



# DIGITAL CAMERA

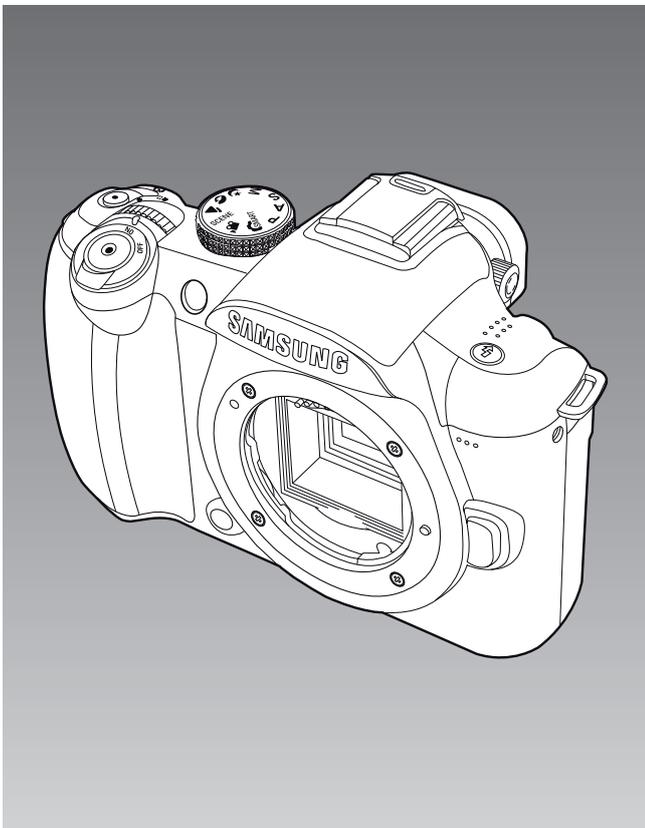
**NX10**

**B Type : NC110**

# ***SERVICE***

# ***Manual***

## DIGITAL CAMERA



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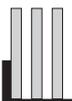
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# 1. Product Specification

## 1-1 Specifications

Specification	NX10	
Image Sensor	Type	CMOS
	Sensor size	23.4×15.6mm
	Effective Pixel	Approx. 14.6 Mega-pixels
	Total Pixel	Approx. 15.1 Mega-pixels
	Color Filter	RGB primary color filter
Lens	Mount	Samsung NX Mount
	Usable Lens	Samsung Lenses
Image Stabilization	Type	Lens Shift (depends on Lens)
Dust Reduction	Type	Super sonic drive
Display	Type	AMOLED
	Size	3.0"
	Resolution	VGA (640×480) 614k dots (PenTile).
	Live view	Field of view : Approx. 100%
Viewfinder	Type	EVF
	Resolution	VGA (640×480) 921k dots equiv.
	Field of View	Approx. 100%
	Magnification	Approx. 0.86x (APS-C, 50mm, -1m <sup>-1</sup> )
	Eyepoint	About 20.2mm
	Diopter Adjustment	Approx. -4.0 ~ +2.0m <sup>-1</sup>

Specification	NX10	
Focusing	Type	Contrast AF
	Focusing point	Selection : 1 point (Free selection) Multi : Normal 15points, Close Up 35points Face Detection : Max. 10faces
		Modes
	AF-assist lamp	Yes (Green LED)
Shutter	Type	Electronically controlled vertical-run focal plane shutter
	Speed	Auto:1/4000sec. ~ 30sec. Manual:1/4000sec. ~ 30sec. (1/3EV or 1/2EV step) Bulb (Limit time : 8 min)
Exposure	Metering System	TTL 247 (19×13) Block segment
		Metering : Multi, Center-weighted, Spot
		Metering range : EVO ~ 18 (ISO100-30mm F2.0)
	Compensation	±3 EV (1/2EV, 1/3EV step)
	AE Lock	AEL button
	ISO Equivalent	Auto, 100, 200, 400, 800, 1600, 3200 (1EV step)

Specification		NX10
Drive Mode	Modes	Single, Continuous, Burst, Self-timer, Bracket (AE, WB, PW)
	Continuous	JPEG : 3fps up to 10shots, Burst mode : 30fps, 30shots by 1 released RAW : 3fps up to 3shots
	Bracket	Auto Exposure Bracket ( $\pm 3$ EV), White Balance Bracket ( $\pm 3$ step), Picture Wizard Bracket (Selectable 3modes)
	Self-timer	2-30sec. (1sec. step)
	Remote controller	Wired : SR9NX01 (Optional)

Specification		NX10
Flash	Type	TTL Auto Pop-up flash
	Modes	Smart Flash, Auto, Auto + Red-eye reduction, Fill-in, Fill-in + Red-eye reduction, 1 <sup>st</sup> Curtain, 2 <sup>nd</sup> Curtain, OFF
	Guide Number	11 (at ISO 100)
	Angle of View Coverage	28mm wide-angle (Equivalent to 35mm)
	Sync. Speed	Less than 1/180sec.
	Flash Compensation	-2 - +2EV (0.5EV step)
	External Flash	Samsung External Flash available (SEF42A, SEF20A) (optional)
	Synchro (Flash attachment)	Hot Shoe
White Balance	Modes	Auto, Daylight, Cloudy, Fluorescent (W, N, D), Tungsten, Flash, Custom, K(Manual)
	Micro adjustment	Each 7steps in Amber / Blue / Green / Magenta axis
Picture Wizard	Modes	Standard, Vivid, Portrait, Landscape, Forest, Retro, Cool, Calm, Classic, Custom (1-3)
	Parameter	Contrast, Sharpness, Saturation, Color tone

Specification		NX10
Shooting	Modes	Smart Auto, Program, Shutter Priority AE, Aperture Priority AE, Manual, Night, Portrait, Landscape, Scene, Movie
	Scene Mode	Beauty shot, Children, Close Up, Text, Sunset, Dawn, Backlight, Fireworks, Beach & Snow
	Image Size	<b>JPEG (3:2):</b> 14M (4592x3056), 10M (3872x2592), 6M (3008x2000), 2M (1920x1280), 1.4M (1472x976): Burst mode only <b>JPEG (16:9):</b> 12M (4592x2584), 8M (3872x2176), 5M (3008x1688), 2M (1920x1080) <b>RAW:</b> 14M (4592x3056)
	Quality	Super fine , Fine, Normal
	RAW Format	SRW
	Color Space	sRGB, Adobe RGB

Specification		NX10
Movie	Format	MP4 (H.264)
	Compression	Movie : H.264 , Sound : AAC
	Movie Clip	With Audio or without Audio (user selectable, recording time : 25 minutes)
	Image size	1280x720 , 640x480 , 320x240
	Frame rate	30fps
	Sound	Mono Sound
	Movie Editing	Still Image Capture, Time Trimming
Image Play	Type	Single image, Thumbnails (3/9/20 images), Slide show, Movie
	Highlight Warning	Available
	Editing	Red eye fix, Back light comp., Photo Style Selector, Resize, Rotate, Face Retouch
	Photo Style Selector	Soft, Vivid, Forest, Autumn, Misty, Gloomy, Classic

Specification		NX10
Storage	Media	SD, SDHC
	File Format	RAW (SRW), JPEG (EXIF 2.21), DCF, DPOF 1.1, PictBridge 1.0
Capacity (1GB)	14M : RAW 35 14M : Super Fine 142, Fine 278, Normal 408 10M : Super Fine 197, Fine 382, Normal 724 6M : Super Fine 322, Fine 615, Normal 1128 2M : Super Fine 738, Fine 1334, Normal 2238 Burst (1.4M) : Super Fine 1490, Fine 2301, Normal 2971 12M(W) : Super Fine 168, Fine 328, Normal 630 8M(W) : Super Fine 234, Fine 454, Normal 860 5M(W) : Super Fine 381, Fine 727, Normal 1334 2M(W) : Super Fine 872, Fine 1573, Normal 2638 Movie : 1280x720 : High Quality 15min., Normal 22min. 640x480 : High Quality 44min., Normal 66min. 320x240 : High Quality 145min., Normal 210min. ※ These figures are measured under the Samsung standard	
Direct Printing		PictBridge

Specification		NX10
Interface	Digital Output Connector	USB 2.0 (HI-SPEED)
	Video output	NTSC, PAL (user selectable) HDMI 1.3 : (1080i, 720P, 576P / 480P)
	External Release	Yes
	DC power input connector	DC 9.0V, 1.5A (100 ~ 240V)
Power Source	Type	Rechargeable battery : BP1310 (1300mAh) Charger: BC1310 AC Adaptor : AD9NX01 (Optional) * Included battery may vary depending on sales region
Physical Specification	Dimensions (WxHxD)	123x87x39.8mm (excluding the projecting parts of the camera)
	Weight	353g (without batteries and card)
	Operating Temperature	0 ~ 40 °C
	Operating Humidity	5 ~ 85%
Software	Application	Samsung Master, Samsung RAW Converter, QuickTime Player 7.6

\* Specifications are subject to change without prior notice

\* All trademarks are the property of their respective owners

## 1-2 Instructions on how to use the memory card

You can use microSD™ (Secure Digital) memory cards.

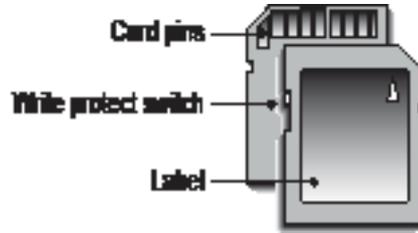


Fig. 1-1 SD (Secure Digital) memory card

- The SD/SDHC memory card has a write protect switch that prevents image files from being deleted or formatted. By sliding the switch to the bottom of the SD/SDHC memory card, the data will be protected. By sliding the switch to the top of the SD/SDHC memory card, the data protection will be cancelled.
- Slide the switch to the top of the SD/SDHC memory card before taking a picture.

When using a 1GB SD memory, the specified shooting capacity will be as follows. These figures are approximate as image capacities can be affected by variables such as subject matter and memory card type.

<Table 1-1>

	Size	Super Fine	Fine	Normal	RAW	RAW+SF	RAW+F	RAW+N
Photos	14M (3:2)	142	278	408	35	28	31	32
	10M (3:2)	197	382	724	38	32	34	36
	6M (3:2)	322	615	1128	41	36	38	39
	2M (3:2)	738	1334	2238	44	41	42	43
	12M (16:9)	168	328	630	37	30	33	35
	8M (16:9)	234	454	860	39	34	36	37
	5M (16:9)	381	727	1334	42	38	39	40
	2M (16:9)	872	1573	2638	44	42	43	43
	Burst	1201	2092	3320	45	43	44	44

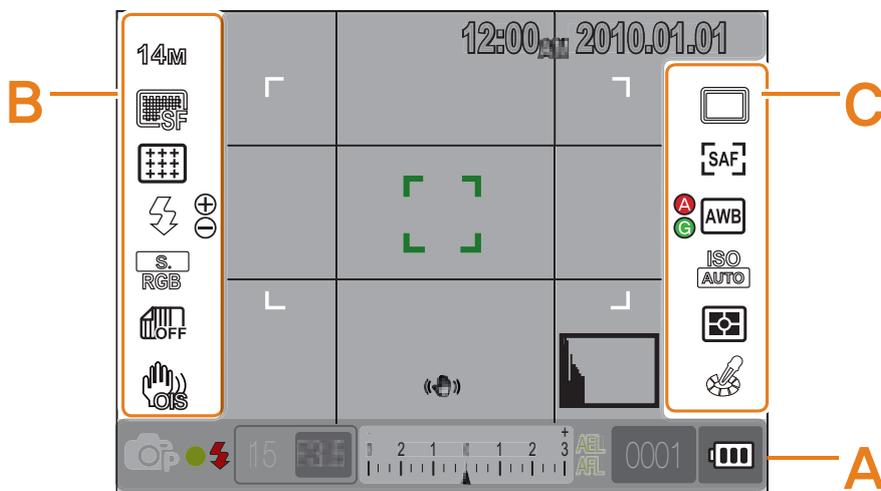
	Size	HQ	Normal
*Movies (30fps)	1280 (16:9)	Approx. 15mins	Approx. 22mins
	640 (4:3)	Approx. 44mins	Approx. 66mins
	320 (4:3)	Approx. 145mins	Approx. 210mins



- The recordable time may vary if you use the zoom.
- Several videos were recorded in succession to determine the total recording time.
- If there is card error, please check below first and guide your customer.
  - Check that there is any dust or substance on the memory card contact.
  - When you use card adaptor, be aware of dust or substance (like a hair) that can be inserted into card adaptor.

## 1-3 LCD monitor indicator

■ The LCD monitor displays information about the shooting functions and selections.



### A Information display

	Shooting mode
	Movie shooting mode
	Focus checking
	Flash
15	Shutter speed
F3.5	Aperture value
	Adjusted value of exposure
AEL/AFL	AEL/AFL setting
0001	Possible no. of shots
	Battery information
	Displays no-insertion of memory card
	Warning of camera shake
12:00 AM 2010.01.01	Time, date and year info
	Focus indicator
	AF zone
	Histogram
	Grid display

### B Shooting option display(left)

14M	Size
1280	Movie size
	Image quality
	Movie quality
	Focus area
	Flash
	Flash light adjustment
	Color space
	Smart range
	OIS
	Voice recording
	Fader
	Wind Cut

### C Shooting option display(right)

	Drive mode
	AF mode
	White balance
	White balance adjustment
	ISO
	Metering option
	Picture wizard
	Timer

# 1-4 Camera Connection Diagram

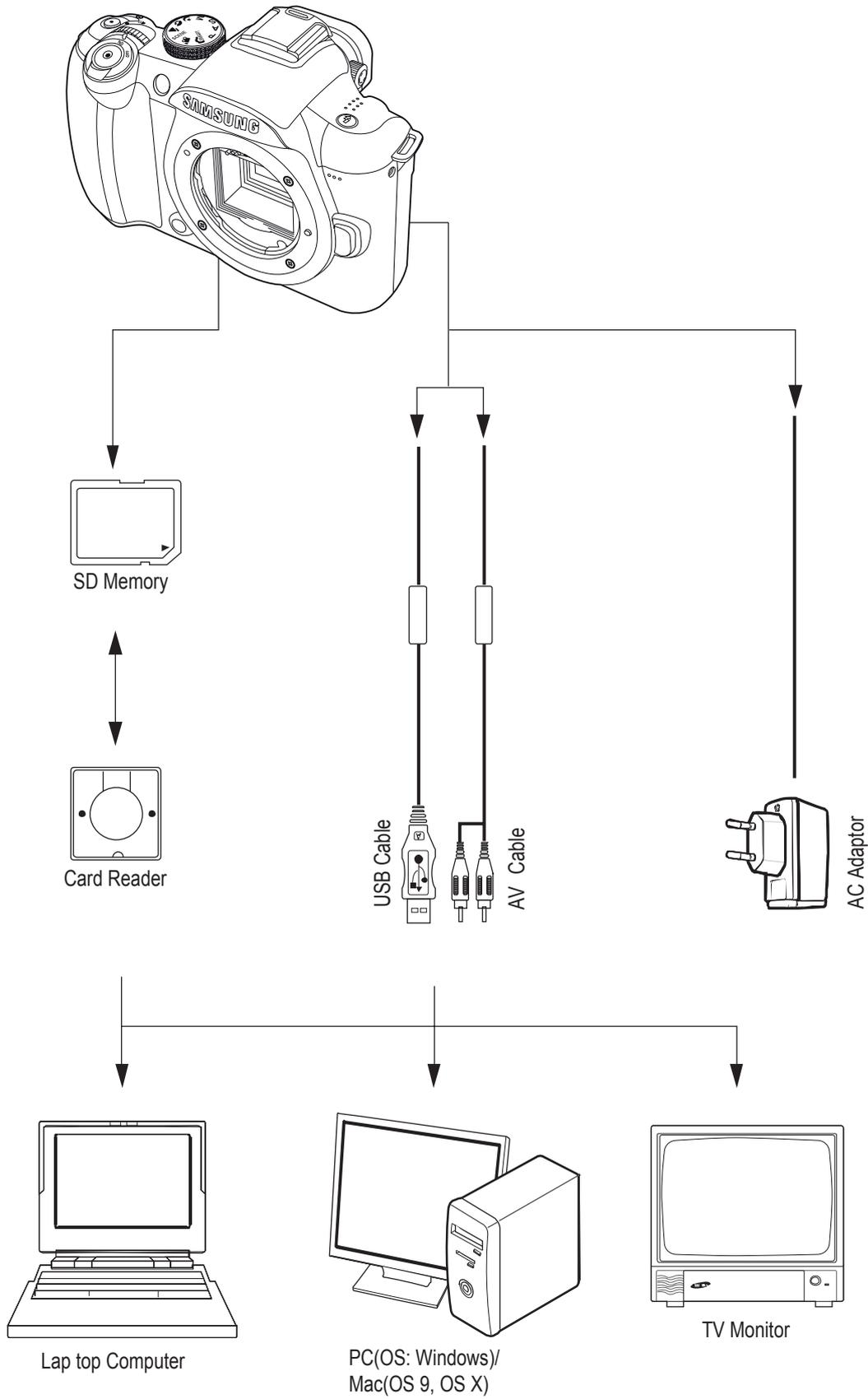


Fig. 1-3 Camera Connection Diagram

# 1-5 Identification of features

## TOP & FRONT

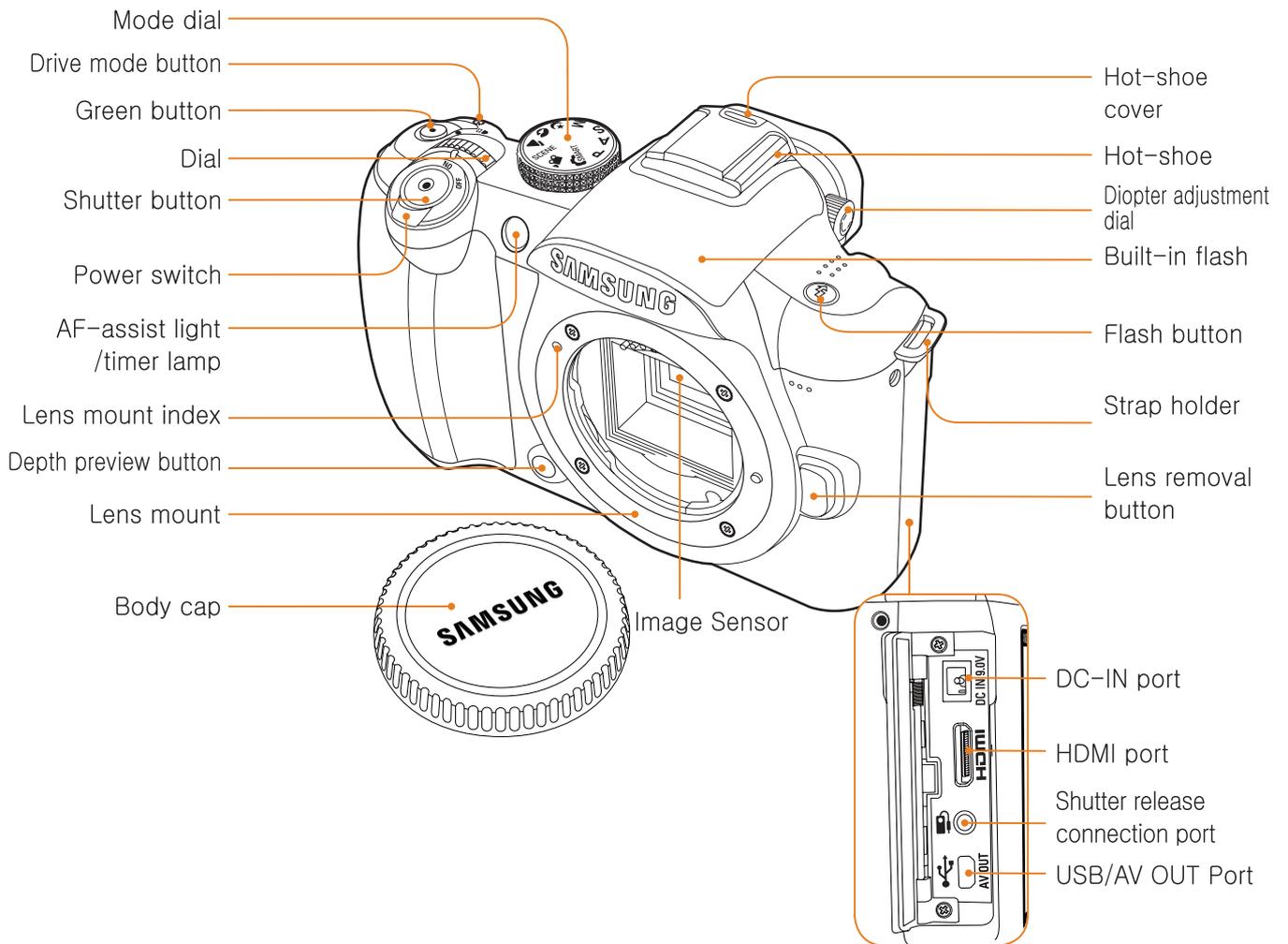


Fig. 1-4 Top & Front

**BACK**

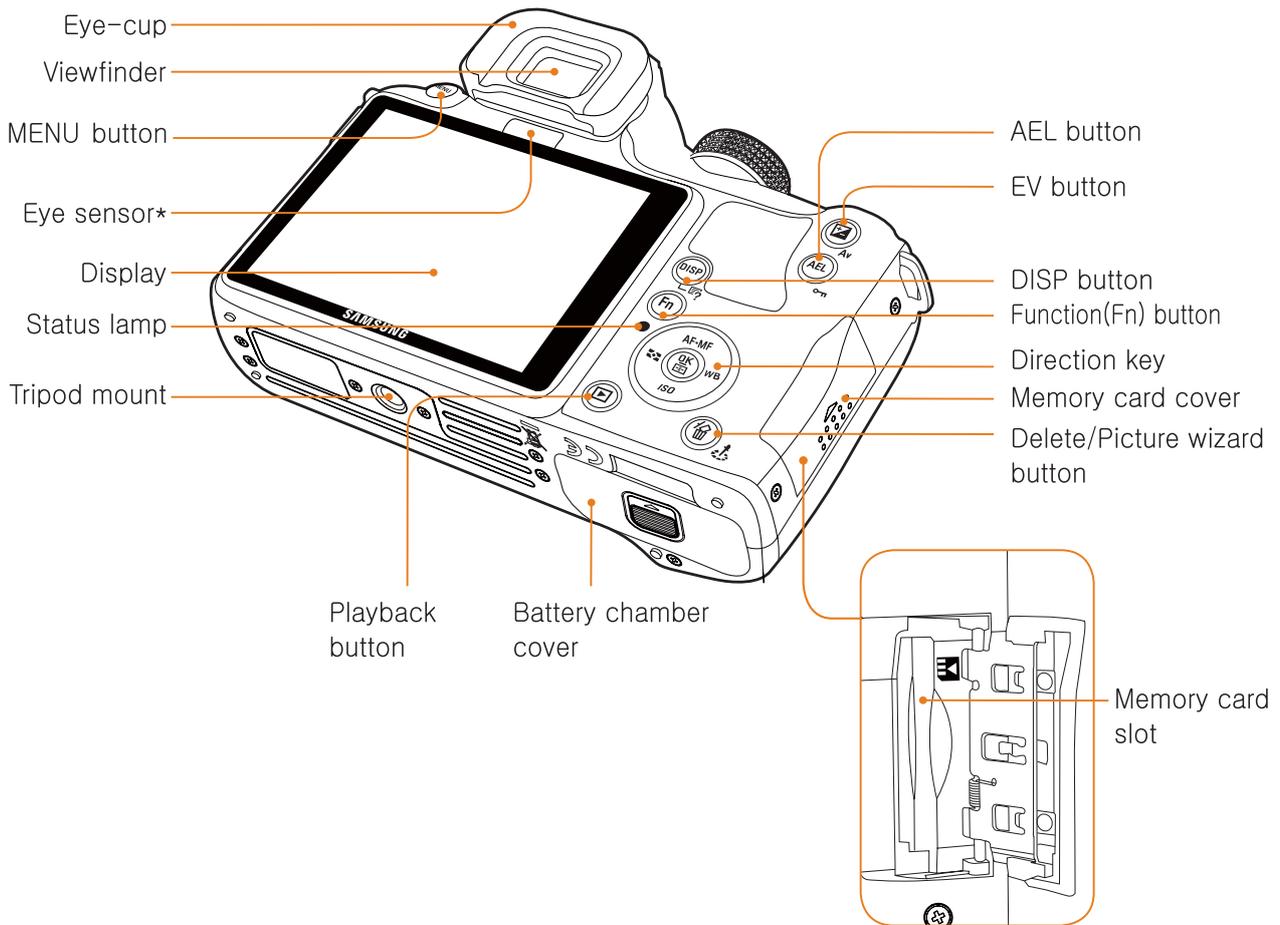


Fig. 1-5 Back

## 2. Operation Instruction & Installation

### 2-1 Install

#### 2-1-1 System Requirements

<Table 2-1 For Windows>

CPU	PC with processor better than Pentium III 500MHz (Pentium III 800MHz recommended)
RAM	Minimum 256MB RAM (Over 512MB recommended)
OS	Windows 2000 / XP / Vista
Available hard disk space	250MB of available hard disk space (Over 1GB recommend)
The other	<ul style="list-style-type: none"> <li>• USB port</li> <li>• CD-ROM Drive</li> <li>• 1024x768 Pixels, 16bit color display compatible monitor (24bit color display recommended)</li> <li>• Microsoft Direct X 9.0 or later</li> </ul>

 **Caution**

- **It is not compatible with Windows XP and Vista 64-bit Edition.**
- **Samsung is not responsible for any defects or damages caused by the use of unauthorized computer including an assembled PC.**

<Table 2-2 For Macintosh>

CPU	Power Mac G3 or later
RAM	Minimum 256MB RAM (Over 512MB recommended)
OS	Mac OS 10.3 or later
Available hard disk space	Minimum 256MB RAM (Over 512MB recommended)
The other	<ul style="list-style-type: none"> <li>• USB port</li> <li>• CD-ROM Drive</li> <li>• 1024x768 Pixels, 16bit color display compatible monitor (24bit color display recommended)</li> </ul>

## 2-1-2 About the software

- 1) After inserting the CD-ROM provided with this camera into the CD-ROM drive, the following window should automatically run



Fig. 2-1

- Samsung Master : This is the all-in-one multi media software solution.

You can download, view, edit and save your digital images and movie clips with this software. This software is only compatible with Windows.

- 
- You should allow 5 ~ 10 seconds for running the automatic setup program according to the capability of your computer. If the frame does not appear, run the [Windows Explorer] and select [Installer.exe] in the CD-ROM Drive root directory.
- 

## 2-1-3 Setting up the application software

- 1) To use this camera with a PC, install the application software first.  
After this has been done, the stored images in the camera can be moved to the PC and can be edited by an image editing program.

- 
- You can visit the Samsung web-site through the internet.
- 

<http://www.samsungcamera.com> : English  
<http://www.samsungcamera.co.kr> : Korean

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- ① The auto run frame will display. Click the [Samsung Digital Camera Installer] menu in the Auto run frame.



Fig. 2-2

- Install DirectX, Samsung Master by selecting a button shown on the monitor.  
If a recent version of DirectX has been installed on your computer, DirectX may not be installed.

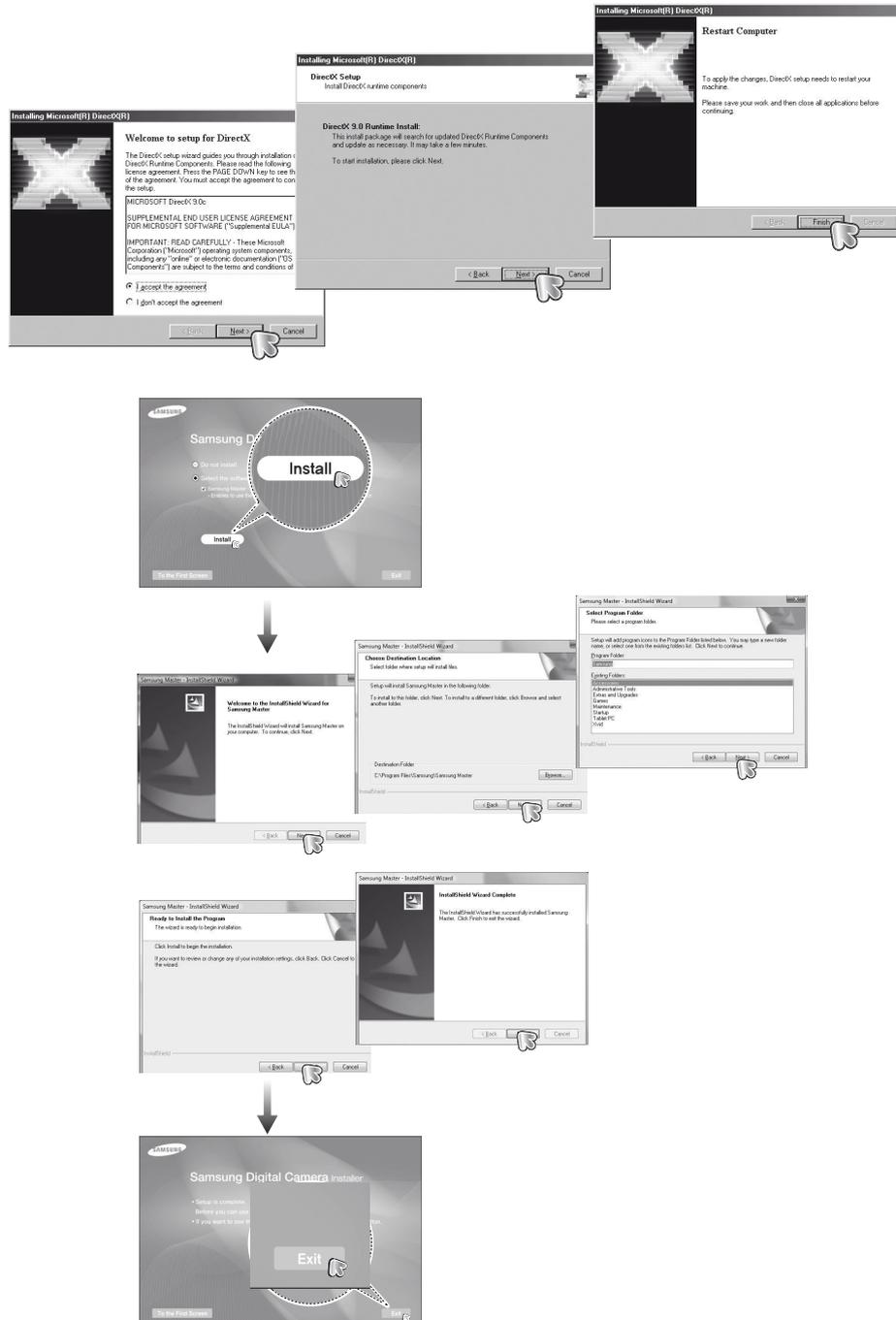


Fig. 2-3

- After restarting the computer, connect the PC to the camera with the USB cable.

- 4 Turn the camera power on. The [Found New Hardware Wizard] will open and the computer will recognise the camera.

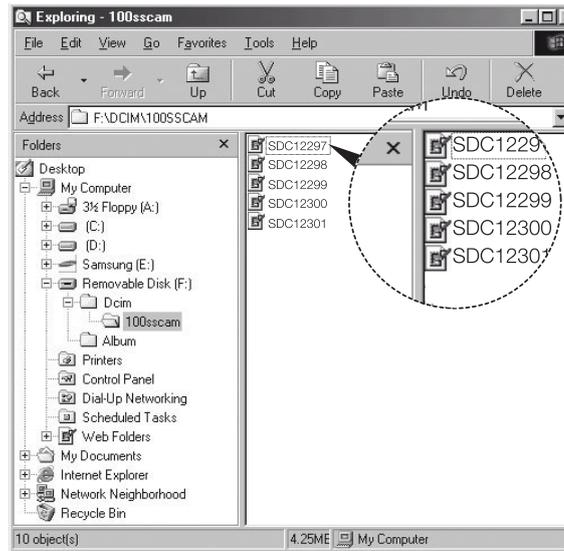


Fig. 2-4

※ If your OS is Windows XP/ Vista, an image viewer program will open.

- PDF documents of user manual are included in the Software CD-ROM supplied with this camera. Search the PDF files with Windows explorer. Before opening the PDF files, you must install the Adobe Reader included in the Software CD-ROM. Install Adobe Reader from the CD provided. If the Internet is not enabled, install Adobe Reader by using the executable file located in the CD.
- To install the Adobe Reader 6.0.1 correctly, Internet Explorer 5.01 or later has to be installed. Visit "www.microsoft.com" and upgrade the Internet Explorer.

## 2-2 FAQ



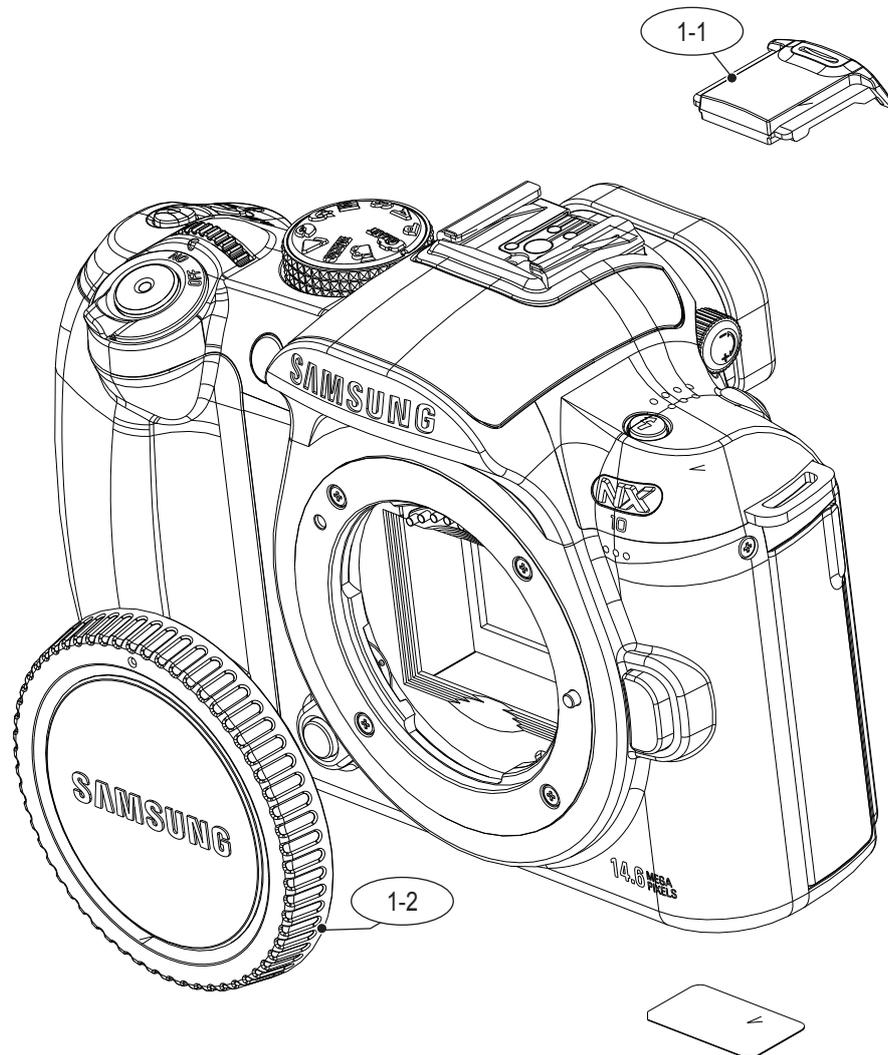
■ Please check the following if the USB connection malfunctions.

Situation	Suggested remedies
Cannot turn on the camera	<ul style="list-style-type: none"> <li>• Make sure that the battery is inserted.</li> <li>• Make sure that the battery is inserted correctly.</li> <li>• Charge the battery.</li> </ul>
The power turns off suddenly	<ul style="list-style-type: none"> <li>• Charge the battery.</li> <li>• Your camera may be in Power save mode. (p. 104)</li> <li>• The power automatically turns off to prevent the camera from malfunctioning in the case that the unit overheats.</li> </ul>
The camera is losing battery power quickly	<ul style="list-style-type: none"> <li>• The battery may lose power more quickly in low temperatures (below 0° C). Keep the battery warm by putting it into your pocket.</li> <li>• Using the flash or recording videos depletes the battery quickly. Recharge if needed.</li> <li>• Batteries are consumable parts that must be replaced over time. Get a new battery if the battery life is diminishing quickly.</li> </ul>
Cannot take photos	<ul style="list-style-type: none"> <li>• There is no space on the memory card. Delete unnecessary files or insert a new card.</li> <li>• Format the memory card. (p. 103)</li> <li>• The memory card is defective. Get a new memory card.</li> <li>• The memory card is locked. Unlock the card. (p. 109)</li> <li>• Make sure that the camera is switched on.</li> <li>• Charge the battery.</li> <li>• Make sure that the battery is inserted correctly.</li> <li>• When the <b>AF Priority</b> function is used, you cannot take a picture without adjusting the correct focus on the subject. Disable the <b>AF Priority</b> function, or set the focus accurately.</li> </ul>
The camera freezes	Remove the battery and insert it again.
The flash does not work	<ul style="list-style-type: none"> <li>• The flash option may be set to <b>Off</b>. (p. 54)</li> <li>• You cannot use the flash in the  mode, or some <b>SCENE</b> modes.</li> </ul>
The flash fires unexpectedly	The flash may fire due to static electricity. This is not a malfunction of the camera.
The date and time are incorrect	Set the date and time in the <b>Setting2</b> (  ) menu.
The display or buttons do not work	Remove the battery and insert it again.
The memory card has an error	The memory card has not been reset. Format the card. (p. 103)
Cannot play back files	If you change the name of a file, your camera may not play the file (the name of the file should meet the DCF standard). If you encounter this situation, play back files on your computer.
The photo is blurry	<ul style="list-style-type: none"> <li>• If the subject is out of focus, the photo may be blurry. Select the appropriate focus methods by using AF Mode option.</li> <li>• If the camera is shaken while shooting, the photo may be blurry. Use the tripod to avoid possible camera shake.</li> <li>• Make sure that the lens is clean. If not, clean the lens. (p. 108)</li> </ul>
The colors in the photo do not match the actual scene	An incorrect white balance can create unrealistic color. Select the proper white balance option to suit the light source. (p. 66)
The photo is too bright	Your photo is overexposed. <ul style="list-style-type: none"> <li>• Adjust the exposure value. (p. 64)</li> <li>• Adjust the aperture value or the shutter speed. (p. 40)</li> <li>• Turn off the flash. (p. 54)</li> <li>• Adjust the ISO speed. (p. 58)</li> </ul>
The photo is too dark	Your photo is underexposed. <ul style="list-style-type: none"> <li>• Adjust the exposure value.</li> <li>• Adjust the aperture value or the shutter speed.</li> <li>• Turn on the flash.</li> <li>• Adjust the ISO speed.</li> </ul>

Situation	Suggested remedies
The TV does not display your photos	<ul style="list-style-type: none"> <li>• Make sure that the camera is correctly connected to the external monitor with the A/V and HDMI cable.</li> <li>• Make sure that your memory card contains photos.</li> </ul>
Your computer does not recognize your camera	<ul style="list-style-type: none"> <li>• Make sure that the USB cable is connected correctly.</li> <li>• Make sure that your camera is switched on.</li> <li>• Make sure that you are using a supported operating system.</li> </ul>
Your computer disconnects the camera while transferring files	<p>The file transmission may be interrupted by static electricity. Disconnect the USB cable and connect it again.</p>
Your computer cannot play videos	<p>The codec installed in your computer may not be compatible with the video files you want to play. Use QuickTime® Player or install Codec Pack Full.</p> <ul style="list-style-type: none"> <li>• <b>Using QuickTime® Player 7.6</b> <ol style="list-style-type: none"> <li>1. Install QuickTime® Player 7.6 which supports MP4 (H.264 (MPEG-4.AVC)).</li> <li>2. Play videos using QuickTime® Player.</li> </ol> </li> <li>• <b>Using Codec Pack Full</b> <ol style="list-style-type: none"> <li>1. Install the latest version of Codec Pack Full.</li> <li>2. Play videos using the media player (Media Player Classic or Windows Media Player 11 recommended).</li> </ol> </li> </ul> <p> • Install QuickTime® Player 7.6 or K-Lite Codec Pack Full on Windows XP SP2 or later.</p> <ul style="list-style-type: none"> <li>• Depending on your computer environment, the video playback may be intermittent.</li> </ul>
The photo is distorted	<p>The wide-angle lens may create distortions on the image. This is the normal feature of the wide-angle lens.</p>

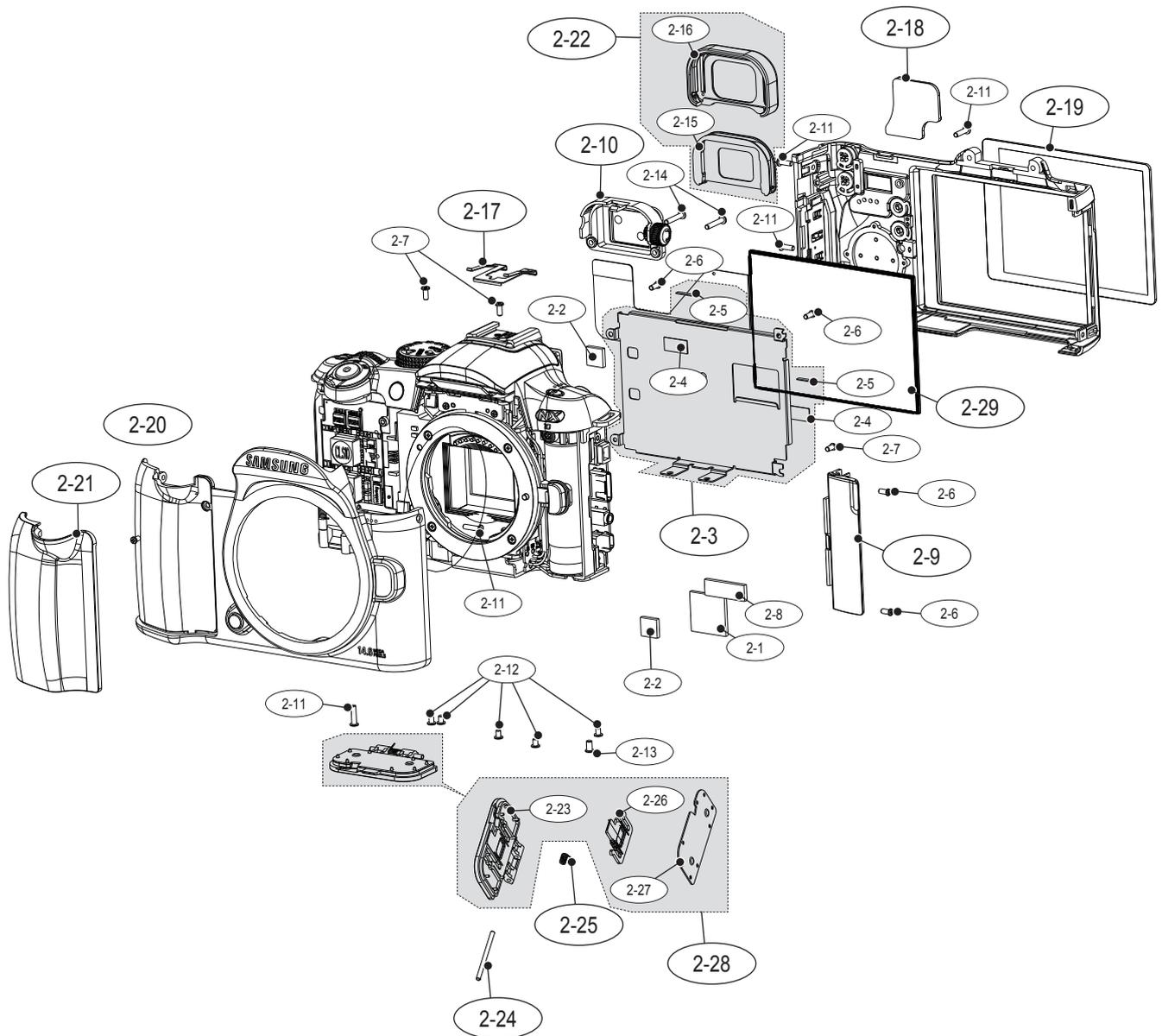
### 3. Exploded View and Parts List

#### 3-1 TOTAL ASSEMBLY



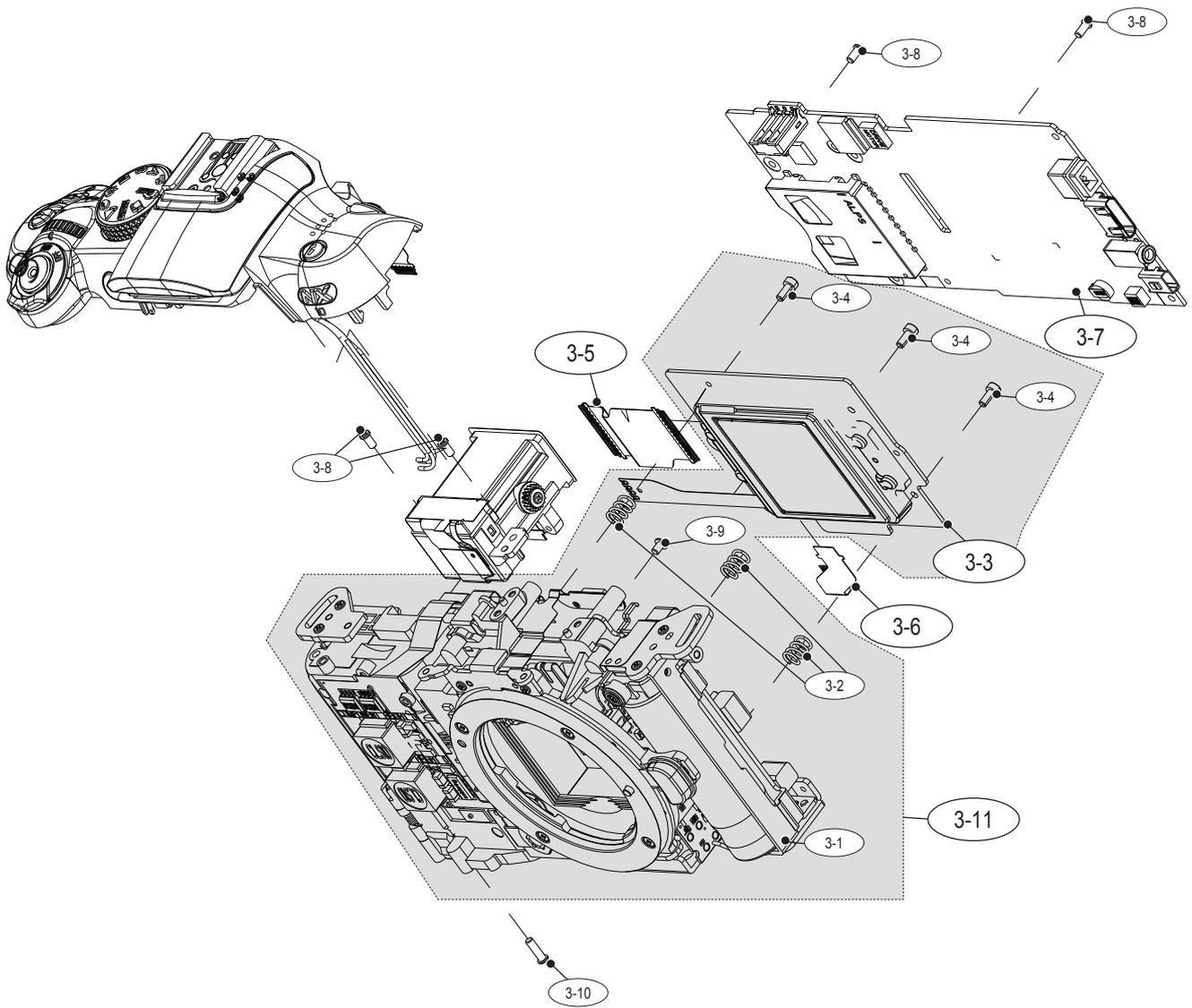
Loc. No	Parts No..	Description	Q ty	Available	Remark
1-1	AD63-03977A	COVER HOT SHOE	1	0	
1-2	AD67-01399A	CAP MOUNT	1	0	

# 3-2 BODY ASSEMBLY



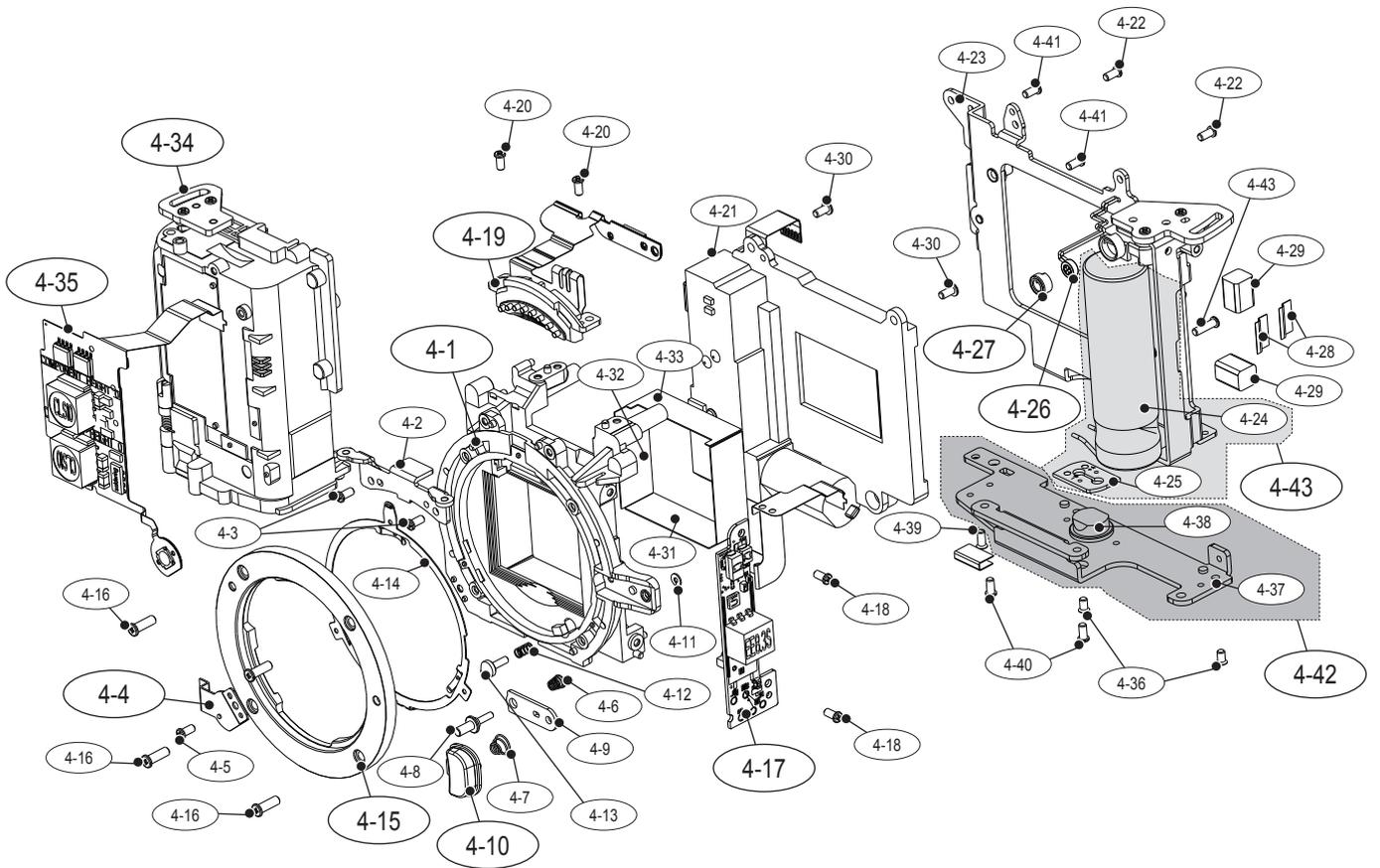
Loc. No	Parts No..	Description	Q ty	Available	Remark
2-1	AD63-04551A	SHEET-THERMAL PAD A	1	X	
2-2	AD63-04552A	SHEET-THERMAL PAD B	2	X	
2-3	AD97-18547A	ASSY-HOLDER LCD	1	O	
2-4	AD63-04464A	T/SHEET LCD HOLDER	2	X	
2-5	AD63-04955A	T/SHEET LCD HOLDER B	2	X	
2-6	6003-001692	SCREW-TAPTYPE	3	X	
2-7	6001-002316	SCREW-MACHINE	1	X	
2-8	AD63-04454A	CUSHION LCD CONNECTOR	1	X	
2-9	AD97-17738A	COVER ASSY-JACK	1	O	BLACK
	AD97-17738B	COVER ASSY-JACK	1	O	TITTAN SILVER
	AD97-17738C	COVER ASSY-JACK_WH	1	O	WHITE
2-10	AD97-17739A	ASSY-HOLDER EP CAP	1	O	
2-11	6003-001704	SCREW-TAPTYPE	5	X	
2-12	6001-002162	SCREW-MACHINE	1	X	
2-13	6001-002278	SCREW-MACHINE	2	X	
2-14	6003-001705	SCREW-TAPTYPE	1	X	
2-15	AD61-04069A	BASE EP CAP	1	X	
2-16	AD73-00330A	RUBBER EP CAP	1	X	
2-17	AD61-04096A	PLATE-SPRING SHOE	1	O	
2-18	AD63-03979A	GRIP-BACK	1	O	
2-19	AD64-02655A	WINDOW-LCD	1	O	
2-20	6003-001637	SCREW-TAPTYPE	1	O	
2-21	AD63-03978A	SIDE GRIP	1	O	
2-22	AD97-17740A	ASSY-RUBBER EP CAP_BLACK	1	O	
2-23	AD63-03958A	COVER BATTERY	1	X	BLACK
	AD63-03958B	COVER BATTERY	1	X	TITTAN SILVER
	AD63-03958C	COVER BATTERY_WH	1	X	WHITE
2-24	AD66-00685A	SHAFT BATTERY COVER	1	O	
2-25	6107-001774	SPRING BATTERY COVER	1	O	
2-26	AD66-00668A	LEVER BATTERY COVER LOCK	1	X	
2-27	AD61-04082A	PLATE BATTERY COVER	1	X	
2-28	AD97-17794A	ASSY-BATTERY COVER COVER	1	O	BLACK
	AD97-17735B	COVER ASSY-BATTERY_NX-10_TS;NX-10,TITAN	1	O	TITTAN SILVER
	AD97-17735C	ASSY-BATTERY COVER COVER_WH	1	O	WHITE
2-29	AD07-00117A	OLED AM	1	O	

### 3-3 MAIN ASSEMBLY



Loc. No	Parts No..	Description	Q ty	Available	Remark
3-1	AD97-17729A	ASSY-HOLDER MOUNT	1	X	
3-2	6107-001777	SPRING CMOS ADJUST	3	X	
3-3	AD97-17731A	ASSY-CMOS	1	O	
3-4	6001-002279	SCREW-MACHINE	3	X	
3-5	AD41-01400A	FPC_DIGITAL	1	O	
3-6	AD41-01401A	FPC_ANALOG	1	O	
3-7	AD92-01021A	MAIN PCB ASSY	1	O	
3-8	6003-001692	SCREW-TAPTYPE	4	X	
3-9	6003-001637	SCREW-TAPTYPE	1	X	
3-10	6003-00175	SCREW-TAPTYPE	1	X	
3-11	AD97-17728A	MAIN ASSY	1	O	

# 3-4 MOUNT HOLDER ASSEMBLY

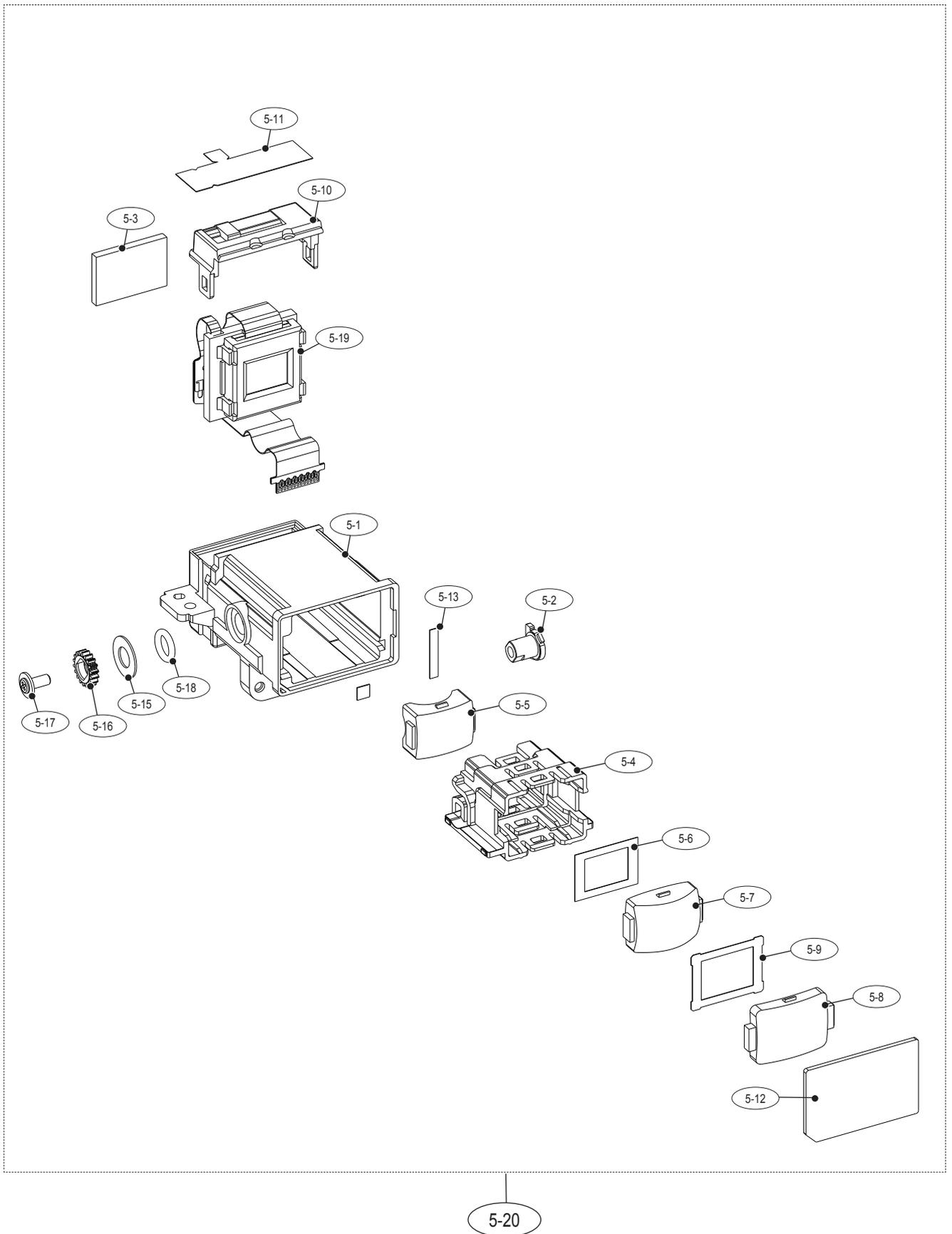


Loc. No	Parts No..	Description	Q ty	Available	Remark
4-1	AD61-04057A	HOLDER MOUNT	1	O	
4-2	AD61-04085A	PLATE FRONT COVER SUPPORT	1	X	
4-3	6003-001641	SCREW 1.7*3.5 PAN	2	X	
4-4	AD61-04093A	HOLDER BUTTON PREVIEW	1	O	
4-5	6003-001641	SCREW 1.7*3.5 PAN	1	X	
4-6	6107-002627	SPRING LENS UNLOCK B	1	X	
4-7	6107-001782	SPRING LENS UNLOCK	1	X	
4-8	AD66-00687A	SHAFT LENS LOCK	1	X	
4-9	AD61-04086A	PLATE LENS LOCK	1	X	
4-10	AD64-02623A	BUTTON LENS UNLOCK	1	O	
4-11	6031-001628	WASHER PLAIN	1	X	
4-12	6107-001781	SPRING LENS DETECT PIN	1	X	
4-13	AD66-00686A	SHAFT LENS DETECT	1	X	
4-14	AD61-04075A	PLATE MOUNT SPRING	1	X	
4-15	AD61-04135A	MOUNT LENS	1	O	
4-16	6003-001755	SCREW 2.0*6.0 PAN	4	X	
4-17	AD92-01023A	STROBO PCB ASSY	1	O	
4-18	6003-001641	SCREW 1.7*3.5 PAN	2	X	
4-19	AD97-17730A	ASSY-BASE IF PIN	1	O	
4-20	6003-001641	SCREW 1.7*3.5 PAN	2	X	
4-21	AD97-17601A	SHUTTER ASSY	1	X	
4-22	6003-001641	SCREW 1.7*3.5 PAN	2	X	
4-23	AD97-17796A	ASSY-CMOS BASE PLATE	1	X	
4-24	2401-004660	C-AL	1	X	
4-25	AD41-01405A	CONDENSOR PCB	1	X	
4-26	3003-001159	MIC-CONDENSOR	1	O	
4-27	AD73-00367A	RUBBER-MIC	1	O	
4-28	AD63-04413A	TAPE MAIN FRAME A	2	X	
4-29	AD63-04555A	CUSHION SHIELD FOAM JACK	2	X	
4-30	6003-001641	TAPTITE 1.7*3.5	2	X	
4-31	AD63-04457A	SHEET ABSORB A	1	X	
4-32	AD63-04458A	SHEET ABSORB B	2	X	
4-33	AD63-04592A	SHEET ABSORB C	1	X	

## Exploded View and Parts List

Loc. No	Parts No..	Description	Q ty	Available	Remark
4-34	AD97-17752A	CHAMBER ASSY-BATTERY	1	O	
4-35	AD92-01018A	FPCB ASSY DUSTREDUCTION	1	O	
4-36	6001-002282	MACHINE FH 1.7*3.0	2	X	
4-37	AD61-04083A	PLATE BOTTOM	1	X	
4-38	AD61-04141A	HOLDER TRIPOD	1	X	
4-39	6003-001641	TAPTITE 1.7*3.5	2	X	
4-40	6003-001641	TAPTITE 1.7*3.5	2	X	
4-41	6003-001647	TAPTITE FH 1.7*4.0	1	X	
4-42	AD97-17793A	ASSY-BOTTOM BASE PLATE CAULKING	1	O	
4-43	AD97-18500A	ASSY-NX-10_CONDENSOR	1	O	

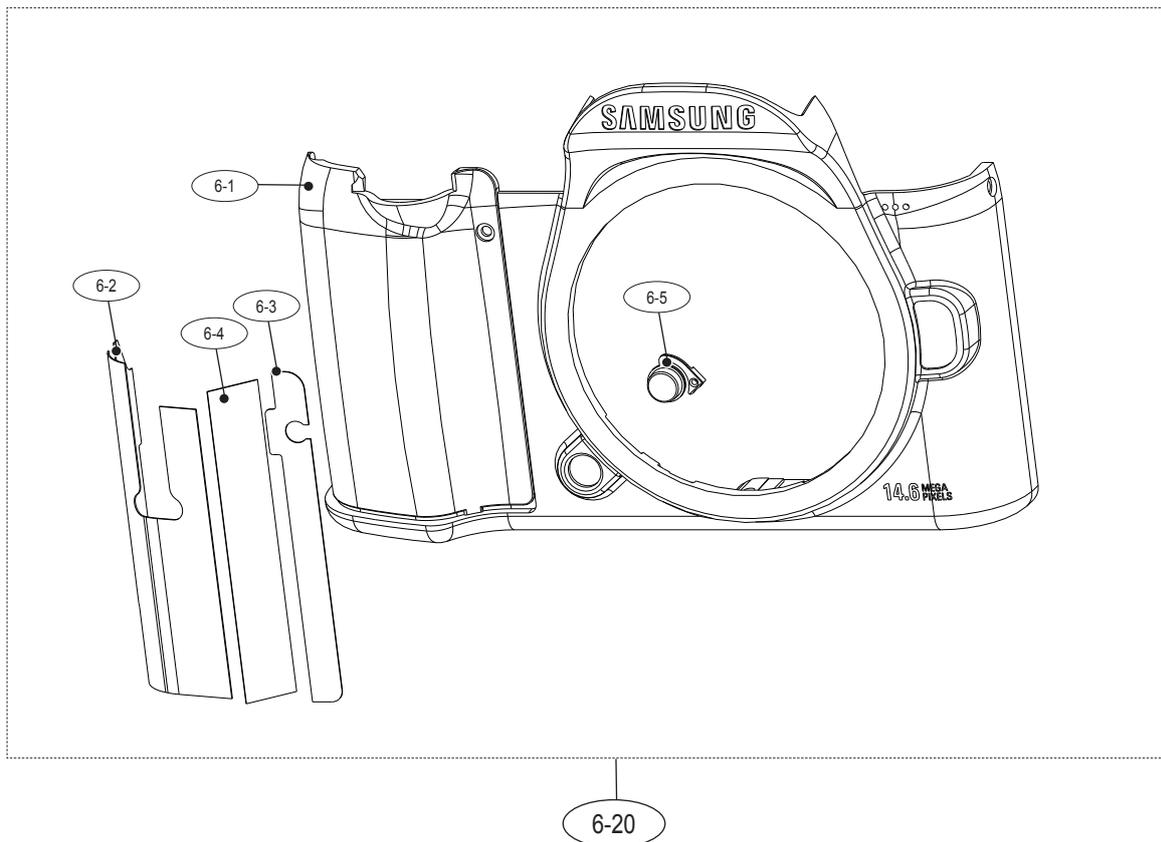
### 3-5 FINDER ASSEMBLY



## Exploded View and Parts List

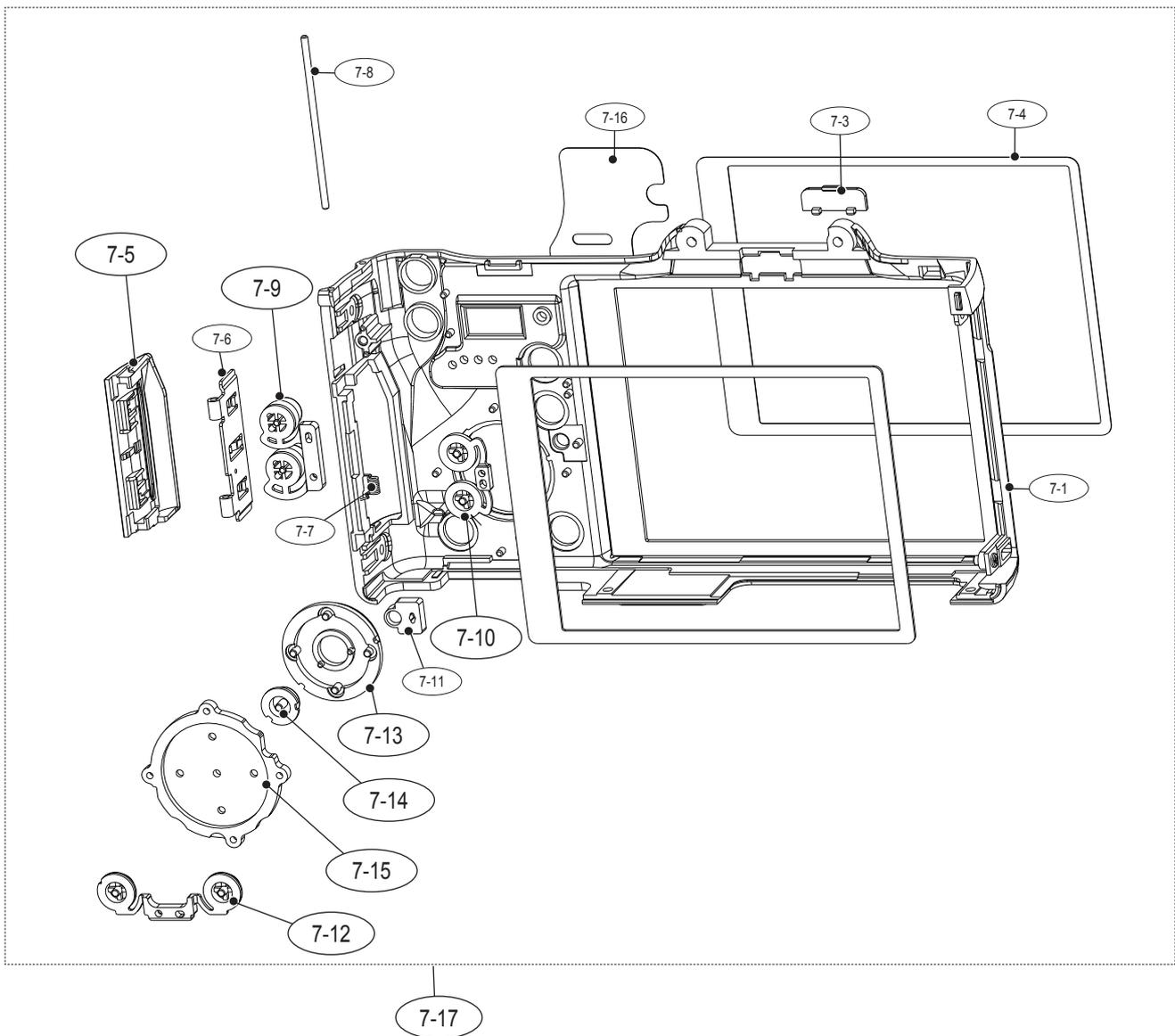
Loc. No	Parts No..	Description	Q ty	Available	Remark
5-1	AD61-04070A	BASE FINDER	1	X	
5-2	AD66-00670A	LINK EP	1	X	
5-3	AD63-04201A	CUSHION FINDER	1	X	
5-4	AD61-04255A	HOLDER LENS	1	X	
5-5	AD67-01396A	LENS G1	1	X	
5-6	AD64-02676A	MASK EVF	1	X	
5-7	AD67-01397A	LENS G2	1	X	
5-8	AD67-01398A	LENS G3	1	X	
5-9	AD64-02684A	MASK LENS	1	X	
5-10	AD63-03976A	COVER FINDER	1	X	
5-11	AD63-04132A	T/SHEET EYEPiece FFC	1	X	
5-12	AD64-02660A	WINDOW EYEPiece	1	X	
5-13	AD63-04197A	T/SHEET FINDER WINDOW A	1	X	
5-14	AD63-04196A	T/SHEET FINDER WINDOW B	1	X	
5-15	6031-001688	WASHER B	1	X	
5-16	AD66-00669A	GEAR EP	1	X	
5-17	6003-001756	SCREW	1	X	
5-18	AD73-00332A	RUBBER EP RING	1	X	
5-19	AD97-18499A	ASSY EVF	1	X	
5-20	AD97-17732B	ASSY-FINDER	1	O	

### 3-6 FRONT COVER ASSEMBLY



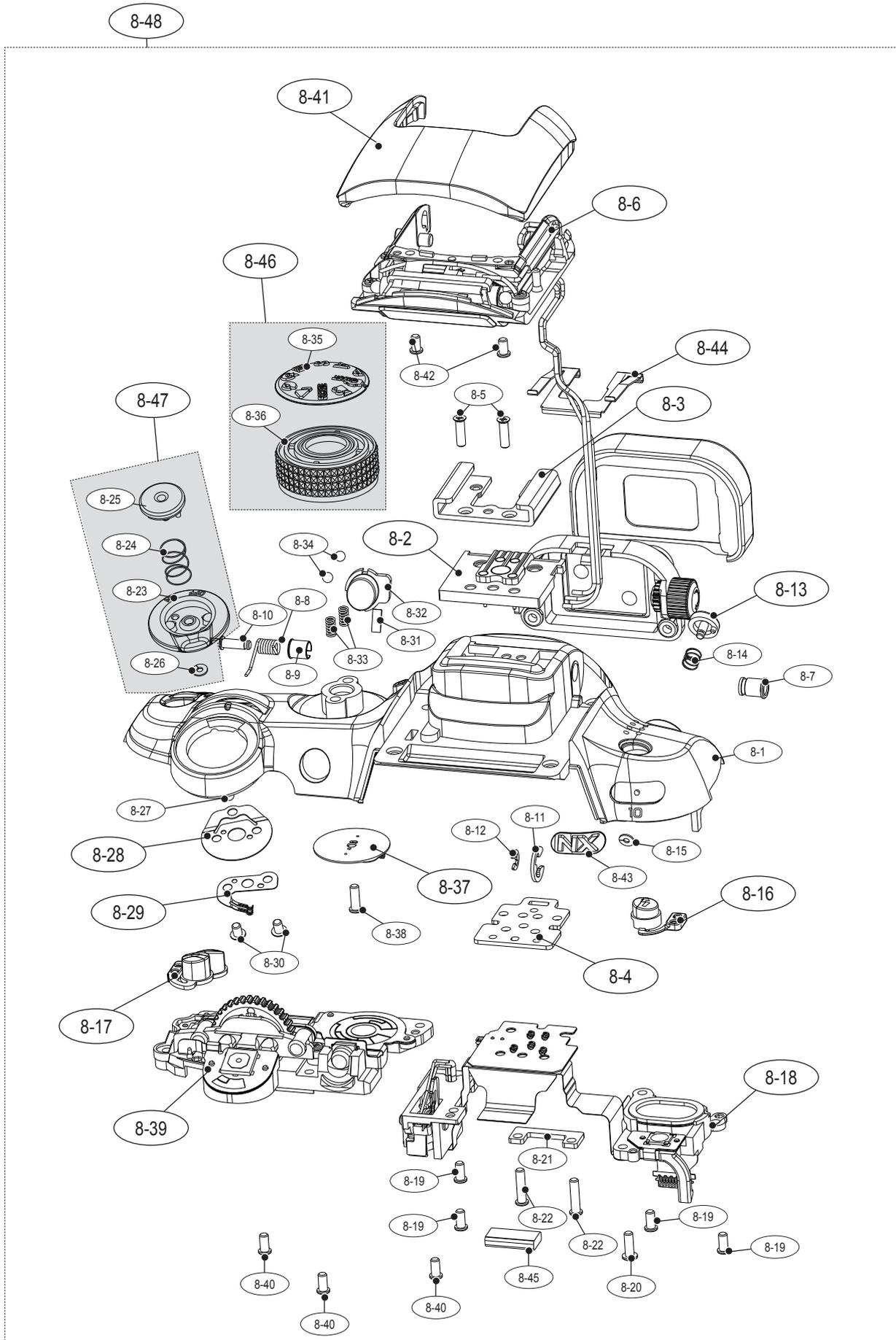
Loc. No	Parts No..	Description	Q ty	Available	Remark
6-1	AD63-03954A	COVER FRONT	1	X	
6-2	AD63-04136A	T/SHEET-GRIP SIDE C	1	X	
6-3	AD63-04134A	T/SHEET-GRIP SIDE A	1	X	
6-4	AD63-04135A	T/SHEET-GRIP SIDE B	1	X	
6-5	AD64-02613A	BUTTON-PREVIEW	1	X	
6-6	AD97-17736A	COVER ASSY-FRONT	1	O	BLACK
	AD97-17736B	COVER ASSY-FRONT	1	O	TITTAN SILVER
	AD97-17736C	COVER ASSY-FRONT_WH	1	O	WHITE

### 3-7 BACK COVER ASSEMBLY



Loc. No	Parts No..	Description	Q ty	Available	Remark
7-1	AD63-03955A	COVER BACK	1	X	
7-2	AD63-04145A	CUSHION LCD	1	X	
7-3	AD64-02605A	WINDOW-EYE SENSOR	1	X	
7-4	AD63-04138A	T/SHEET-LCD WINDOW	1	X	
7-5	AD63-03956A	COVER-SD CARD	1	O	BLACK
	AD63-03956B	COVER-SD CARD	1	O	TITTAN SILVER
	AD63-03956C	COVER-SD CARD_WH	1	O	WHITE
7-6	AD61-04090A	PLATE-SD COVER	1	X	
7-7	6107-001789	SPRING-TS	1	X	
7-8	AD66-00691A	SHAFT-SD COVER	1	X	
7-9	AD64-02614A	BUTTON-AE	1	O	
7-10	AD64-02618A	BUTTON-FN	1	O	
7-11	AD64-02607A	WINDOW-CARD ACCESS	1	X	
7-12	AD64-02617A	BUTTON PLAY	1	O	
7-13	AD64-02615A	BUTTON-4WAY	1	O	
7-14	AD64-02616A	BUTTON OK	1	O	
7-15	AD73-00329A	RUBBER BUTTON-4WAY	1	O	
7-16	AD63-04133A	T/SHEET-GRIP BACK	1	X	
7-17	AD97-17737A	COVER ASSY-BACK	1	O	BLACK
	AD97-17737B	COVER ASSY-BACK	1	O	TITTAN SILVER
	AD97-17737E	COVER ASSY-BACK_WH	1	O	WHITE

### 3-8 TOP COVER ASSEMBLY

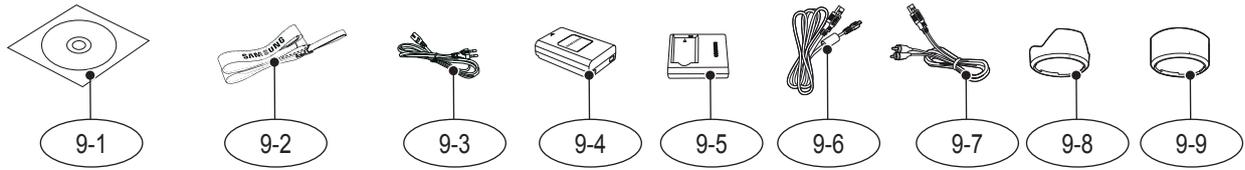


Loc. No	Parts No..	Description	Q ty	Available	Remark
8-1	AD63-03959A	COVER TOP	1	X	BLACK
	AD63-03959B	COVER TOP	1	X	BROWN
	AD63-03959E	COVER TOP_WH	1	X	WHITE
8-2	AD97-17742A	ASSY-BASE HOT SHOE	1	O	
8-3	AD61-04081A	PLATE-HOT SHOE	1	O	
8-4	AD61-04088A	PLATE-HOT SHOE BOTTOM	1	O	
8-5	6001-002297	SCREW-MACHINE	2	X	
8-6	AD97-17751A	STROBO ASSY	1	O	
8-7	AD61-04136A	BUSH-POP UP A	1	X	
8-8	6107-001785	SPRING-TS(POP UP)	1	X	
8-9	AD61-04137A	BUSH-POP UP B	1	X	
8-10	AD66-00689A	SHAFT-POP UP	1	X	
8-11	6044-001184	RING-E_1	1	X	
8-12	6044-001136	RING-E_2	1	X	
8-13	AD64-02622A	BUTTON-MENU	1	O	
8-14	6107-001783	SPRING-CS(MENU)	1	X	
8-15	6031-001628	WASHER PLAIN	1	X	
8-16	AD64-02621A	BUTTON-POP UP	1	O	
8-17	AD64-02620A	BUTTON-DRIVE	1	O	
8-18	AD97-17743A	ASSY-HOLDER HOT SHOE FPCB	1	O	
8-19	6003-001641	SCREW-TAPTYPE	4	X	
8-20	6003-001753	SCREW-TAPTYPE	1	X	
8-21	AD61-04078A	PLATE-HOT SHOE HOLD	1	X	
8-22	6001-001745	SCREW-MACHINE	2	X	
8-23	AD66-00671A	LEVER POWER	1	X	
8-24	6107-001788	SPRING RELEASE	1	X	
8-25	AD64-02619A	BUTTON RELEASE	1	X	
8-26	6031-001628	WASHER PLAIN	1	X	
8-27	AD64-01738A	KNOB MODE DIAL-CLICK BALL	1	X	
8-28	AD61-04087A	PLATE-POWER LEVER CLICK	1	O	
8-29	AD67-01174A	CONTACT-POWER LEVER	1	O	
8-30	6003-001297	SCREW-TAPTYPE	2	X	
8-31	AD63-04198A	T/SHEET-WINDOW AF	1	X	
8-32	AD64-02606A	WINDOW-AF	1	X	
8-33	6107-001784	SPRING-CS(MODE DIAL)	2	X	

## Exploded View and Parts List

Loc. No	Parts No..	Description	Q ty	Available	Remark
8-35	AD67-01246A	CAP MODE DIAL	1	X	
8-36	AD64-02626A	KNOB DIAL MODE	1	X	
8-37	AD97-17775A	ASSY-CONTACT MODE DIAL CAULKING	1	O	
8-38	6003-001671	SCREW-TAPTYPE	1	X	
8-39	AD97-17749A	ASSY-HOLDER TOP FPCB	1	O	
8-40	6003-001641	SCREW-TAPTYPE	3	X	
8-41	AD63-03960A	COVER STROBO-TOP	1	O	
8-42	6003-001637	SCREW-TAPTYPE	2	X	
8-43	AD61-04173A	PLATE-NAME	1	X	
8-44	AD61-04096A	PLATE SPRING SHOE	1	O	
8-45	AD63-04534A	CUSHION SHIELD FOAM TOP FPCB	1	X	
8-46	AD97-17748A	ASSY-DIAL MODE	1	O	
8-47	AD97-17747A	ASSY-LEVER POWER	1	O	
8-48	AD97-17741A	COVER ASSY-TOP-NX-10	1	O	BLACK
	AD97-17741B	COVER ASSY-TOP-NX-10	1	O	TITTAN SILVER
	AD97-17741E	COVER ASSY-TOP-NX-10_WH	1	O	WHITE

## 3-9 PACKING ITEMS



Loc. No	Parts No..	Description	Q ty	Available	Remark
9-1	AD46-00297A	Samsung_CD_NX-10	1	0	
	AD46-00298A	Samsung_CD_NC-110	1	0	
9-2	AD63-04468A	STRAP_NX-10	1	0	
9-3	3903-000346	AC CODE CABLE_KOR-D1	1	0	
	3903-000516	AC CODE CABLE_CHINA	1	0	
	3903-000347	AC CODE CABLE_EXP-D1	1	0	
	3903-000347	AC CODE CABLE_EXP-D1	1	0	
	AD81-00681A	AC CODE CABLE_USA-D1	1	0	
	AD81-00682A	AC CODE CABLE_UK-DSC220SE	1	0	
	3903-000348	AC CODE CABLE_AUS-D1	1	0	
9-4	AD43-00192A	NX BATTERY(BP1310)	1	0	
9-5	AD44-00157A	NX CHARGER(BC1310)	1	0	
9-6	AD39-00174A	USB_CABLE_8PIN	1	0	
9-7	AD39-00175A	AV CABLE_8PIN	1	0	
9-8	AD67-01378A	BARREL-HOOD(18-55)	1	0	
9-9	AD67-01294A	BARREL-HOOD(50-200)	1	0	

# Memo

## 4. Firmware update

### 4-1 F/W upgrade of Body by using user menu

#### 1. Preparation

► The following preparations are required before upgrade the F/W of NX10.

- F/W file (nx10.bin, 15,872KB)
- SD card to save the firmware file.
- SD card reader to read and write SD card and PC
- Fully charged battery.

► Download the latest NX10 firmware file and save it into the ROOT folder.

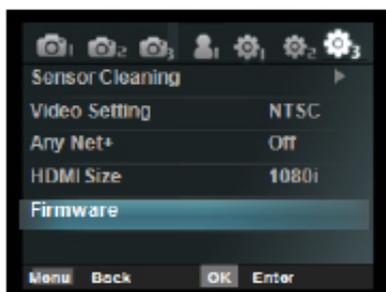
► Insert an SD card for firmware into the camera.

► Insert a fully charged battery into the camera.

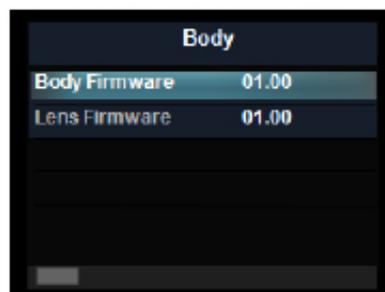
#### 2. Firmware Upgrade

► To upgrade the F/W, enter the user menu as below.

- ① Turn on the camera. (Located to the right side of Power switch)
- ② Press the menu button.
- ③ Move to "Setup Menu 3" (Press the left button of 4-way key.)
- ④ Select the "Firmware Update" < Fig. 4-1 >  
(After pressing the left button of 4-way key, press the OK button for 1 time.)
- ⑤ Select the "Body Firmware" < Fig. 4-1 >  
(Press the OK button for 1 time)



1. Setup menu3

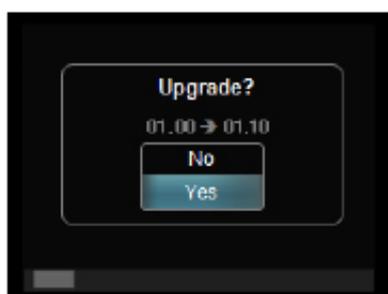


2. Firmware Upgrade Menu

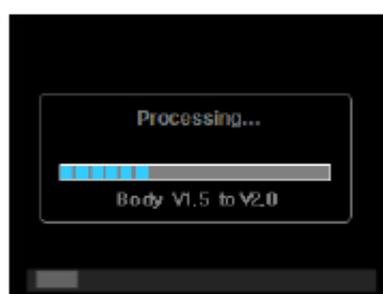
Fig 4-1

- ⑤ Select "Yes" < Fig. 4-3 >  
(After pressing the down button of 4-way key, press the OK button for 1 time.)

► The upgrading progress bar will be increased, then after finishing it, camera will reboot again.



3. Firmware Upgrade Confirm



4. Firmware Upgrade Progress

Fig 4-2

## 4-2 Upgrading procedure by using C/S menu.

---

### 1. Preparation

▶ **The following preparations are required before upgrade the F/W of NX10.**

- DSP F/W file (nx10.bin, 15,872KB)
- CPU F/W file (nx10c.bin, 256KB)
- DSP Loader file (Loader.bin, 256KB)
- SD card to save the firmware file.
- SD card reader to read and write SD card and PC.
- Fully charged battery.

▶ **Download the latest NX10 firmware file and save it into the ROOT folder.**

▶ **Insert an SD card for firmware into the camera.**

▶ **Insert a fully charged battery into the camera.**

### 2. Firmware Upgrade

▶ **To upgrade the F/W, enter the CS menu as below.**

1) DSP F/W (Including DSP Loader)

- ① Turn on the camera. (Located to the right side of Power switch)
- ② Select the "Smart Auto mode"
- ③ Enter the C/S menu. < Fig. 4-3 >
  - Press the left and right button of 4-way key in order.
  - Press the OK button while pressing the EVC button.
- ④ Select "1. FW UPDATE" < Fig. 4-4 >  
(Press the OK button for 1 time)
- ⑤ Select "(1) DSP F/W UPDATE" < Fig. 4-5 >  
(Press the OK button for 1 time)
- ⑥ Press the OK button. < Fig. 4-6 >
- ⑦ The status LED will blink during the upgrade. If it is stop, turn off and on the camera.  
(If it is not blinking over 2 sec, it may finish.)

2) CPU F/W

- ⑧ Turn on the camera. (Located to the right side of Power switch)
- ⑨ Select the "Smart Auto mode"
- ⑩ Enter the C/S menu. < Fig. 4-3 >
  - Press the left and right button of 4-way key in order.
  - Press the OK button while pressing the EVC button.
- ⑪ Select "1. FW UPDATE" < Fig. 4-4 >  
(Press the OK button for 1 time)
- ⑫ Select "(2) CPU F/W UPDATE". < Fig. 4-5 >  
(After pressing down button for 1 time, press the OK button.)
- ⑬ Press the OK button. < Fig. 4-7 >
- ⑭ If F/W status percentage reach 100%, it turned off automatically.

Fig 4-3

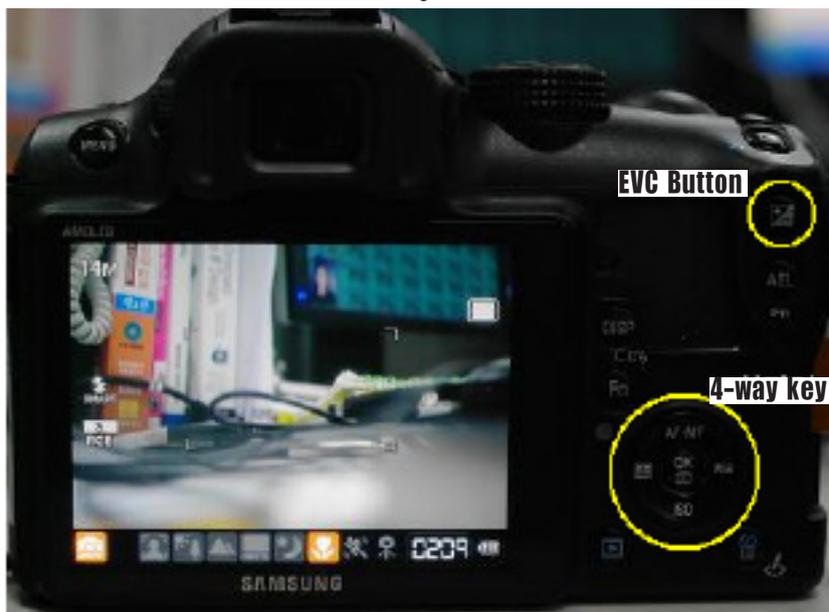


Fig 4-4

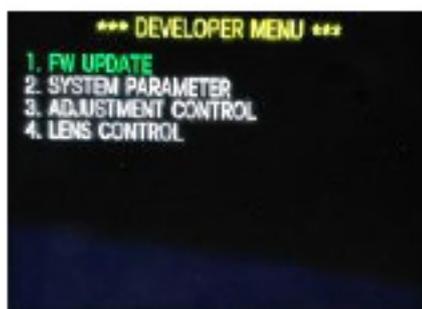


Fig 4-6

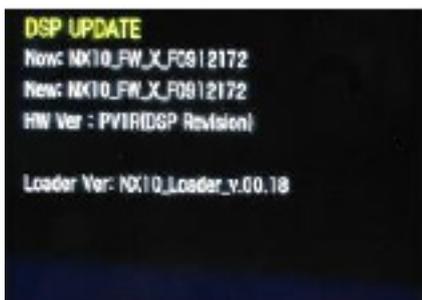
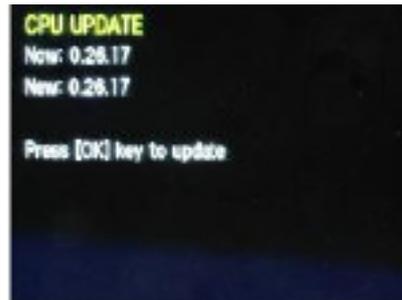


Fig 4-5



Fig 4-7



# Memo

## 5. Adjustment

### 5-1 Basic guide for adjustment



- After you replace the electronic parts, you must make adjustments for each adjustment item in ST1000.
- The following table shows the necessary adjustment item for replacing each part.

1. After changing each parts, please adjust the camera by using below table.

<Table 5-1>

Process	Adjustment section	Main PCB	CMOS	Shutter	EVF	Top Flash	Equipment
ADJ_01	CIS Tilt	•	•	•			•
	Input CIS DOT Data	•	•				
	Shutter Speed	•		•			•
ADJ_02	Dust Reduction	•	•				
ADJ_04	OB adj	•	•				
	AFE Gain adj	•	•				•
	ISO sensitivity adj	•	•				•
ADJ_05	VFPN adj	•	•				
	Defective Pixel adj	•	•				
ADJ_06	AWB Low adj	•	•				•
ADJ_07	Internal Strobe adj	•				•	
	AWB Strobe adj	•				•	
	AF secondary strobe adj	•		•	•	•	
ADJ_08	Proximity Sensor adj	•		•	•		

#### 2. Needed tools for adjustment

- ADJ\_00 : Kyoritsu (RSM-5000)
- ADJ\_01 : Kyoritsu (RFS-5910)
- ADJ\_04 : Light Source Box ( 5500K±100, Lv. 12 )
- ADJ\_06 : Light Source Box ( 3100K±100, Lv. 11 )
- ADJ\_07 : Gray chart(18%) for FLASH & AWB adjustment , Dark Room

#### 3. Adjustment program file

- To adjust the CIS Dot & Shutter Speed, you need to Shutter Adjustment.zip software file.  
First of all, please un-zip the S/W and install it as below.
  - 1) Please un-zip the attached S/W file on the root of C:
  - 2) Please run the 'install.bat' inside the /USB\_Filter sub-folder.
  - 3) Please run the '\_2005vcredist\_x86.exe' inside the /VC++ Patch sub-folder.
  - 4) Please run the NXShutterSpeed.exe program.
- To adjust the other sections, please save the each adjustment data to the SD card.  
The adjustment file name must be "nx10.adj" and save it with info.tg and info.tgw files to root of SD card.

## 5-2 Tester Mode

1. Enter the Tester Mode : Left → OK → Right → Ev and OK button at the same time.

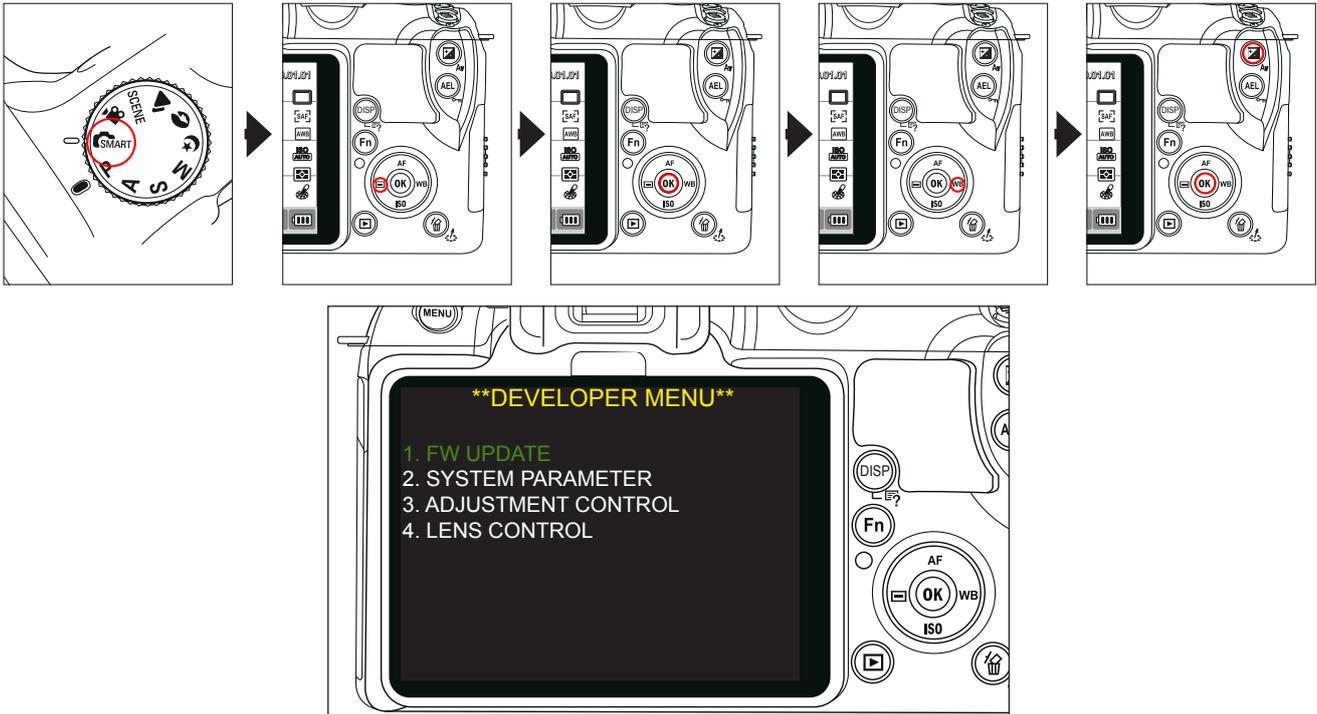


Fig. 5-1

2. The contents of Tester Mode.

<Table 5-2>

Menu	Detail menu	Function
1. FW UPDATE	(1) DSP FW UPDATE (2) CPU FW UPDATE (3) LENS FW UPDATE (4) EXT. FLASH FW UPDATE (5) DSP FW BACKUP (6) RESET USERDATA	Do the upgrade firmware for each section. It's only CS firmware not customer's one. Update display screen.
2. SYSTEM PARAMETER	(1) FACTORY RESET	Factory reset mode setting.
3. ADJUSTMENT CONTROL	(1) AUTO START DISABLE (2) LINE PROCESS STEP (3) LINE PROCESS MARK (4) ADJUST DATA TO LOG FILE (5) ADJUST RESULT	(1) Prevent auto start mode when insert the adjustment file. (2) Setting of each adjustment procedure. (3) Confirm the former adjustment whether it is finish or not. (4) Save the result of adjustment. (5) Confirm the result of adjustment.
4. LENS CONTROL	(1) OIS ADJUSTMENT (2) ZOOM WIDE SET (3) ZOOM TELE SET	(1) OIS lens adjustment. (2) Fix the wide value of zoom lens. (3) Fix the tele value of zoom lens.

### 3. LENS CONTROL

#### (1) OIS ADJUSTMENT

- When you adjust the OIS function which have a OIS lens, you can adjust it.
- How to adjust

After combine the lens, enter the tester mode. Select the LENS CONTROL → OIS ADJUSTMENT → Press the OK button.

**\* Caution : Do not shake the camera when adjust it.**

#### (2) ZOOM WIDE SET, ZOOM TELE SET

- When you adjust the position of zoom position, you can use it.  
(After changing the PCB inside the lens or disassemble the mount, you must adjust it.)
- How to adjust

After combine the lens, enter the tester mode. Select the LENS CONTROL → ZOOM WIDE SET  
→ Locate the zoom position to the Wide. → Select OK (In case of Tele, vise versa)

**\* Caution : Do not shake the camera when adjust it.**

## 5-3 CIS TILT Adjustment



■ If you change or disassemble the CMOS ASS'Y, you must do the CMOS Tilt adjustment.

### <How to Adjust>

1. Prepare CIS Tilt adjustment tools. (Kyoritsu (RSM-5000))
2. After pressing the Start button, Tilt adjustment procedure finished automatically.
3. After completing the adjustment, please bonding 3 screws and fix it as below.

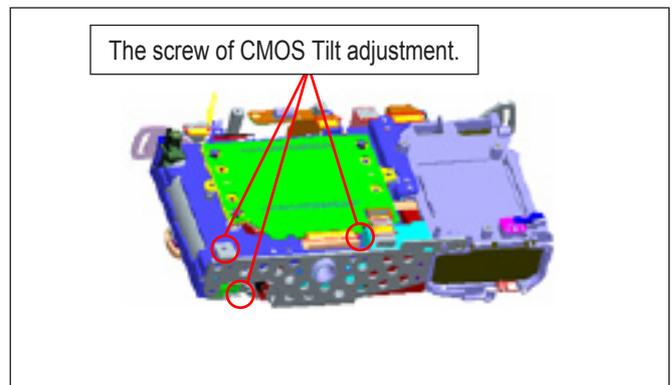


Fig. 5-2

### <Adjustment Result>

It can be adjust below 10 $\mu$ m between MOUNT and CMOS ASS'Y.

## 5-4 Input CIS DOT & Adjust the Shutter Speed (ADJ\_01)



- When you change the MAIN PCB or CMOS, you need to input the DOT value of CMOS on the EEPROM.
- You must do the Shutter speed adjustment after changing the Shutter ASS'Y or Main PCB.

### <How to adjust>

1. Connect to PC and Shutter Speed adjustment tool by using usb cable.



Fig. 5-3

2. Connect to PC to your camera by using USB cable and turn on the camera.

3. Change the setting on the tester mode as below.

- TEST MODE : Left → OK → Right → Ev + OK button at the same time.
- 3. Select the ADJUSTMENT CONTROL.
- (2) LINE PROCESS STEP value is 01.
- (3) LINE PROCESS MARK value is Off.

4. Please run NX-Shutter Speed adjustment program after insert the SD Card which contain the adjustment file.

5. Press the send (①) button after input CMOS S/N on the Serial section of MAIN PCB.

6. You can find the result of CMOS DOT on the right side as a (②).

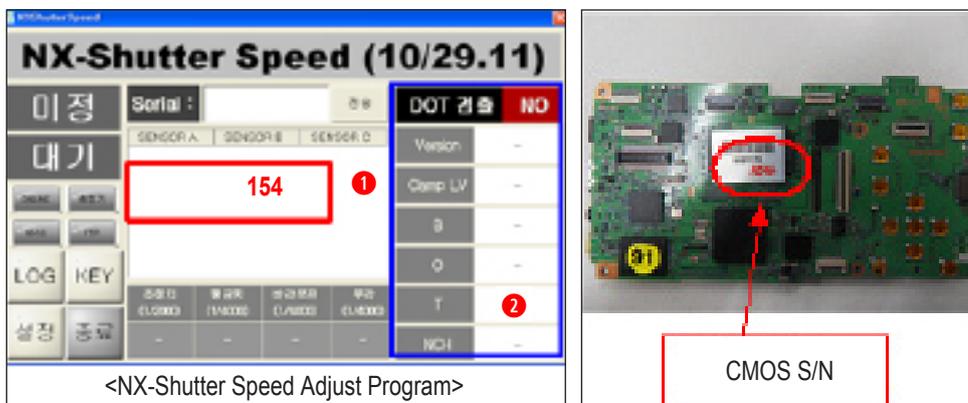


Fig. 5-4

\* If total defects of B, O, T are over 1000, it may display NG.

7. If you press the Start button on the Shutter Speed adjustment tool, it will be start PTP communications and then do the shooting as a 1/2000 shutter speed. Finally, shutter speed measured on the tools.
8. Adjustment tools→Transfer the measured value(Shutter Speed) to PC→Transfer to camera.
9. The adjustment value set after calculation it based on the 1/2000sec(0.488ms) of Offset value. After applying to Offset value that means it will be start from 1/4000 sec, then the tools received the result value. Compare to standard value as a 1/4000 sec (0.269ms), it decide the range of standard.
10. After finishing the adjustment, the result value will be saved on the memory(NOR-Flash), then display it on the LCD.

#### <Adjustment Result>

You can see the adjustment result by using Log File saved on the memory card. You can also confirm the ADJUSTMENT RESULT on the Tester mode.

## 5-5 Dust Reduction (ADJ\_02)



- It adjust the frequent voltage to remove the dust on the CMOS.

#### <How to adjust>

1. Change the setting on the tester mode as below.
  - TEST MODE : Left → OK → Right → Ev + OK button at the same time.
  - 3. Select ADJUSTMENT CONTROL
  - (2) LINE PROCESS STEP value is 02.
  - (3) LINE PROCESS MARK value is 01.
2. Insert the SD card to the camera which contained adjustment data.
3. After turning on the camera, it will be start automatically.
4. After completing the adjustment, camera turned off automatically.

#### <Adjustment Result>

You can see the adjustment result by using Log File saved on the memory card. You can also confirm the ADJUSTMENT RESULT on the Tester mode.

## 5-6 OB, AFE GAIN, ISO Adjustment (ADJ\_04)



- Adjust the CMOS characteristics. (BLACK, GAIN, ISO sensitivity)

### <How to adjust>

1. Prepare the Light Source Box.
  - Color Temperature : 5500K±100, Lv. 12
2. Change the setting on the tester mode as below.
  - TEST MODE : Left → OK → Right → Ev + OK button at the same time.
  - 3. Select ADJUSTMENT CONTROL.
  - (2) LINE PROCESS STEP value is 04.
  - (3) LINE PROCESS MARK value is 03.
3. Insert the SD card to the camera which contained adjustment data.
4. After combine the master lens to the camera, attached to the Light Source Box.

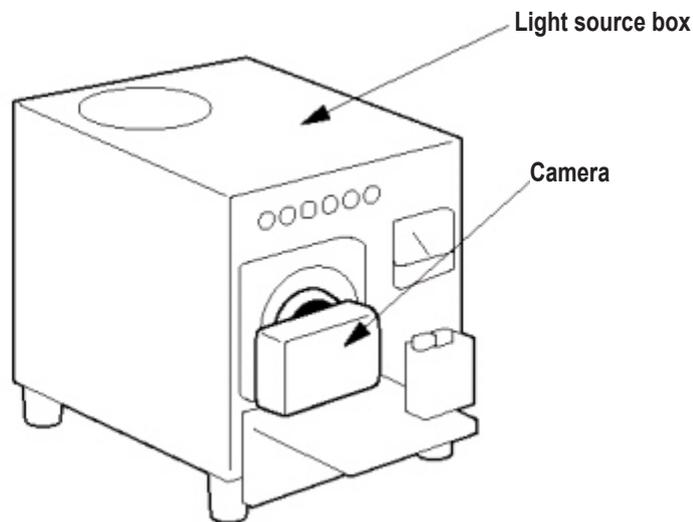


Fig. 5-5

5. After turning on the camera, it will be start automatically.
6. After completing the adjustment, camera turned off automatically.

### <Adjustment Result>

You can see the adjustment result by using Log File saved on the memory card. You can also confirm the ADJUSTMENT RESULT on the Tester mode.

## 5-7 VFPN, DEFECT PIXEL Adjustment (ADJ\_05)

---



- Adjust the CMOS characteristics. (Noise of vertical line(VFPN), Dead Pixel)
- 

### <How to adjust>

1. Change the setting on the tester mode as below.
  - TEST MODE : Left → OK → Right → Ev + OK button at the same time.
  - 3. Select ADJUSTMENT CONTROL.
  - (2) LINE PROCESS STEP value is 05.
  - (3) LINE PROCESS MARK value is 04.
3. Insert the SD card to the camera which contained adjustment data.
4. After combine the master lens to the camera, cover the front area of lens by using lens cap or clothes.
5. After turning on the camera, it will be start automatically.
6. After completing the adjustment, camera turned off automatically.

### <Adjustment Result>

You can see the adjustment result by using Log File saved on the memory card. You can also confirm the ADJUSTMENT RESULT on the Tester mode.

## 5-8 AWB Low level adjustment (ADJ\_06)



- Adjust the CMOS characteristics. (AWB Low Level)

### <How to adjust>

1. Prepare the Light Source Box.

- Color Temperature :  $3300K \pm 100$ , Lv. 11

2. Change the setting on the tester mode as below.

- TEST MODE : Left → OK → Right → Ev + OK button at the same time.

- 3. Select ADJUSTMENT CONTROL.

- (2) LINE PROCESS STEP value is 06.

- (3) LINE PROCESS MARK value is 05.

3. Insert the SD card to the camera which contained adjustment data.

4. After combine the master lens to the camera, attached to the Light Source Box.

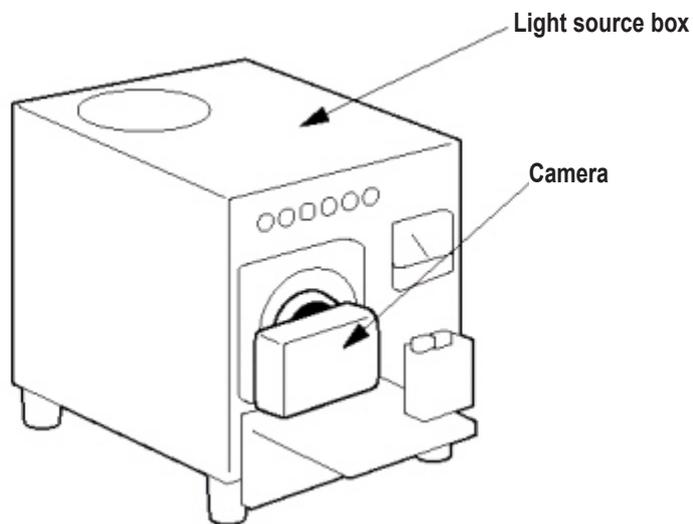


Fig. 5-6

5. After turning on the camera, it will be start automatically.

6. After completing the adjustment, camera turned off automatically.

### <Adjustment Result>

You can see the adjustment result by using Log File saved on the memory card. You can also confirm the ADJUSTMENT RESULT on the Tester mode.

## 5-9 Internal Strobe, AWB Strobe, AF auxiliary light Test (ADJ\_07)

---



- Adjust the CMOS characteristics. (AWB Low Level)
- 

### <How to adjust>

1. Combine the lens of 30mm to the camera, then located on the Dark Room(Box).
2. The distance between Gray chart(18%) and camera is 80cm
3. Change the setting on the tester mode as below.
  - TEST MODE : Left → OK → Right → Ev + OK button at the same time.
  - 3. Select ADJUSTMENT CONTROL.
  - (2) LINE PROCESS STEP value is 07.
  - (3) LINE PROCESS MARK value is 06.
4. Insert the SD card to the camera which contained adjustment data.
5. After turning on the camera, it will be start automatically.
6. After completing the adjustment, camera turned off automatically.

### <Adjustment Result>

You can see the adjustment result by using Log File saved on the memory card. You can also confirm the ADJUSTMENT RESULT on the Tester mode.

## 5-10 Proximity Sensor Adjustment (ADJ\_08)



- To adjust the distance of EVF perceive sensor.

### <How to adjust>

1. Change the setting on the tester mode as below.
  - TEST MODE : Left → OK → Right → Ev + OK button at the same time.
  - 3. Select ADJUSTMENT CONTROL.
  - (2) LINE PROCESS STEP value is 08.
  - (3) LINE PROCESS MARK value is 07.
2. Insert the SD card to the camera which contained adjustment data.
3. The distance between eyepiece lens and camera is 4.5cm

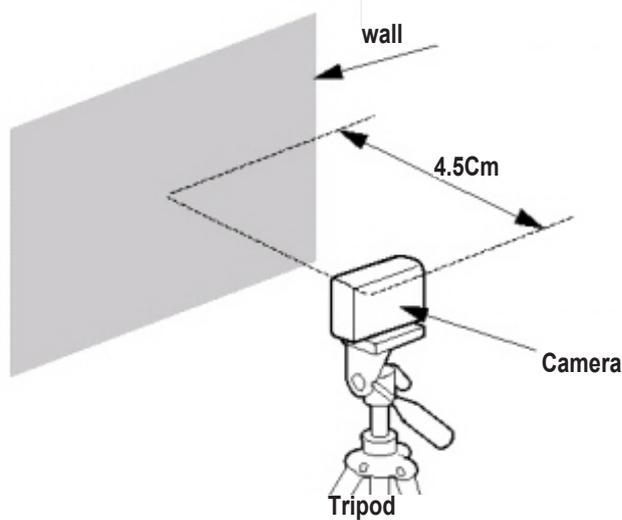


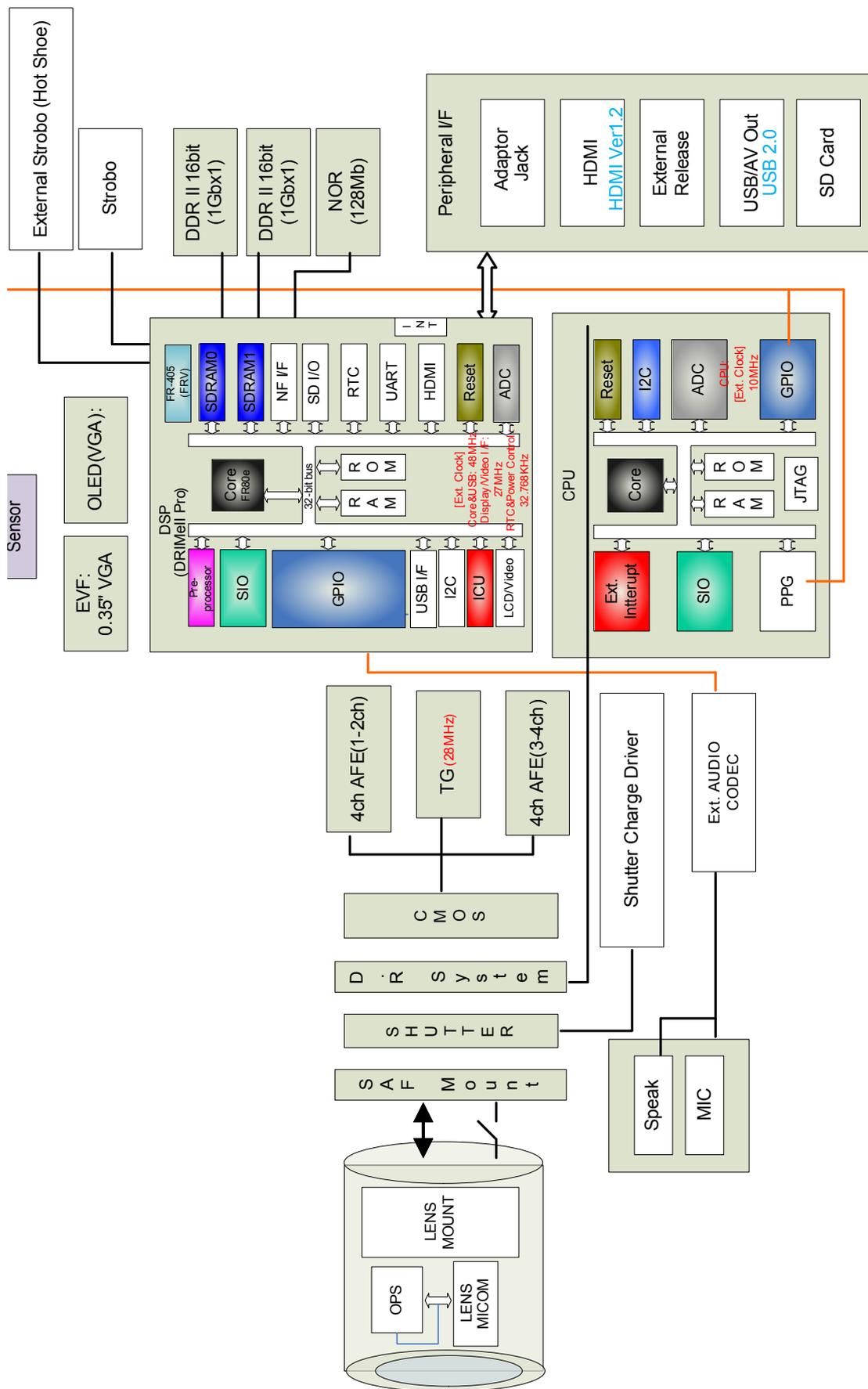
Fig. 5-4

4. After turning on the camera, it will be start automatically.
5. After turning on the camera, it will be start automatically.

### <Adjustment Result>

You can see the adjustment result by using Log File saved on the memory card. You can also confirm the ADJUSTMENT RESULT on the Tester mode.

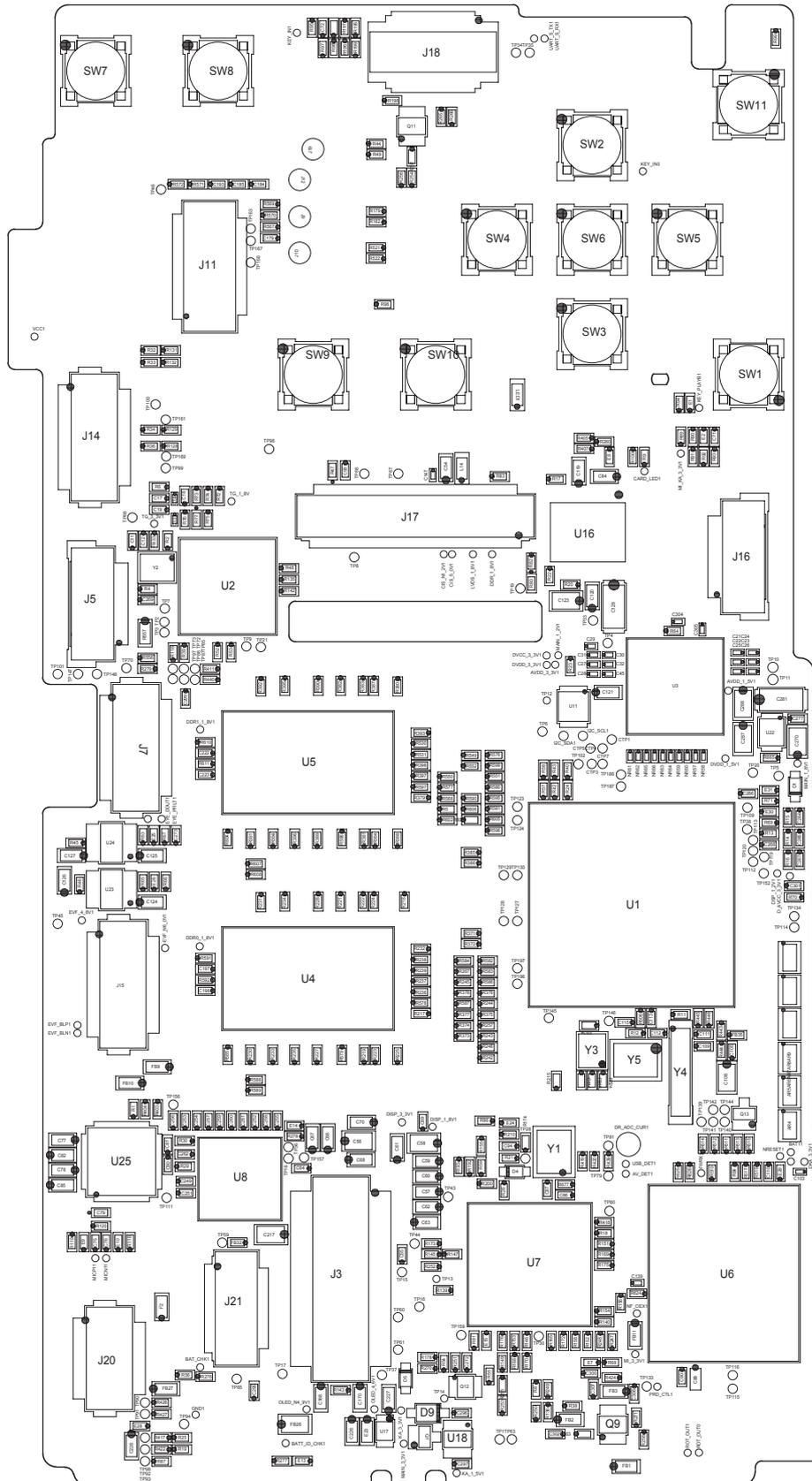
# 6. Block Diagram



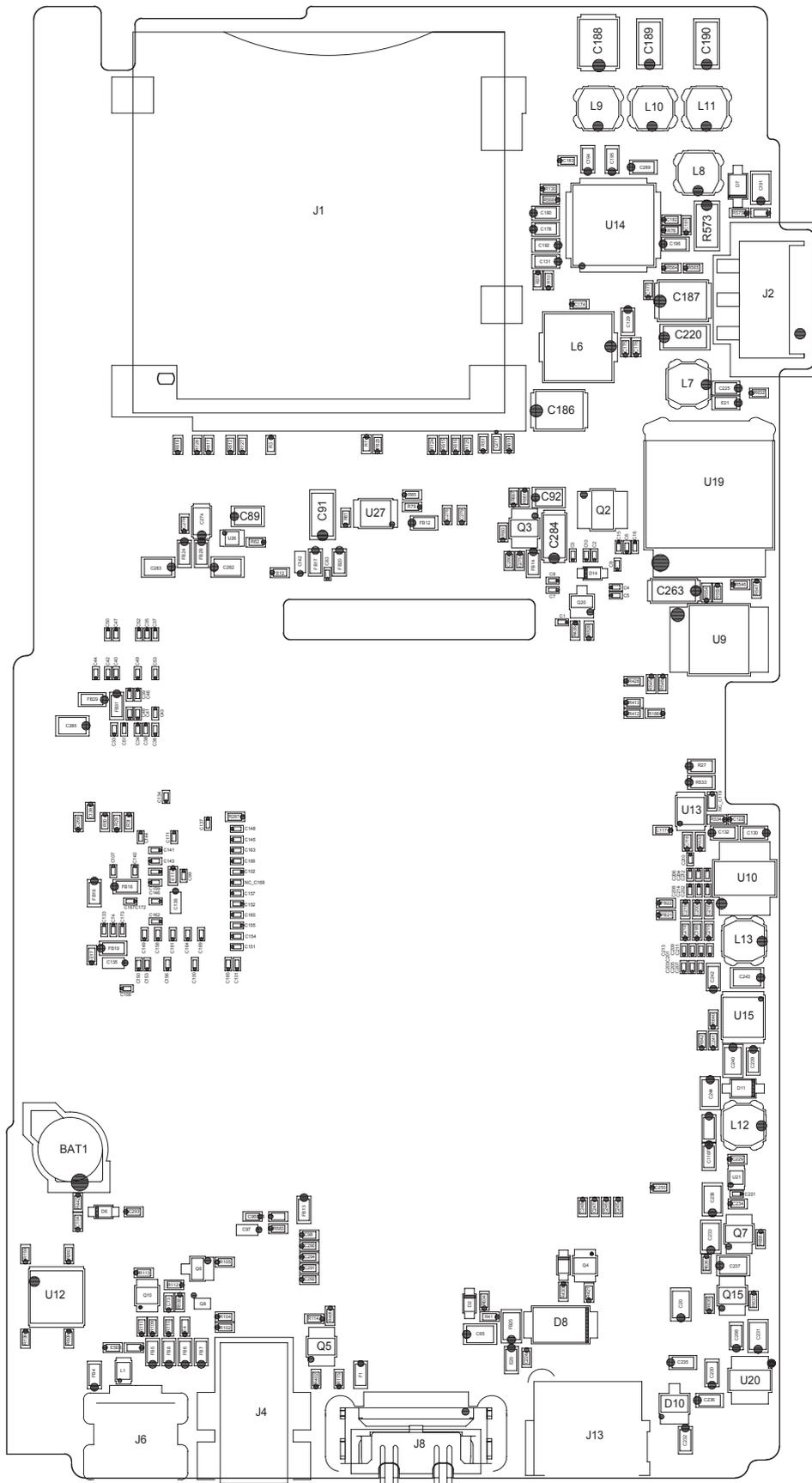
# Memo

# 7. PCB Diagrams

## 7-1 Main PCB (TOP)

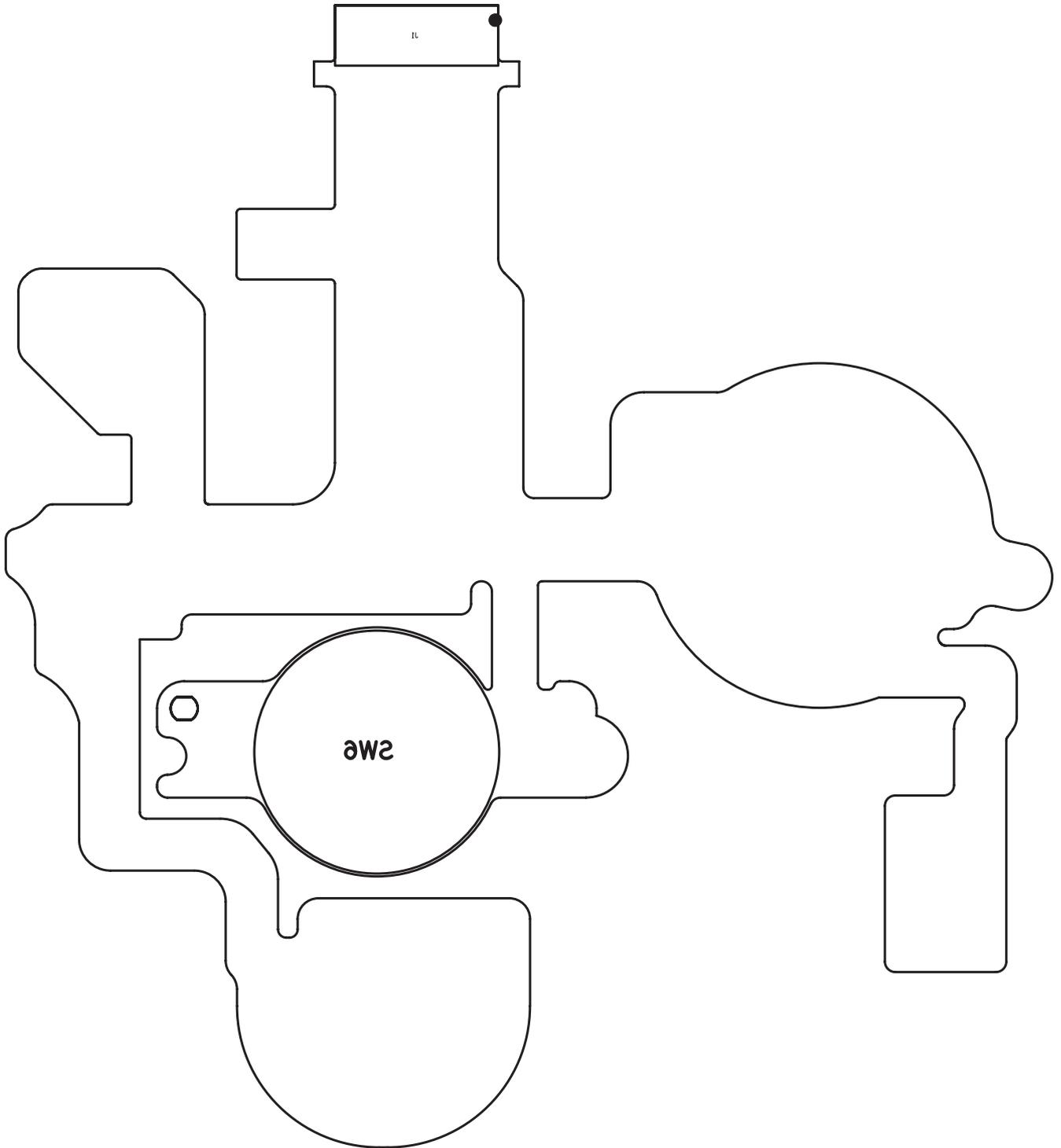


# 7-2 Main PCB (Bottom)

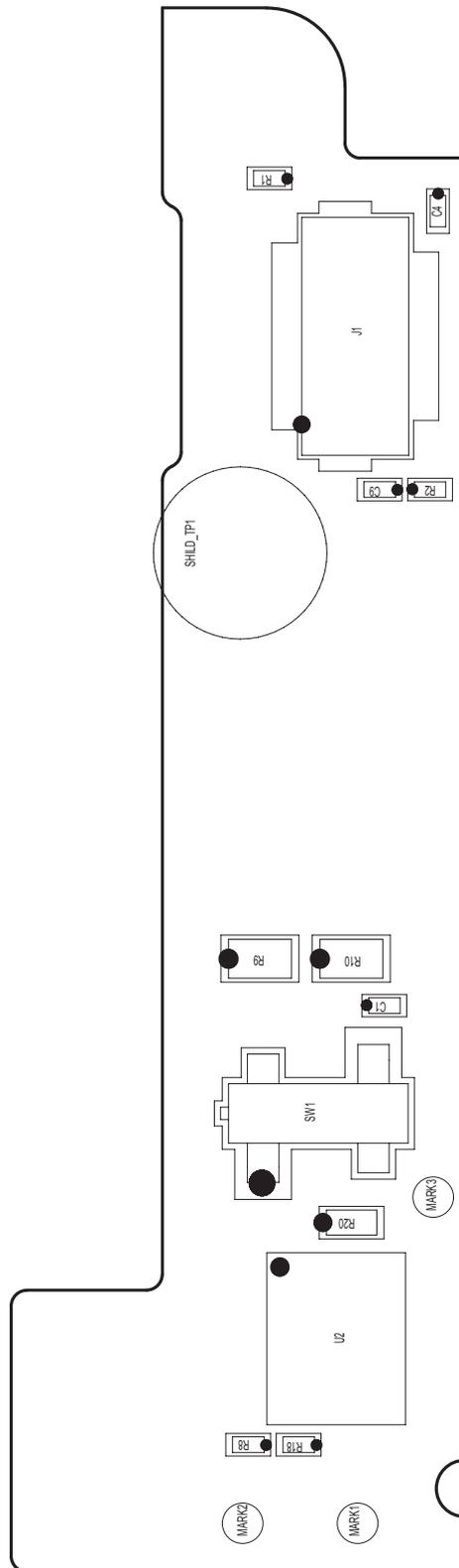


### 7-3 Key PCB

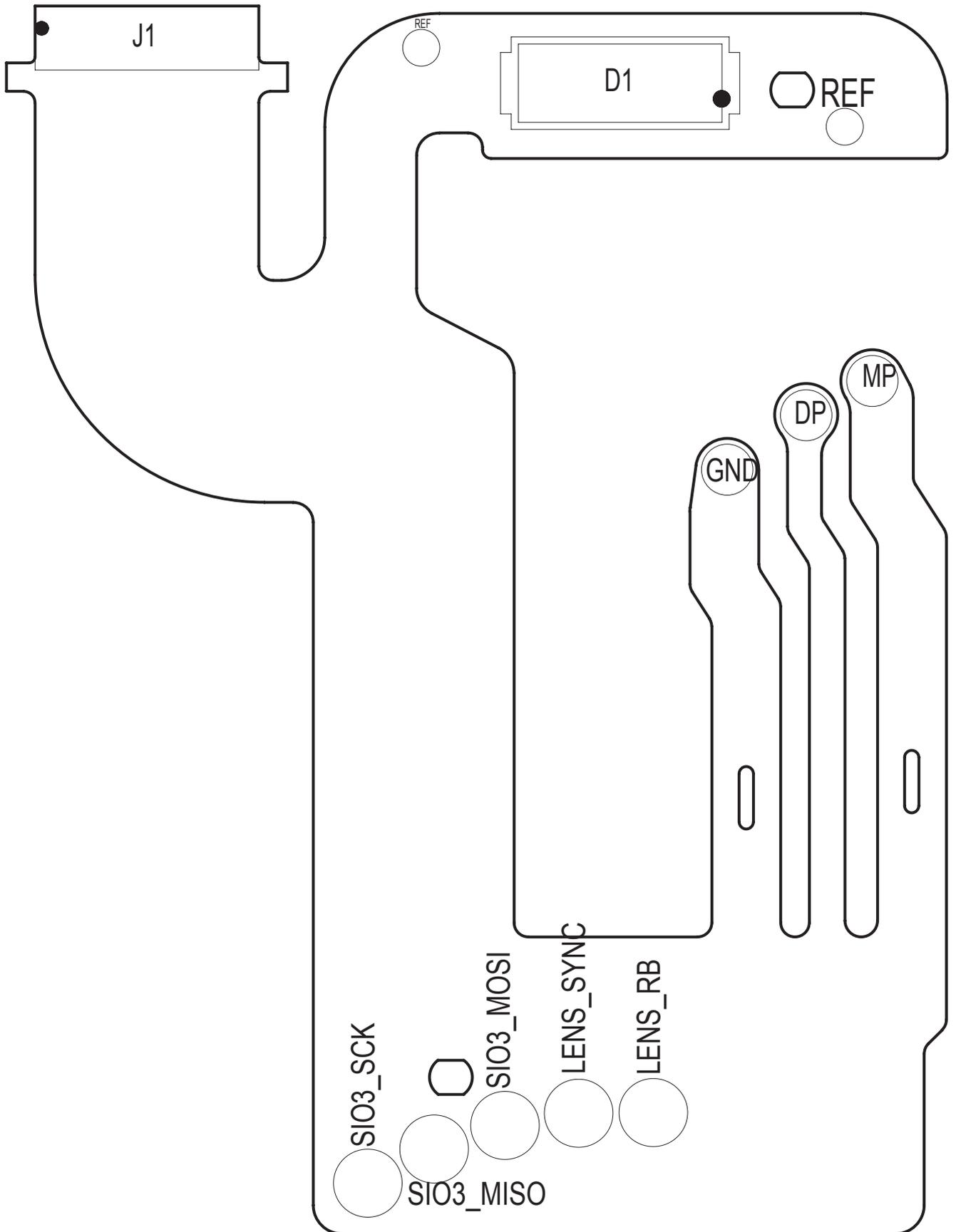
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# 7-4 Strobo PCB

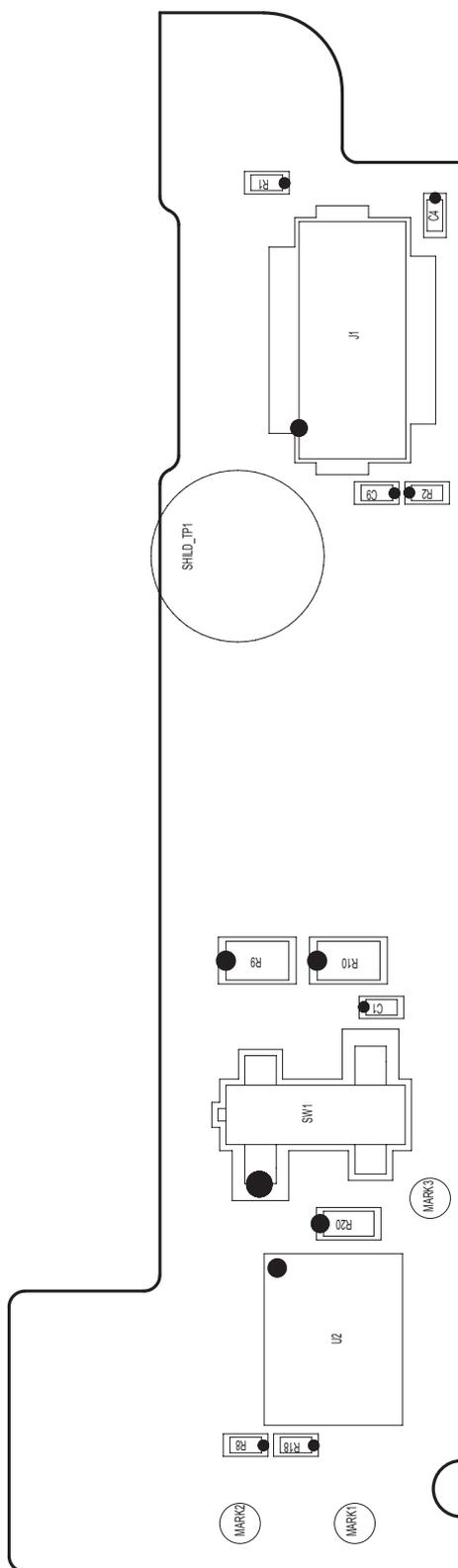


# 7-5 Lens PCB



# 7-6 Trig PCB

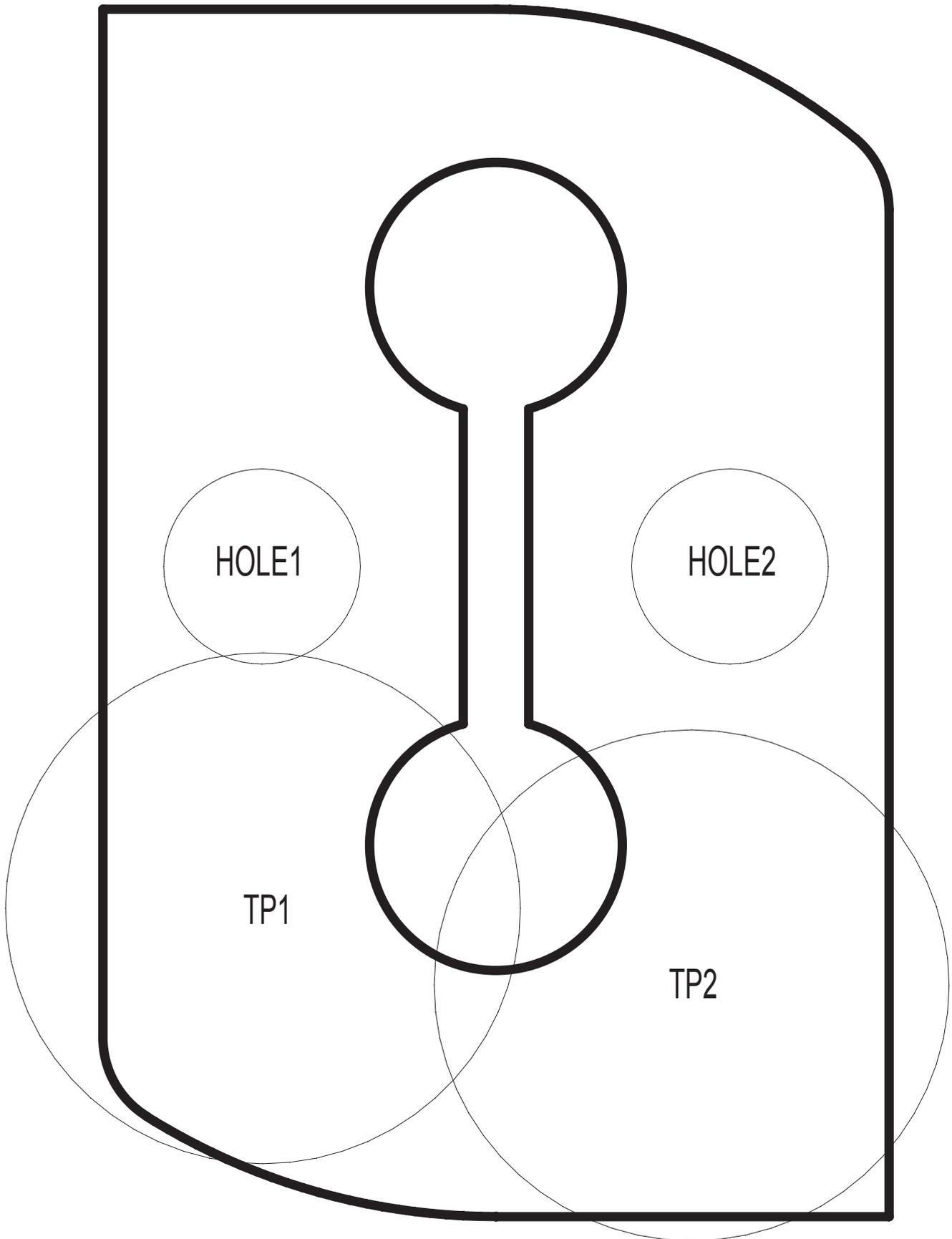
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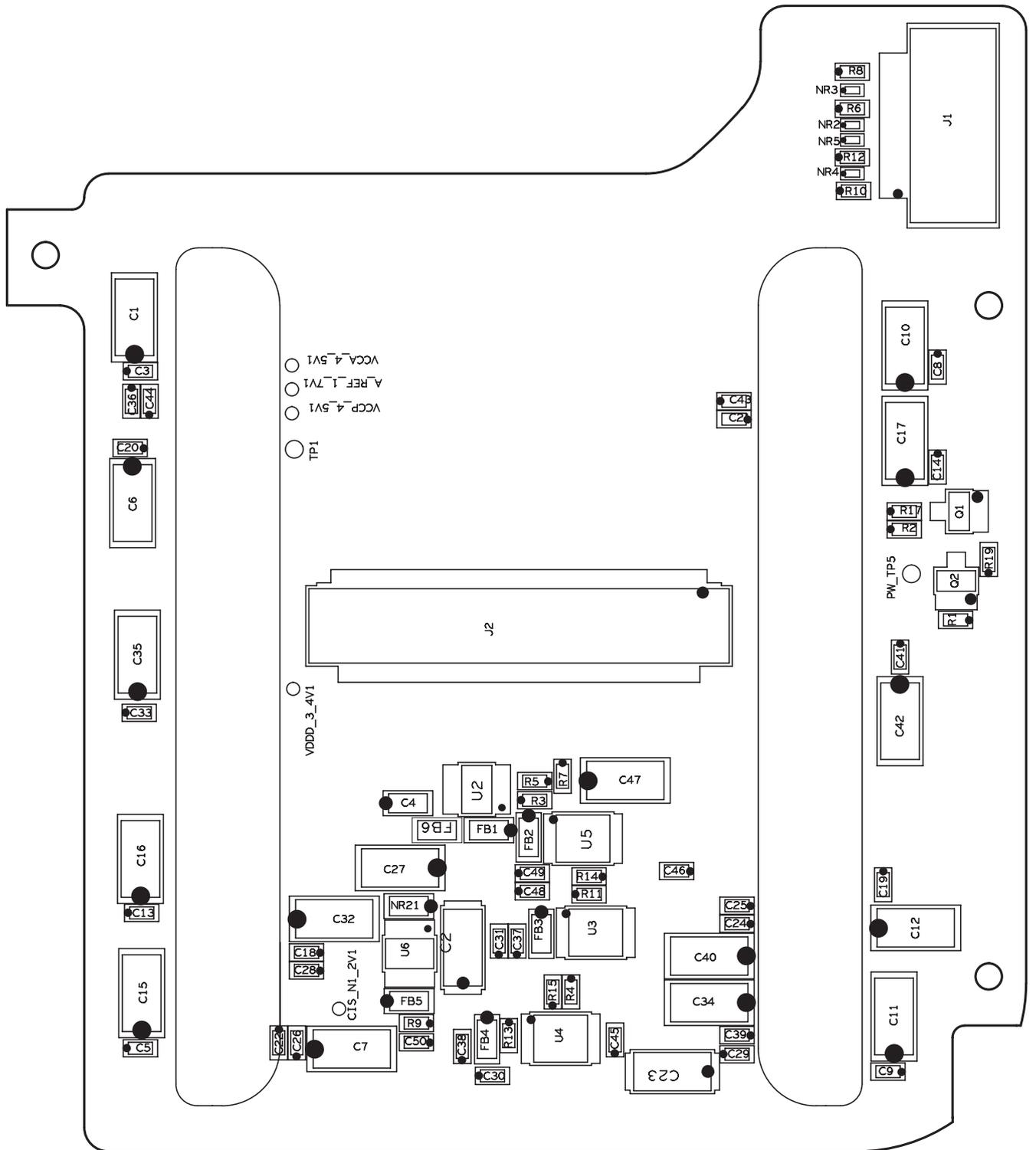


## 7-8 Condenser PCB

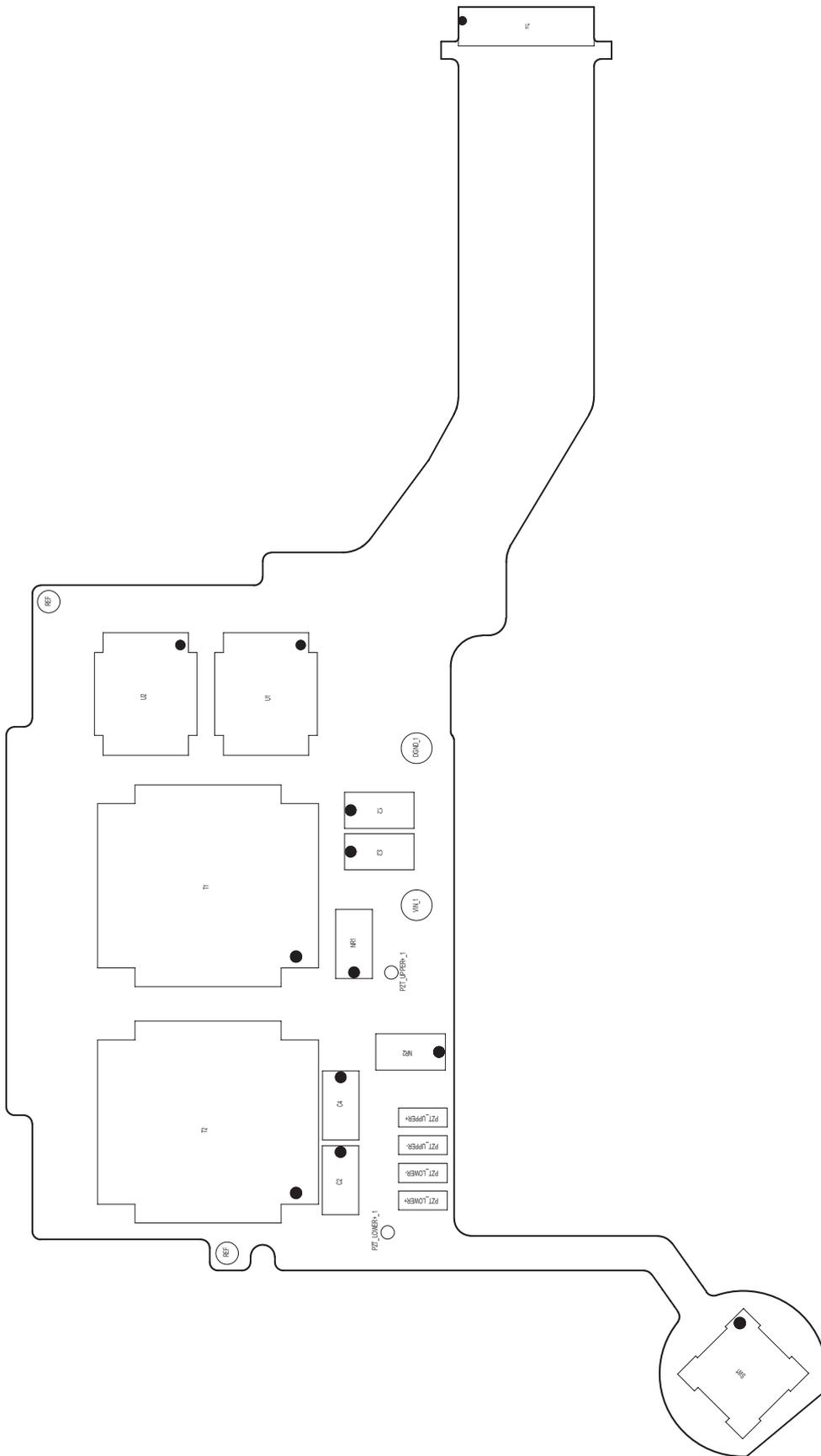
---



# 7-9 Cis PCB



# 7-10 PV PCB



## 8. Disassembly and reassembly

### 8-1 Disassembly of main unit

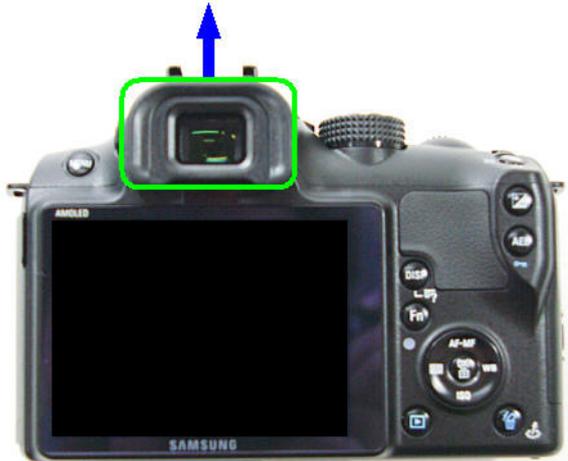
#### Precaution for disassembly/reassembly

1. Set up the repair table where the anti-static mat is installed to disassemble and reassemble the camera.
2. When handling the key PCB of the camera, wear the anti-static band on the wrist to prevent any error from static electricity.
3. When handling key parts, be careful of the following.

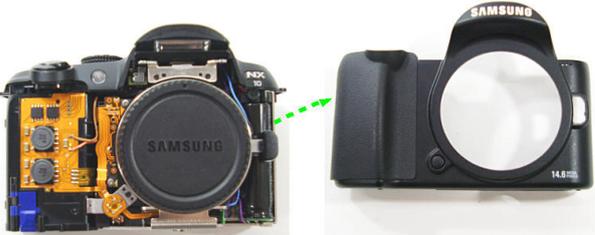
<Table 9-1>

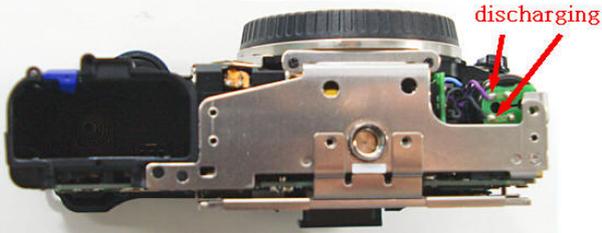
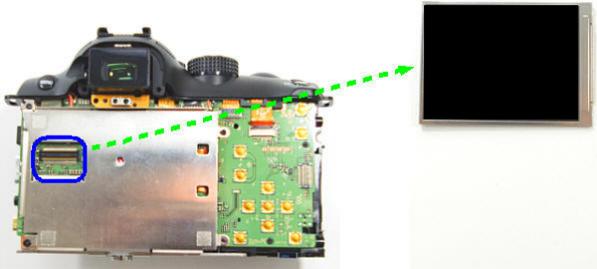
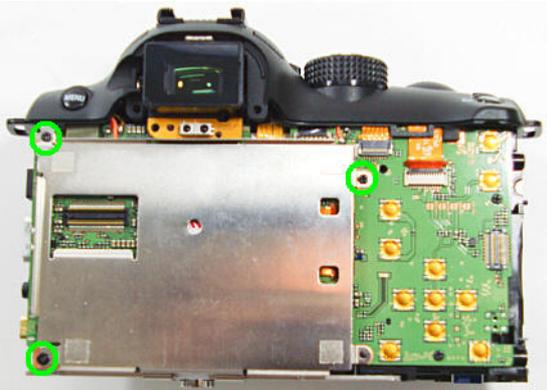
Part	Precaution
<b>F PCB Type</b>	When assembling the F PCB to the CONNECTOR with a pin set, be careful not to cause dents or tears on the PCB.
<b>CCD and IR CUT</b>	When handling the parts, be careful not to leave any fingerprints. Use the pin set with soft tips. When cleaning the parts with alcohol, be careful not to cause any stains. Do the repair work in a dust free environment.
<b>PCB Type</b>	Always use the anti-static mat and wrist band, as the parts can be damaged from static electricity from the hand.
<b>CONTACT Type</b>	Be careful of damage of deformation of parts from the pin set.

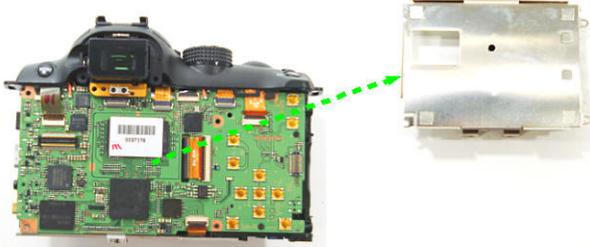
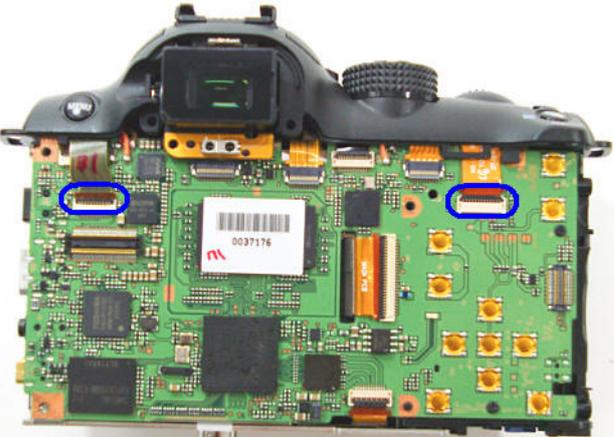
No.	Disassembly image	Disassembly description
1		Remove 2 Screws.
2		Remove 3 Screws.
3		Remove 7 Screws.

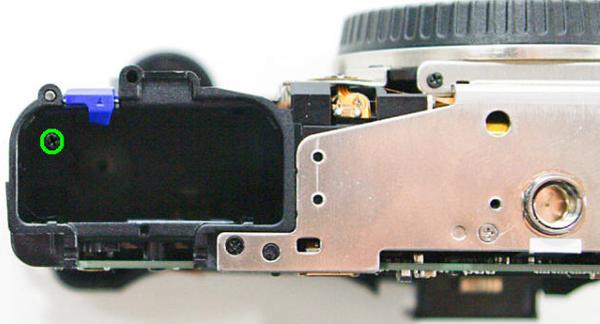
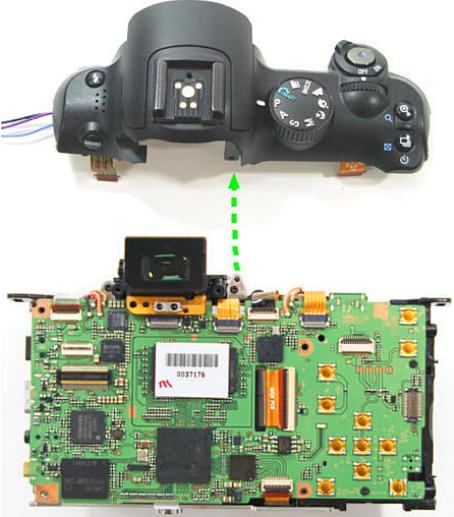
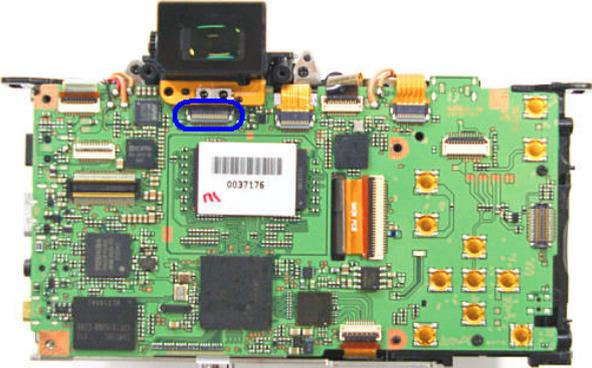
No.	Disassembly image	Disassembly description
4		<p>Remove 2 Screws.</p>
5		<p>Disassemble the EP CAP.</p>
6		<p>Remove 2 Screws.</p>

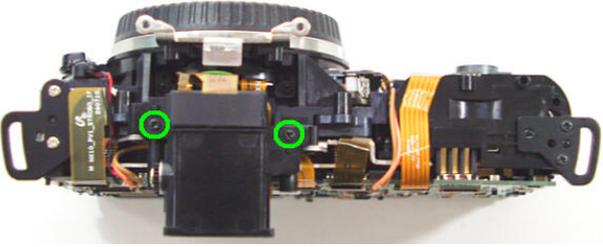
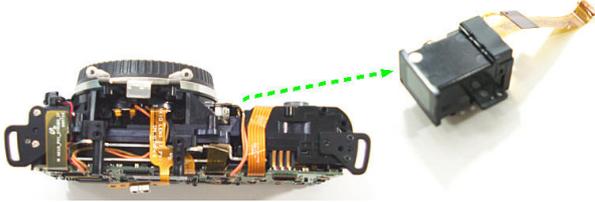
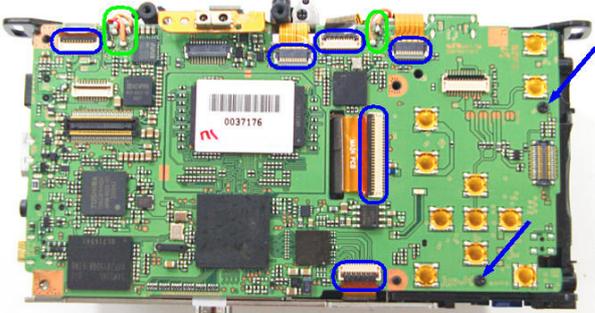
No.	Disassembly image	Disassembly description
7		<p>Disassemble the Holder EP Cap.</p>
8		<p>Remove 1 Screw.</p>
9		<p>Disassemble the Back Cover Assy.</p>

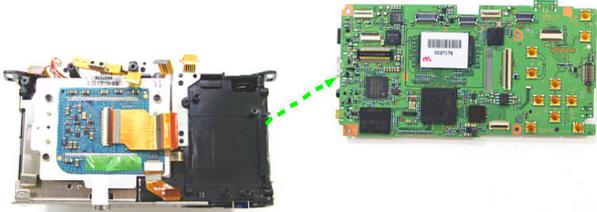
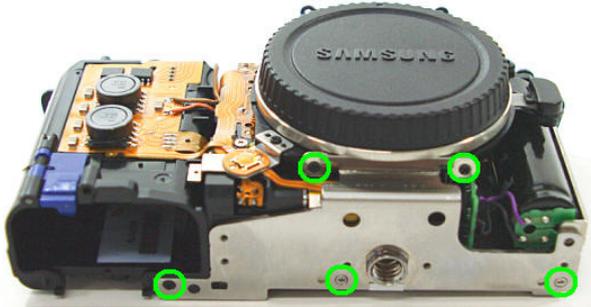
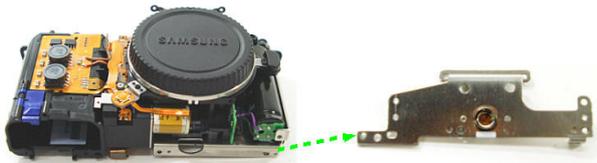
No.	Disassembly image	Disassembly description
10		<p>Disassemble the Jack Cover Assy.</p>
11		<p>Disassemble the Battery Cover Assy.</p>
12		<p>Disassemble the Front Cover Assy.</p>

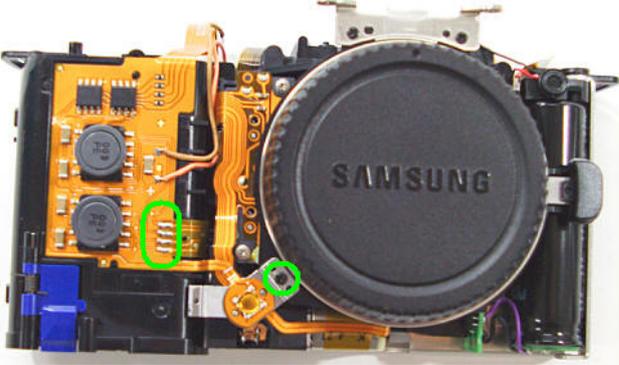
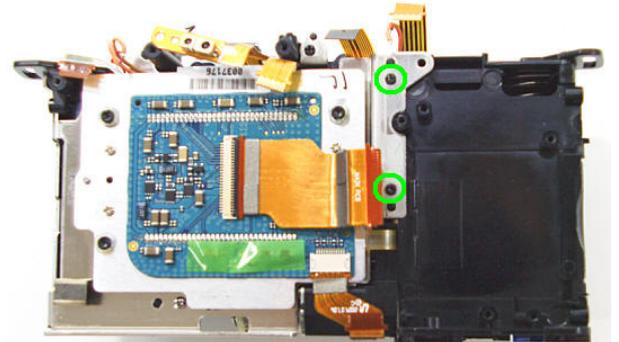
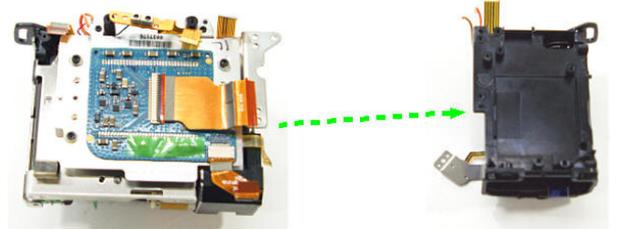
No.	Disassembly image	Disassembly description
13		<p><b>⚠ Caution</b></p> <p>It must be processed for discharge to the main condenser as shown in the below picture.</p>
14		<p>Disassemble the LCD Assy.</p>
15		<p>Remove 3 Screws.</p>

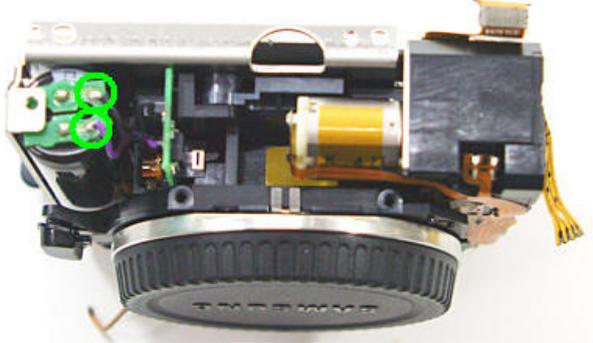
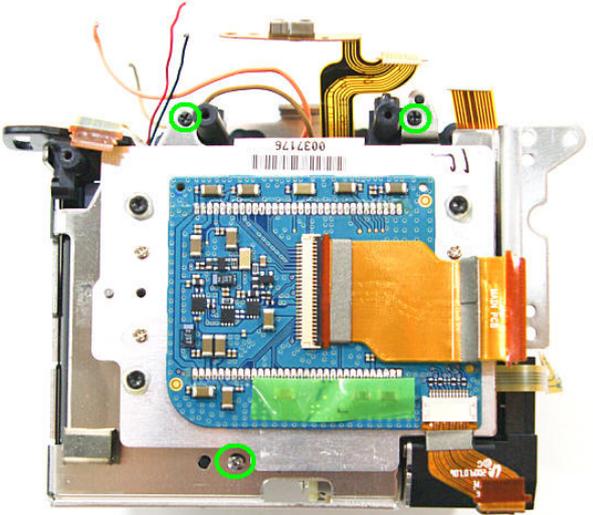
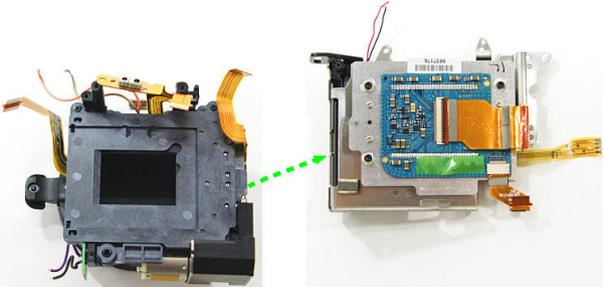
No.	Disassembly image	Disassembly description
16		<p>Disassemble the LCD Holder.</p>
17		<p>Disassemble the Connector in Main PCB.</p>
18		<p>Disassemble the Lead wire in Strobe PCB.</p>

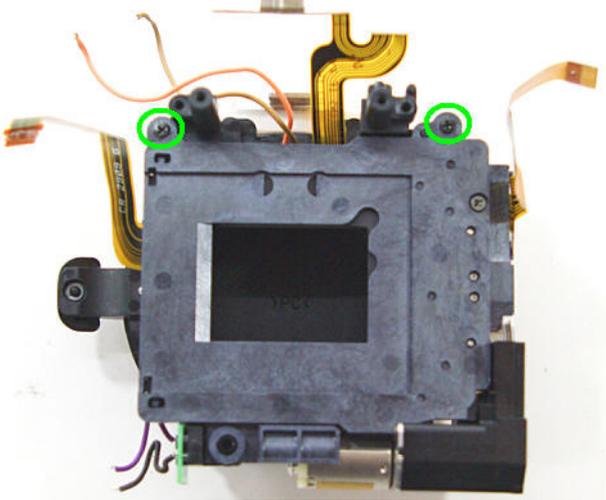
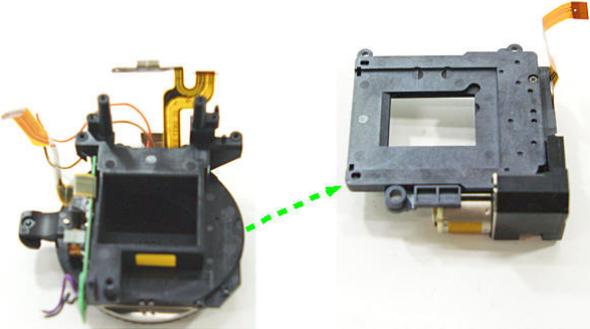
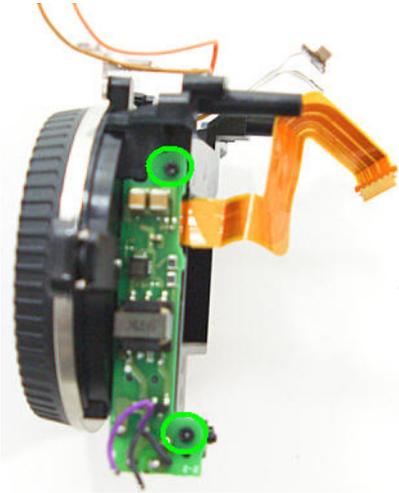
No.	Disassembly image	Disassembly description
19		<p>Remove 1 Screw.</p>
20		<p>Disassemble the Top Cover Assy.</p>
21		<p>Disassemble the Connector in Main PCB.</p>

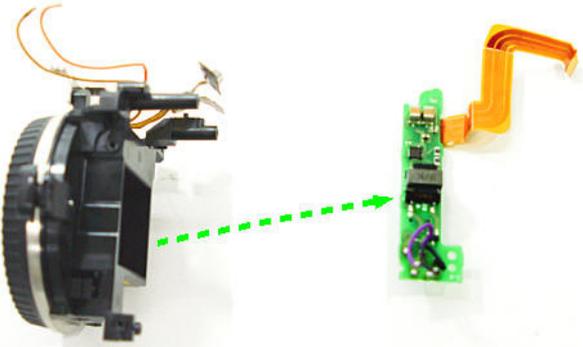
No.	Disassembly image	Disassembly description
22		Remove 2 Screws.
23		Disassemble the Finder Assy.
24		Remove 2 Screws, 2 Connectors, 6 Lead Wire in Main PCB

No.	Disassembly image	Disassembly description
25		Disassemble the Main PCB.
26		Remove 5Screws.
27		Disassemble the Bottom Plate.

No.	Disassembly image	Disassembly description
28		<p>Disassemble 1 Screw, soldering.</p>
29		<p>Remove 2Screws.</p>
30		<p>Disassemble the Battery Chamber Assy.</p>

No.	Disassembly image	Disassembly description
31		<p>Remove the 2Lead Wire.</p>
32		<p>Remove 3Screws.</p>
33		<p>Disassemble the CMOS Base Plate Assy.</p>

No.	Disassembly image	Disassembly description
34		Remove 2Screws.
35		Disassemble the Shutter Assy.
36		Remove 2Screws in Strobe PCB Assy.

No.	Disassembly image	Disassembly description
37		Disassemble the Strobe PCB Assy.