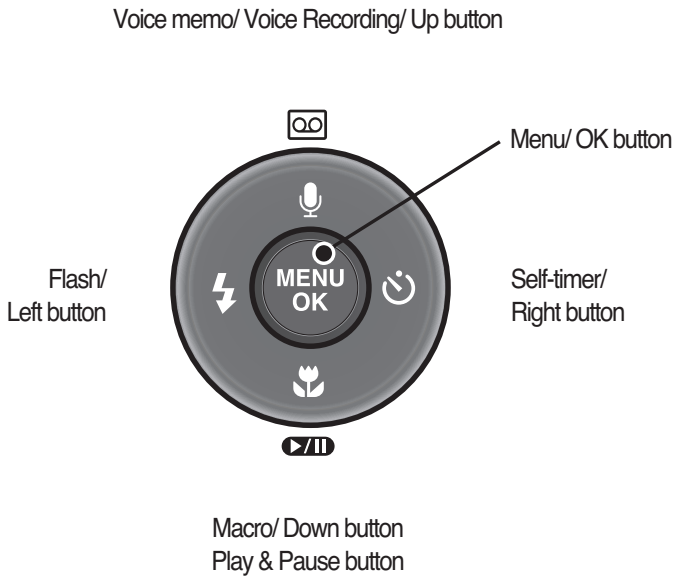
Back & Bottom



Bottom

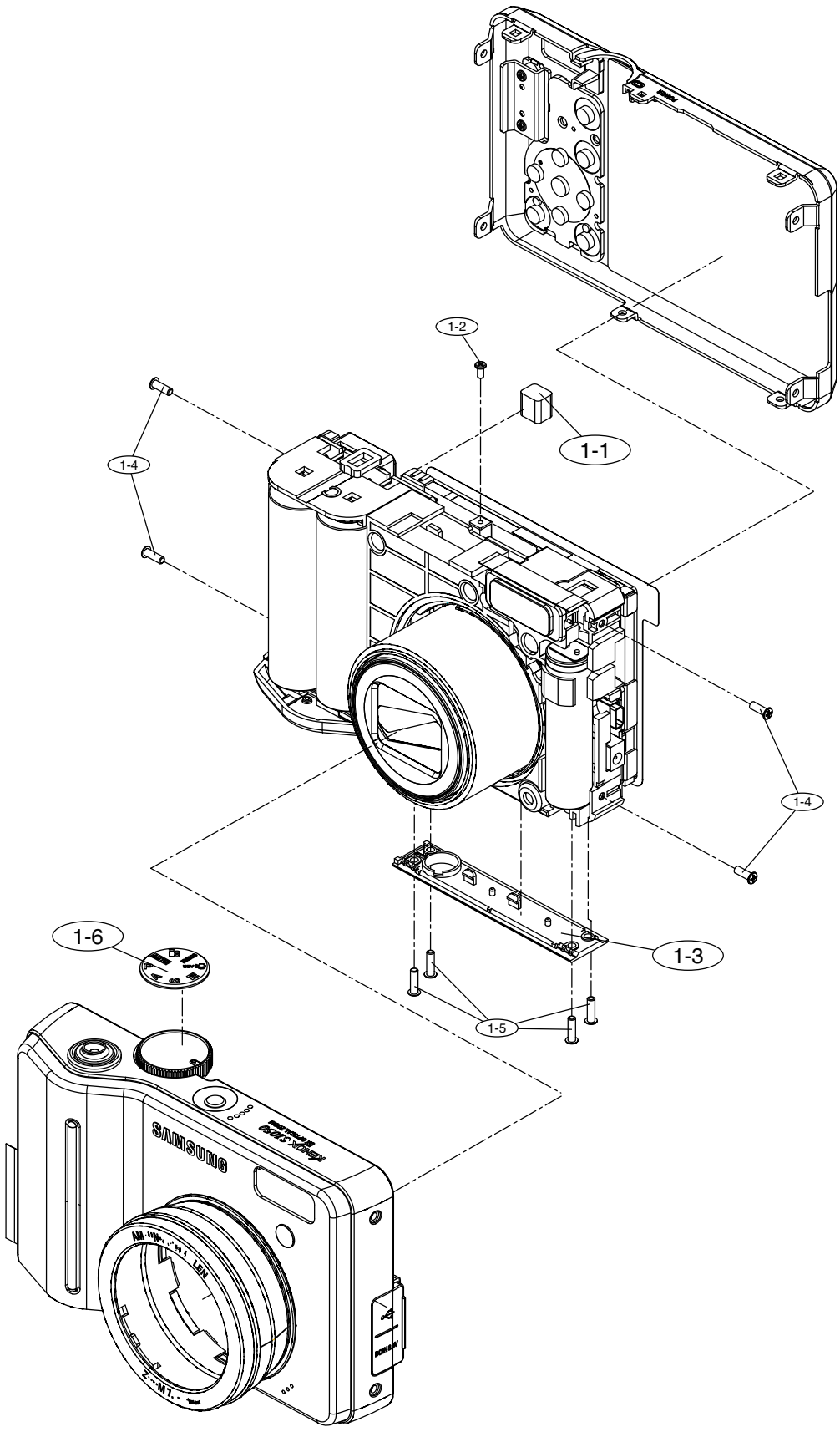


5-function button

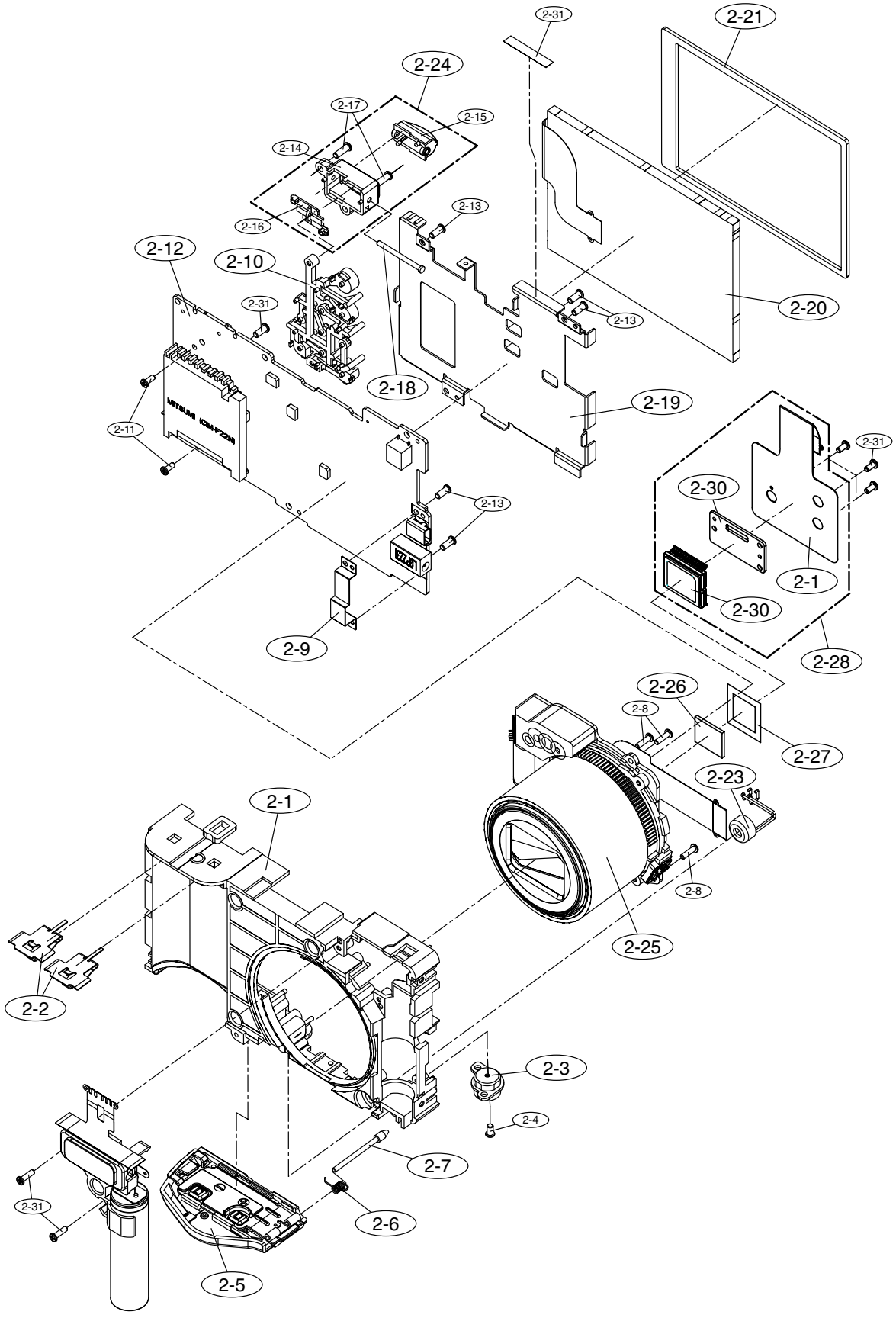


Ⅱ. EXPLODED VIEW AND PART LIST

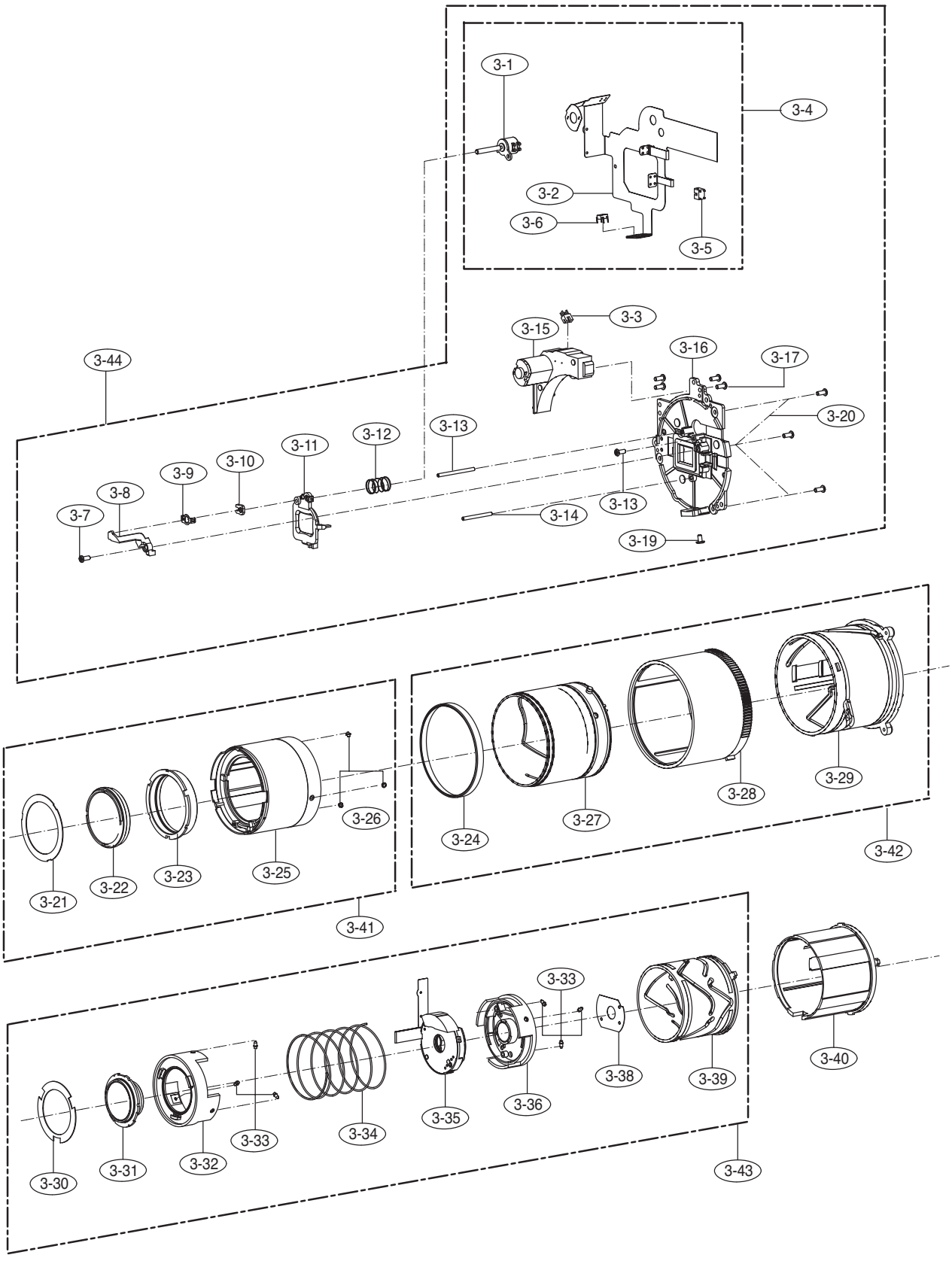
1. MAIN ASSEMBLY



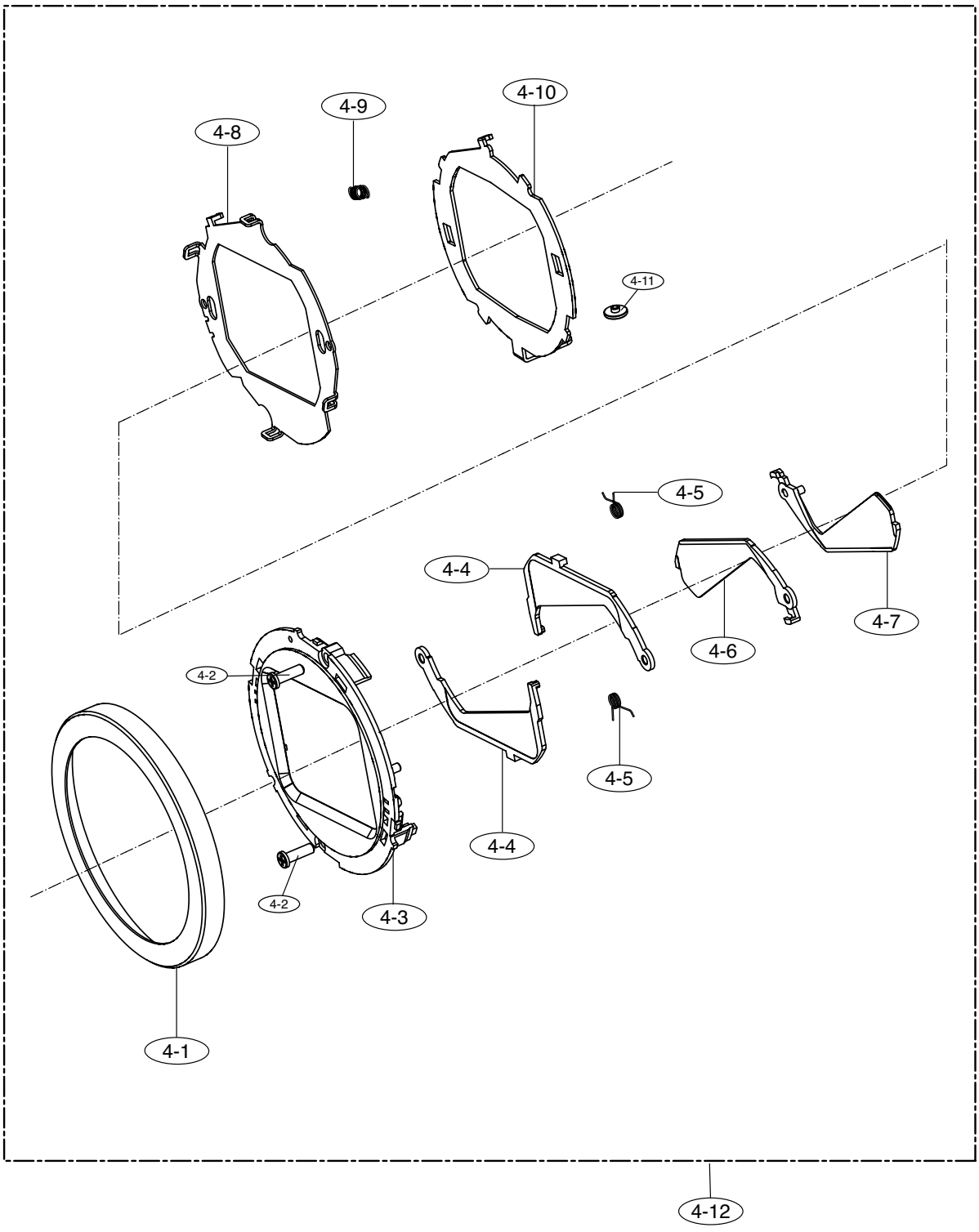
2. BODY ASSEMBLY



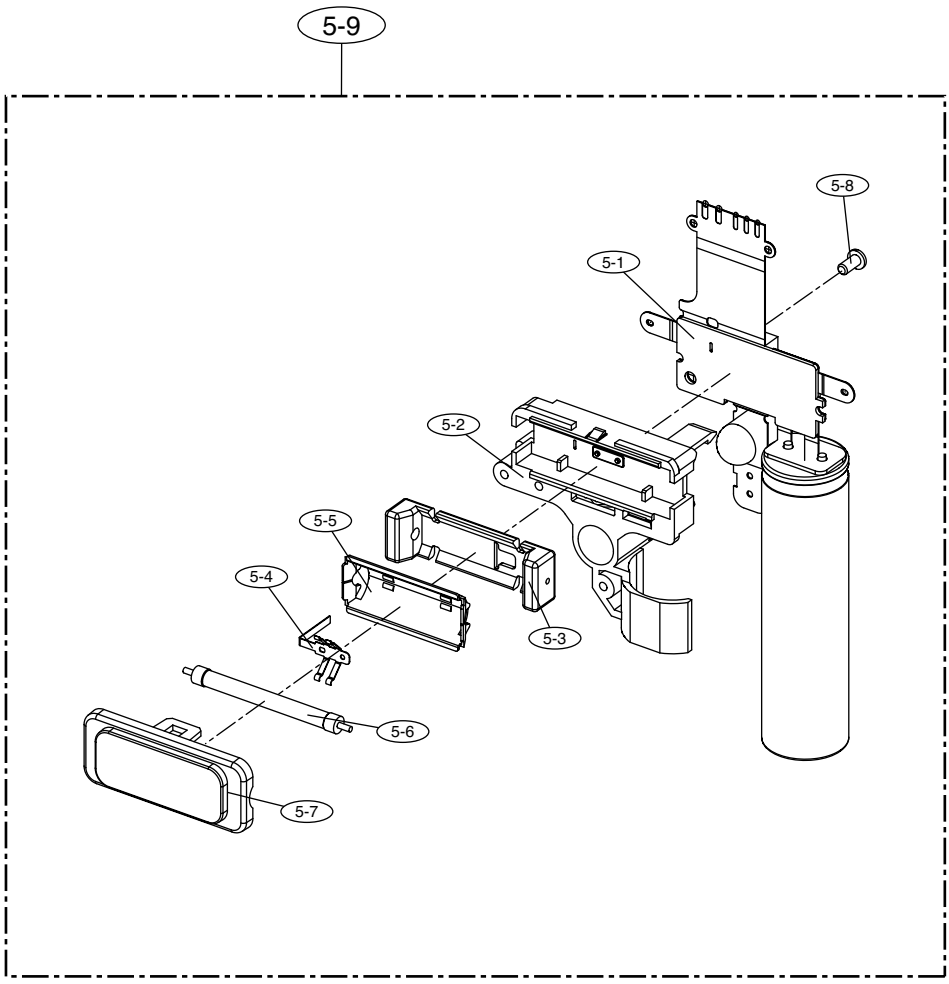
3. BARREL ASSEMBLY



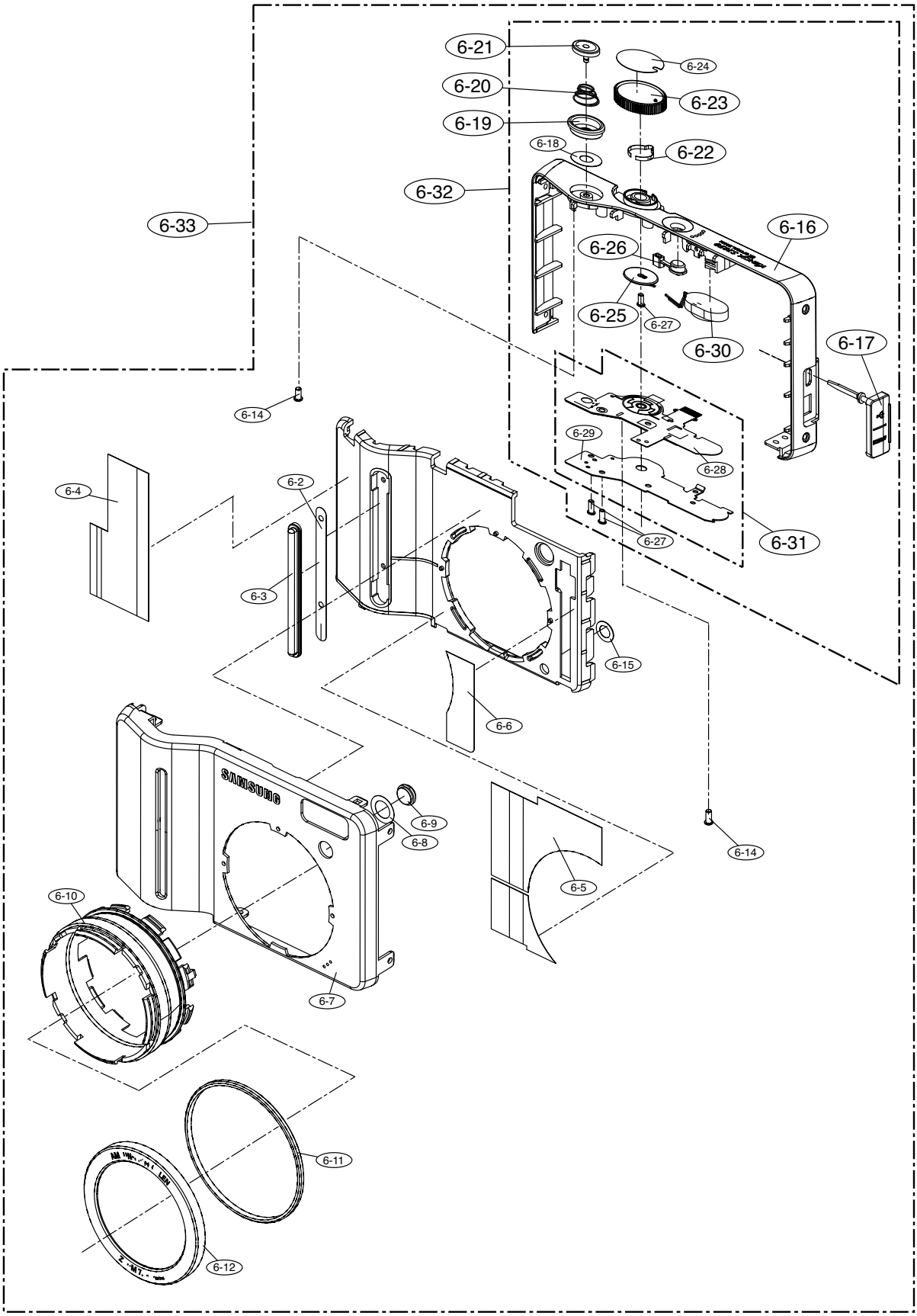
4. BARRIER ASSEMBLY



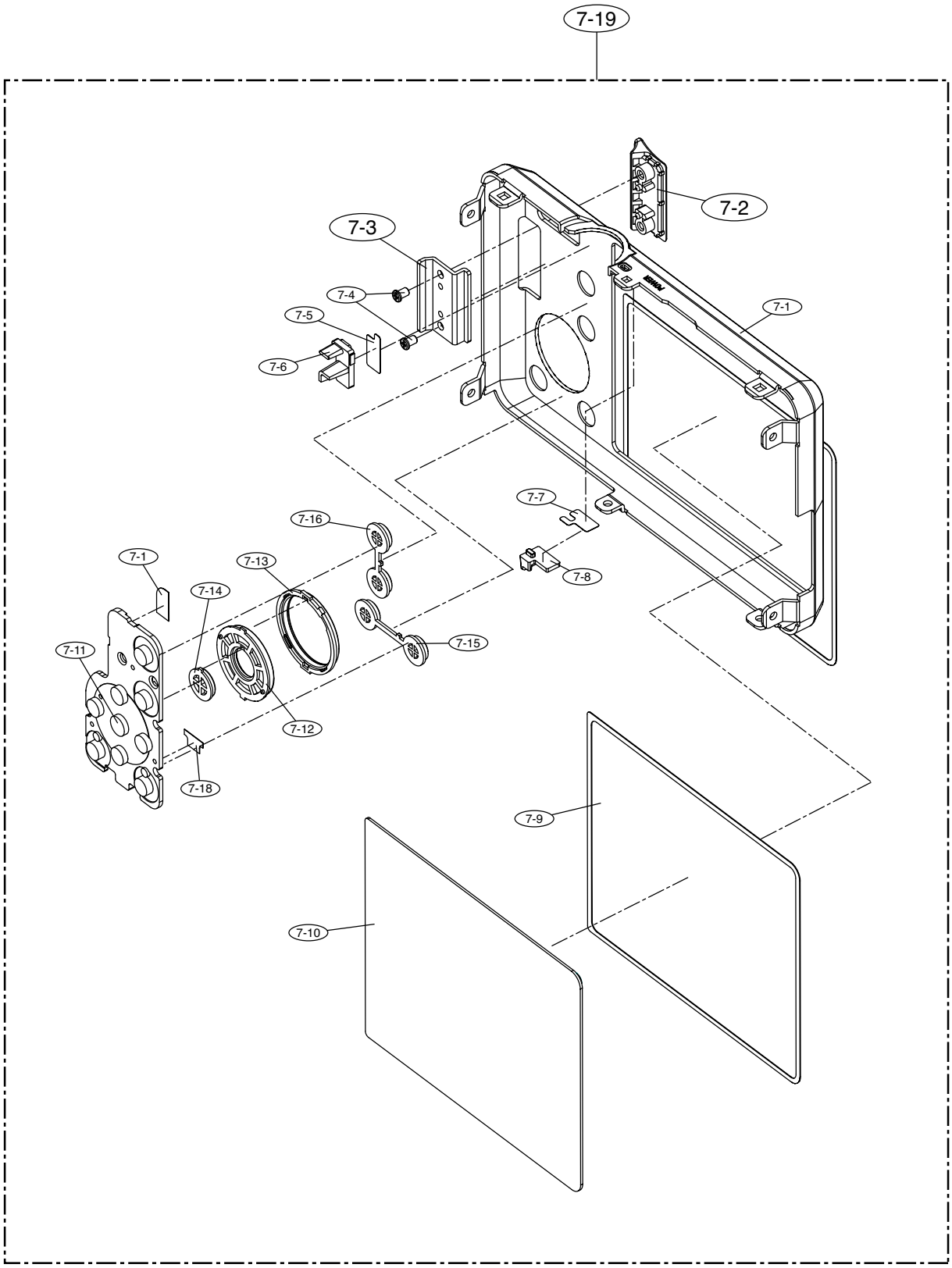
5. STROBO ASSEMBLY



6. FRONT COVER ASSEMBLY



7. REAR COVER ASSEMBLY



8. PACKING ITEM

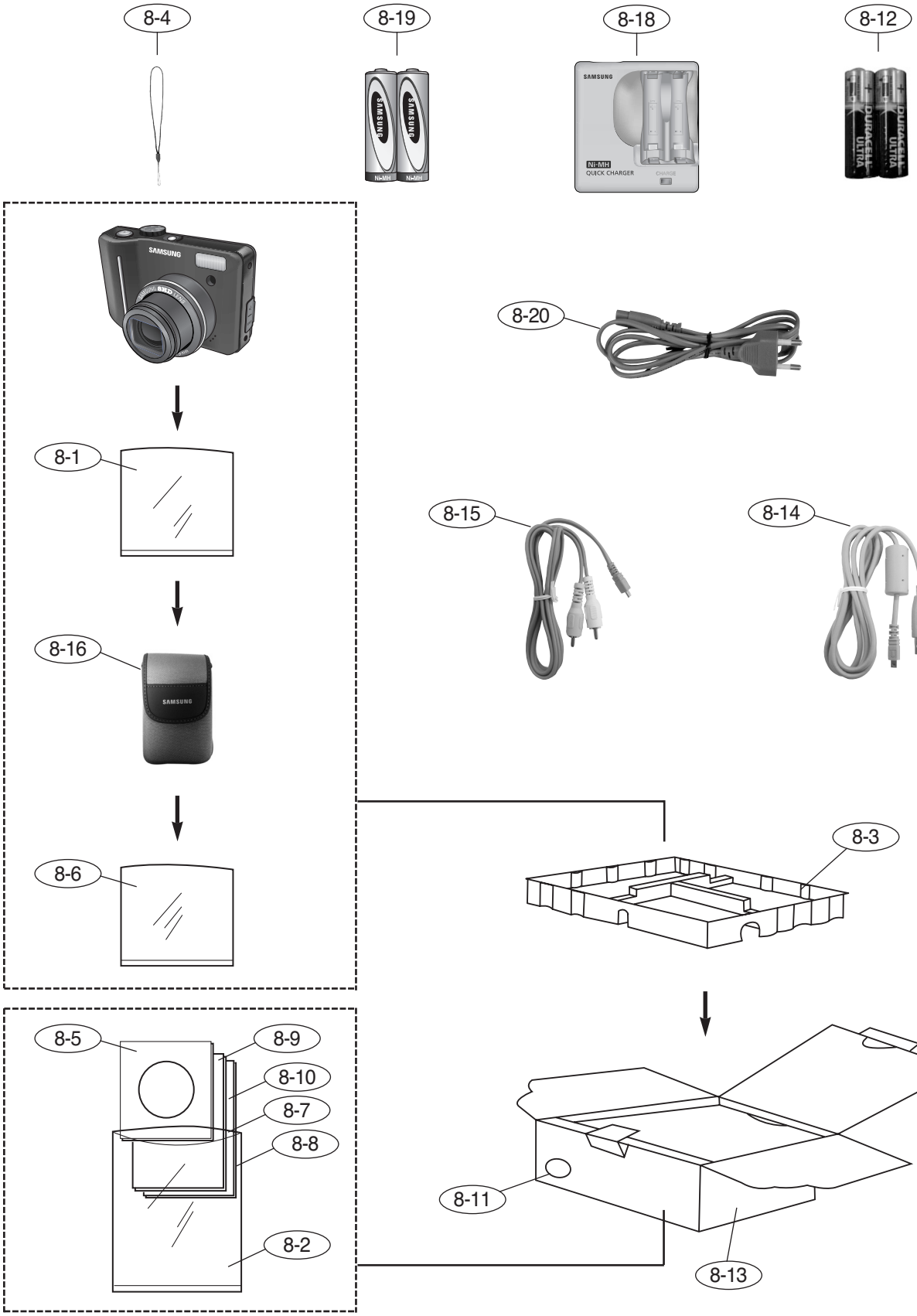


Fig No.	Old Code	New Code	Parts Name	Q'ty	Supply	Remarks
1.MAIN ASSEMBLY						
1-1	Q7409279801A	AD63-02219A	PCB SHIELD FORM	1	O	
1-2	Q6001016501A	6001-002131	SCREW	1	X	
1-3	Q7217398301A	AD81-04639A	BOTTOM DECO	1	O	
1-4	Q6003002402A	6003-001645	SCREW	4	X	
1-5	Q6003002702A	6003-001650	SCREW	4	X	
1-6	Q7104002401A	AD64-01802A	MODE DIAL DECO	1	O	
2.BODY ASSEMBLY						
2-1	Q7211088602A	AD62-00065A	BATTERY CHAMBER	1	O	
2-2	Q7011055603A	AD67-00621A	BATTERY CONTACT(S2_5363)	2	O	
2-3	Q7003000402A	AD61-03136A	TRIPOD CONNECTOR	1	O	
2-4	Q9761173012	6003-001688	SCREW	1	X	
2-5	Q9007278601A	AD97-14506A	BATTERY COVER ASSY	1	O	BLACK
	Q9007278601B	AD97-14507A	BATTERY COVER ASSY	1	O	SILVER
	Q9007278601C	AD97-14508A	BATTERY COVER ASSY	1	O	PATTEN SILVER
2-6	Q6107074501A	6107-001449	BATTERY HINGE SPRING_S3_73	1	O	
2-7	Q7004002701A	AD61-03139A	BATTERY HINGE	1	O	
2-8	Q6003018501A	6003-001665	SCREW	5	X	
2-9	Q7011060301A	AD61-03169A	USB PLATE	1	O	
2-10	Q7211088502A	AD64-01823A	BACK KEY ACTUATOR	1	O	
2-11	Q0961900301A	6003-001630	T1.4X3.5	2	X	
2-12	Q9008115501A	AD92-00356A	MAIN PCB ASSY	1	O	
2-13	Q9761174007	6003-001692	SCREW	6	X	
2-14	Q7217399101A	AD61-03477A	ZOOM LEVER HOLDER	1	X	
2-15	Q7217399001A	AD64-01945A	ZOOM LEVER	1	X	
2-16	Q7309051401A	AD73-00258A	ZOOM RUBBER	1	X	
2-17	Q9761175007	6003-001694	SCREW	2	X	
2-18	Q7004002601A	AD61-03138A	ZOOM LEVER HINGE	1	X	
2-19	Q7011060001A	AD61-03166A	LCD FRAME	1	O	
2-20	Q0704013701A	AD07-00070A	LCD	1	O	
2-21	Q7409267901A	AD63-02165A	LCD WINDOW CUSHION	1	O	
2-22	Q7409267601A	AD63-02162A	LCD TAPE	1	X	
2-23	Q3003001201A	3003-001123	MIC	1	O	
2-24	Q9007278701A	AD97-14509A	ZOOM LEVER ASSY(16+17+18+19)	1	O	BLACK
	Q9007278701B	AD97-14510A	ZOOM LEVER ASSY(16+17+18+20)	1	O	SILVER
2-25	Q9002159801A	AD97-13539A	BARREL ASSY	1	O	BLACK
	Q9002169101A	AD97-13597A	BARREL ASSY	1	O	SILVER
2-26	Q2904004101A	AD63-01250A	IR CUT FILTER	1	O	
2-27	Q7309051202A	AD63-01908A	OLPF CUSHION	1	O	
2-28	Q9008116101A	AD92-00362A	CCD FPCB ASS'Y SMD	1	O	
2-29	Q7012094301A	AD61-03250A	CCD PLATE	1	O	
2-30	Q0961900301A	6003-001630	SCREW	3	X	
3.BARREL ASSEMBLY						
3-1	Q9002145901A	AD97-13450A	AF MOTOR ASS'Y	1	X	
3-2	Q4101039102A	AD41-00976A	MAIN_F-PCB	1	X	
3-3	Q0608001301A	0604-001302	PHOTO INTERRUPTER SHARP	1	X	
3-4	Q9002159601A	AD92-00173A	MAIN_F-PCB_ASSY	1	O	
3-5	Q0608001001A	0604-001374	PHOTO INTERRUPTER	1	X	
3-6	Q9002159801A	AD97-13539A	BARREL_ASSY	1	X	
3-7	Q0961900301A	6003-001630	SCREW	1	X	

3-8	Q7212192602A	AD61-03415A	AF GUIDE HOLDER	1	O	
3-9	Q7012080802A	AD61-03230A	AF CLIP HOLDER	1	O	
3-10	Q7012080702A	AD61-03229A	AF CLIP	1	O	
3-11	Q9002143201A	AD97-13431A	4TH BARREL ASS'Y	1	O	
3-12	Q6107066401A	6107-001425	4TH LENS SPRING	1	O	
3-13	Q7411121802A	AD66-00533A	AF GUIDE BAR -A	1	O	
3-14	Q7411121902A	AD66-00534A	AF GUIDE BAR -B	1	O	
3-15	Q9002158801A	AD97-13534A	ZOOM_GEAR_ASSY	1	O	
3-16	Q7212201402A	AD61-03426A	LENS_BASE	1	O	
3-17	Q0961900301A	6003-001630	SCREW	4	X	
3-18	Q0961900301A	6003-001630	SCREW	1	X	
3-19	Q0994913101A	6003-001631	SCREW	1	X	
3-20	Q0961900301A	6003-001630	SCREW	3	X	
3-21	Q7409208602B	AD63-01950A	1ST SHIELD	1	X	
3-22	Q9002142901A	AD97-13428A	1ST BARREL ASS'Y	1	X	
3-23	Q7212192101A	AD81-03660A	SLIP RING	1	X	
3-24	Q7012094101A	AD64-01763A	CAM_DECO_RING	1	X	
3-25	Q7212197502A	AD67-00697A	ZOOM_RING	1	X	
3-26	Q7411110404A	AD66-00522A	1ST MOVE PIN	3	X	
3-27	Q7212197401A	AD67-00696A	CAM BARREL	1	X	
3-28	Q9002160001A	AD97-13541A	OUTER_GUIDE_BARREL_ASSY	1	O	
3-29	Q7212191504B	AD67-00671A	OUTER_CAM_BARREL	1	O	
3-30	Q7409208702B	AD63-01951A	2ND SHIELD	1	X	
3-31	Q9002143001A	AD97-13429A	2ND BARREL ASS'Y	1	X	
3-32	Q7212192005A	AD67-00676A	2ND MOVE BARREL	1	X	
3-33	Q7411121704A	AD66-00532A	2ND MOVE PIN	3	X	
3-34	Q6107066103B	6107-001422	2ND LENS SPRING	1	X	
3-35	Q9005163201A	AD97-13737A	SHUTTER ASS'Y	1	X	
3-36	Q9002143101A	AD97-13430A	3RD BARREL ASS'Y	1	X	
3-37	Q7411121704A	AD66-00532A	2ND MOVE PN	3	X	
3-38	Q7012088701A	AD63-01276A	3RD LIGHT SHIELD	1	X	
3-39	Q7212191901A	AD67-00675A	INNER CAM BARREL	1	X	
3-40	Q7212191801B	AD67-00674A	GUIDE BARREL	1	O	
3-41	Q9002148501A	AD97-13472A	ZOOM RING ASS'Y	1	O	
	Q9002155801A	AD97-13520A	ZOOM RING ASS'Y	1	O	
3-42	Q9002160101A	AD97-13542A	CAM_BARREL_ASS'Y	1	O	
	Q9002155701A	AD97-13519A	CAM_BARREL_ASS'Y	1	O	
3-43	Q9002148101A	AD97-13467A	INNER CAM BARREL ASS'Y	1	O	
3-44	Q9002159301A	AD97-13537A	LENS_BASE_ASS'Y	1	O	
4. BARRIER ASSEMBLY						
4-1	Q7012094001A	AD64-01762A	DECORATION_RING	1	O	
	Q7012098101A	AD64-01772A	DECORATION_RING	1	O	
4-2	Q6003048701A	6002-001418	BARRIER SCREW-A	2	X	
4-3	Q7212192805A	AD64-01837A	FRONT PANEL	1	O	
4-4	Q7212193102A	AD63-01517A	BARRIER C	2	O	
4-5	Q6107066302A	6107-001424	BARRIER_CLOSE_SPRING	2	O	
4-6	Q7212192902A	AD63-01515A	BARRIER A	1	O	
4-7	Q7212193002A	AD63-01516A	BARRIER B	1	O	
4-8	Q7012087703B	AD61-03238A	BARRIER BASE	1	O	
4-9	Q6107066201A	6107-001423	BARRIER OPEN SPRING	1	O	
4-10	Q7012087802A	AD66-00481A	BARRIER LEVER	1	O	
4-11	Q7411122503A	AD66-00537A	BARRIER LEVER PIN	1	X	
4-12	Q9002145201A	AD97-13444A	BARRIER ASSY	1	O	
5.STROBO ASSEMBLY						

5-1	Q9008115901A	AD92-00360A	STROBO FPCB ASS'Y	1	X	
5-2	Q7214091101A	AD61-03457A	REFLECTOR HOLDER	1	X	
5-3	Q7309048001A	AD73-00246A	XE TUBE RUBBER	1	X	
5-4	Q7011056002A	AD67-00623A	TRIGER CONTACT	1	X	
5-5	Q7014004801A	AD67-00634A	REFLECTOR	1	X	
5-6	Q0611003101A	AD47-00012A	REF XE TUBE	1	X	
5-7	Q7214091001A	AD67-00759A	FRESNEL LENS	1	X	
5-8	Q0961900301A	6003-001630	SCREW	2	X	
5-9	Q9001121401A	AD97-13803A	STROBO ASSY	1	O	
6.FRONT COVER ASSEMBLY						
6-1	Q7217399501A	AD63-01685A	FRONT INNER COVER	1	X	
6-2	Q7409268601A	AD63-02171A	GRIP TAPE	1	X	
6-3	Q7217398501A	AD63-01684A	GRIP	1	X	
6-4	Q7409268401A	AD63-02169A	FRONT INNER TAPE B	1	X	
6-5	Q7409268301A	AD63-02168A	FRONT INNER TAPE A	1	X	
6-6	Q7409269401A	AD63-02173A	FRONT INNER TAPE C	1	X	
6-7	Q7101003201B	AD63-01415A	FRONT AL COVER	1	X	
6-8	Q7409268501A	AD63-02170A	AF LED WINDOW TAPE	1	X	
6-9	Q7217377301A	AD64-01868A	AF LED WINDOW	1	X	
6-10	Q7217399201C	AD64-01948A	DECO BARREL	1	X	
6-11	Q7104002301A	AD64-01801A	DECO BLUE RING	1	X	
6-12	Q7104002201A	AD64-01799A	DECO FRONT RING	1	X	
6-14	Q9761173512	6003-001691	T1.7X3.5	2		
6-15	Q7409267701A	AD63-02163A	MIC SCREEN	1	X	
6-16	Q7217398402A	AD63-01683A	MIDDLE COVER	1	X	
6-17	Q7309051501B	AD63-01909A	DC USB COVER BLACK	1	O	SILVER
	Q7309051502A	AD63-01910A	DC USB COVER BLACK	1	O	BLACK
6-18	Q7409256101A	AD63-02096A	RELEASE RECO RING TAPE(NV103)	1	X	
6-19	Q7411123801A	AD64-02143A	RELEASE DECO RING(NV103)	1	O	
6-20	Q6107070901A	AD81-07604A	RELEASE SPRING (nv103)	1	O	
6-21	Q7217376901A	AD64-01863A	RELEASE BUTTON (nv10)	1	O	
6-22	Q7101002301A	AD61-03333A	MODE DIAL PLATE (NV SL 73)	1	O	
6-23	Q7217399401A	AD64-01950A	MODE DIAL	1	O	
6-24	Q7409280801A	AD63-02227A	MODE DIAL TAPE	1	X	
6-25	Q9007272001A	AD97-14371A	MODE CONTACT (NV_103)	1	O	
6-26	Q7217399302A	AD64-01949A	POWER BUTTON	1	O	
6-27	Q9761173512	6003-001691	T1.7X3.5	3	X	
6-28	Q9008115701A	AD92-00358A	TOP KEY FPCB ASSY	1	X	
6-29	Q7011060101A	AD61-03167A	TOP KEY PLATE	1	X	
6-30	Q3001001501A	3001-002317	SPEAKER	1	O	
6-31	Q9007278501A	AD97-14505A	TOP KEY PLATE ASSY(13+14)	1	O	
6-32	Q9007277501A	AD97-14473A	MIDDLE COVER ASSY KENOX S1050		O	BLACK
	Q90072775010	AD97-14475A	MIDDLE COVER ASSY KENOX S1050		O	SILVER
	Q9007277501B	AD97-14474A	MIDDLE COVER ASSY_SAMSUNG S1050	1	O	BLACK
	Q9007277501D	AD97-14476A	MIDDLE COVER ASSY_SAMSUNG S1050	1	O	SILVER
6-33	Q9007277201B	AD97-14464A	FRONT_CONVER_ASSY_SAMSUNG_105	1	O	BLACK
	Q9007277201D	AD97-14466A	FRONT_CONVER_ASSY_SAMSUNG_105	1	O	SILVER
	Q9007277201E	AD97-14467A	FRONT_CONVER_ASSY_KENOX_1050	1	O	PATTEN BLACK
	Q9007277201F	AD97-14468A	FRONT_CONVER_ASSY_KENOX_1050	1	O	PATTEN SILVER
	Q9007277201G	AD97-14469A	FRONT_CONVER_ASSY_SAMSUNG_1050		O	PATTEN SILVER
7.REAR COVER ASSEMBLY						
7-1	Q7101003301C	AD63-01418A	BACK AL COVER	1	X	
7-2	Q7103004201A	AD61-03344A	STRAP HOLDER	1	O	BLACK

7-2	Q7103004201B	AD61-03345A	STRAP HOLDER	1	O	SILVER
7-3	Q7101003401A	AD61-03335A	STRAP HOLDER PLATE	1	O	
7-4	Q6001018801A	6001-002136	M1.7X2.5	2	X	
7-5	Q7409268001A	AD63-02166A	BACK LED TAPE	1	X	
7-6	Q7217398001A	AD64-01933A	BACK LED WINDOW	1	X	
7-7	Q7409268101A	AD63-02167A	TOP LED TAPE	1	X	
7-8	Q7217397801A	AD64-01931A	TOP LED WINDOW	1	X	
7-9	Q7409267801A	AD63-02164A	LCD WINDOW TAPE	1	X	
7-10	Q7217397901A	AD64-01932A	LCD WINDOW	1	X	
7-11	Q7309051601A	AD73-00259A	BACK KEY RUBBER	1	X	
7-12	Q7217398701A	AD64-01940A	NAVI BUTTON	1	X	
7-13	Q7217398801A	AD64-01942A	NAVI BUTTON DECO	1	X	
7-14	Q7217398901A	AD64-01943A	OK BUTTON	1	X	
7-15	Q7217403801A	AD64-01974A	PLAY BUTTON	1	X	
7-16	Q7217398601A	AD64-01938A	FUNCTION BUTTON	1	X	
7-17	Q7409274901A	AD63-02199A	BACK KEY TAPE B	1	X	
7-18	Q7409274801A	AD63-02198A	BACK KEY TAPE A	1	X	
7-19	Q9007277401A	AD97-14470A	BACK COVER ASS'Y	1	O	BLACK
	Q9007277401B	AD97-14471A	BACK COVER ASS'Y	1	O	SILVER
	Q9007277401C	AD97-14472A	BACK COVER ASS'Y	1	O	SILVER PATTERN
8.PACKING ITEM						
8-1	QP960210101A	6902-000924	PE BAG (FOR CAMERA)	1	O	
8-2	Q6909018202A	6902-000921	PE BAG (FOR ACCESSORY)	1	O	
8-3	Q6901266101A	AD81-02549A	MOLD_PULP_Samsung_S1050_EXP	1	O	
8-4	Q7409271401A	AD63-02596A	STRAP_KENOX_S730_KOR_EXP	1	O	
8-5	Q4609018301A	AD46-00140A	DRIVER_DIGIMAX_MASTER_S3-105	1	O	
8-6	Q6909020201A	6902-000945	AIR_BAG_Samsung_S1050_FOR_BODY	1	O	
	Q6909020101A	6902-000944	AIR_BAG_KENOX_S1050	1	O	
8-7	Q6806381001A	DNA	Q_GUIDE_KENOX_S1050	1	X	
	Q6806381301A	DNA	Q_GUIDE_Samsung_S1050_ENG	1	X	
	Q6806381401A	DNA	Q_GUIDE_Samsung_S1050_GER	1	X	
	Q6806381501A	DNA	Q_GUIDE_Samsung_S1050_FRA	1	X	
	Q6806381601A	DNA	Q_GUIDE_Samsung_S1050_SPA	1	X	
	Q6806381701A	DNA	Q_GUIDE_Samsung_S1050_ITA	1	X	
	Q6806381801A	DNA	Q_GUIDE_Samsung_S1050_CHI_T	1	X	
	Q6806381901A	DNA	Q_GUIDE_Samsung_S1050_DUT	1	X	
	Q6806382001A	DNA	Q_GUIDE_Samsung_S1050_POR	1	X	
	Q6806382101A	DNA	Q_GUIDE_Samsung_S1050_SWE	1	X	
	Q6806382201A	DNA	Q_GUIDE_Samsung_S1050_DEN	1	X	
	Q6806382301A	DNA	Q_GUIDE_Samsung_S1050_FIN	1	X	
	Q6806382401A	DNA	Q_GUIDE_Samsung_S1050_RUS	1	X	
	Q6806382501A	DNA	Q_GUIDE_Samsung_S1050_CHI_S	1	X	
	Q6806382601A	DNA	Q_GUIDE_Samsung_S1050_TK	1	X	
	Q6806382701A	DNA	Q_GUIDE_Samsung_S1050_IND	1	X	
	Q6806382801A	DNA	Q_GUIDE_Samsung_S1050_ARA	1	X	
	Q6806382901A	DNA	Q_GUIDE_Samsung_S1050_THA	1	X	
	Q6806381101A	DNA	U_MANUAL_KENOX_S1050	1	X	
	Q6806383001A	DNA	U_MANUAL_Samsung_S1050_ENG	1	X	
	Q6806383101A	DNA	U_MANUAL_Samsung_S1050_GER	1	X	
	Q6806383201A	DNA	U_MANUAL_Samsung_S1050_FRA	1	X	
	Q6806383301A	DNA	U_MANUAL_Samsung_S1050_SPA	1	X	
	Q6806383401A	DNA	U_MANUAL_Samsung_S1050_ITA	1	X	
	Q6806383501A	DNA	U_MANUAL_Samsung_S1050_CHI_T	1	X	
	Q6806383601A	DNA	U_MANUAL_Samsung_S1050_DUT	1	X	

8-8	Q6806383701A	DNA	U_MANUAL_Samsung_S1050_POR	1	X	
	Q6806383801A	DNA	U_MANUAL_Samsung_S1050_SWE	1	X	
	Q6806383901A	DNA	U_MANUAL_Samsung_S1050_DEN	1	X	
	Q6806384001A	DNA	U_MANUAL_Samsung_S1050_FIN	1	X	
	Q6806384101A	DNA	U_MANUAL_Samsung_S1050_RUS	1	X	
	Q6809006601A	AD68-02007A	U_MANUAL_ROHS_CHI	1	O	
	Q6806384201A	AD81-02183A	U_MANUAL_Samsung_S1050_CHI_S	1	O	
	Q6806384301A	DNA	U_MANUAL_Samsung_S1050_TK	1	X	
	Q6806384401A	DNA	U_MANUAL_Samsung_S1050_IND	1	X	
	Q6806384501A	DNA	U_MANUAL_Samsung_S1050_ARA	1	X	
	Q6806384601A	DNA	U_MANUAL_Samsung_S1050_THA	1	X	
8-9	Q6806381201A	AD68-01780A	QS_MANUAL_KENOX_S1050	1	O	
	Q6806384701A	AD81-02184A	QS_MAN_S1050_E_G_F_SP_I_DU_P_7	1	O	
	Q6806384801A	AD68-01781A	QS_MAN_S1050_E_G_FI_SW_DA_RU_6	1	O	
	Q6806384901A	AD68-01782A	QS_MAN_S1050_E_TU_CH_IN_AR_TH_6	1	O	
	Q6806385001A	AD68-01783A	QS_MAN_S1050_EN_SP_FR_3	1	O	
8-10	OP955150101F	6801-001642	WARRANTY CARD_KOREA	1	O	
	Q6807003003U	6801-001646	WARRANTY CARD_EXP	1	O	
	Q6807012301A	6801-001658	WARRANTY CARD_2 YERARS	1	O	
	Q6807010903C	6801-001650	WARRANTY CARD_RUS(3 YEARS)	1	O	
	Q6807011301B	AD81-02236A	WARRANTY CARD_TSOE(CHINA)	1	O	
	Q6807009502E	6801-001647	CARD_PRODUCT(Mexico)	1	O	
	Q6807012101A	6801-001656	WARRANTY CARD_IRAN	1	O	
	Q6807012401A	6801-001659	WARRANTY CARD_TURKEY	1	O	
8-11	Q6901266601A	AD81-02550A	GT_BOX_KENOX_S1050_SBC-N2_BLAC	1	O	
	Q6901266701A	AD81-02551A	GT_BOX_S1050_EXP_AUS_ALKALINE_B	1	O	
	Q6901266801A	AD81-02552A	GT_BOX_S1050_USA_CAN_ALKALINE_B	1	O	
	Q6901273301A	AD69-01205A	GT_BOX_KENOX_S1050_PATTERN_SL	1	O	
8-12	Q4301001801A	AD81-00867A	ALKALINE (1.5V, AA) 2EA - DURACEL U	1	O	
8-13	Q6804110401A	AD81-01565A	GT_COLOR_STICKER_Silver	1	O	
	Q6804129001A	AD68-01427A	GT_COLOR_S1050_PATTERN_SILVER	1	O	
	Q6804128801A	AD68-02262A	GT_COLOR_S1050_PATTERN_BLACK	1	O	
8-14	Q3802006601A	AD81-00748A	USB CABLE_S730	1	O	
8-15	Q3802006701A	AD81-00749A	AV CABLE_S730	1	O	
8-16	Q6904031001A	AD81-02620A	POUCH_Kenox S850_BLACK	1	O	
	Q6904032401A	AD81-02627A	POUCH_KENOX_S1050_SILVER	1	O	
8-17	Q4302000901A	AD81-00879A	BATTERY_SNB-2512(AA Type)	1	O	
8-18	Q4309002301A	AD81-00898A	Ni-MH CHARGER(SBC-N2)	1	O	
8-19	Q6806368001A	AD68-01753A	MANUAL_SNB-2512B KIT_KOR	1	O	
8-20	Q3801003001A	AD81-00695A	AC CODE CABLE_KOR-D1	1	O	

Ⅲ. ADJUSTMENT

1. FIRMWARE

1) Reseting Camera

1. Turn on the Camera

2. Press and hold the UP button and Shutter button and then press the Power button.

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

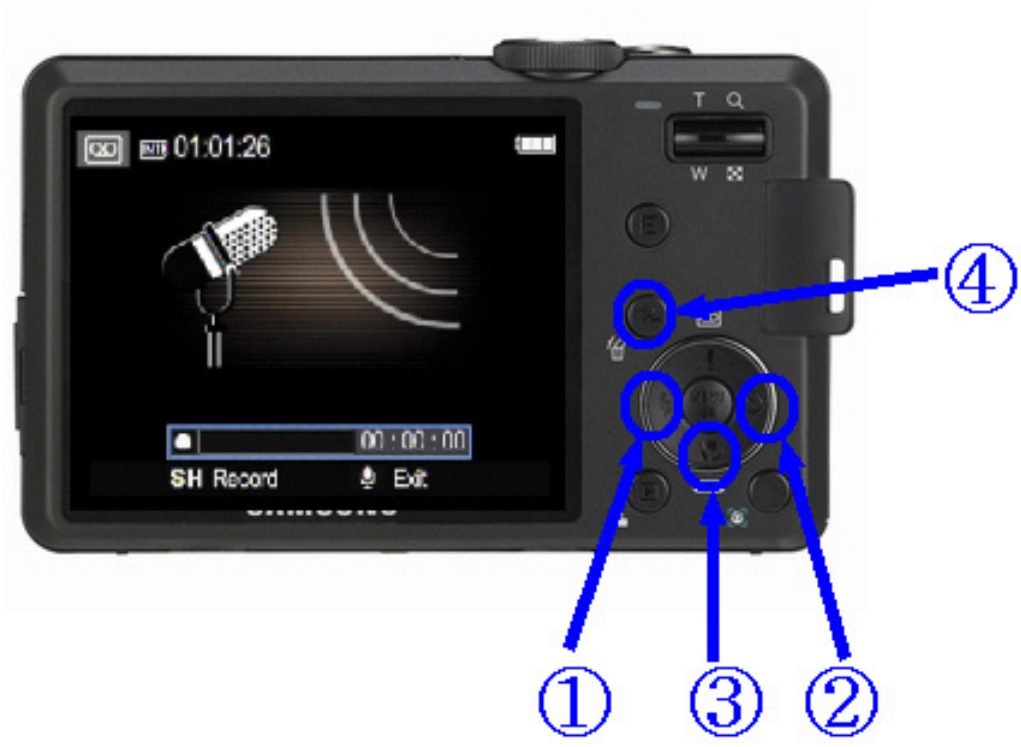
2) Checking version

1. Remove the memory card from the camera.

2. Turn on the camera.

3. Turn on the camera and press the Up button twice.

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



5. After pressing the buttons, Firmware version will be displayed

3) Upgrading

1. Insert the SD card that has the firmware and turn on the camera.

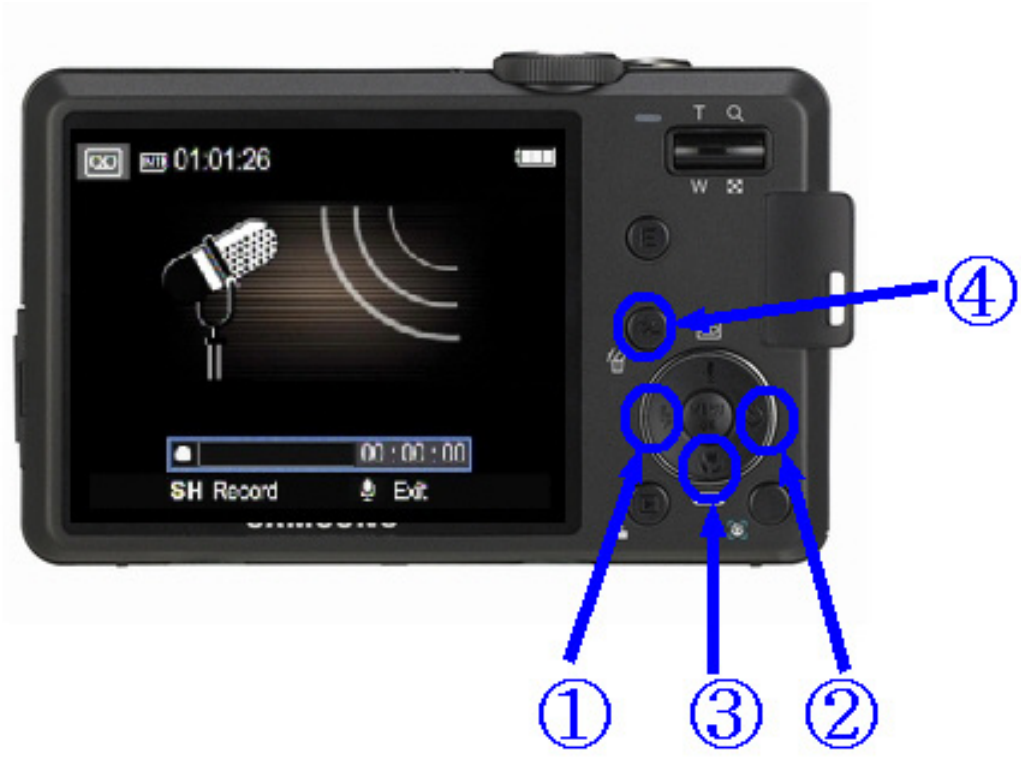
* Updating the firmware will delete all data in the SD card.
  Be sure to download all data to your PC before updating the firmware.
  The firmware file name must be " STS3105.ELF "

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 → UpÄbutton → +/- button)



6. After pressing the buttons, Firmware upgrading is shown and then the firmware will be upgraded.
   (For about 30 seconds. Camera status lamp : blicking)

7. After upgrading the firmware, the camera will be turned off automatically.

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

4) Full Version of Firmware

How to do the Full Version of Firmware

Depend on the camera status If the Full version of Firmware is needed, upgrade the Full Version of Firmware.

▷**Camera Status** : When turning on the camera, the power consumption (Checking the POWER SUPPLY) is 200-300mA and the camera can't 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.
▷**Information** :

- The Full Version of Firmware delets all the files saved in the camera and newly install the firmware.
- After Full Version of Firmware, all the adjusted data is deleted that the back up and upload of data is needed.
- The previous adjusted data will be saved in SD card automatically when updating Full Version of firmware and after updating completed, upload the file
- Check the back up files CLUT0.BIN, DefectivePixel0.bin andÄDefectivePixel1.bin at the SD cardÄwhich are previous adjusted data.

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

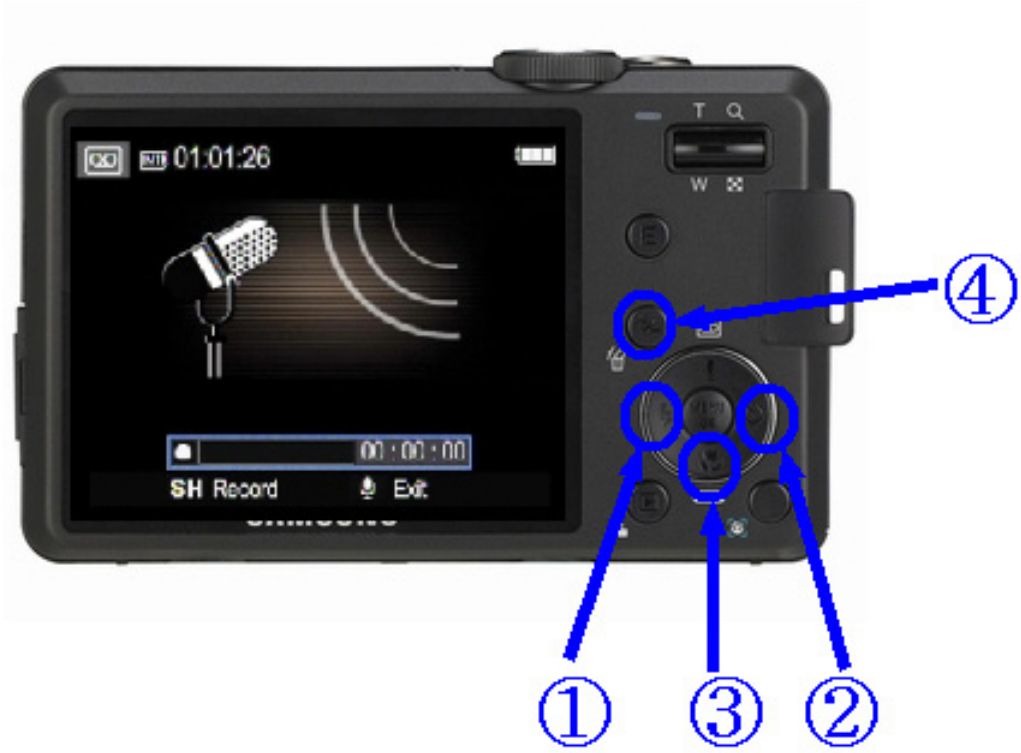
* Back up all the datas in the Flash memory cause all the data will be erased while updating Full version of firmware. The firmware file name must be Ä"STS3105_FULL.ELF".

2. Use the AC adapter or fully charged battery.
   All of the battery level indicator on the LCD monitor must be displayed.

3. Turn on the camera.

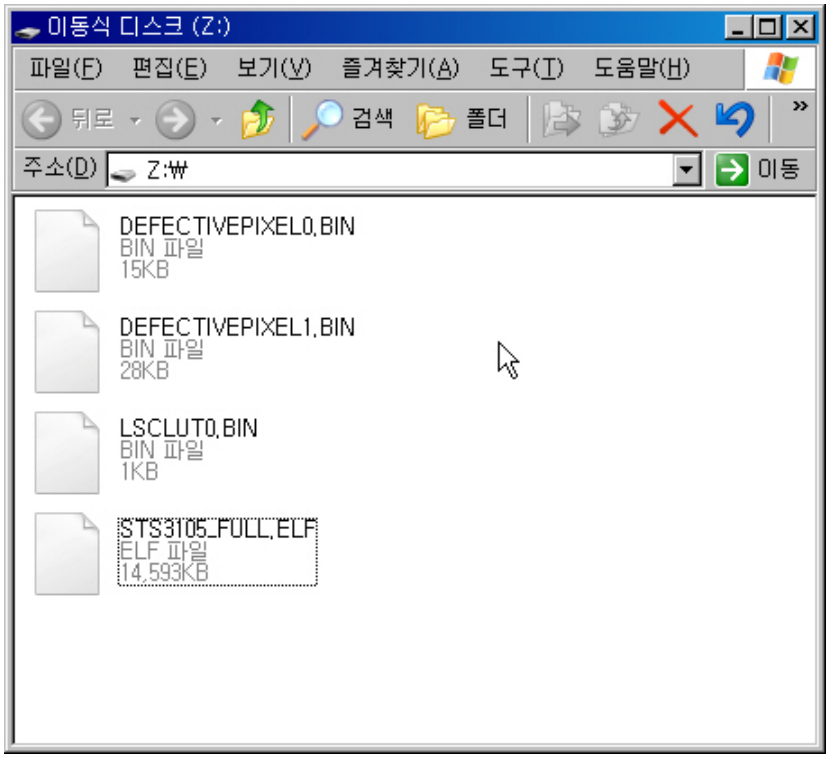
4. Press the Up button twice to select the Voice recording mode.

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



6. After pressing the buttons, Ämessage will display for about 1 minute. (Camera status lamp : blicking)

- While upgrade the Full Version of firmware, the previous data will be saved into the SD card automatically and there should be 3 files LSCLUT0.BIN, DefectivePixel0.bin and DefectivePixel1.bin when the copy is firmly completed.



7. After the Full Version of firmware, upload the back up data.
   Tun on the camera and press the Up button twice to select the Voice recording mode again.
   Press the 4Äfunction button as following order. (Telet button → Wide button → Down button → OK button)

8. The upload will be completed after below massage is shown.

9. Turn off the camera.(This time, the camera turns off automatically.)

2. ADJUSTMENT CAUTION

1) Basic Information of Adjustment

After changing the electronic parts of S1050, 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(18%..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 "STS3105ADJ.txt".

```
////////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : PM Batch Test 8-process
//  DATE : 2007.02.15
////////////////////////////////////////////////////////


//==========================================#0. adj control setting

adj_control check_process_id     65535
adj_control set_process_id   65534
adj_control save_e2prom       1
adj_control save_data_file   1
adj_control save_process_pass    1
adj_control batch          1
adj_control osd_delay          0

adj_control signal        100

//==========================================#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       1500 4000

adj_ob capture_agc        96
adj_ob capture_target_rgb    0 0 0
adj_ob capture_luma_min_max       1500 4000
adj_ob run
```

```
//delay 5
//adj_control signal 100

//=========================================#2.LSC

//mode program

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 5

//adj_control signal          100

//=========================================#3.Battery Level

adj_battery base     211 231

adj_battery half_1   176
adj_battery low_1    170
adj_battery empty_1       166
adj_battery lock_1   162
adj_battery start_1       182

adj_battery half_2   176
adj_battery low_2    169
adj_battery empty_2       165
adj_battery lock_2   161
adj_battery start_2       164
adj_battery run

//=========================================#4.BackLash

//mode program
//adj_backlash adj_count     2
//adj_backlash max_backlash       85
//adj_backlash run

// Backlash --> burning
Delay 10
//adj_control signal 100
```

```
//=========================================#5.Shutter Closing

zoom close__to__open
mode program

adj__sh__close max__count              20
adj__sh__close open__init__linedelay     40
adj__sh__close open__init__subdelay       0
adj__sh__close open__linedelay__min__max       35 55

adj__sh__close apt__init__linedelay       43
adj__sh__close apt__init__subdelay         0
adj__sh__close apt__linedelay__min__max   40 60

adj__sh__close iris__skip              0
adj__sh__close iris__adjustrange          6

adj__sh__close gain__skip1             0
adj__sh__close gain__skip2             0

adj__sh__close gain__offset           -3
adj__sh__close gain__setIvalue            208
adj__sh__close gain__adjustrange1         15
adj__sh__close gain__adjustrange2         15

adj__sh__close run

//delay 10
//adj__control signal 100

//=========================================#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 10
```

```
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     11 0 0 0 0
adj_strobe_intensity Standard_Luma   190 365 375 720 790 1370
adj_strobe_intensity awb_gain          560 695 280 320
adj_strobe_intensity run

//delay 5
//adj_control signal 100

//=============================================#7.PUNT

zoom close_to_open        // initialize barrel

mode program
coach idle
ae metering      0        // A* related parameter setting
ae iso       0
ae evc       6
ae preview_fnum 1
set wb auto
coach view
//mode program            // idle -> view
delay 25               // A* convergence delay

adj_punt zoomstep         0 10
adj_punt searching_min_short     307 360 411 460 506 548 573 575 573 574 570
adj_punt searching_max_short     411 460 511 558 604 646 673 679 683 688 690
adj_punt searching_min         105 154 203 250 298 338 359 359 355 352 348
adj_punt searching_max         476 564 613 660 708 748 769 769 765 762 758
adj_punt limit_min_short     317 370 421 470 516 558 583 585 583 584 580
adj_punt limit_max_short     401 450 501 548 594 636 663 669 673 678 680
adj_punt limit_min         135 184 233 280 328 368 389 389 385 382 378
adj_punt limit_max         446 534 583 630 678 718 739 739 735 732 728
adj_punt slop_min          -100 -100 -90 -100 -130 -150 -170 -170 -170 -170
adj_punt slop_max          60 80 100 120 140 160 180 180 180 180
adj_punt run

//delay 5
//adj_control signal 100
```

```
//==========================================#8.Current
Consumption
mode program
delay 20
zoom wide
delay 30
zoom tele
delay 20
mode playback
delay 10
mode program
poweroff zoom_close
```

```
////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : Backlash / Burnin / Defective Pixel
//  DATE : 2007.02.15
////////////////////////////////////////////////////


//==========================================#0. adj control setting

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        30
adj_control override_tv_usb      1
adj_control do_check_process_id 1    // check

//==========================================#1. Backlash

mode program

adj_backlash adj_count        2
adj_backlash max_backlash    85
//adj_backlash integration
adj_backlash run
```

```
delay 20

//==========#2. Burnin Test

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

//==========#3. CCD Defective Pixel

//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 shold be formatted at PC.

2) OB SETTING

Judge correctly low level of input signal by doing OB setting about each Preview and Capture and defines validity data area under condition of low brightness condition.

<How to act>

① Check the luminance of Preview while shutter is closing and find the OB value base on luminance value of preview.

② Wirte the result of Preview's OB value at the Data file by referencing the information of CARD WRITE

③ Wirte the adjusted value of Preview at the EEPROM by referencing the information of EEPROM WRITE

④ Check the luminance of Capture while the shutter is closing and base on that value, find the OB value.

⑤ Write the result of Capture's OB adjusted value by referencing the information of CARD WRITE

⑥ Write the Capture's adjusted value at the EEPROM by referencing the information of EEPROM WRITE

⑦ Change the ISO and repeat the from no.4 to no.6

<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 modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : PM Batch Test 8
//  DATE : 2007.02.15
////////////////////////////////////////////////////


//==========================================#0. adj control
setting

adj_control check_process_id     65535
adj_control set_process_id   65534
adj_control save_e2prom       1
adj_control save_data_file   1
adj_control save_process_pass    1
adj_control batch          1
adj_control osd_delay          0

adj_control signal        100

//==========================================#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       1500 4000

adj_ob capture_agc        96
adj_ob capture_target_rgb    0 0 0
adj_ob capture_luma_min_max       1500 4000
adj_ob run

//delay 5
//adj_control signal 100

//==========================================#2.LSC

//mode program
```

```
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 5

//adj_control signal           100

//=============================================#3.Battery Level

adj_battery base      211 231

adj_battery half_1   176
adj_battery low_1    170
adj_battery empty_1       166
adj_battery lock_1   162
adj_battery start_1       182

adj_battery half_2   176
adj_battery low_2    169
adj_battery empty_2       165
adj_battery lock_2   161
adj_battery start_2       164
adj_battery run

//=============================================#4.BackLash

//mode program
//adj_backlash adj_count     2
//adj_backlash max_backlash       85
//adj_backlash run

// Backlash --> burning
Delay 10
//adj_control signal 100

//=============================================#5.Shutter Closing

zoom close_to_open
mode program
```

```
adj__sh__close max__count              20
adj__sh__close open__init__linedelay      40
adj__sh__close open__init__subdelay       0
adj__sh__close open__linedelay__min__max       35 55

adj__sh__close apt__init__linedelay       43
adj__sh__close apt__init__subdelay        0
adj__sh__close apt__linedelay__min__max   40 60

adj__sh__close iris__skip              0
adj__sh__close iris__adjustrange          6

adj__sh__close gain__skip1             0
adj__sh__close gain__skip2             0

adj__sh__close gain__offset           -3
adj__sh__close gain__setIvalue            208
adj__sh__close gain__adjustrange1         15
adj__sh__close gain__adjustrange2         15

adj__sh__close run

//delay 10
//adj__control signal 100

//=========================================#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 10

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     11 0 0 0 0
```

```
adj_strobe_intensity Standard_Luma  190 365 375 720 790 1370
adj_strobe_intensity awb_gain       560 695 280 320
adj_strobe_intensity run

//delay 5
//adj_control signal 100

//=============================================#7.PUNT

zoom close_to_open      // initialize barrel

mode program
coach idle
ae metering     0       // A* related parameter setting
ae iso      0
ae evc      6
ae preview_fnum 1
set wb auto
coach view
//mode program          // idle -> view
delay 25            // A* convergence delay

adj_punt zoomstep       0 10
adj_punt searching_min_short    307 360 411 460 506 548 573 575 573 574 570
adj_punt searching_max_short    411 460 511 558 604 646 673 679 683 688 690
adj_punt searching_min      105 154 203 250 298 338 359 359 355 352 348
adj_punt searching_max      476 564 613 660 708 748 769 769 765 762 758
adj_punt limit_min_short    317 370 421 470 516 558 583 585 583 584 580
adj_punt limit_max_short    401 450 501 548 594 636 663 669 673 678 680
adj_punt limit_min      135 184 233 280 328 368 389 389 385 382 378
adj_punt limit_max      446 534 583 630 678 718 739 739 735 732 728
adj_punt slop_min       -100 -100 -90 -100 -130 -150 -170 -170 -170 -170
adj_punt slop_max       60 80 100 120 140 160 180 180 180 180
adj_punt run

//delay 5
//adj_control signal 100

//=============================================#8.Current
Consumption
mode program
delay 20
zoom wide
delay 30
```

```
zoom  tele
delay  20
mode  playback
delay  10
mode  program
poweroff  zoom__close
```

※ SD CARD shold be formatted at PC.

3) LENS SHADING

This menu adjust the brightness gaps between center of the lens and around the lens

<How to act>

① Do the Lens Shading adjustment while the iris is open andÄZoom step is 0.Ä
* Set the LV as 8.2 of Light box.
* The position of Light Box is 10mm ±1mm while the barrel is open.
* The colour temperature of Light box is 3300K.

② Write the result of adjustment at the EEPROM by referencing the information of EEPROM WRITE

③ Write the result of adjustment at Data file by referencing the information of CARD WRITE

④ Set the Maxium and Minium level

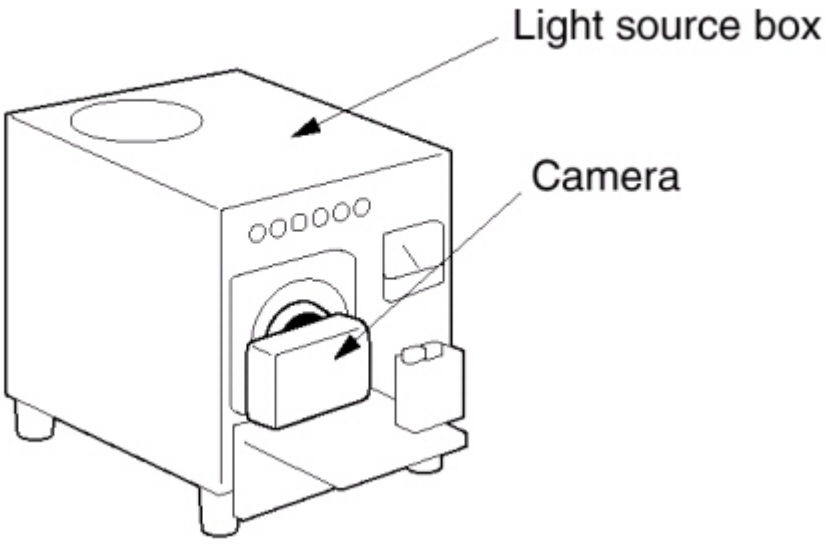
<How to adjust>

a...Prepare AE TESTER can be test up to LV as 8.2.

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 AE TESTER.

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 adjustment, the camera is turned off automatically.

<Description of TXT file>

When modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : PM Batch Test 8
//  DATE : 2007.02.15
////////////////////////////////////////////////////


//==========================================#0. adj control
setting

adj_control check_process_id     65535
adj_control set_process_id   65534
adj_control save_e2prom       1
adj_control save_data_file   1
adj_control save_process_pass    1
adj_control batch          1
adj_control osd_delay          0

adj_control signal        100

//==========================================#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       1500 4000

adj_ob capture_agc        96
adj_ob capture_target_rgb    0 0 0
adj_ob capture_luma_min_max       1500 4000
adj_ob run
```

```
//delay 5
//adj_control signal 100

//=========================================#2.LSC

//mode program

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 5

//adj_control signal          100

//=========================================#3.Battery Level

adj_battery base     211 231

adj_battery half_1   176
adj_battery low_1    170
adj_battery empty_1       166
adj_battery lock_1   162
adj_battery start_1       182

adj_battery half_2   176
adj_battery low_2    169
adj_battery empty_2       165
adj_battery lock_2   161
adj_battery start_2       164
adj_battery run

//=========================================#4.BackLash

//mode program
//adj_backlash adj_count     2
//adj_backlash max_backlash       85
//adj_backlash run

// Backlash --> burning
Delay 10
//adj_control signal 100
```

```
//=========================================#5.Shutter Closing

zoom close__to__open
mode program

adj__sh__close max__count              20
adj__sh__close open__init__linedelay     40
adj__sh__close open__init__subdelay      0
adj__sh__close open__linedelay__min__max      35 55

adj__sh__close apt__init__linedelay      43
adj__sh__close apt__init__subdelay       0
adj__sh__close apt__linedelay__min__max   40 60

adj__sh__close iris__skip              0
adj__sh__close iris__adjustrange         6

adj__sh__close gain__skip1             0
adj__sh__close gain__skip2             0

adj__sh__close gain__offset           -3
adj__sh__close gain__setlvalue           208
adj__sh__close gain__adjustrange1       15
adj__sh__close gain__adjustrange2       15

adj__sh__close run

//delay 10
//adj__control signal 100

//=========================================#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 10
```

```
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     11 0 0 0 0
adj__strobe__intensity Standard__Luma   190 365 375 720 790 1370
adj__strobe__intensity awb__gain          560 695 280 320
adj__strobe__intensity run

//delay 5
//adj__control signal 100

//=========================================#7.PUNT

zoom close__to__open        // initialize barrel

mode program
coach idle
ae metering      0         // A* related parameter setting
ae iso       0
ae evc       6
ae preview__fnum 1
set wb auto
coach view
//mode program             // idle -> view
delay 25               // A* convergence delay

adj__punt zoomstep         0 10
adj__punt searching__min__short     307 360 411 460 506 548 573 575 573 574 570
adj__punt searching__max__short     411 460 511 558 604 646 673 679 683 688 690
adj__punt searching__min         105 154 203 250 298 338 359 359 355 352 348
adj__punt searching__max         476 564 613 660 708 748 769 769 765 762 758
adj__punt limit__min__short     317 370 421 470 516 558 583 585 583 584 580
adj__punt limit__max__short     401 450 501 548 594 636 663 669 673 678 680
adj__punt limit__min        135 184 233 280 328 368 389 389 385 382 378
adj__punt limit__max        446 534 583 630 678 718 739 739 735 732 728
adj__punt slop__min         -100 -100 -90 -100 -130 -150 -170 -170 -170 -170
adj__punt slop__max          60 80 100 120 140 160 180 180 180 180
adj__punt run

//delay 5
//adj__control signal 100
```

```
//=========================================#8.Current
Consumption
mode  program
delay  20
zoom  wide
delay  30
zoom  tele
delay  20
mode  playback
delay  10
mode  program
poweroff  zoom__close
```

※ SD CARD shold be formatted at PC.

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 modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : PM Batch Test 8
//  DATE : 2007.02.15
////////////////////////////////////////////////////


//=========================================#0. adj control
setting

adj_control check_process_id     65535
adj_control set_process_id   65534
adj_control save_e2prom       1
adj_control save_data_file   1
```

```
adj__control save__process__pass    1
adj__control batch          1
adj__control osd__delay          0

adj__control signal        100

//=================================#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       1500 4000

adj__ob capture__agc        96
adj__ob capture__target__rgb    0 0 0
adj__ob capture__luma__min__max       1500 4000
adj__ob run

//delay 5
//adj__control signal 100

//=================================#2.LSC

//mode program

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 5

//adj__control signal          100

//=================================#3.Battery Level

adj__battery base     211 231

adj__battery half__1   176
adj__battery low__1    170
adj__battery empty__1       166
adj__battery lock__1   162
adj__battery start__1       182
```

```
adj_battery half_2  176
adj_battery low_2   169
adj_battery empty_2     165
adj_battery lock_2  161
adj_battery start_2     164
adj_battery run

//=============================================#4.BackLash

//mode program
//adj_backlash adj_count    2
//adj_backlash max_backlash     85
//adj_backlash run

// Backlash --> burning
Delay 10
//adj_control signal 100

//=============================================#5.Shutter Closing

zoom close_to_open
mode program

adj_sh_close max_count          20
adj_sh_close open_init_linedelay    40
adj_sh_close open_init_subdelay     0
adj_sh_close open_linedelay_min_max     35 55

adj_sh_close apt_init_linedelay     43
adj_sh_close apt_init_subdelay      0
adj_sh_close apt_linedelay_min_max  40 60

adj_sh_close iris_skip          0
adj_sh_close iris_adjustrange       6

adj_sh_close gain_skip1         0
adj_sh_close gain_skip2         0

adj_sh_close gain_offset        -3
adj_sh_close gain_setIvalue         208
adj_sh_close gain_adjustrange1      15
adj_sh_close gain_adjustrange2      15

adj_sh_close run
```

```
//delay 10
//adj__control signal 100

//=========================================#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 10

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     11 0 0 0 0
adj__strobe__intensity Standard__Luma  190 365 375 720 790 1370
adj__strobe__intensity awb__gain         560 695 280 320
adj__strobe__intensity run

//delay 5
//adj__control signal 100

//=========================================#7.PUNT

zoom close__to__open        // initialize barrel

mode program
coach idle
ae metering      0        // A* related parameter setting
ae iso       0
ae evc       6
ae preview__fnum 1
set wb auto
coach view
//mode program            // idle -> view
delay 25               // A* convergence delay
```

```
adj_punt zoomstep          0 10
adj_punt searching_min_short      307 360 411 460 506 548 573 575 573 574 570
adj_punt searching_max_short      411 460 511 558 604 646 673 679 683 688 690
adj_punt searching_min          105 154 203 250 298 338 359 359 355 352 348
adj_punt searching_max          476 564 613 660 708 748 769 769 765 762 758
adj_punt limit_min_short      317 370 421 470 516 558 583 585 583 584 580
adj_punt limit_max_short      401 450 501 548 594 636 663 669 673 678 680
adj_punt limit_min          135 184 233 280 328 368 389 389 385 382 378
adj_punt limit_max          446 534 583 630 678 718 739 739 735 732 728
adj_punt slop_min           -100 -100 -90 -100 -130 -150 -170 -170 -170 -170
adj_punt slop_max           60 80 100 120 140 160 180 180 180 180
adj_punt run

//delay 5
//adj_control signal 100

//=========================================================#8.Current
Consumption
mode program
delay 20
zoom wide
delay 30
zoom tele
delay 20
mode playback
delay 10
mode program
poweroff zoom_close
```

※ SD CARD shold be formatted at PC.

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...The adjustment will be done automatically.

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

<Description of TXT file>

When modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : PM Batch Test 8
//  DATE : 2007.02.15
////////////////////////////////////////////////////////

//==========================================#0. adj control
setting

adj_control check_process_id     65535
adj_control set_process_id   65534
adj_control save_e2prom       1
adj_control save_data_file   1
adj_control save_process_pass    1
adj_control batch          1
adj_control osd_delay          0

adj_control signal         100
```

```
//=================================================#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       1500 4000

adj_ob capture_agc        96
adj_ob capture_target_rgb    0 0 0
adj_ob capture_luma_min_max       1500 4000
adj_ob run

//delay 5
//adj_control signal 100

//=================================================#2.LSC

//mode program

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 5

//adj_control signal          100

//=================================================#3.Battery Level

adj_battery base      211 231

adj_battery half_1   176
adj_battery low_1    170
adj_battery empty_1       166
adj_battery lock_1   162
adj_battery start_1       182

adj_battery half_2   176
adj_battery low_2    169
```

```
adj__battery empty__2       165
adj__battery lock__2   161
adj__battery start__2       164
adj__battery run

//=========================================#4.BackLash

//mode program
//adj__backlash adj__count     2
//adj__backlash max__backlash       85
//adj__backlash run

// Backlash --〉 burning
Delay 10
//adj__control signal 100

//=========================================#5.Shutter Closing

zoom close__to__open
mode program

adj__sh__close max__count             20
adj__sh__close open__init__linedelay      40
adj__sh__close open__init__subdelay       0
adj__sh__close open__linedelay__min__max       35 55

adj__sh__close apt__init__linedelay       43
adj__sh__close apt__init__subdelay        0
adj__sh__close apt__linedelay__min__max   40 60

adj__sh__close iris__skip             0
adj__sh__close iris__adjustrange          6

adj__sh__close gain__skip1             0
adj__sh__close gain__skip2             0

adj__sh__close gain__offset           -3
adj__sh__close gain__setIvalue            208
adj__sh__close gain__adjustrange1         15
adj__sh__close gain__adjustrange2         15

adj__sh__close run

//delay 10
//adj__control signal 100
```

```
//========================================#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 10

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      11 0 0 0 0
adj_strobe_intensity Standard_Luma   190 365 375 720 790 1370
adj_strobe_intensity awb_gain          560 695 280 320
adj_strobe_intensity run

//delay 5
//adj_control signal 100

//========================================#7.PUNT

zoom close_to_open        // initialize barrel

mode program
coach idle
ae metering      0         // A* related parameter setting
ae iso       0
ae evc       6
ae preview_fnum 1
set wb auto
coach view
//mode program             // idle -> view
delay 25               // A* convergence delay

adj_punt zoomstep         0 10
adj_punt searching_min_short      307 360 411 460 506 548 573 575 573 574 570
adj_punt searching_max_short      411 460 511 558 604 646 673 679 683 688 690
adj_punt searching_min        105 154 203 250 298 338 359 359 355 352 348
```

```
adj__punt searching__max        476 564 613 660 708 748 769 769 765 762 758
adj__punt limit__min__short     317 370 421 470 516 558 583 585 583 584 580
adj__punt limit__max__short     401 450 501 548 594 636 663 669 673 678 680
adj__punt limit__min        135 184 233 280 328 368 389 389 385 382 378
adj__punt limit__max        446 534 583 630 678 718 739 739 735 732 728
adj__punt slop__min         -100 -100 -90 -100 -130 -150 -170 -170 -170 -170
adj__punt slop__max         60 80 100 120 140 160 180 180 180 180
adj__punt run

//delay 5
//adj__control signal 100

//=========================================#8.Current
Consumption
mode program
delay 20
zoom wide
delay 30
zoom tele
delay 20
mode playback
delay 10
mode program
poweroff zoom__close
```

※ SD CARD shold be formatted at PC.

6) Iris ADJ

Adjust the step of spertures's differences.

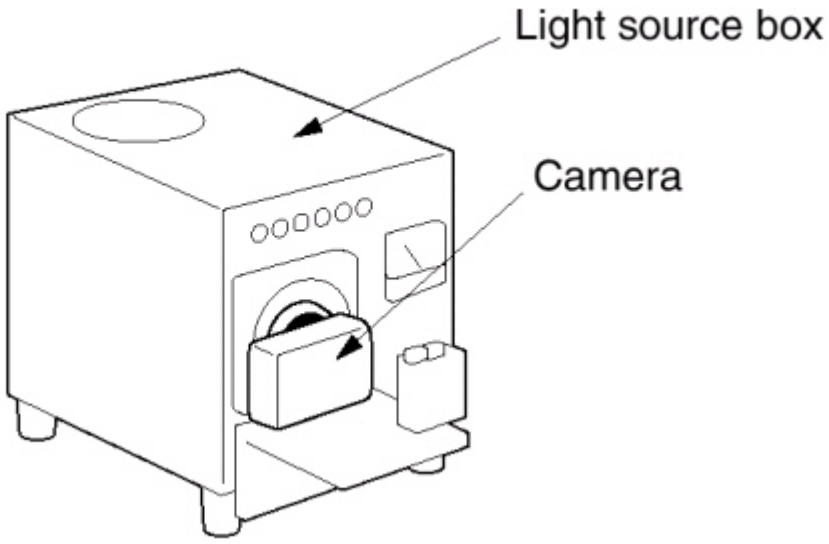
< How to adjust >

a...Prepare AE TESTER can be test up to LV13.

a...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 AE TESTER.

d...Attach the camera on the AE METER and set the LV as 13.



e...Turn on the camera.

f...Adjustment will be done automatically.

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

<Description of TXT file>

When modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : PM Batch Test 8
//  DATE : 2007.02.15
////////////////////////////////////////////////////////


//=============================================#0. adj control
setting

adj_control check_process_id     65535
adj_control set_process_id   65534
adj_control save_e2prom       1
adj_control save_data_file   1
adj_control save_process_pass    1
adj_control batch          1
adj_control osd_delay          0

adj_control signal        100

//=============================================#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       1500 4000

adj_ob capture_agc        96
adj_ob capture_target_rgb    0 0 0
adj_ob capture_luma_min_max       1500 4000
adj_ob run

//delay 5
//adj_control signal 100
```

```
//=============================================#2.LSC

//mode program

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 5

//adj_control signal           100

//=============================================#3.Battery Level

adj_battery base      211 231

adj_battery half_1   176
adj_battery low_1    170
adj_battery empty_1       166
adj_battery lock_1   162
adj_battery start_1       182

adj_battery half_2   176
adj_battery low_2    169
adj_battery empty_2       165
adj_battery lock_2   161
adj_battery start_2       164
adj_battery run

//=============================================#4.BackLash

//mode program
//adj_backlash adj_count     2
//adj_backlash max_backlash       85
//adj_backlash run

// Backlash --> burning
Delay 10
//adj_control signal 100

//=============================================#5.Shutter Closing

zoom close_to_open
mode program
```

```
adj__sh__close max__count              20
adj__sh__close open__init__linedelay      40
adj__sh__close open__init__subdelay       0
adj__sh__close open__linedelay__min__max       35 55

adj__sh__close apt__init__linedelay       43
adj__sh__close apt__init__subdelay        0
adj__sh__close apt__linedelay__min__max   40 60

adj__sh__close iris__skip              0
adj__sh__close iris__adjustrange          6

adj__sh__close gain__skip1             0
adj__sh__close gain__skip2             0

adj__sh__close gain__offset           -3
adj__sh__close gain__setIvalue            208
adj__sh__close gain__adjustrange1         15
adj__sh__close gain__adjustrange2         15

adj__sh__close run

//delay 10
//adj__control signal 100

//=========================================#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 10

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     11 0 0 0 0
adj_strobe_intensity Standard_Luma   190 365 375 720 790 1370
adj_strobe_intensity awb_gain          560 695 280 320
adj_strobe_intensity run

//delay 5
//adj_control signal 100

//=============================================#7.PUNT

zoom close_to_open        // initialize barrel

mode program
coach idle
ae metering       0         // A* related parameter setting
ae iso        0
ae evc        6
ae preview_fnum 1
set wb auto
coach view
//mode program             // idle -> view
delay 25               // A* convergence delay

adj_punt zoomstep         0 10
adj_punt searching_min_short     307 360 411 460 506 548 573 575 573 574 570
adj_punt searching_max_short     411 460 511 558 604 646 673 679 683 688 690
adj_punt searching_min         105 154 203 250 298 338 359 359 355 352 348
adj_punt searching_max         476 564 613 660 708 748 769 769 765 762 758
adj_punt limit_min_short     317 370 421 470 516 558 583 585 583 584 580
adj_punt limit_max_short     401 450 501 548 594 636 663 669 673 678 680
adj_punt limit_min         135 184 233 280 328 368 389 389 385 382 378
adj_punt limit_max         446 534 583 630 678 718 739 739 735 732 728
adj_punt slop_min          -100 -100 -90 -100 -130 -150 -170 -170 -170 -170
adj_punt slop_max          60 80 100 120 140 160 180 180 180 180
adj_punt run
```

```
//delay 5
//adj_control signal 100

//==========================================#8.Current
Consumption
mode program
delay 20
zoom wide
delay 30
zoom tele
delay 20
mode playback
delay 10
mode program
poweroff zoom_close
```

※ SD CARD shold be formatted at PC.

7) SHUTTER CLOSE TIME ADJ

Adjust the Closing timing of machanical shutter.
As the shutter closing time is different depend on the camera set the reduce the differences by adjusting the camera.

<How to act>

① Adjust the Shutter closing tiime after checking the number of maxium setting up adjustment.
* The standard luminance of Light box is 13 LV.
* The standard colour temperature of Light box is 3300K.

② Do the adjustment by referencing standard luminanace.
- The Line delay and Sub delay is adjusted to find the proper value at standard luminance.
- First Line delay and Sube delay value is assigned at the script.

③ If the result of Line delay is located between standard minium and maxium value, OK and if not, NG.

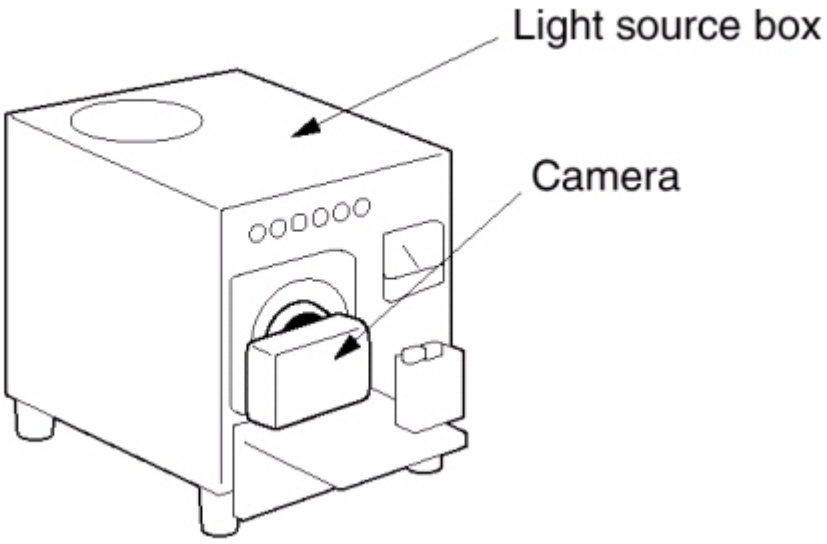
④ Write the result of adjustment at the EEPROM by referencing the information of EEPROM WRITE.

⑤ Write the result of adjustment at the Data file by referencing the information of CARD WRITE.

<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 modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : PM Batch Test 8
//  DATE : 2007.02.15
////////////////////////////////////////////////////////


//=============================================#0. adj control setting

adj_control check_process_id     65535
adj_control set_process_id   65534
adj_control save_e2prom       1
adj_control save_data_file   1
adj_control save_process_pass    1
adj_control batch          1
adj_control osd_delay          0

adj_control signal        100

//=============================================#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       1500 4000

adj__ob capture__agc        96
adj__ob capture__target__rgb    0 0 0
adj__ob capture__luma__min__max       1500 4000
adj__ob run

//delay 5
//adj__control signal 100

//=========================================#2.LSC

//mode program

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 5

//adj__control signal          100

//=========================================#3.Battery Level

adj__battery base     211 231

adj__battery half__1   176
adj__battery low__1    170
adj__battery empty__1       166
adj__battery lock__1   162
adj__battery start__1       182

adj__battery half__2   176
adj__battery low__2    169
adj__battery empty__2       165
adj__battery lock__2   161
adj__battery start__2       164
adj__battery run

//=========================================#4.BackLash
```

```
//mode program
//adj__backlash adj__count     2
//adj__backlash max__backlash      85
//adj__backlash run

// Backlash --〉 burning
Delay 10
//adj__control signal 100

//=============================================#5.Shutter Closing

zoom close__to__open
mode program

adj__sh__close max__count             20
adj__sh__close open__init__linedelay     40
adj__sh__close open__init__subdelay      0
adj__sh__close open__linedelay__min__max      35 55

adj__sh__close apt__init__linedelay      43
adj__sh__close apt__init__subdelay       0
adj__sh__close apt__linedelay__min__max   40 60

adj__sh__close iris__skip             0
adj__sh__close iris__adjustrange         6

adj__sh__close gain__skip1            0
adj__sh__close gain__skip2            0

adj__sh__close gain__offset           -3
adj__sh__close gain__setlvalue            208
adj__sh__close gain__adjustrange1       15
adj__sh__close gain__adjustrange2       15

adj__sh__close run

//delay 10
//adj__control signal 100

//=============================================#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 10

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      11 0 0 0 0
adj__strobe__intensity Standard__Luma   190 365 375 720 790 1370
adj__strobe__intensity awb__gain          560 695 280 320
adj__strobe__intensity run

//delay 5
//adj__control signal 100

//=============================================#7.PUNT

zoom close__to__open        // initialize barrel

mode program
coach idle
ae metering       0         // A* related parameter setting
ae iso        0
ae evc        6
ae preview__fnum 1
set wb auto
coach view
//mode program              // idle -> view
delay 25                // A* convergence delay

adj__punt zoomstep         0 10
adj__punt searching__min__short      307 360 411 460 506 548 573 575 573 574 570
adj__punt searching__max__short      411 460 511 558 604 646 673 679 683 688 690
adj__punt searching__min         105 154 203 250 298 338 359 359 355 352 348
```

```
adj_punt searching_max          476 564 613 660 708 748 769 769 765 762 758
adj_punt limit_min_short       317 370 421 470 516 558 583 585 583 584 580
adj_punt limit_max_short       401 450 501 548 594 636 663 669 673 678 680
adj_punt limit_min          135 184 233 280 328 368 389 389 385 382 378
adj_punt limit_max          446 534 583 630 678 718 739 739 735 732 728
adj_punt slop_min           -100 -100 -90 -100 -130 -150 -170 -170 -170 -170
adj_punt slop_max           60 80 100 120 140 160 180 180 180 180
adj_punt run

//delay 5
//adj_control signal 100

//==========================================#8.Current
Consumption
mode program
delay 20
zoom wide
delay 30
zoom tele
delay 20
mode playback
delay 10
mode program
poweroff zoom_close
```

※ SD CARD shold be formatted at PC.

8) CCD GAIN ADJ

Adjust the CCD gain by camera.

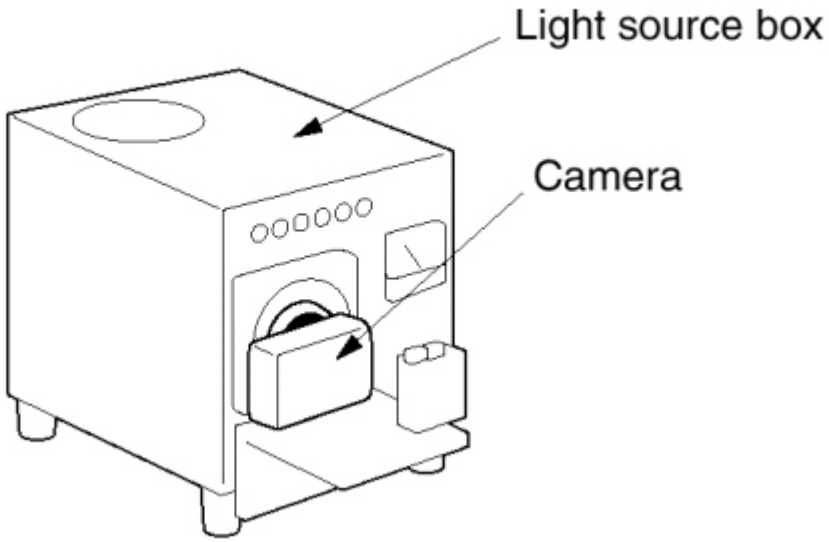
< How to adjust >

a...Prepare AE TESTER can be test up to LV13.

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 AE TESTER.

d...Attach the camera on the AE METER and set the LV as 13.



e...Turn on the camera.

f...Adjustment will be done automatically.

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

<Description of TXT file>

When modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : PM Batch Test 8
//  DATE : 2007.02.15
////////////////////////////////////////////////////


//=================================#0. adj control
setting

adj_control check_process_id     65535
adj_control set_process_id   65534
adj_control save_e2prom       1
adj_control save_data_file   1

adj_control save_process_pass    1
adj_control batch          1
adj_control osd_delay          0

adj_control signal        100

//=================================#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       1500 4000

adj_ob capture_agc        96
adj_ob capture_target_rgb    0 0 0
adj_ob capture_luma_min_max       1500 4000
adj_ob run

//delay 5
//adj_control signal 100
```

```
//=================================================#2.LSC

//mode program

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 5

//adj_control signal           100

//=================================================#3.Battery Level

adj_battery base     211 231

adj_battery half_1   176
adj_battery low_1    170
adj_battery empty_1       166
adj_battery lock_1   162
adj_battery start_1       182

adj_battery half_2   176
adj_battery low_2    169
adj_battery empty_2       165
adj_battery lock_2   161
adj_battery start_2       164
adj_battery run

//=================================================#4.BackLash

//mode program
//adj_backlash adj_count     2
//adj_backlash max_backlash       85
//adj_backlash run

// Backlash --> burning
Delay 10
//adj_control signal 100

//=================================================#5.Shutter Closing

zoom close_to_open
mode program
```

```
adj__sh__close max__count              20
adj__sh__close open__init__linedelay      40
adj__sh__close open__init__subdelay       0
adj__sh__close open__linedelay__min__max       35 55

adj__sh__close apt__init__linedelay       43
adj__sh__close apt__init__subdelay        0
adj__sh__close apt__linedelay__min__max   40 60

adj__sh__close iris__skip              0
adj__sh__close iris__adjustrange          6

adj__sh__close gain__skip1             0
adj__sh__close gain__skip2             0

adj__sh__close gain__offset           -3
adj__sh__close gain__setIvalue            208
adj__sh__close gain__adjustrange1         15
adj__sh__close gain__adjustrange2         15

adj__sh__close run

//delay 10
//adj__control signal 100

//=========================================#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 10
```

```
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     11 0 0 0 0
adj_strobe_intensity Standard_Luma   190 365 375 720 790 1370
adj_strobe_intensity awb_gain          560 695 280 320
adj_strobe_intensity run

//delay 5
//adj_control signal 100

//=============================== #7.PUNT

zoom close_to_open        // initialize barrel

mode program
coach idle
ae metering       0         // A* related parameter setting
ae iso        0
ae evc        6
ae preview_fnum 1
set wb auto
coach view
//mode program             // idle -> view
delay 25               // A* convergence delay

adj_punt zoomstep         0 10
adj_punt searching_min_short     307 360 411 460 506 548 573 575 573 574 570
adj_punt searching_max_short     411 460 511 558 604 646 673 679 683 688 690
adj_punt searching_min         105 154 203 250 298 338 359 359 355 352 348
adj_punt searching_max         476 564 613 660 708 748 769 769 765 762 758
adj_punt limit_min_short     317 370 421 470 516 558 583 585 583 584 580
adj_punt limit_max_short     401 450 501 548 594 636 663 669 673 678 680
adj_punt limit_min         135 184 233 280 328 368 389 389 385 382 378
adj_punt limit_max         446 534 583 630 678 718 739 739 735 732 728
adj_punt slop_min          -100 -100 -90 -100 -130 -150 -170 -170 -170 -170
adj_punt slop_max          60 80 100 120 140 160 180 180 180 180
adj_punt run
```

```
//delay 5
//adj_control signal 100

//==========================================#8.Current
Consumption
mode program
delay 20
zoom wide
delay 30
zoom tele
delay 20
mode playback
delay 10
mode program
poweroff zoom_close
```

※ SD CARD shold be formatted at PC.

9) FLASH ADJ

Adjust the CCD gain by camera.

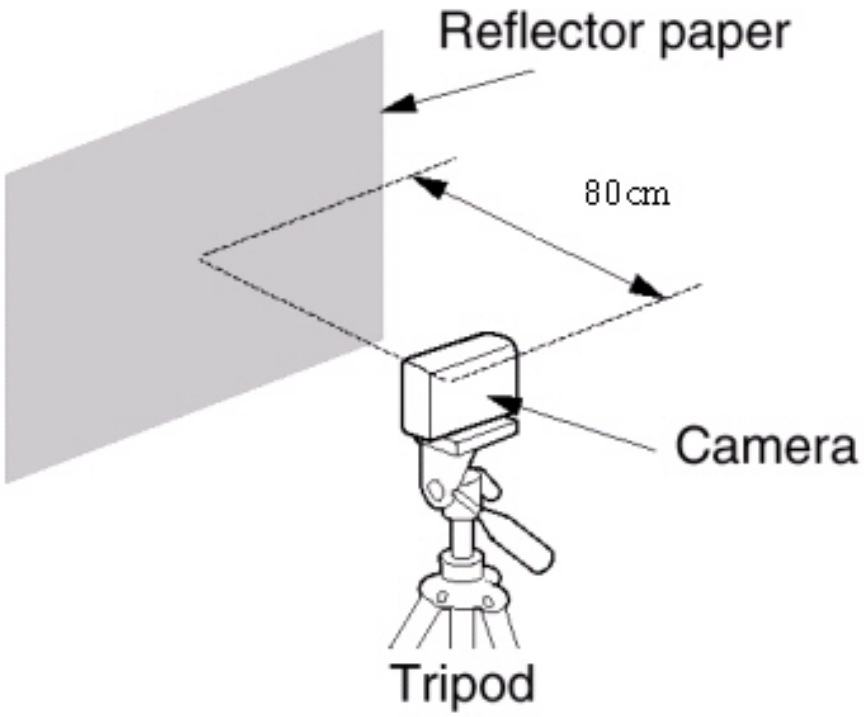
< How to adjust >

a...Prepare AE TESTER can be test up to LV13.

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 AE TESTER.

d...Attach the camera on the AE METER and set the LV as 13.



e...Turn on the camera.

f...Adjustment will be done automatically.

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

<Description of TXT file>

When modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : PM Batch Test 8
//  DATE : 2007.02.15
////////////////////////////////////////////////////


//=============================================#0. adj control
setting

adj_control check_process_id     65535
adj_control set_process_id   65534
adj_control save_e2prom       1
adj_control save_data_file   1
adj_control save_process_pass    1
adj_control batch          1
adj_control osd_delay          0

adj_control signal        100

//=============================================#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       1500 4000

adj_ob capture_agc        96
adj_ob capture_target_rgb    0 0 0
adj_ob capture_luma_min_max       1500 4000
adj_ob run

//delay 5
//adj_control signal 100

//=============================================#2.LSC
```

```
//mode program

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 5

//adj__control signal           100

//=========================================#3.Battery Level

adj__battery base     211 231

adj__battery half__1   176
adj__battery low__1    170
adj__battery empty__1       166
adj__battery lock__1   162
adj__battery start__1       182

adj__battery half__2   176
adj__battery low__2    169
adj__battery empty__2       165
adj__battery lock__2   161
adj__battery start__2       164
adj__battery run

//=========================================#4.BackLash

//mode program
//adj__backlash adj__count     2
//adj__backlash max__backlash       85
//adj__backlash run

// Backlash --> burning
Delay 10
//adj__control signal 100

//=========================================#5.Shutter Closing

zoom close__to__open
mode program
```

```
adj__sh__close max__count              20
adj__sh__close open__init__linedelay      40
adj__sh__close open__init__subdelay       0
adj__sh__close open__linedelay__min__max       35 55

adj__sh__close apt__init__linedelay       43
adj__sh__close apt__init__subdelay        0
adj__sh__close apt__linedelay__min__max   40 60

adj__sh__close iris__skip              0
adj__sh__close iris__adjustrange          6

adj__sh__close gain__skip1             0
adj__sh__close gain__skip2             0

adj__sh__close gain__offset           -3
adj__sh__close gain__setIvalue            208
adj__sh__close gain__adjustrange1         15
adj__sh__close gain__adjustrange2         15

adj__sh__close run

//delay 10
//adj__control signal 100

//=========================================================#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 10
```

```
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     11 0 0 0 0
adj_strobe_intensity Standard_Luma   190 365 375 720 790 1370
adj_strobe_intensity awb_gain          560 695 280 320
adj_strobe_intensity run

//delay 5
//adj_control signal 100

//=============================== #7.PUNT

zoom close_to_open        // initialize barrel

mode program
coach idle
ae metering       0         // A* related parameter setting
ae iso        0
ae evc        6
ae preview_fnum 1
set wb auto
coach view
//mode program             // idle -> view
delay 25               // A* convergence delay

adj_punt zoomstep         0 10
adj_punt searching_min_short     307 360 411 460 506 548 573 575 573 574 570
adj_punt searching_max_short     411 460 511 558 604 646 673 679 683 688 690
adj_punt searching_min         105 154 203 250 298 338 359 359 355 352 348
adj_punt searching_max         476 564 613 660 708 748 769 769 765 762 758
adj_punt limit_min_short     317 370 421 470 516 558 583 585 583 584 580
adj_punt limit_max_short     401 450 501 548 594 636 663 669 673 678 680
adj_punt limit_min         135 184 233 280 328 368 389 389 385 382 378
adj_punt limit_max         446 534 583 630 678 718 739 739 735 732 728
adj_punt slop_min          -100 -100 -90 -100 -130 -150 -170 -170 -170 -170
adj_punt slop_max          60 80 100 120 140 160 180 180 180 180
adj_punt run
```

```
//delay 5
//adj_control signal 100

//==========================================#8.Current
Consumption
mode program
delay 20
zoom wide
delay 30
zoom tele
delay 20
mode playback
delay 10
mode program
poweroff zoom_close
```

※ SD CARD shold be formatted at PC.

10) FOCUS ADJ

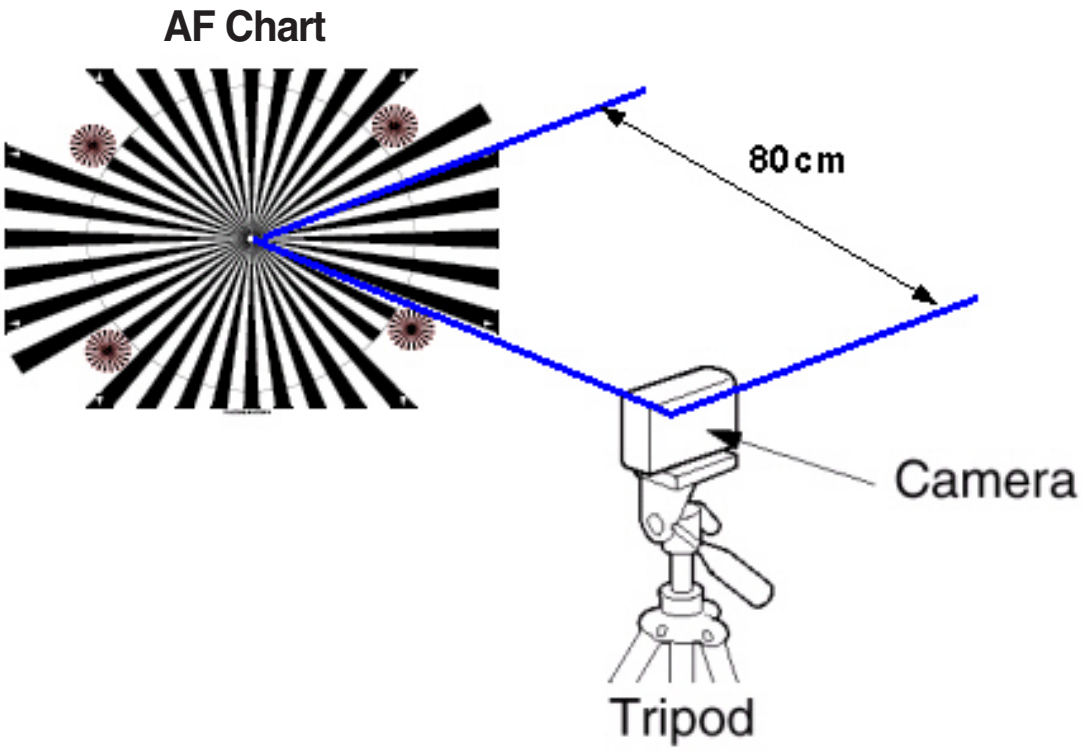
Set up the AF searching range to find the best focusing position by barrel.

< 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 modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : PM Batch Test 8
//  DATE : 2007.02.15
////////////////////////////////////////////////////////


//=============================================#0. adj control
setting

adj_control check_process_id     65535
adj_control set_process_id   65534
adj_control save_e2prom       1
adj_control save_data_file   1
adj_control save_process_pass    1
adj_control batch          1
adj_control osd_delay          0

adj_control signal        100

//=============================================#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       1500 4000

adj_ob capture_agc        96
adj_ob capture_target_rgb    0 0 0
adj_ob capture_luma_min_max       1500 4000
adj_ob run

//delay 5
//adj_control signal 100
```

```
//=========================================#2.LSC

//mode program

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 5

//adj_control signal           100

//=========================================#3.Battery Level

adj_battery base     211 231

adj_battery half_1   176
adj_battery low_1    170
adj_battery empty_1       166
adj_battery lock_1   162
adj_battery start_1       182

adj_battery half_2   176
adj_battery low_2    169
adj_battery empty_2       165
adj_battery lock_2   161
adj_battery start_2       164
adj_battery run

//=========================================#4.BackLash

//mode program
//adj_backlash adj_count     2
//adj_backlash max_backlash       85
//adj_backlash run

// Backlash --> burning
Delay 10
//adj_control signal 100

//=========================================#5.Shutter Closing
```

```
zoom close__to__open
mode program

adj__sh__close max__count              20
adj__sh__close open__init__linedelay     40
adj__sh__close open__init__subdelay       0
adj__sh__close open__linedelay__min__max       35 55

adj__sh__close apt__init__linedelay       43
adj__sh__close apt__init__subdelay         0
adj__sh__close apt__linedelay__min__max   40 60

adj__sh__close iris__skip              0
adj__sh__close iris__adjustrange          6

adj__sh__close gain__skip1             0
adj__sh__close gain__skip2             0

adj__sh__close gain__offset           -3
adj__sh__close gain__setIvalue            208
adj__sh__close gain__adjustrange1         15
adj__sh__close gain__adjustrange2         15

adj__sh__close run

//delay 10
//adj__control signal 100

//=========================================================#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 10
```

```
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     11 0 0 0 0
adj_strobe_intensity Standard_Luma   190 365 375 720 790 1370
adj_strobe_intensity awb_gain          560 695 280 320
adj_strobe_intensity run

//delay 5
//adj_control signal 100

//=============================== #7.PUNT

zoom close_to_open        // initialize barrel

mode program
coach idle
ae metering       0         // A* related parameter setting
ae iso        0
ae evc        6
ae preview_fnum 1
set wb auto
coach view
//mode program             // idle -> view
delay 25               // A* convergence delay

adj_punt zoomstep         0 10
adj_punt searching_min_short     307 360 411 460 506 548 573 575 573 574 570
adj_punt searching_max_short     411 460 511 558 604 646 673 679 683 688 690
adj_punt searching_min         105 154 203 250 298 338 359 359 355 352 348
adj_punt searching_max         476 564 613 660 708 748 769 769 765 762 758
adj_punt limit_min_short     317 370 421 470 516 558 583 585 583 584 580
adj_punt limit_max_short     401 450 501 548 594 636 663 669 673 678 680
adj_punt limit_min         135 184 233 280 328 368 389 389 385 382 378
adj_punt limit_max         446 534 583 630 678 718 739 739 735 732 728
adj_punt slop_min          -100 -100 -90 -100 -130 -150 -170 -170 -170 -170
adj_punt slop_max          60 80 100 120 140 160 180 180 180 180
adj_punt run

//delay 5
//adj_control signal 100
```

```
//==========================================#8.Current
Consumption
mode  program
delay  20
zoom  wide
delay  30
zoom  tele
delay  20
mode  playback
delay  10
mode  program
poweroff  zoom__close
```

※ SD CARD shold be formatted at PC.

11)BURNING TEST

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

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

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 cameran

c...The function will be done in order automatically

※ After completing the functions, "Burning END" message will display and the camera turn off automatically.

<Description of TXT file>

When modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : Backlash / Burnin / Defective Pixel
//  DATE : 2007.02.15
////////////////////////////////////////////////////////


//=========================================#0. adj control setting

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        30
adj_control override_tv_usb       1
adj_control do_check_process_id 1    //

//=========================================#1. Backlash

mode program
```

```
adj__backlash adj__count        2
adj__backlash max__backlash    85
//adj__backlash integration
adj__backlash run

delay 20

//=============================================#2. Burnin Test

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

//=============================================#3. CCD Defective Pixel

//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 shold be formatted at PC.

12) CCD DEFECT CELL

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

<How to act>

① Check the reference level and exposure time setting and do the Defective Pixel
Do the White Defective Pixel for STS3-63, TH-73R and L2-74.

② Do the inspection by referencing the specification (Maxium number of Defective cell)

③ Write the number of Defective Cell at the Data file by referencing the information of CARD WRITE.

<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 modify the program, use the Memo Pad of Windows and save it as "STS3105ADJ.txt"
Use only section related to each adjustment.

```
////////////////////////////////////////////////////////
//  PROJECT : STS3-105
//  PROCESS : Backlash / Burnin / Defective Pixel
//  DATE : 2007.02.15
////////////////////////////////////////////////////////


//=========================================#0. adj control setting
```

```
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         30
adj__control override__tv__usb       1
adj__control do__check__process__id 1    //

//=========================================#1. Backlash

mode program

adj__backlash adj__count        2
adj__backlash max__backlash    85
//adj__backlash integration
adj__backlash run

delay 20

//=========================================#2. Burnin Test

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

//================================#3. CCD Defective Pixel

//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 shold be formatted at PC.

13) EEPROM READ

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

<How to read>

a...Insert the codes and save the program in the SD 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.

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 file and you can check the EEPROM DATA.

12) EEPROM WRITE

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

<How to write>

a...Insert the codes and save the program in the SD card.

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

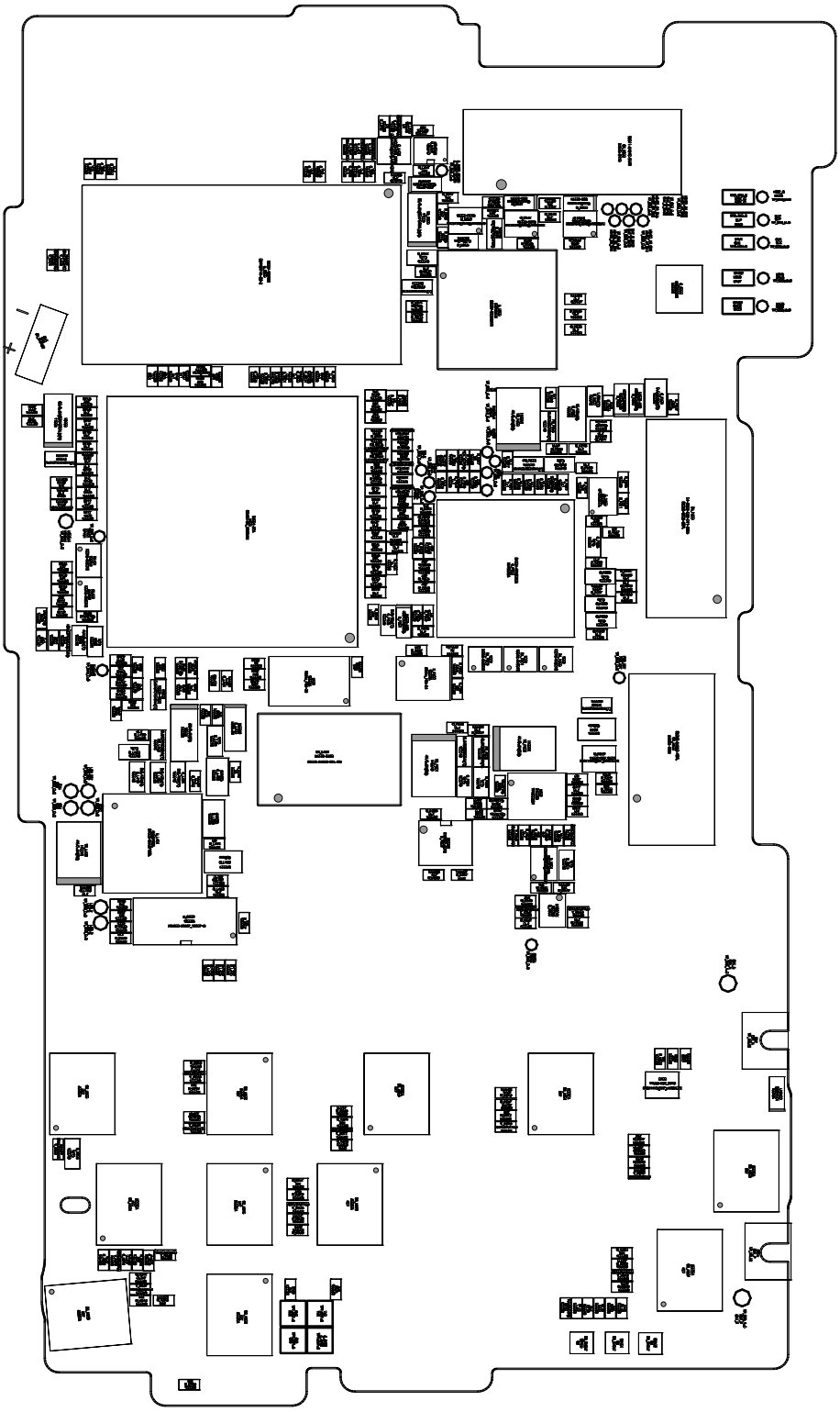
c...Turn on the camera and the data of EEPROM will be copied to the camera.

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

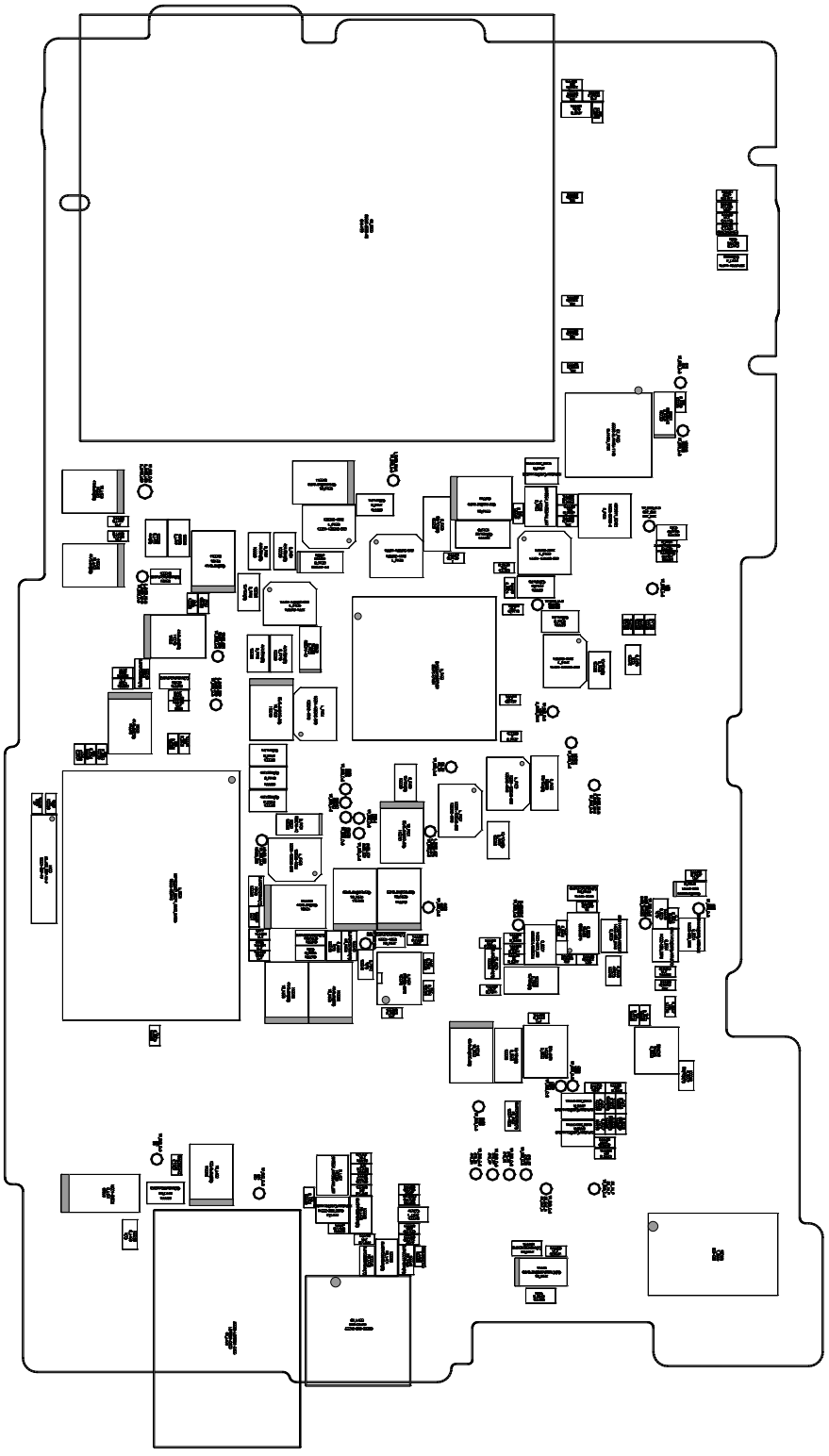
Ⅳ. PATTERN DIAGRAM

1. PARTS ARRANGEMENT FOR EACH PCB ASS'Y

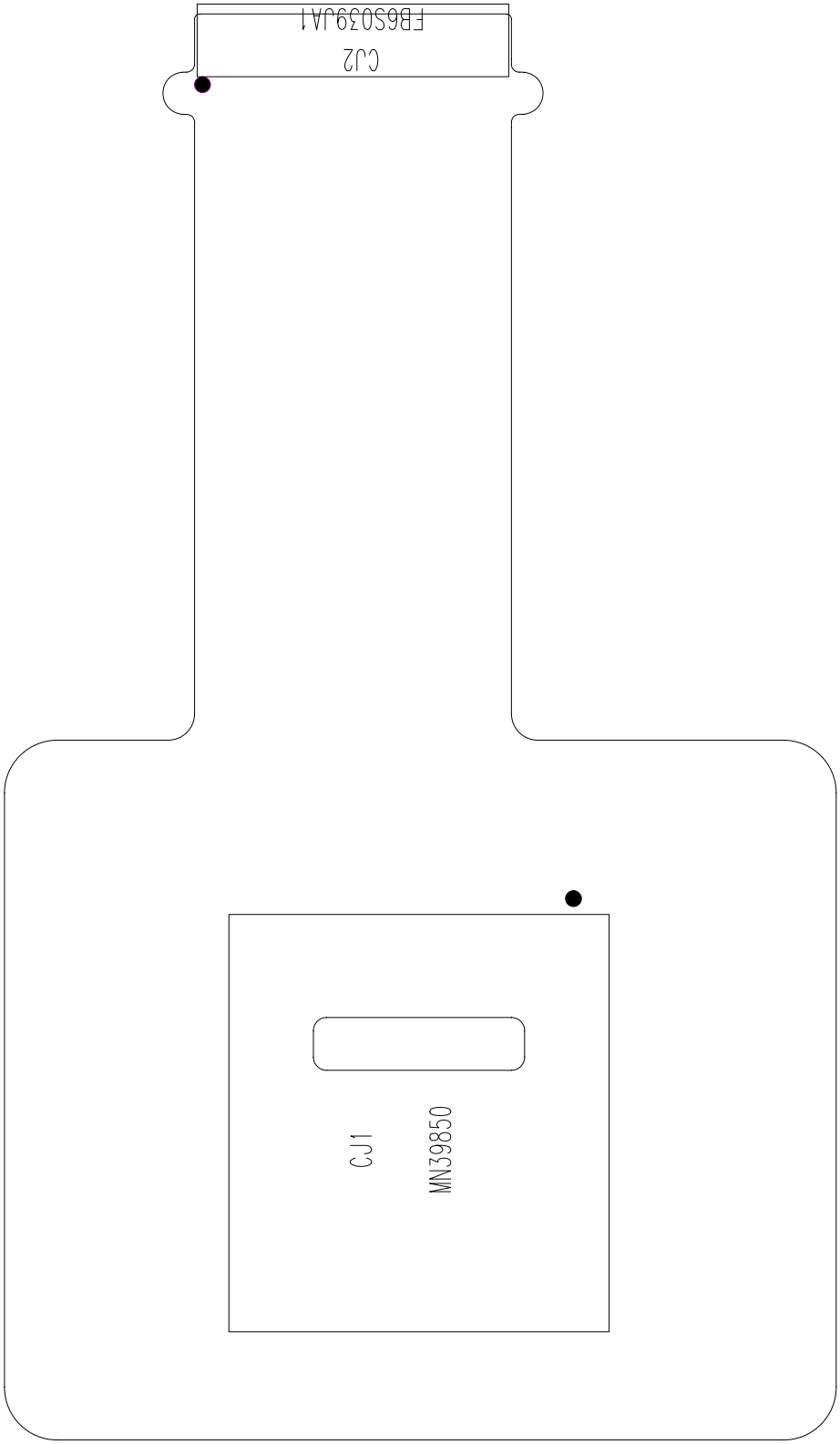
1) MAIN_TOP



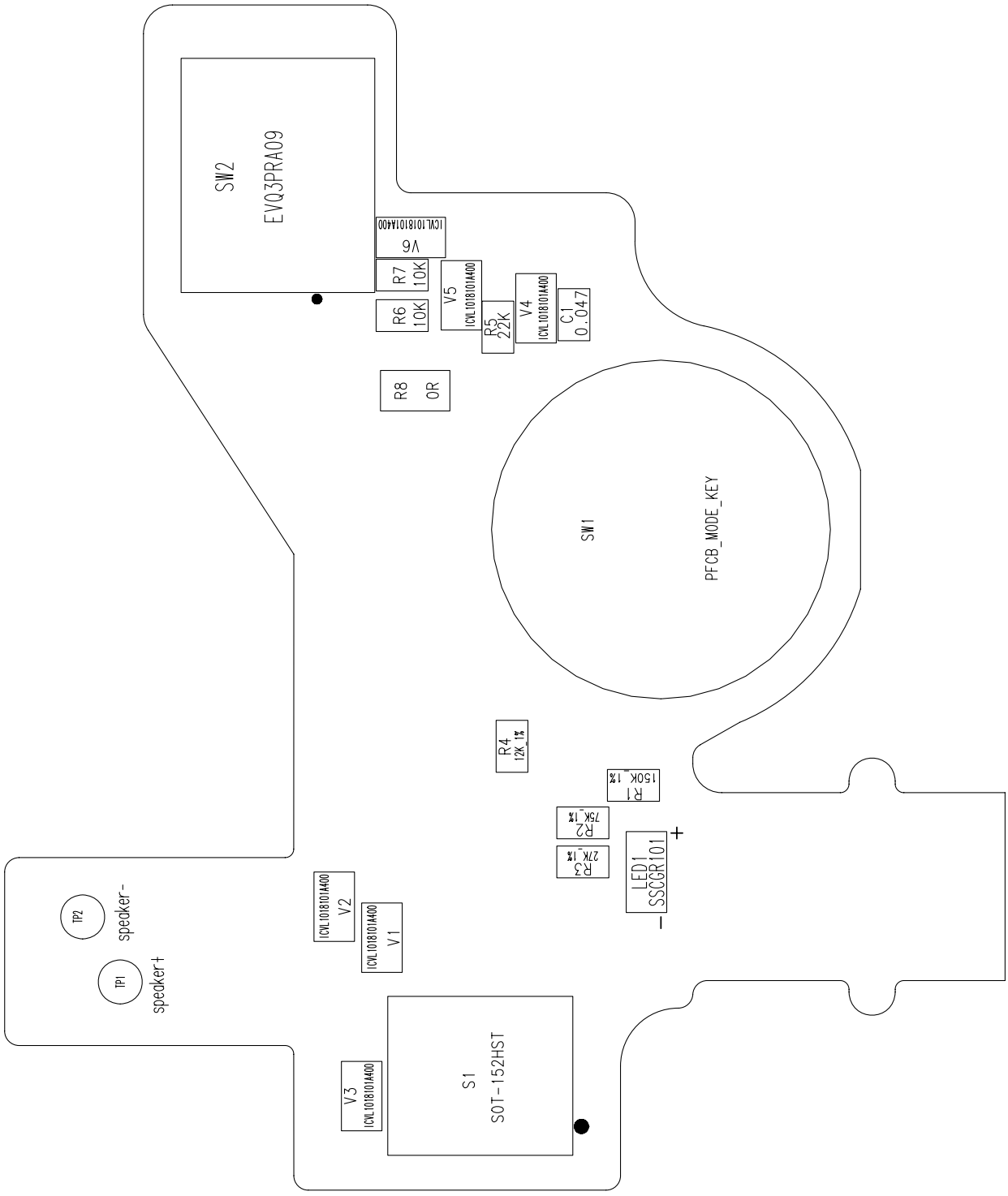
2) MAIN_BOTTOM



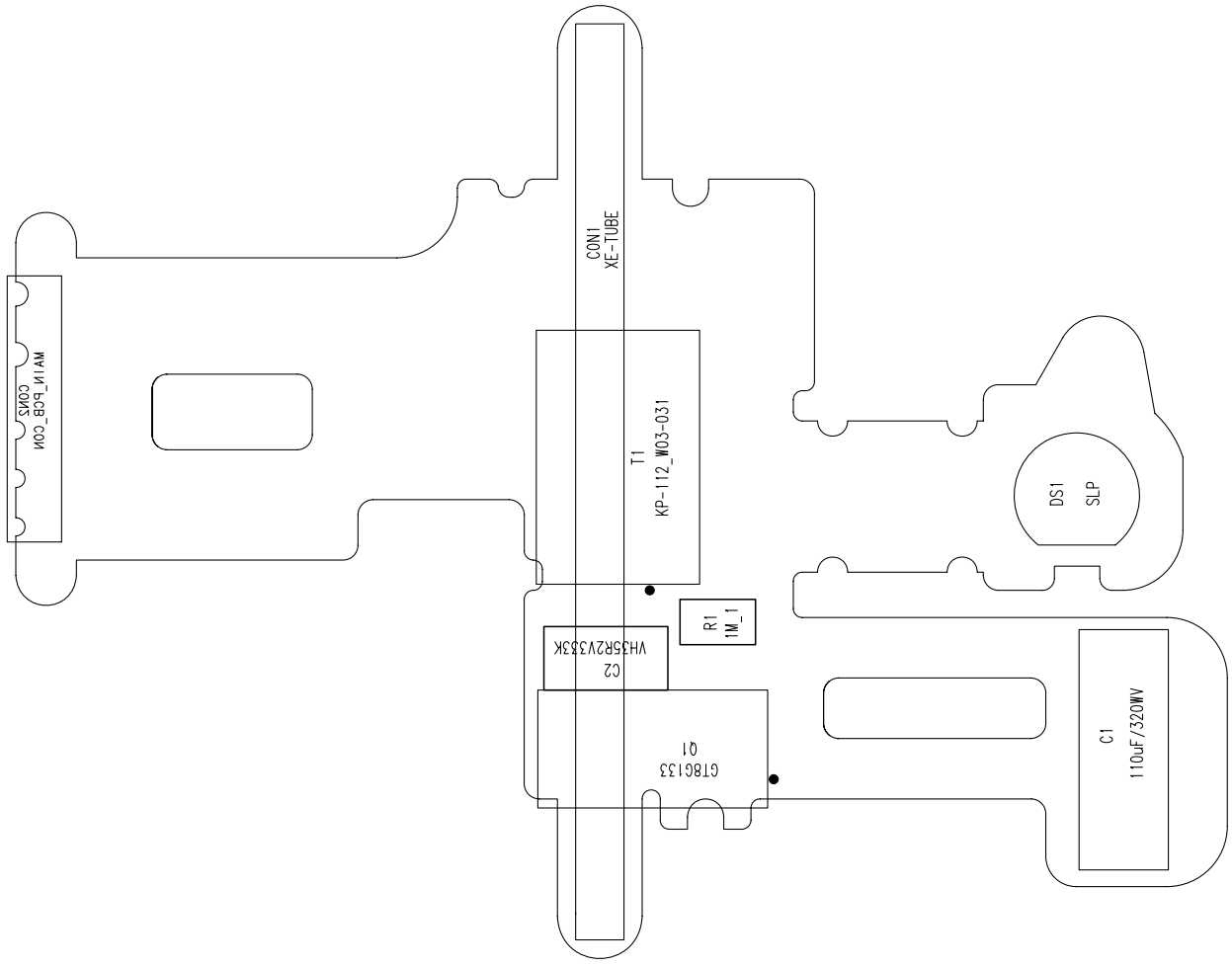
3) CCD



4) MODE

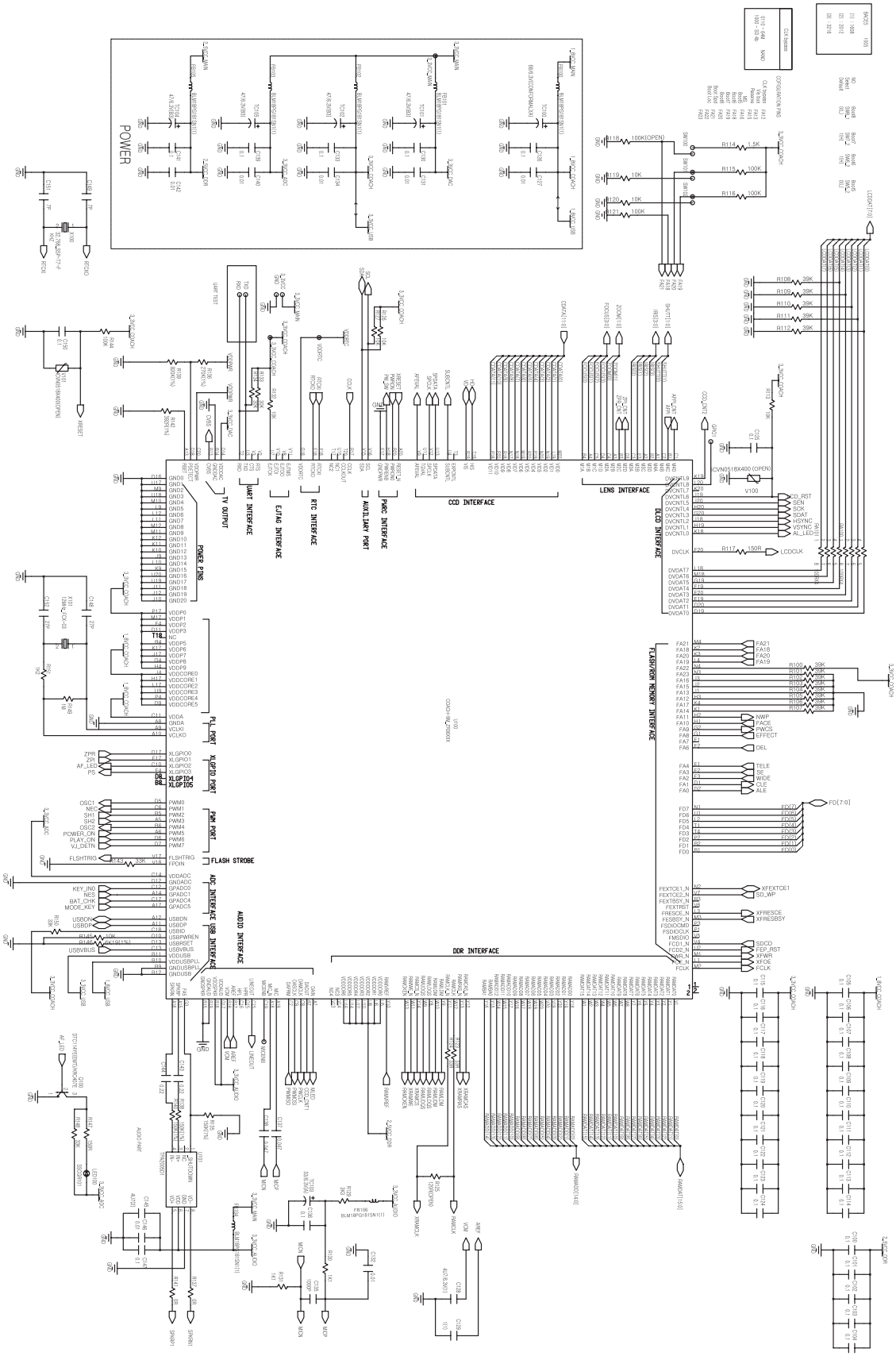

SW2
EVQ3PRA09
V6
R7 10K
R6 10K
V5
R5 22K
V4
C1 0.047
R8 0R
SW1
PFCB_MODE_KEY
R4 12K_1%
R1 150K_1%
R2 75K_1%
R3 27K_1%
LED1 SSCGR101
V2
V1
TP2 speaker-
TP1 speaker+
V3
S1 SOT-152HST

5) STROBO

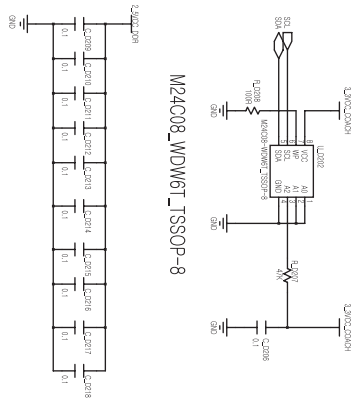

CON1
XE-TUBE
T1
KP-112_W03-031
DS1
SLP
R1
1W_1
C2
VH35R2V333K
Q1
GTBG133
C1
110uF/320WV
MAIN_PCB_COM
COMS

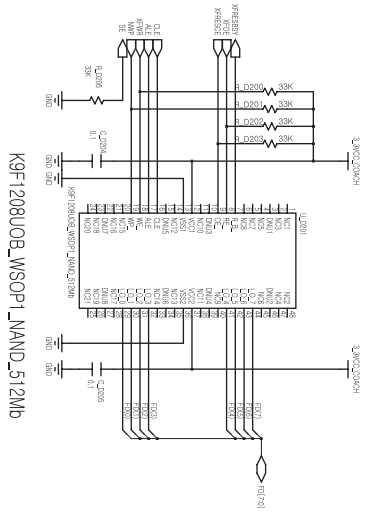
Ⅴ. CIRCUIT DIAGRAM

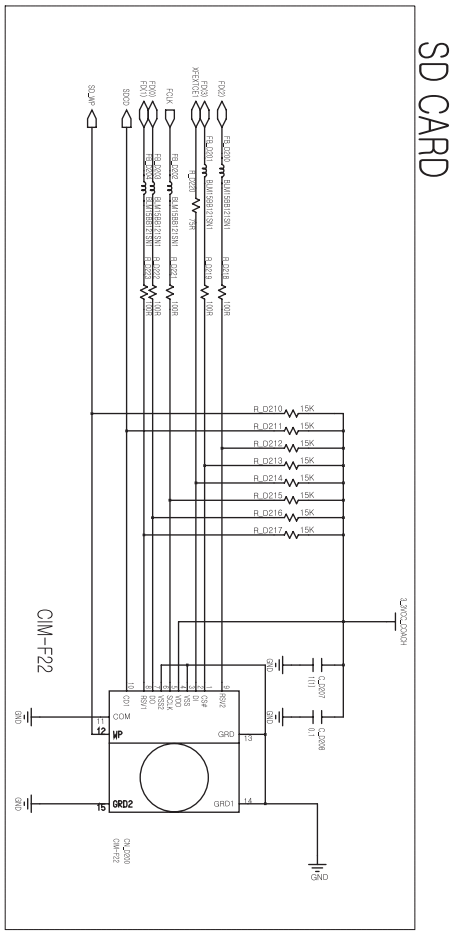
1) MAIN

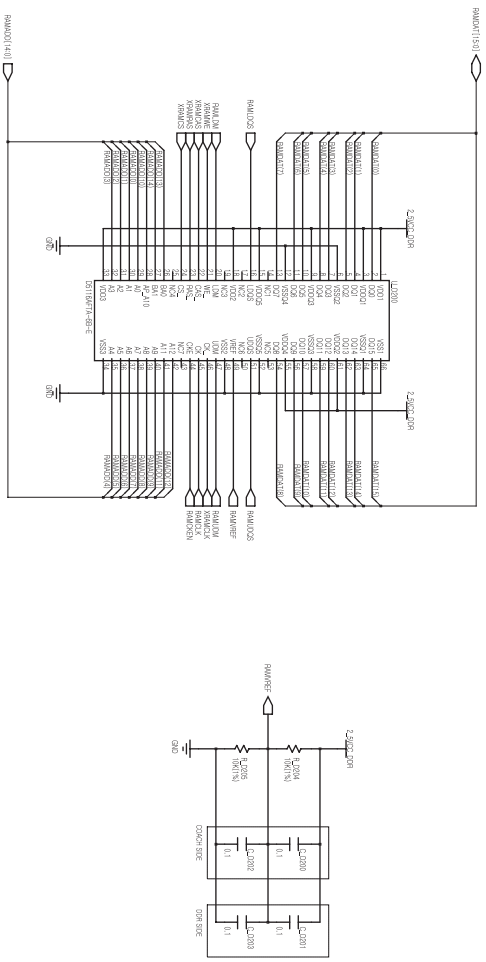


2) MAIN_DDR

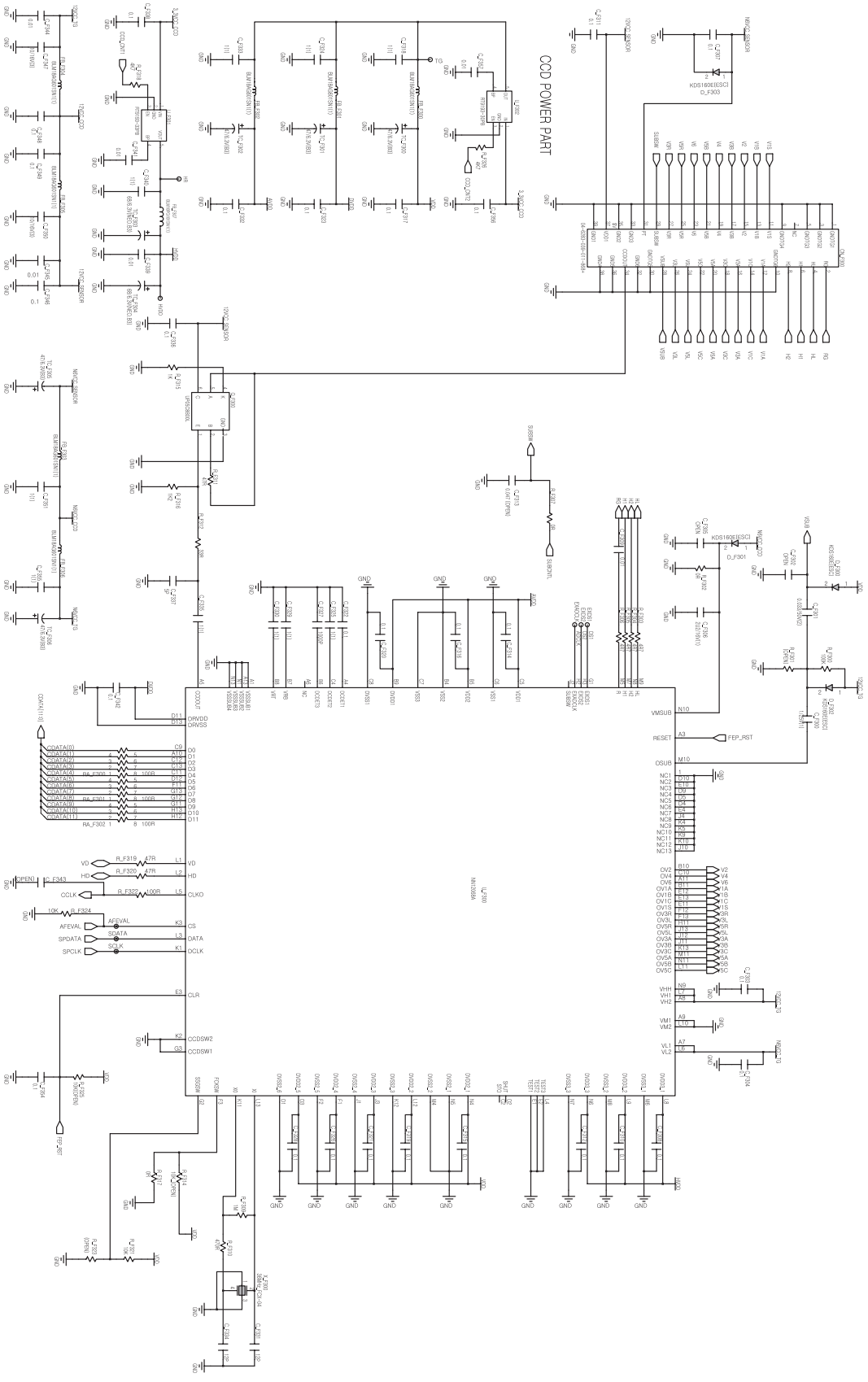

M24C08_WDW6T_TSSOP-8


K9F1208U0B_WSOP1_NAND_512Mb

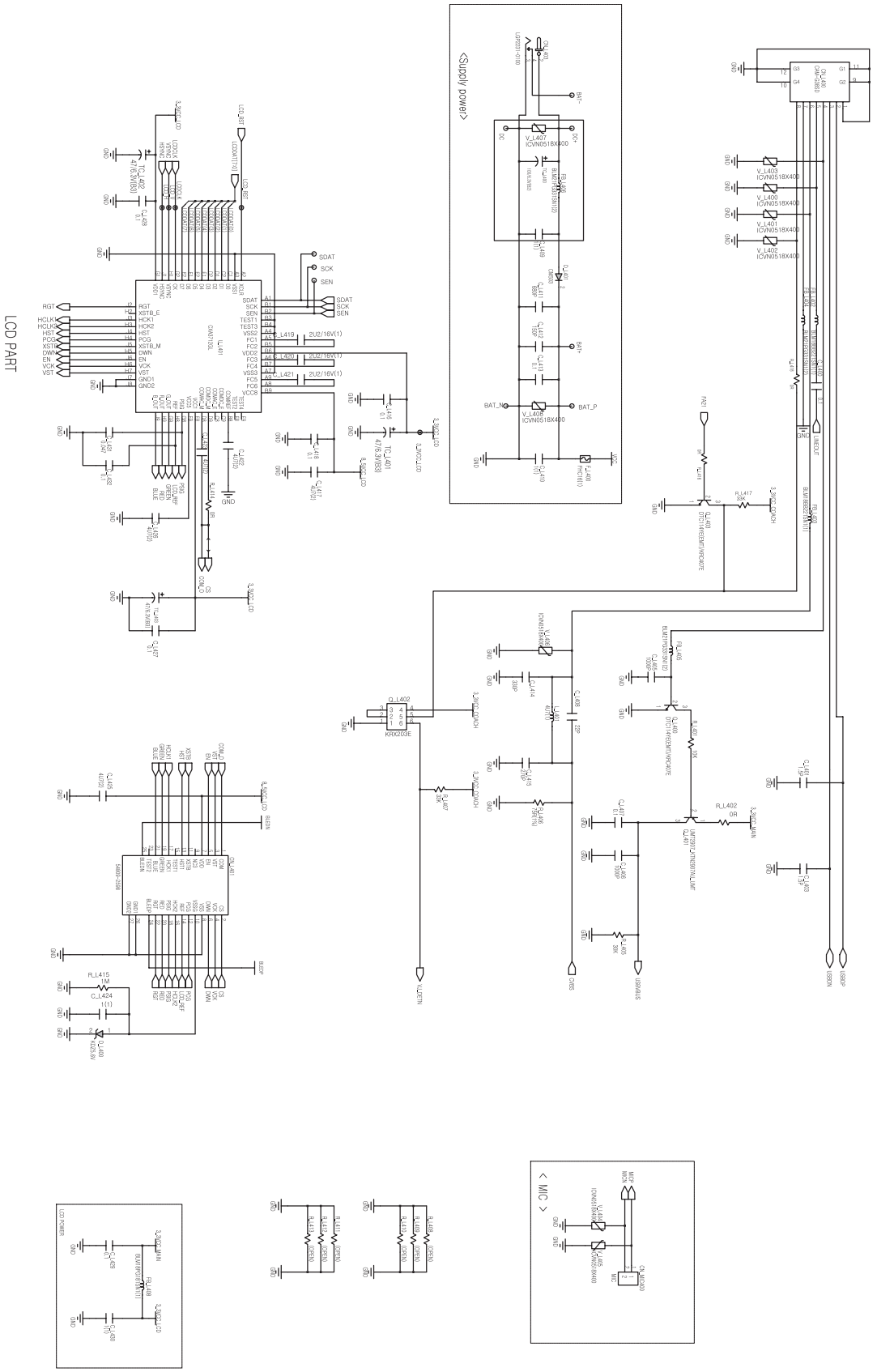

SD CARD
CIM-F22



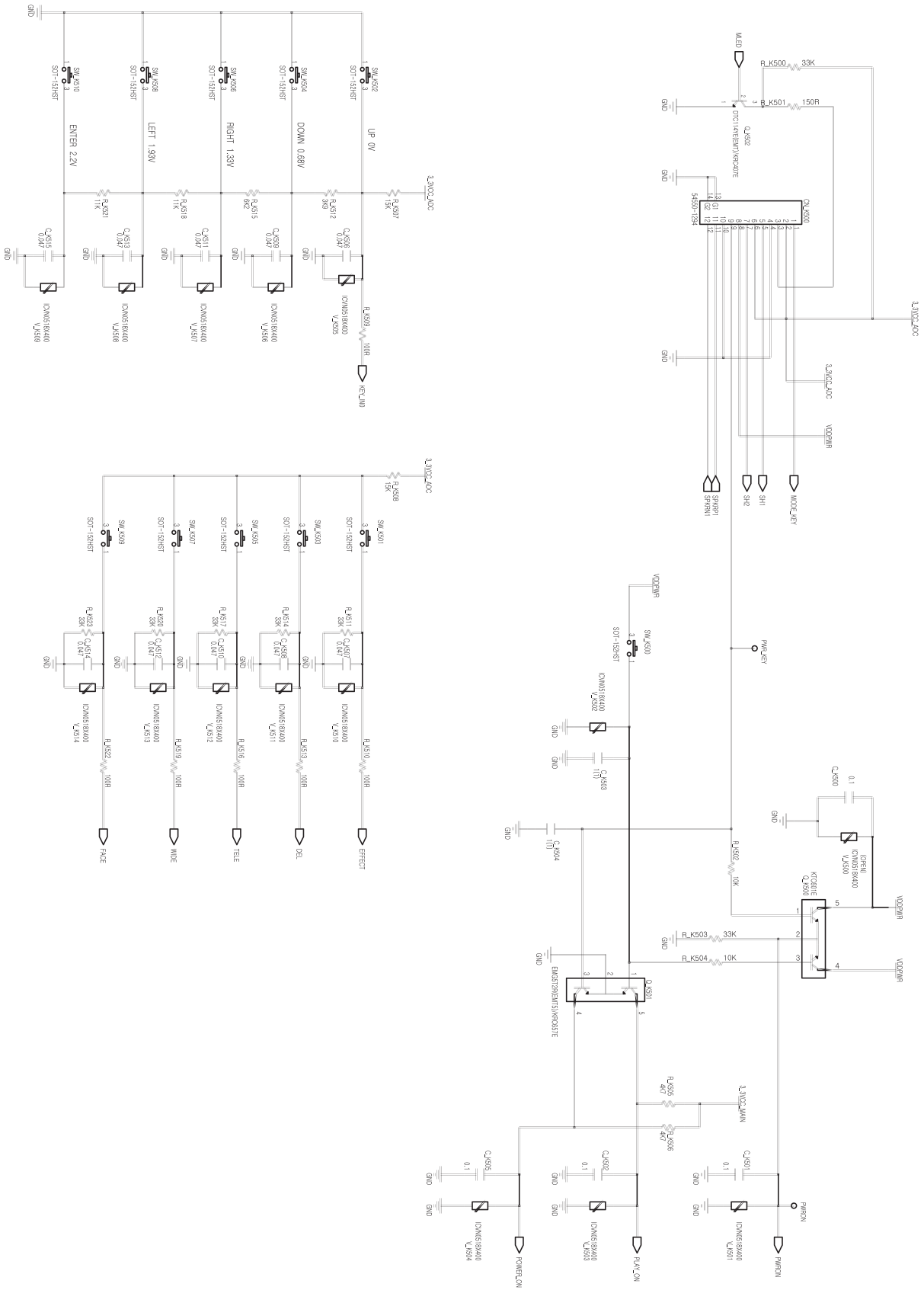
3) MAIN_CCD(FEP)



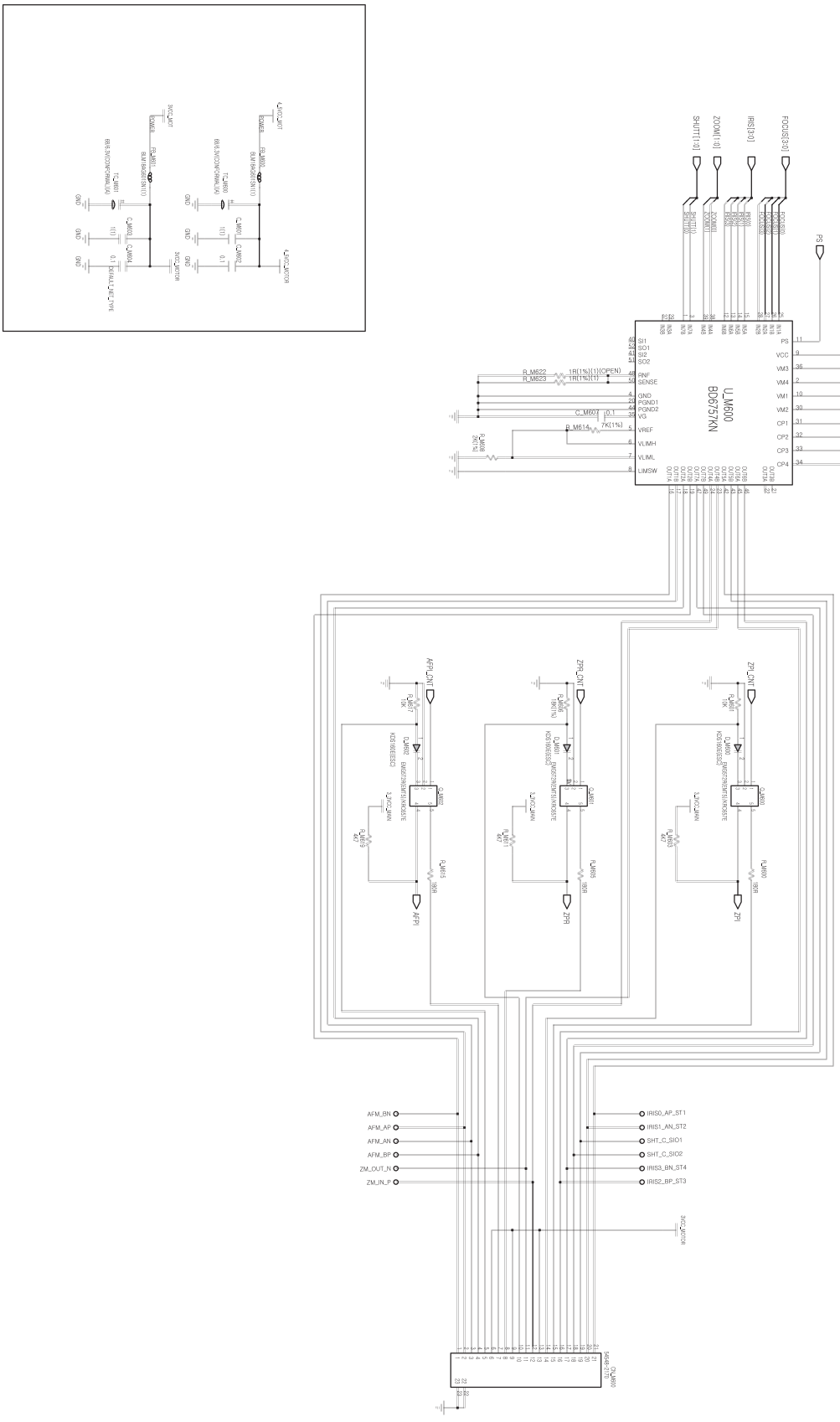
4) MAIN_I/O LCD



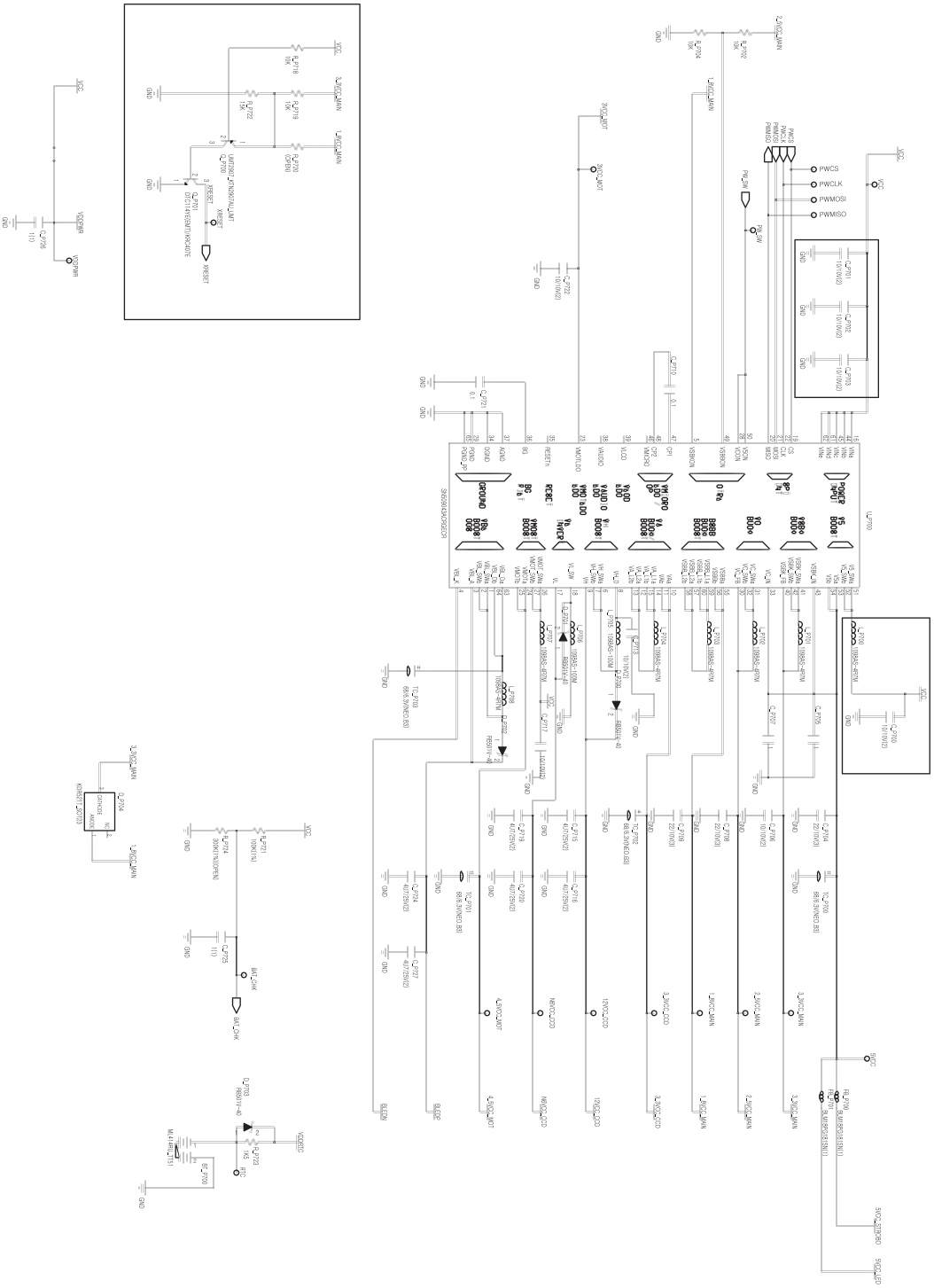
5) MAIN_KEY


ENTER 2.2V
LEFT 1.93V
RIGHT 1.33V
DOWN 0.68V
UP 0V
KEY_IN0
FACE
WIDE
TELE
DEL
EFFECT
MLED
R_K500 33K
R_K501 150R
Q_K502
CN_K500
3.3VCC_ADC
VDDPWR
SPKRP1
SPKRN1
SH2
SH1
MODE_KEY
SW_K500
PWR_KEY
C_K500
IC_K500
KTC3311E
R_K503 33K
R_K504 10K
Q_K501
R_K505 4K7
R_K506 4K7
3.3VCC_MAIN
C_K506
C_K502
C_K501
IC_K504
IC_K503
IC_K501
POWER_ON
PLAY_ON
PWRON

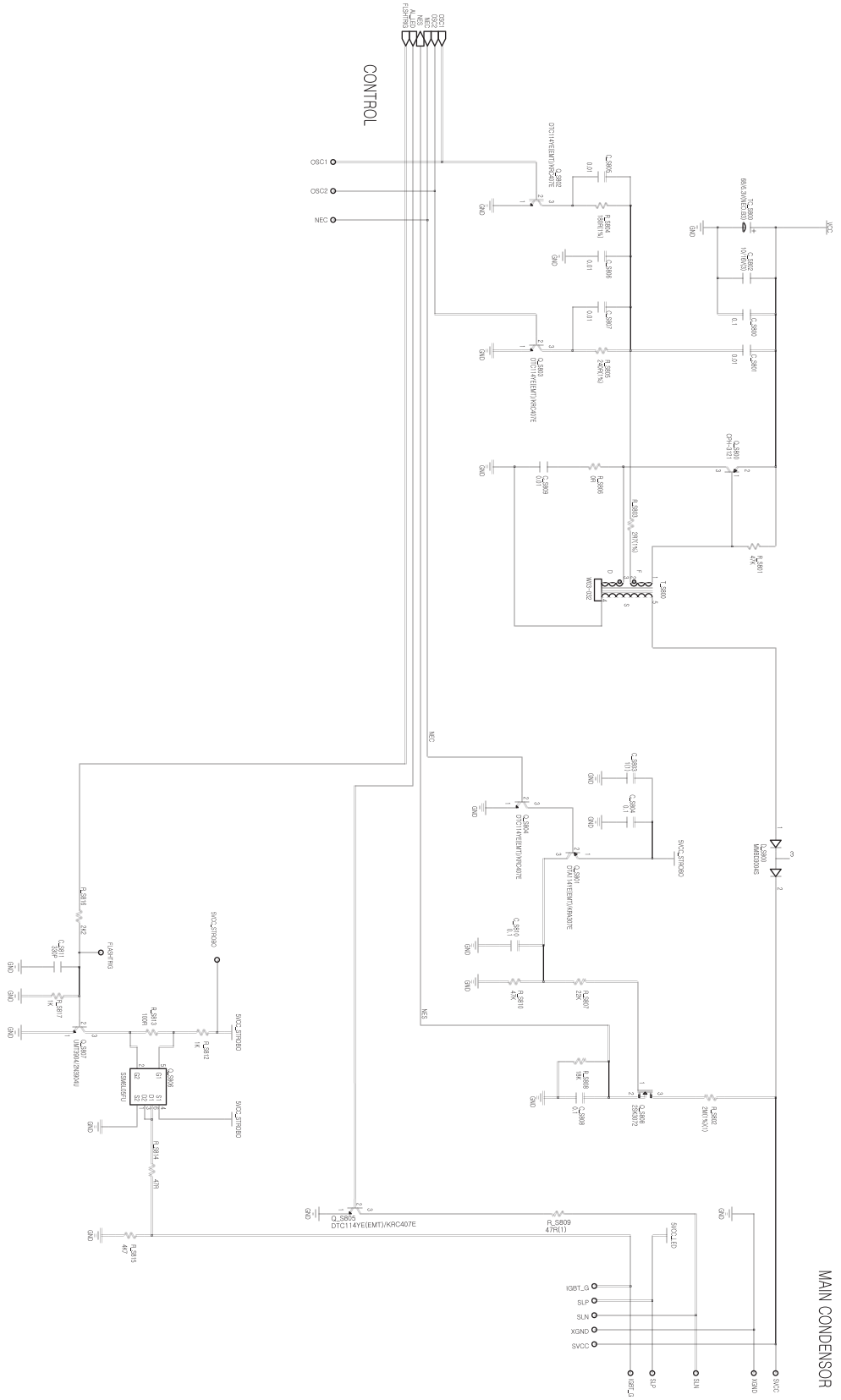
6) MAIN_LENS(MOTOR)



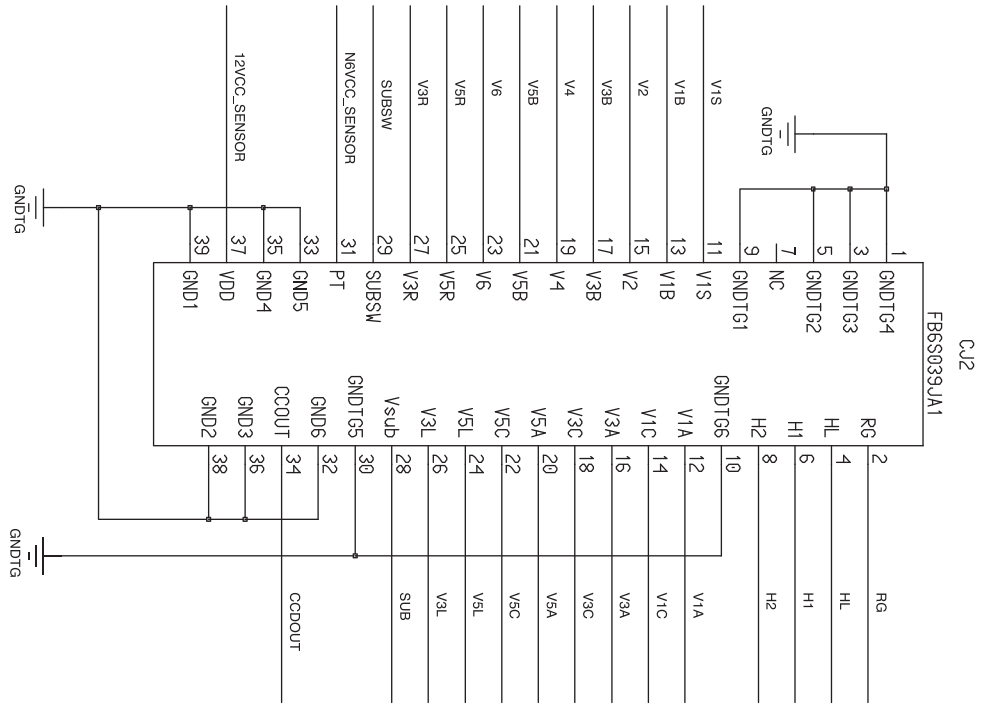
7) MAIN_POWER

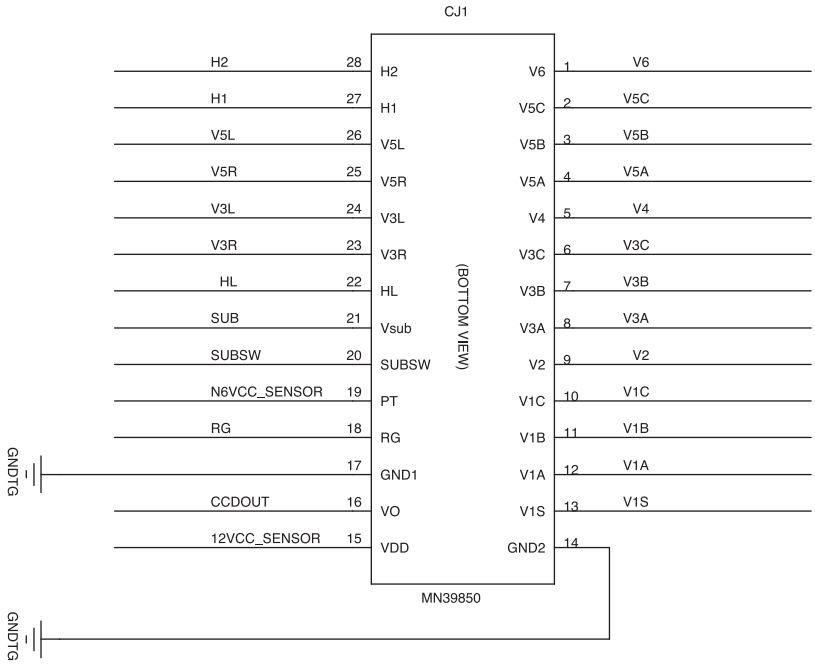


8) MAIN_STROBO

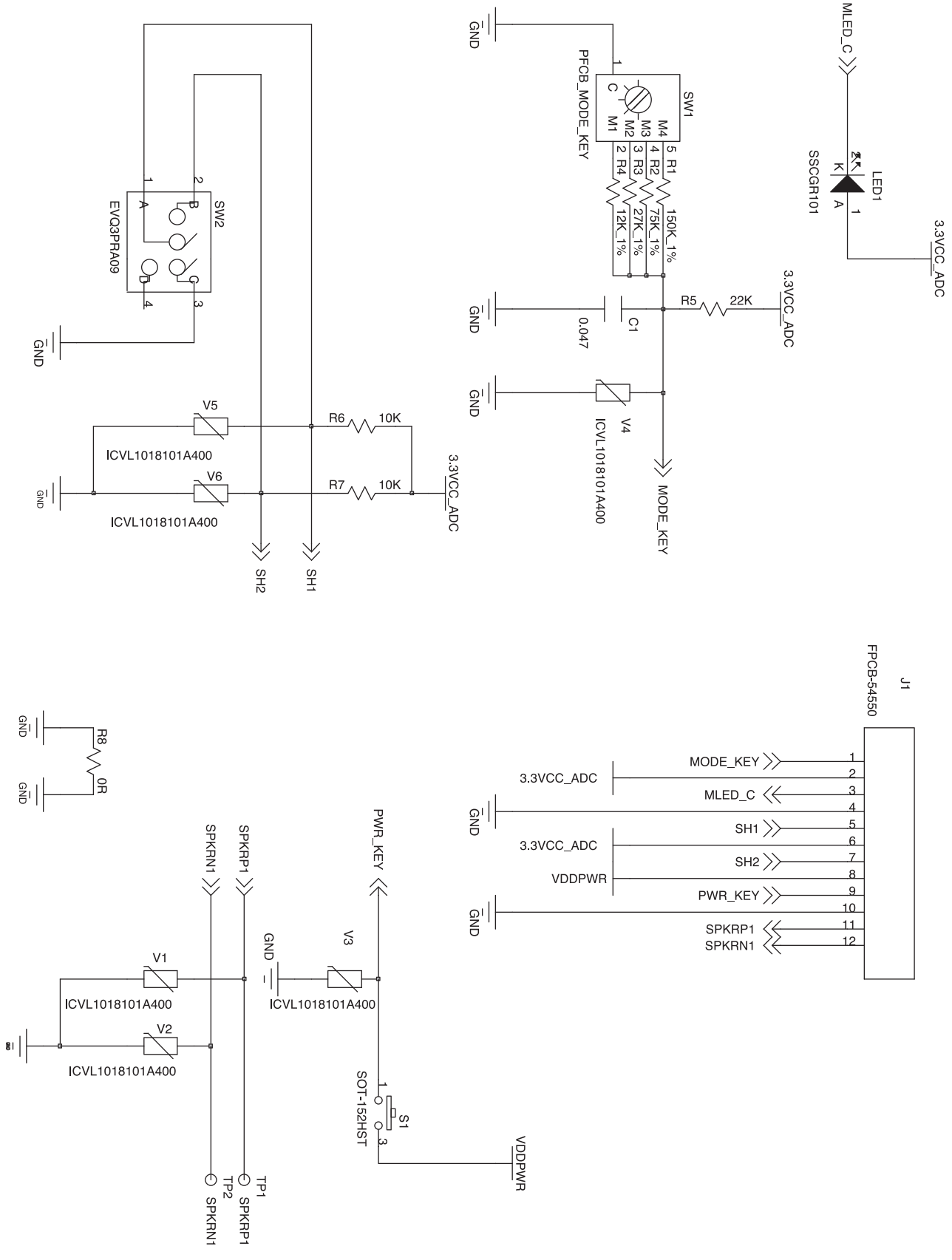


9) CCD

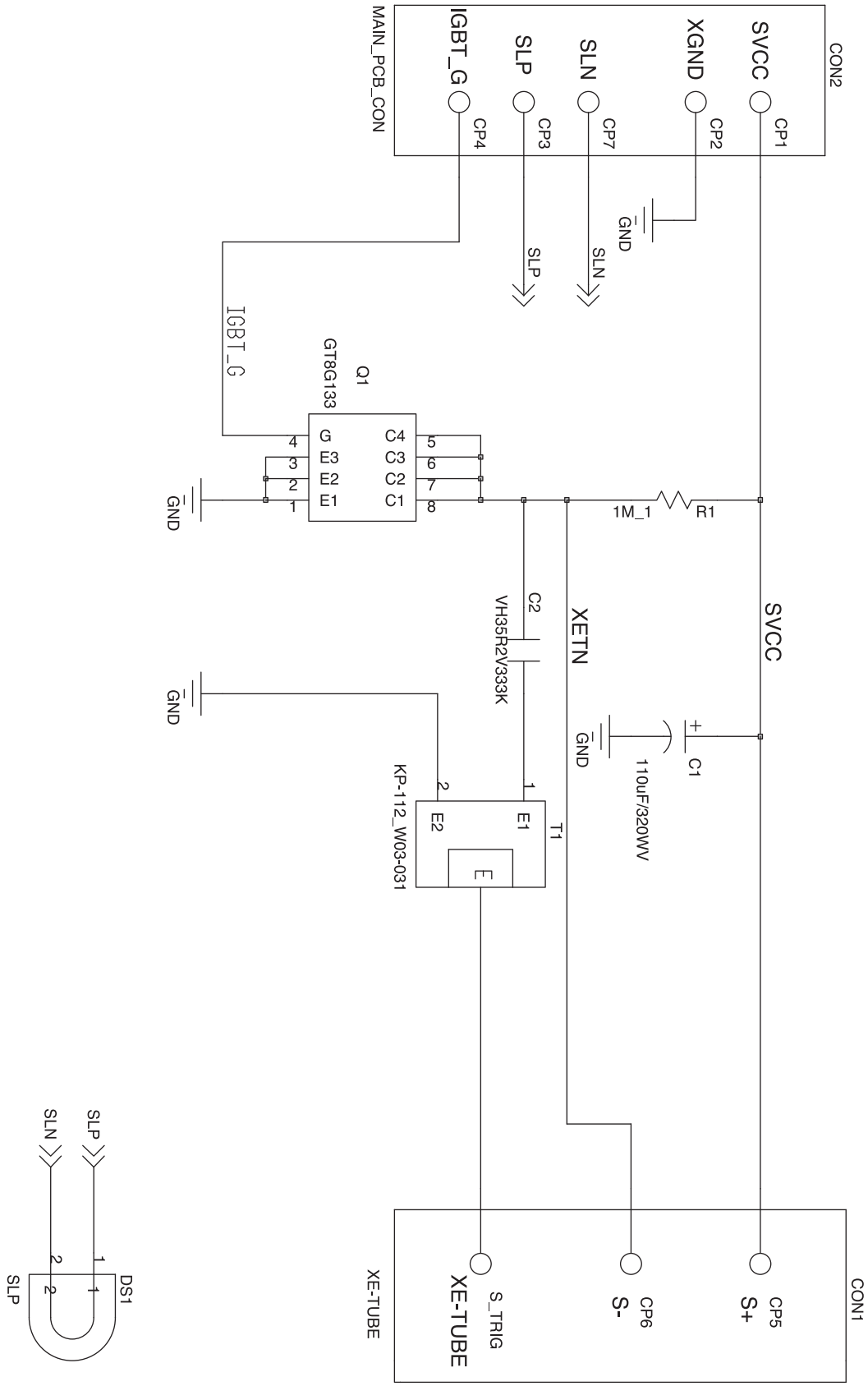

CJ2
FBGS039JA1
GNDTG4 1
RG 2
GNDTG3 3
HL 4
GNDTG2 5
H1 6
NC 7
H2 8
GNDTG1 9
GNDTG6 10
V1S 11
V1A 12
V1B 13
V1C 14
V2 15
V3A 16
V3B 17
V3C 18
V4 19
V5A 20
V5B 21
V5C 22
V6 23
V5L 24
V5R 25
V3L 26
V3R 27
Vsub 28
SUBSW 29
GNDTG5 30
N6VCC_SENSOR 31
PT 33
GND6 32
CCOUT 34
GND5 35
GND4 36
VDD 37
GND3 38
GND1 39
GNDTG
12VCC_SENSOR
SUBSW
V3R
V5R
V6
V5B
V4
V3B
V2
V1B
V1S
GNDTG
RG
HL
H1
H2
V1C
V3A
V5A
V5C
V3C
V1A
V5L
SUB
V3L
CCDOUT
GNDTG


CJ1
H2 28
H1 27
V5L 26
V5R 25
V3L 24
V3R 23
HL 22
SUB 21
SUBSW 20
N6VCC_SENSOR 19
RG 18
17
CCDOUT 16
12VCC_SENSOR 15
H2
V5L
V5R
V3L
V3R
HL
Vsub
SUBSW
PT
RG
GND1
VO
VDD
(BOTTOM VIEW)
V6 1
V5C 2
V5B 3
V5A 4
V4 5
V3C 6
V3B 7
V3A 8
V2 9
V1C 10
V1B 11
V1A 12
V1S 13
GND2 14
V6
V5C
V5B
V5A
V4
V3C
V3B
V3A
V2
V1C
V1B
V1A
V1S
MN39850
GNDTG
GNDTG

10) MODE


MLED_C
LED1
SSCGR101
3.3VCC_ADC
GND
PFCB_MODE_KEY
SW1
M1
M2
M3
M4
R1
R2
R3
R4
150K_1%
75K_1%
27K_1%
12K_1%
R5
22K
C1
0.047
V4
ICVL1018101A400
MODE_KEY
SW2
EVQ3PRA09
V5
V6
R6
R7
10K
SH2
SH1
R8
0R
SPKRN1
SPKRP1
PWR_KEY
V1
V2
V3
S1
SOT-152HST
VDDPWR
TP1
TP2
J1
FPCB-54550
MODE_KEY
MLED_C
SH1
SH2
PWR_KEY
SPKRP1
SPKRN1

11) STROBO


CON2
MAIN_PCB_CON
SVCC
XGND
SLN
SLP
IGBT_G
CP1
CP2
CP7
CP3
CP4
GND
SLP
SLN
IGBT_G
Q1
GT8G133
G
E3
E2
E1
C4
C3
C2
C1
1M_1
R1
C2
VH35R2V333K
XETN
SVCC
C1
110uF/320WV
T1
KP-112_W03-031
E2
E1
E
CON1
XE-TUBE
S_TRIG
CP6
CP5
S-
S+
DS1

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

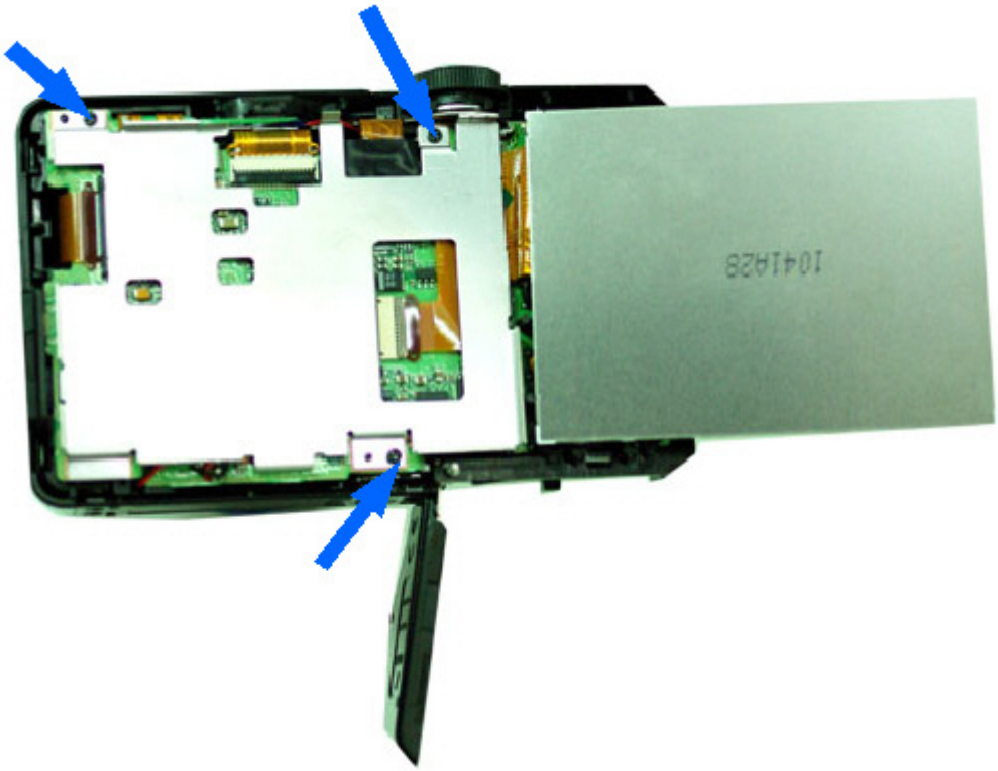
1. Remove 2 screws

2. Remove 2 screws

3. Remove 4Äscrews

4. Disassemble the BACK COVER.

5. Remove 3 screws.

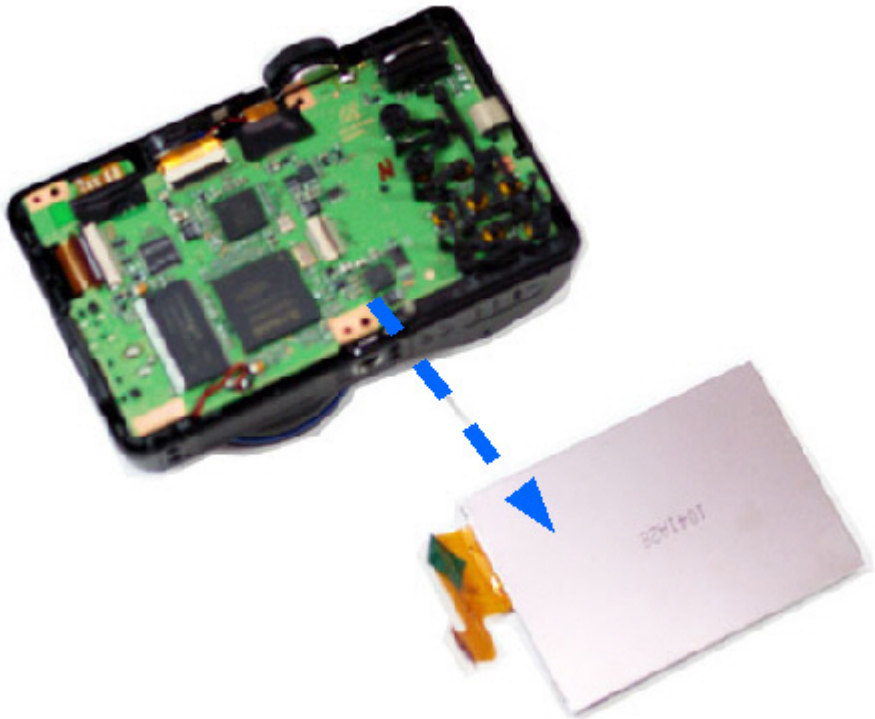


6. Remove 1 screws.

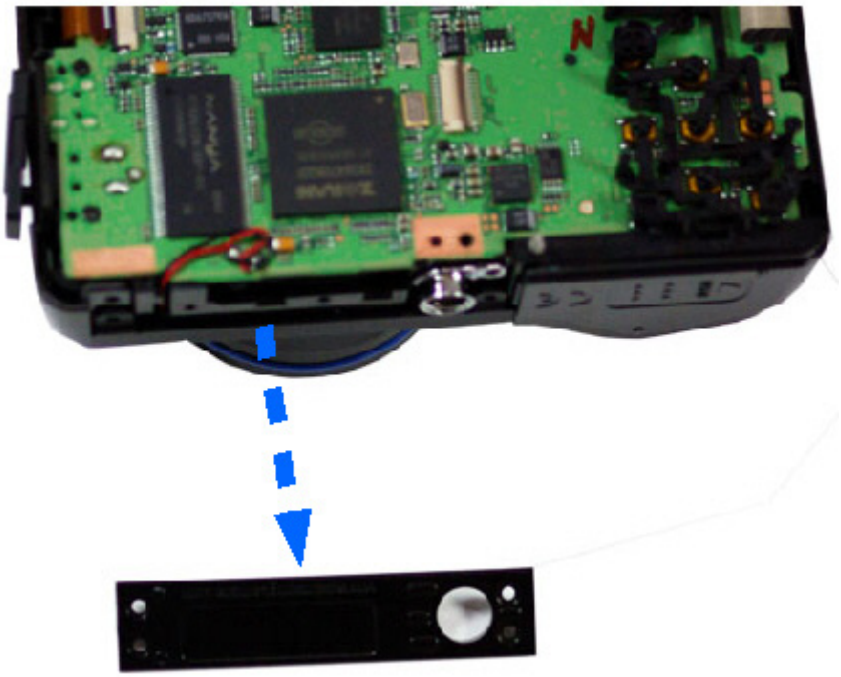
7. Disassemble the LCD panel

8. Disconnect the PCB from the connector.

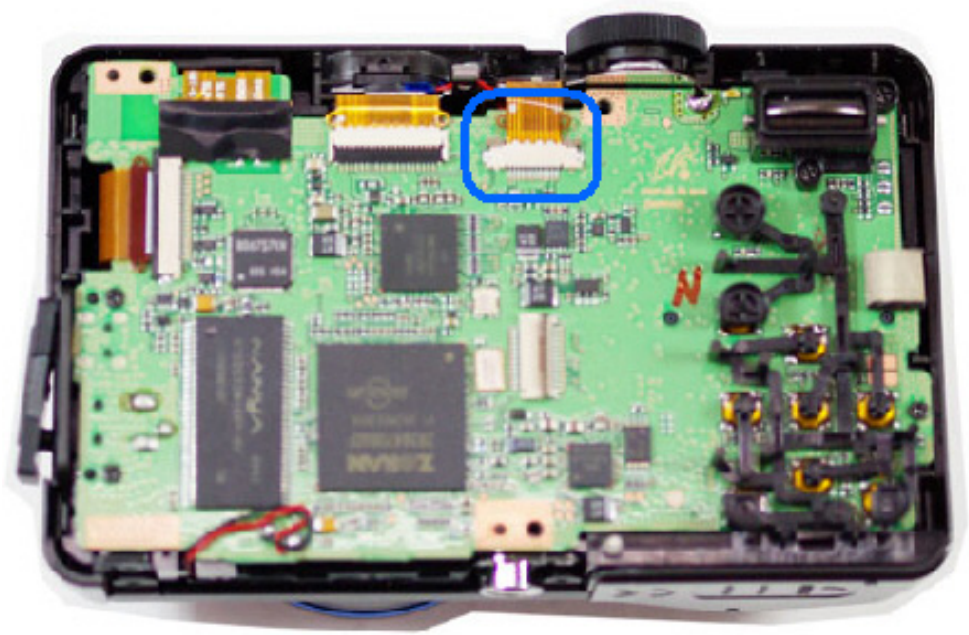
9. Disassemble the LCD ASSY.



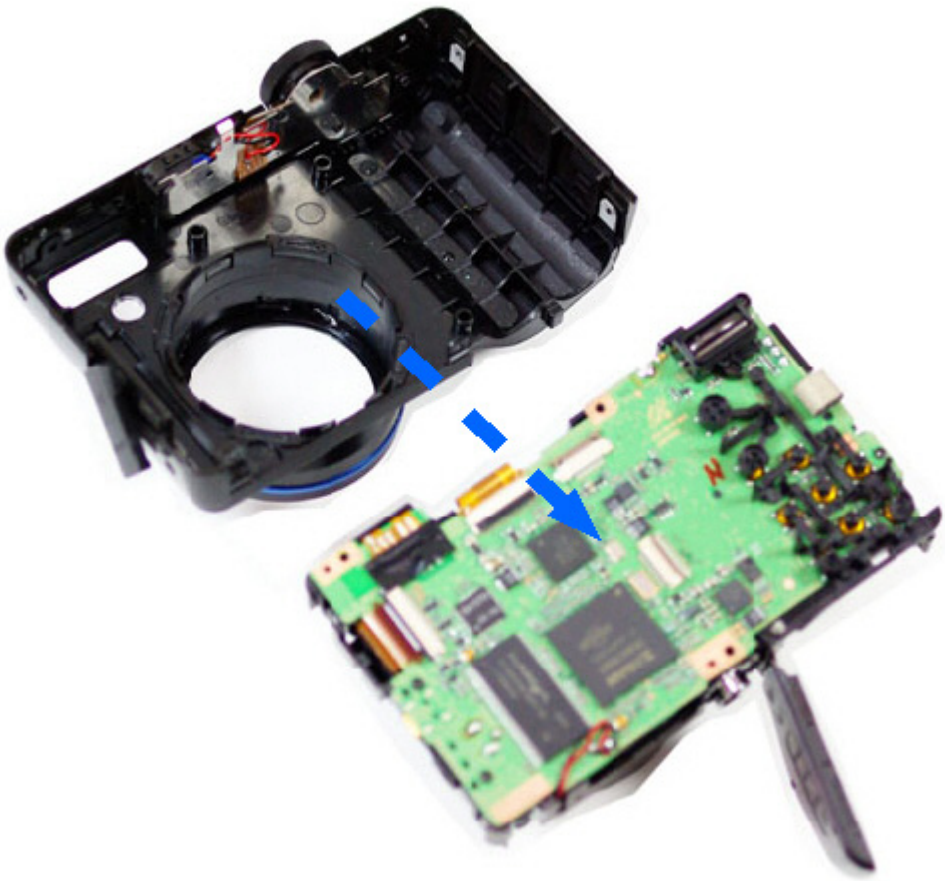
10. Disassemble the BOTTOM COVER.



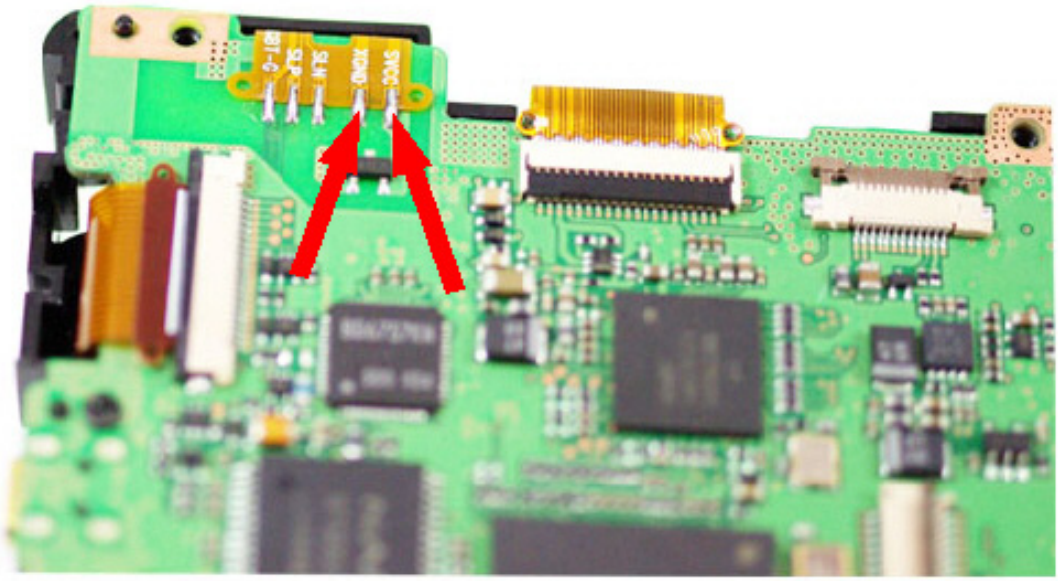
11. Disconnect the PCB from the connector.



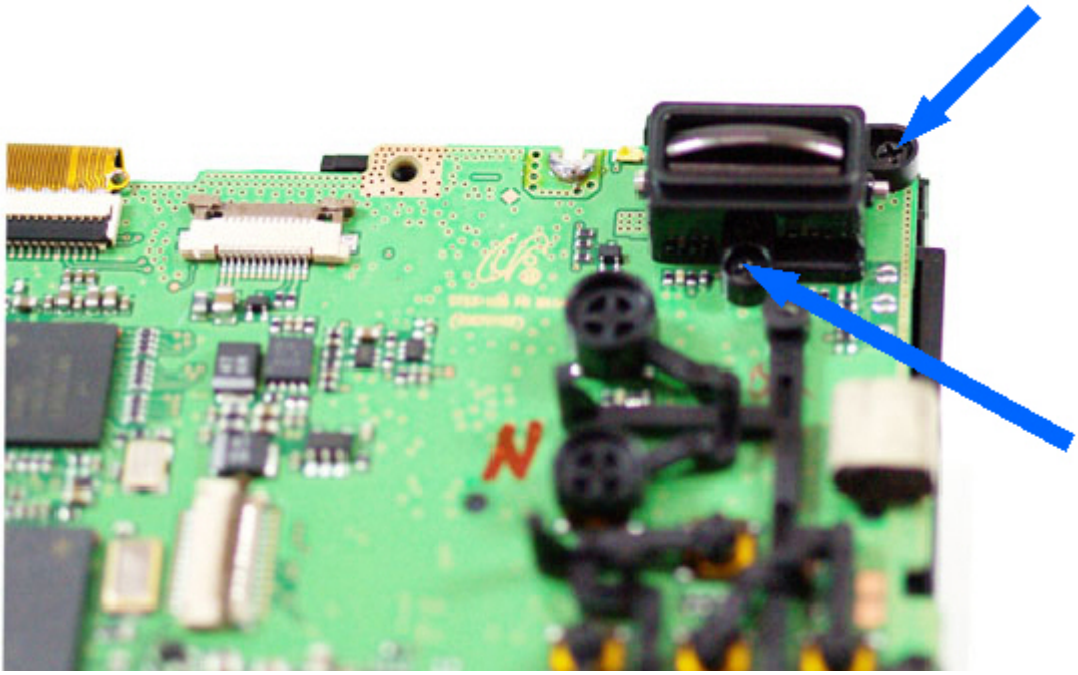
12. Disassemble the FRONT COVER.



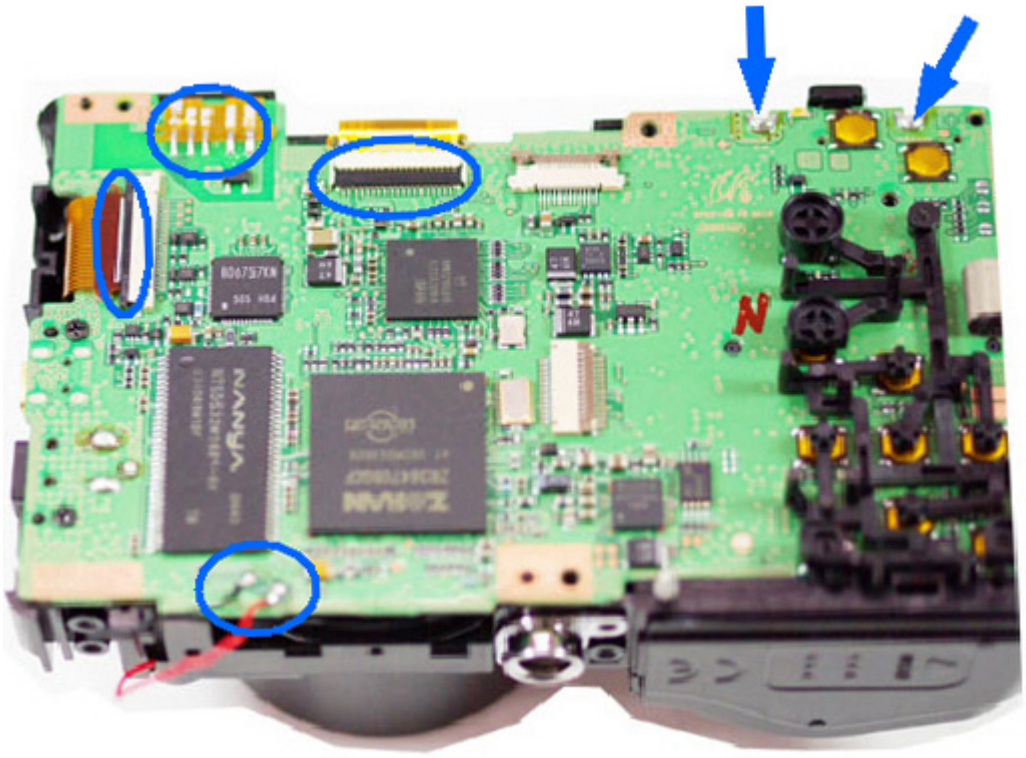
13. **Caution. Discharging point** : Before removing the PCB soldering, discharge the main condenser.



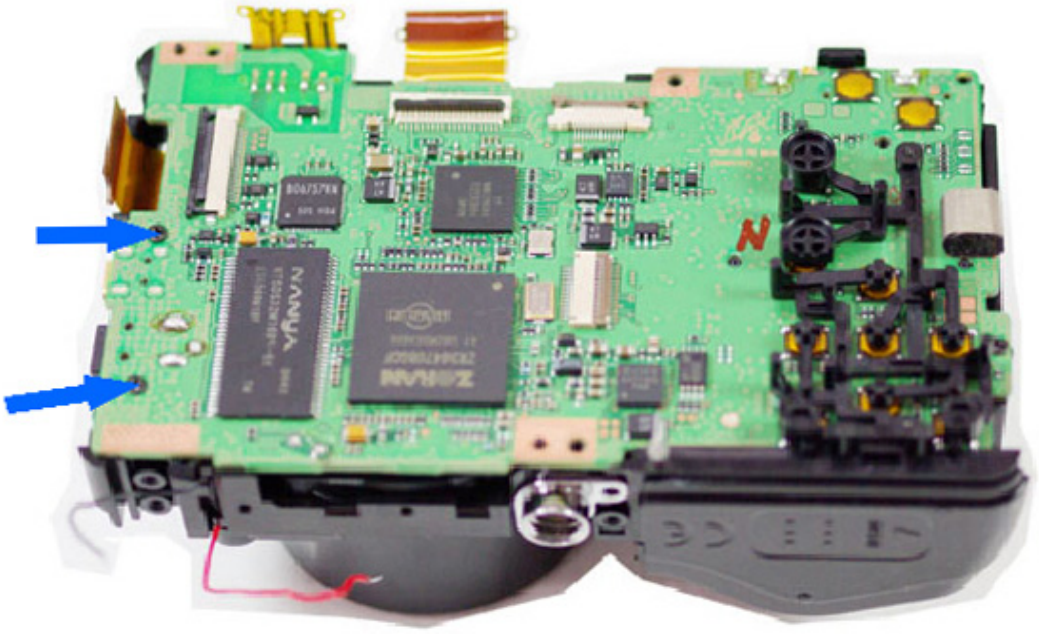
14. Remove 2 screws.



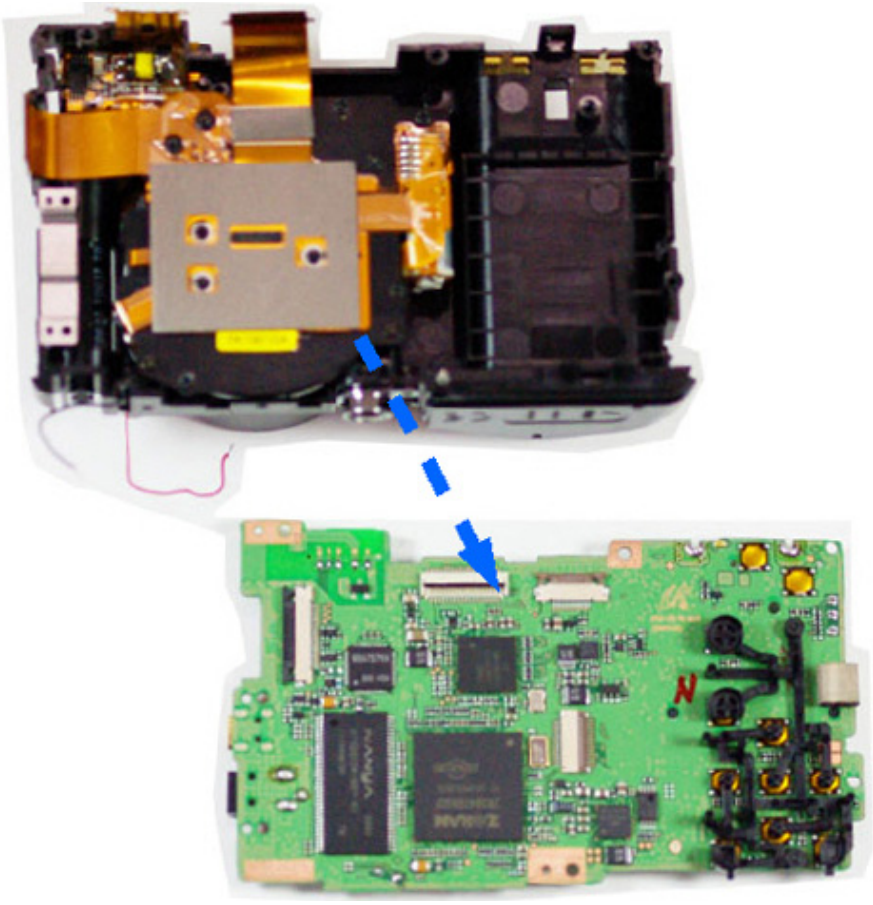
15. Remove the 2 soldering of battery contact and disconnect the Strobo F PCB.
Remove wire of mic.



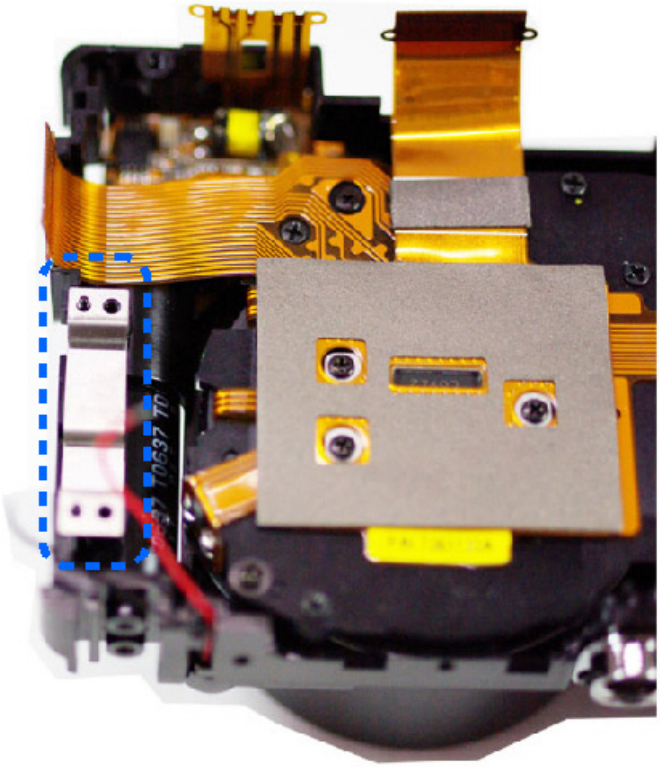
16. Remove 2 screws.



17. Disassemble the MAIN PCB.

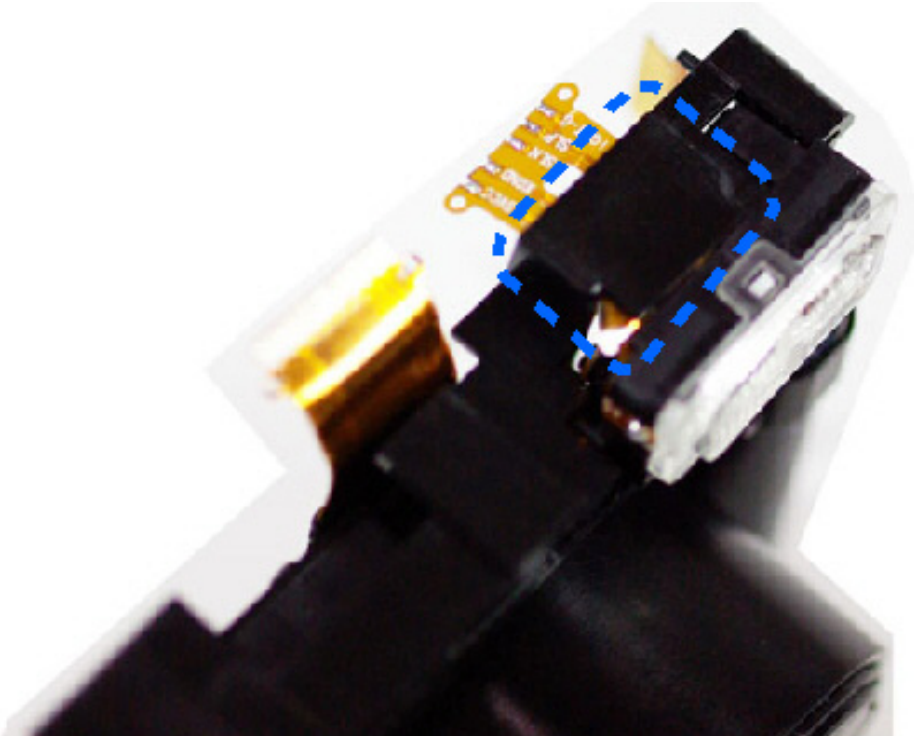


※ Be careful not to lost this.

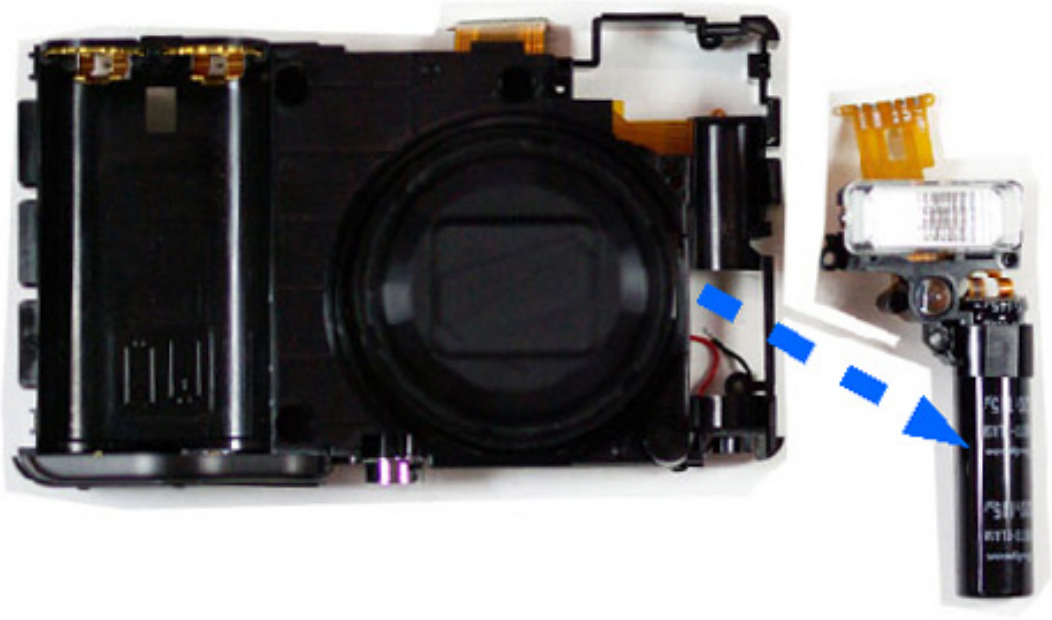


18. Remove 2 screws.

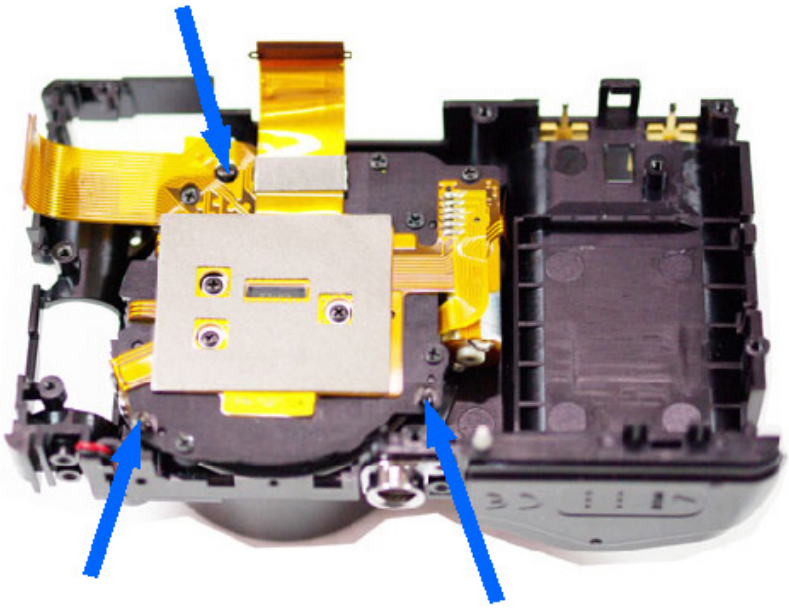
※ Be carefule of location of PCB while assembling.



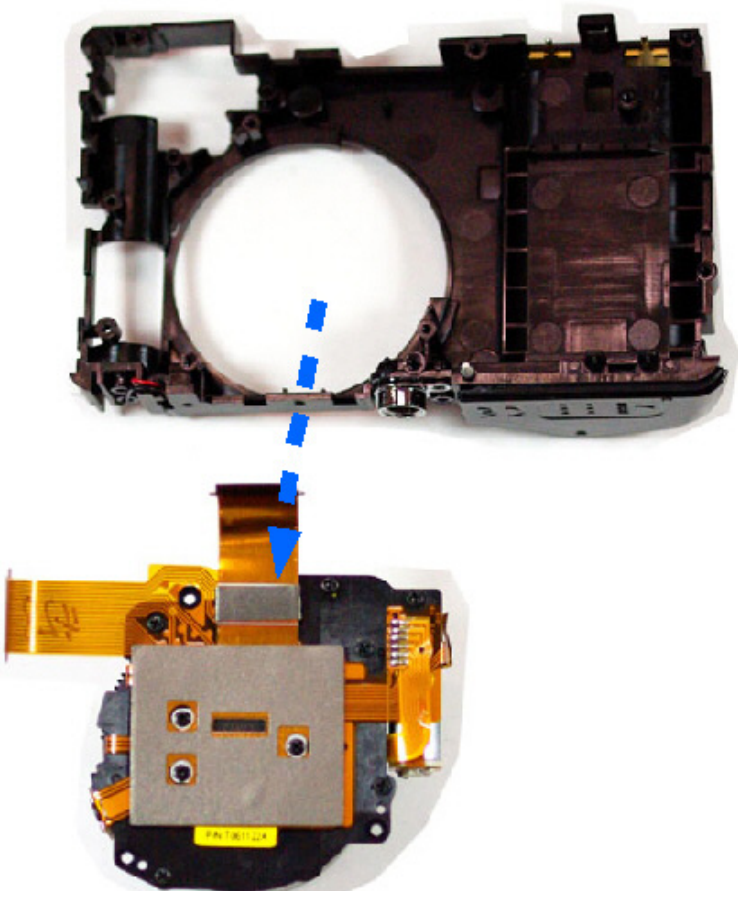
19. Disassemble the STROBE PCB.



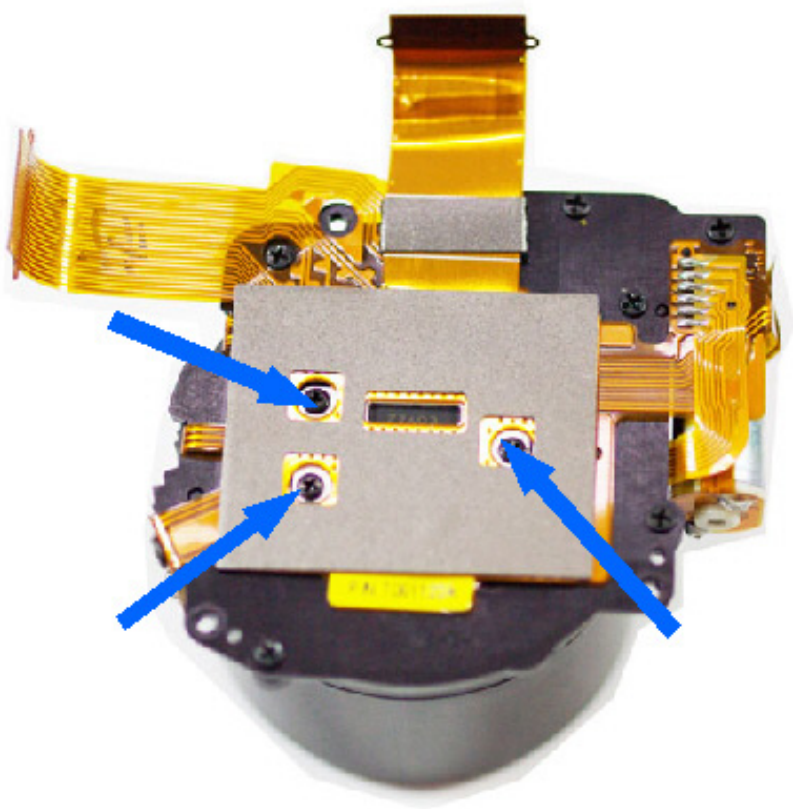
20. Remove 3 screws.



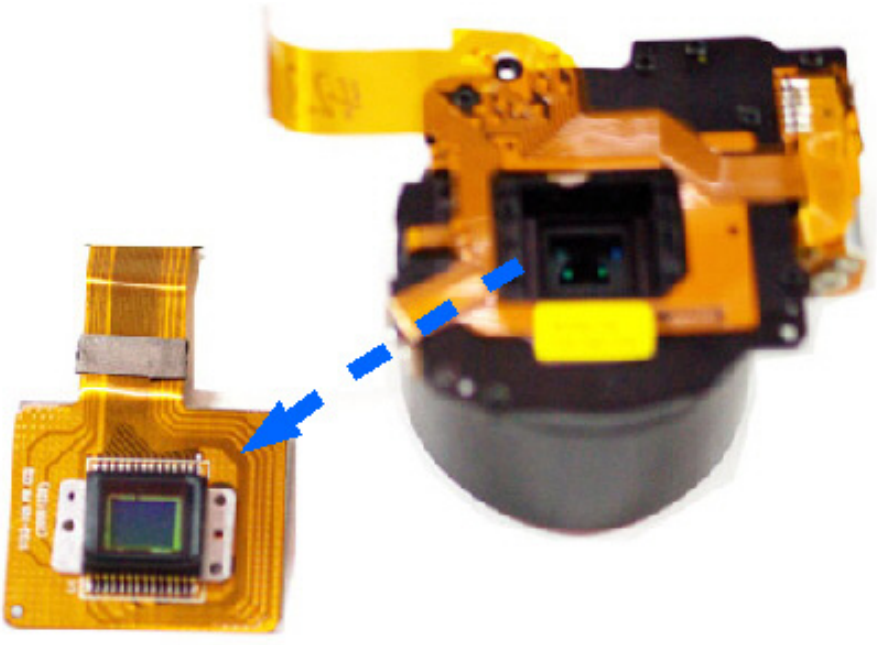
21. Disassemble the Barrel ASSY



22. Remove 3 screws.

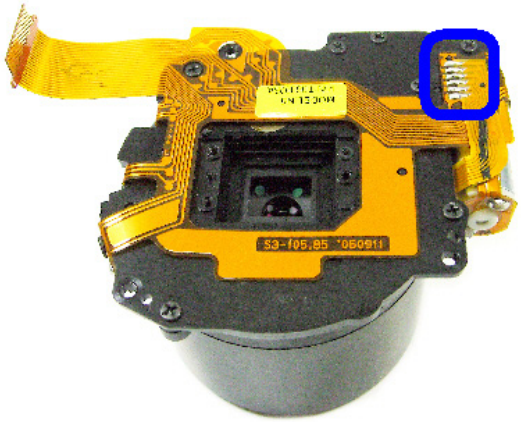


23. Disassemble the CCD.

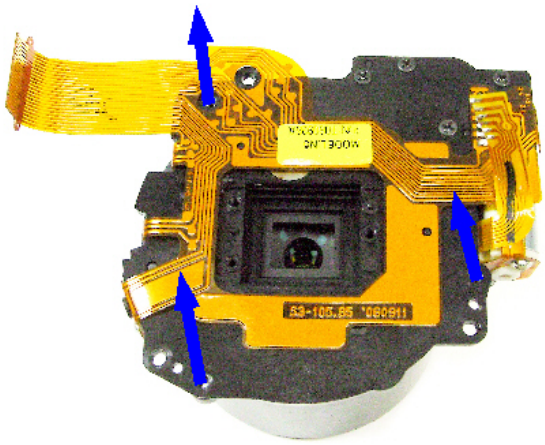


■ Disassemble Barrel

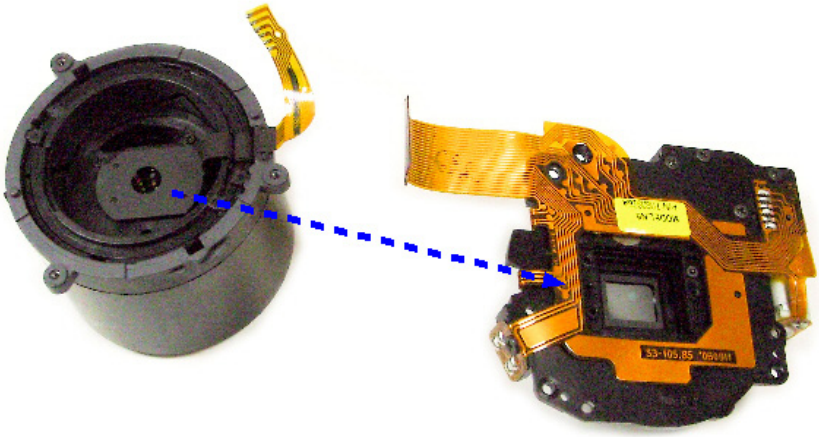
1. Remove soldering.



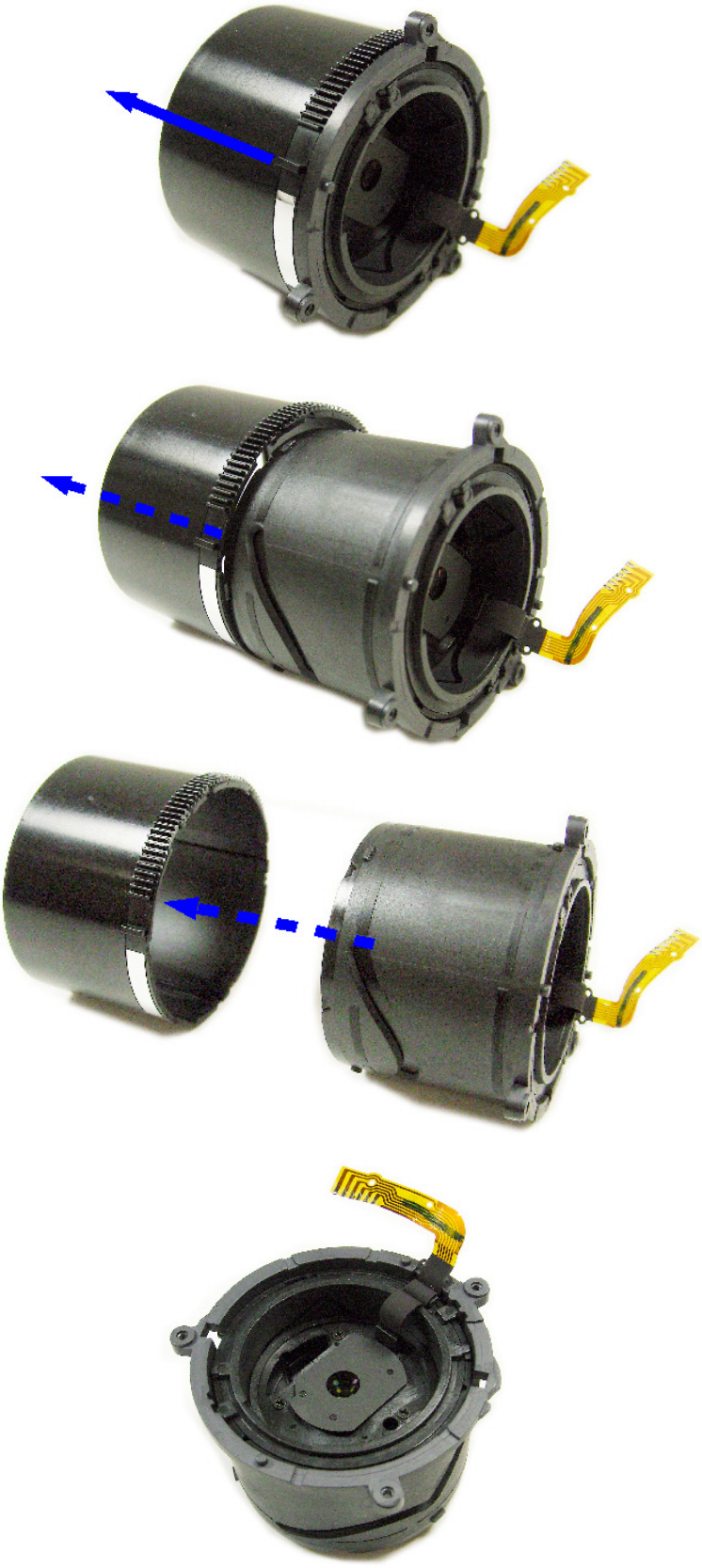
2. Remove 3 screws.



3. After disassembling the Lens base.

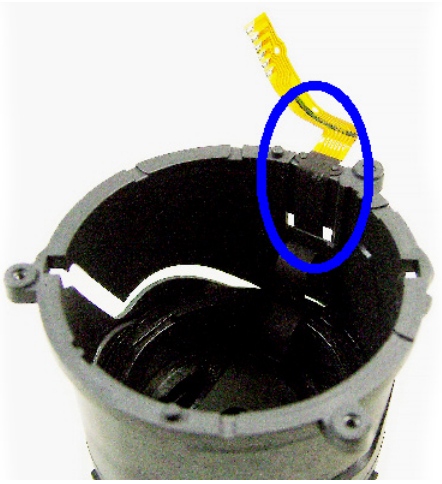


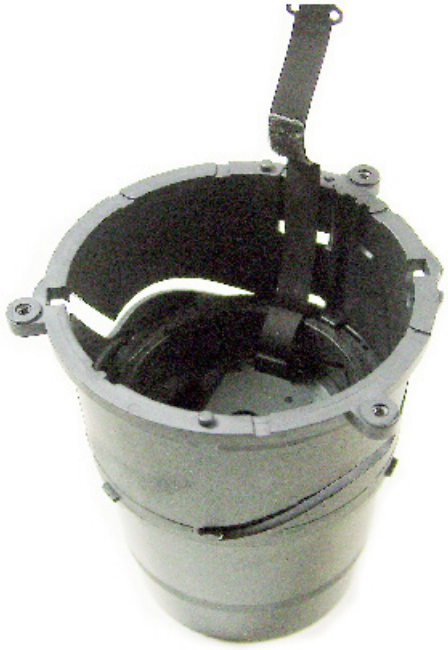
4. Disassemble the Outer Outer Guide Barrel.



5. Move the the Tele posion lie below.

6. Disassemble the Shutter PCB.

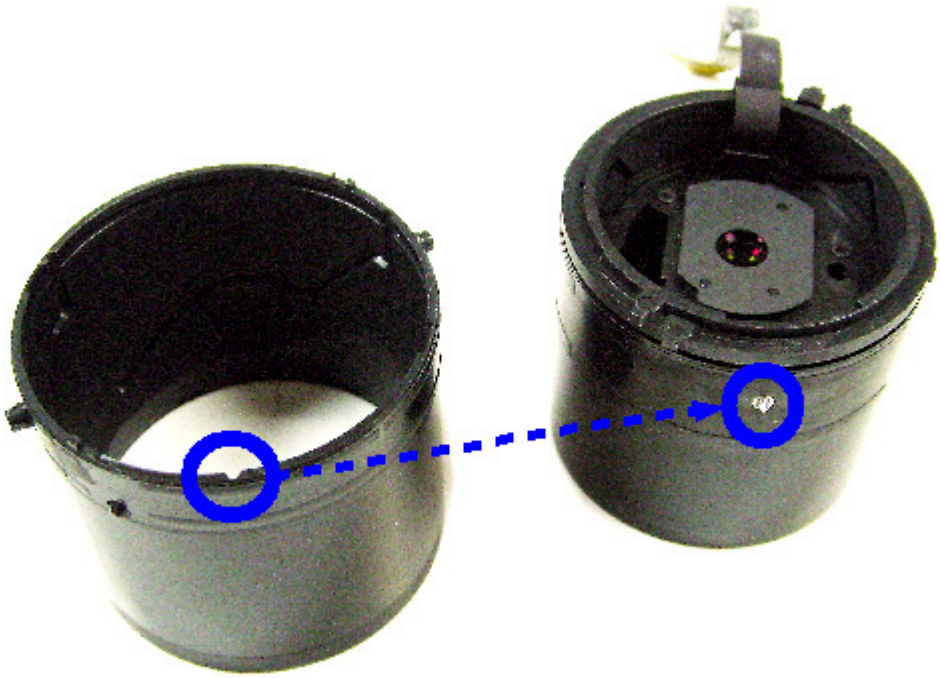




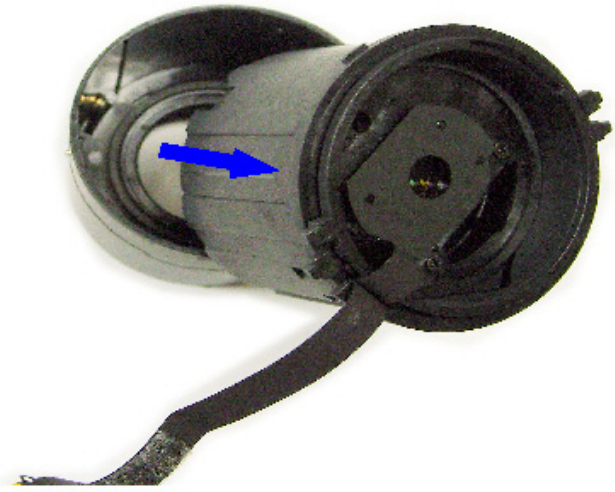
7. Move to the Wide positon like below.

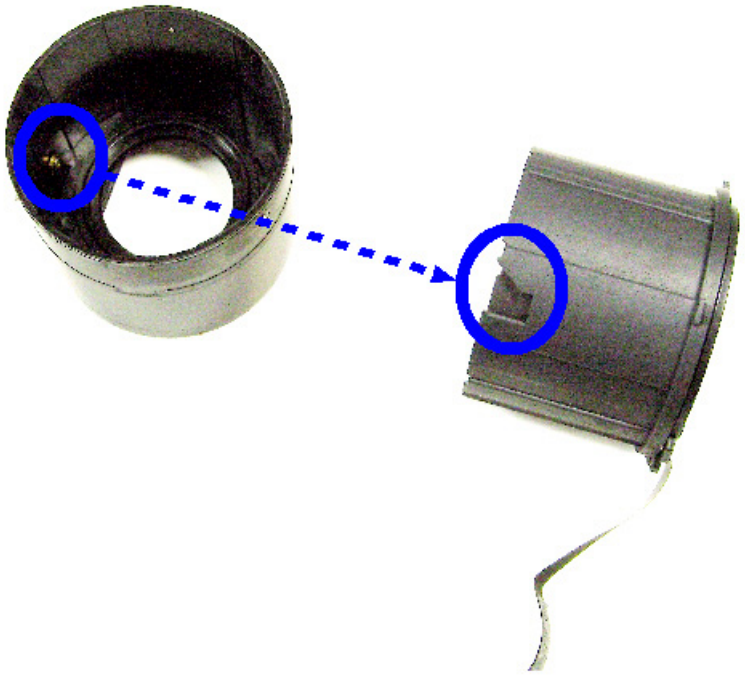
8. Disassemble the Cam Barrel.

9. Disassmble the INNER CAM BARREL ASSY.



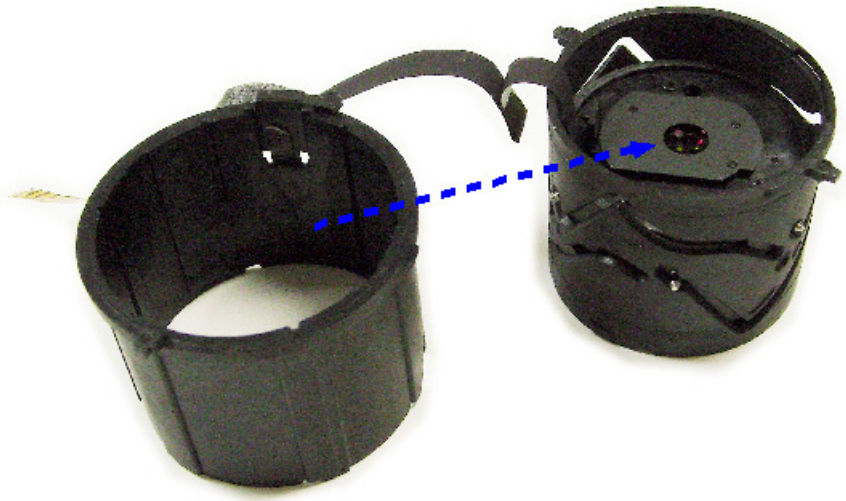
10. Disassemble the Zoom Ring Assy and be careful of position of ZOOM RING ASSY's pin.



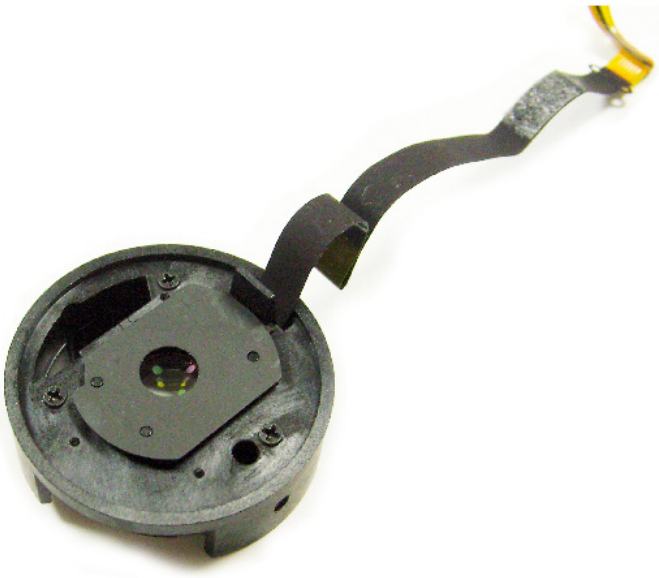


11. Disassmble the Shutter PCB.(Both side tape)

12. Disassblem the Guide plate.



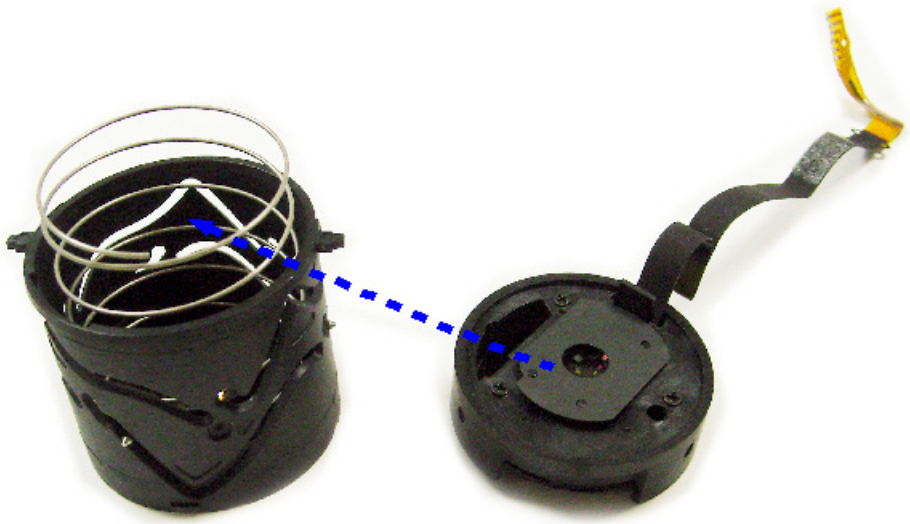
13. Be carefule ofe 3 pin postion at the Shutter Ass'y.



■ Assmble Barrel

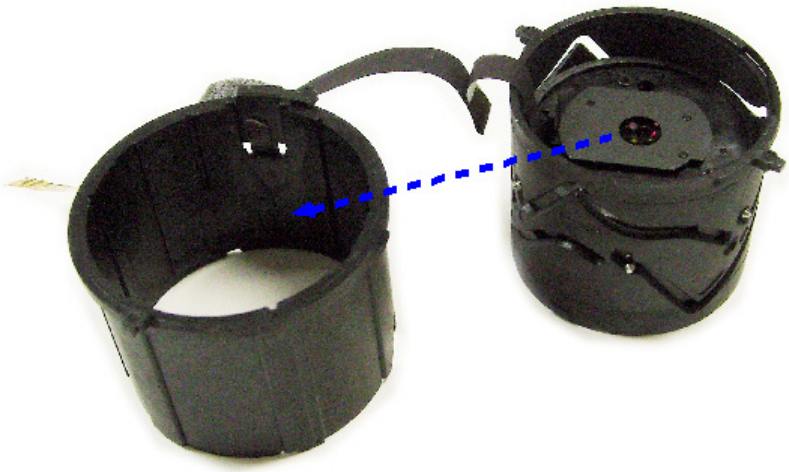
1. Put the Spring at the GUIDE PLATE.

2. Locate the Shutter Assy attenting the position.

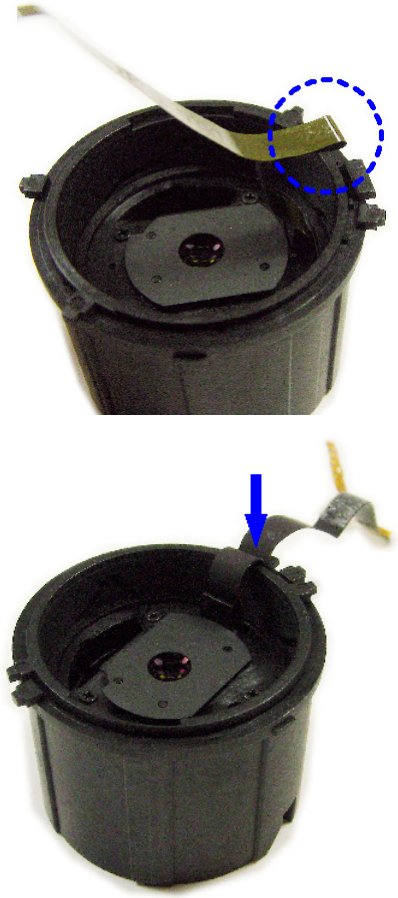


3. Assemble the 3 pins of Sutther ass'y.

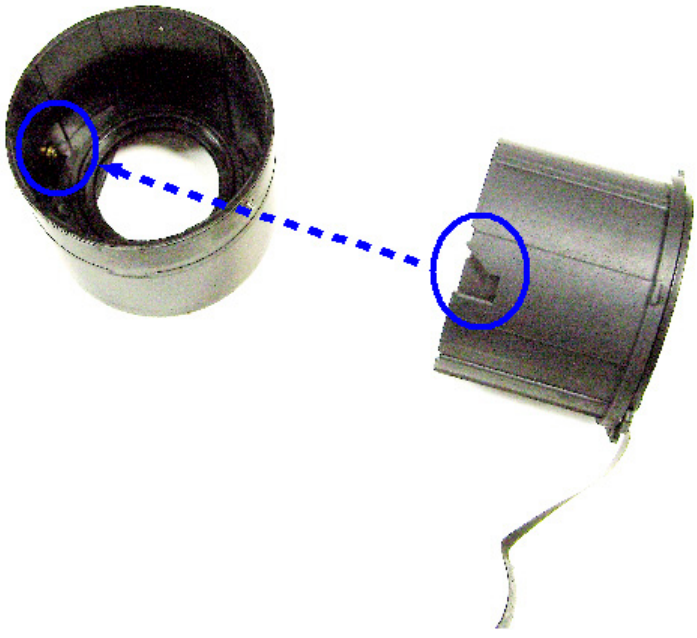
4. Asseble the Giude Plate.

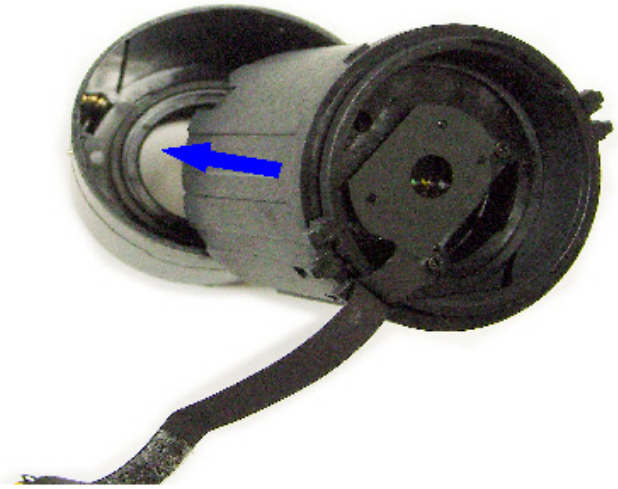


5. Inserte the Shutter PCB. (Both side tape)

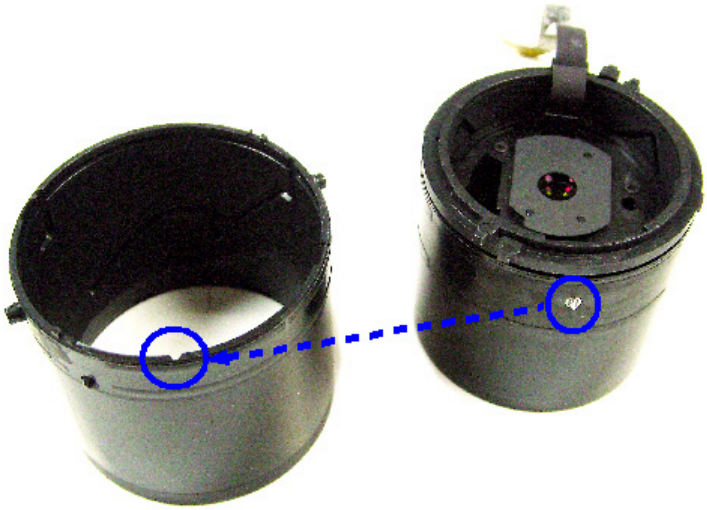


6. Assemble the Zoom Ring Ass'y cautioning Pin position.





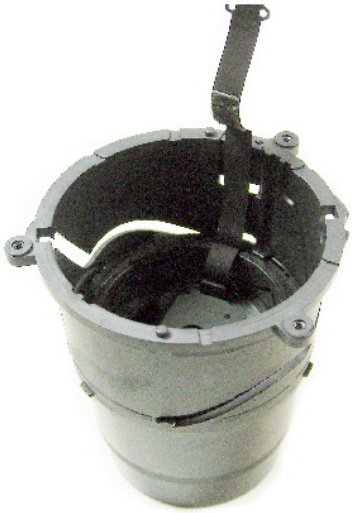
7. Assemble the INNER CAM BARREL ASSY.

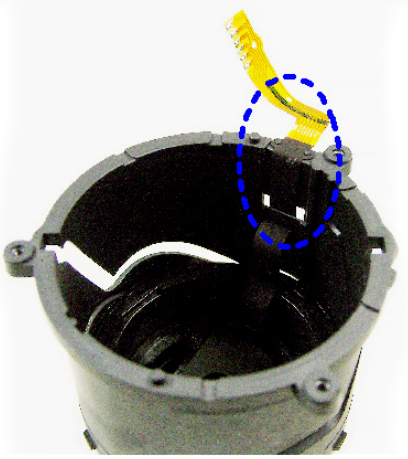


8. Assemble the CAM BARREL ASSY.

9. Move to Tele position like below.

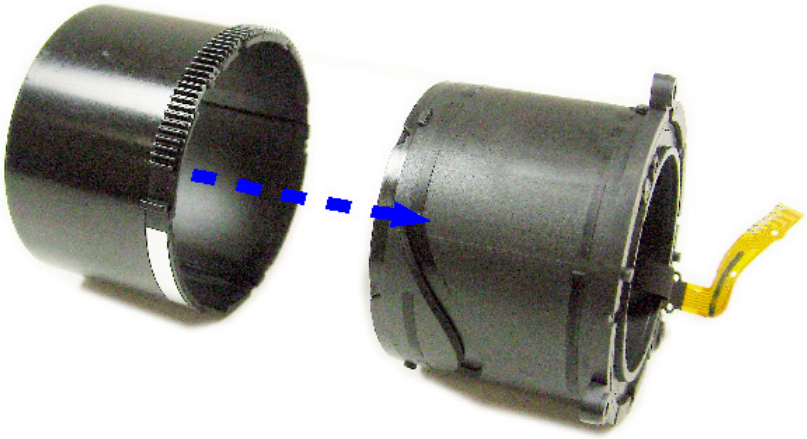
10. Assemble the Shutter PCB.

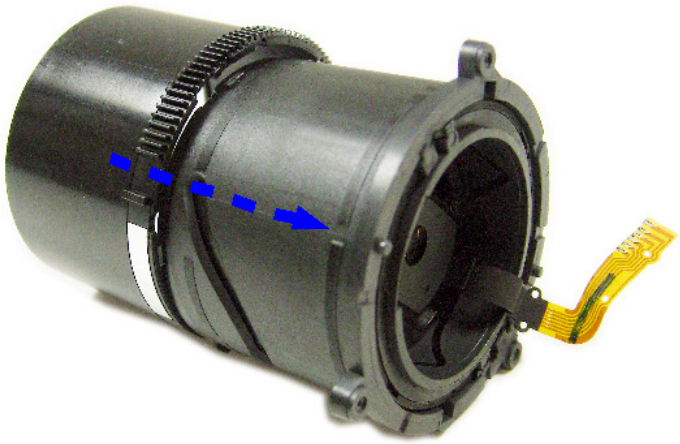


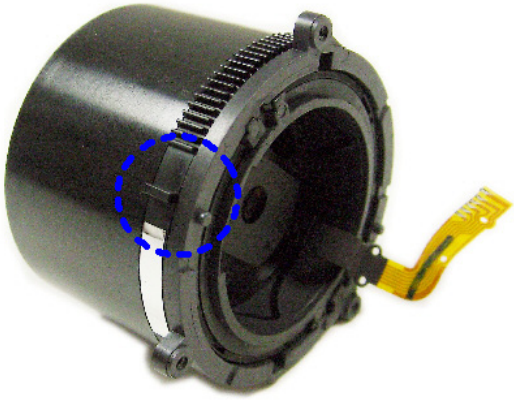


11. Move to the Wide position.

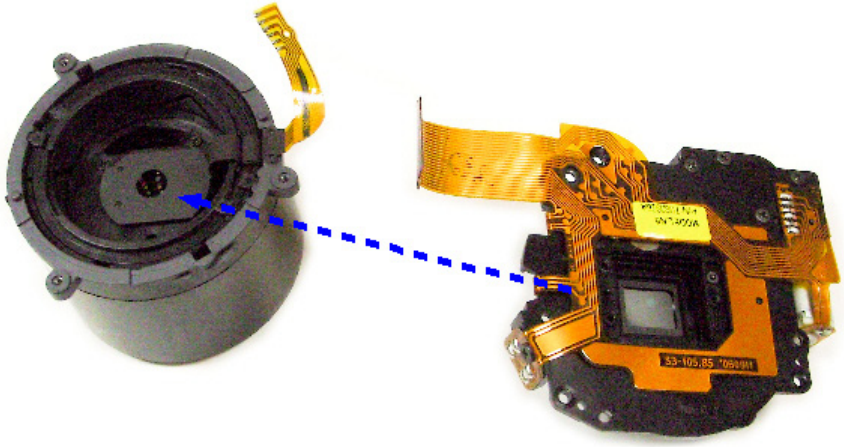
12. Assemble the OUTER GUIDE BARREL.



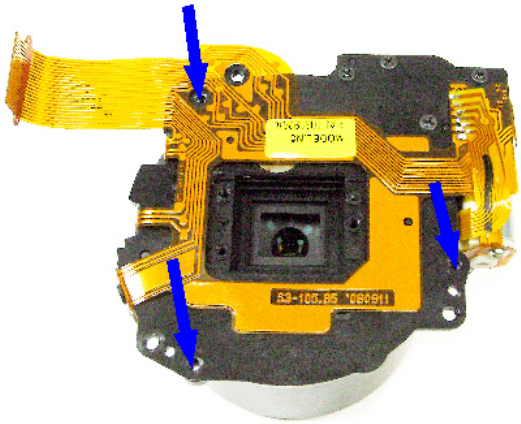




13. Assemble the LENS BASE ASSY.



14. Assemble 3 screws



15. Solder the Shutter F PCB.