

# SERVICE MANUAL for the *Kodak EasyShare C300* DIGITAL CAMERA Service Code: 8784



## Important

Qualified service personnel must repair this equipment.



**PLEASE NOTE** The information contained herein is based on the experience and knowledge relating to the subject matter gained by Eastman Kodak Company prior to publication.

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This equipment includes parts and assemblies sensitive to damage from electrostatic discharge. Use caution to prevent damage during all service procedures.

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## Section 1: Illustrated Parts List

### Necessary Materials

#### Primary Tools:

Description	Tool or Part No.
ESD MAT	Region Provided
SCREWDRIVER - <i>Phillips</i> , No. 004 x 0 m	TL-5429
SCREWDRIVER - <i>Phillips</i> , No. 000 x 40 mm (1.57 in.)	TL-5430
SCREWDRIVER - <i>Phillips</i> , No. 2 x 40 mm (1.57 in.)	TL-5431
SCREWDRIVER - <i>Phillips</i> , No. 0 x 50 mm (1.96 in.)	TL-5432
TWEEZERS - 2	TL-1207
SOLDERING IRON - 35 W, 188 - 204° C (370 - 400° F)	TL-2818
STATION - weller soldering, 50 W, optional	TL-5412
TIP - soldering iron, standard ST1, optional	TL-5413
TIP - soldering iron, single flat ST5, optional	TL-5414
TIP - soldering iron, conical ST7, optional	TL-5415
SOLDER REMOVAL TOOL	TL-3314
FLASH CAPACITOR DISCHARGE TOOL - resistor minimum, 6.8 kΩ	TL-5337
DIGITAL VOLTMETER	TL-4114
DC POWER SUPPLY - 0 - 12 V, 2.5 A with clip leads, ez or alligator	Region Provided
IQ TEST CHART	TL-5179
<i>Loctite</i> 495 SEALANT or similar material	Region Provided
AIR HOSE - optional	Region Provided
SCREWDRIVER - <i>Milwaukee</i> , cordless, with battery and charger, optional	TL-5424
HEX ADAPTER - 0.40 mm (0.02 in.) bit, optional	TL-5421
BATTERY for a POWER SCREWDRIVER - 2.4 V, optional	TL-5422
BIT - power, 80 mm (3.14 in.), 4 mm (0.15 in.) drive, optional	TL-5423
<i>Kodak</i> LENS CLEANING PAPER	Region Provided
<i>Kodak</i> LENS CLEANER	1C8000
COVER CLEANER - <i>Johnson</i> SHINE-UP FURNITURE WAX	TL-5182
COMPUTER <ul style="list-style-type: none"> <li>• <i>IBM</i> or <i>IBM</i> compatible with a <i>Pentium</i> PROCESSOR</li> <li>• 233 MHz minimum</li> <li>• <i>Microsoft Windows</i> 98, 98 SE, 2000, MILLENNIUM EDITION or XP PROFESSIONAL OPERATING SYSTEM</li> <li>• 64 MB RAM, 128 MB RAM is recommended</li> <li>• 100 MB of space available on the HARD DISK</li> <li>• CD-ROM DRIVE</li> <li>• USB PORT</li> <li>• Color MONITOR with a minimum resolution of 800 x 600 pixels, 16-bit high color, 24-bit true color is recommended</li> <li>• Access to the INTERNET</li> </ul>	Region Provided

**Special Tools:**

Description	Tool, Part, or Catalog No.
BATTERY VOLTAGE ADJUSTMENT TOOL - battery simulator	TL-5637
DIGITAL MULTIMETER	TL-4114
USB INTERFACE CABLE for selected <i>Kodak EasyShare</i> PRODUCTS and DC SERIES DIGITAL CAMERAS	853 9249*
CAMERA NEST	TL-5846
<i>Kodak EasyShare</i> CAMERA DOCK 6000	821 0049
Kodak DOCK ADAPTER KIT D-22 ***	175 6824
<i>Kodak EasyShare</i> CAMERA DOCK SERIES 3	188 6597
<i>Kodak</i> OXY-ALKALINE DIGITAL CAMERA BATTERIES - 2	3E7101
<i>Kodak</i> Ni-MH BATTERY PACK	114 8683
<i>Kodak EasyShare</i> RAPID CHARGER for Ni-MH RECHARGEABLE BATTERY PACK	891 4012
<i>Kodak</i> SD/MMC MEMORY CARD	*
<i>Kodak</i> MULTI-CARD READER	134 2682
<i>Kodak EasyShare</i> SOFTWARE - Version 4.0 or higher	*
SERVICE SOFTWARE - "Vista for Service V4.1.0.3.zip"	**
Firmware files - "script4service(C300).zip"	**

\* This item is provided by the region.

\*\* This file is on the Kodak Partner Site.

\*\*\* See [Configurations for the CAMERA DOCK](#).

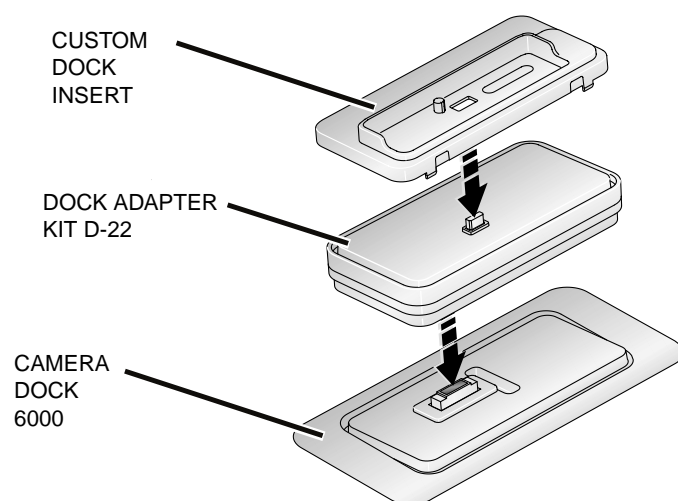
**Configurations for the CAMERA DOCK**

Figure 1

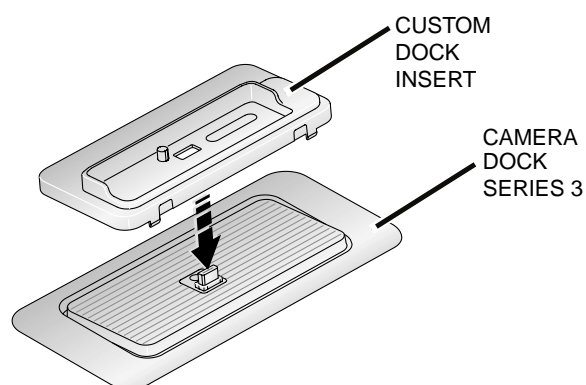


Figure 2

P252\_0075BA

**Note**

- You must use the *Kodak* DOCK ADAPTER KIT D-22 when connecting the *Kodak EasyShare* C300 DIGITAL CAMERA to the *Kodak EasyShare* CAMERA DOCK 6000.
- The *Kodak EasyShare* C300 DIGITAL CAMERA is compatible with:
  - *Kodak EasyShare* CAMERA DOCK SERIES 3
  - other 26-PIN DOCKS

## Reference Table for New CAMERAS

Use the following catalog numbers to order a replacement CAMERA if the CAMERA is under warranty and cannot be repaired, or to order a MASTER CAMERA.

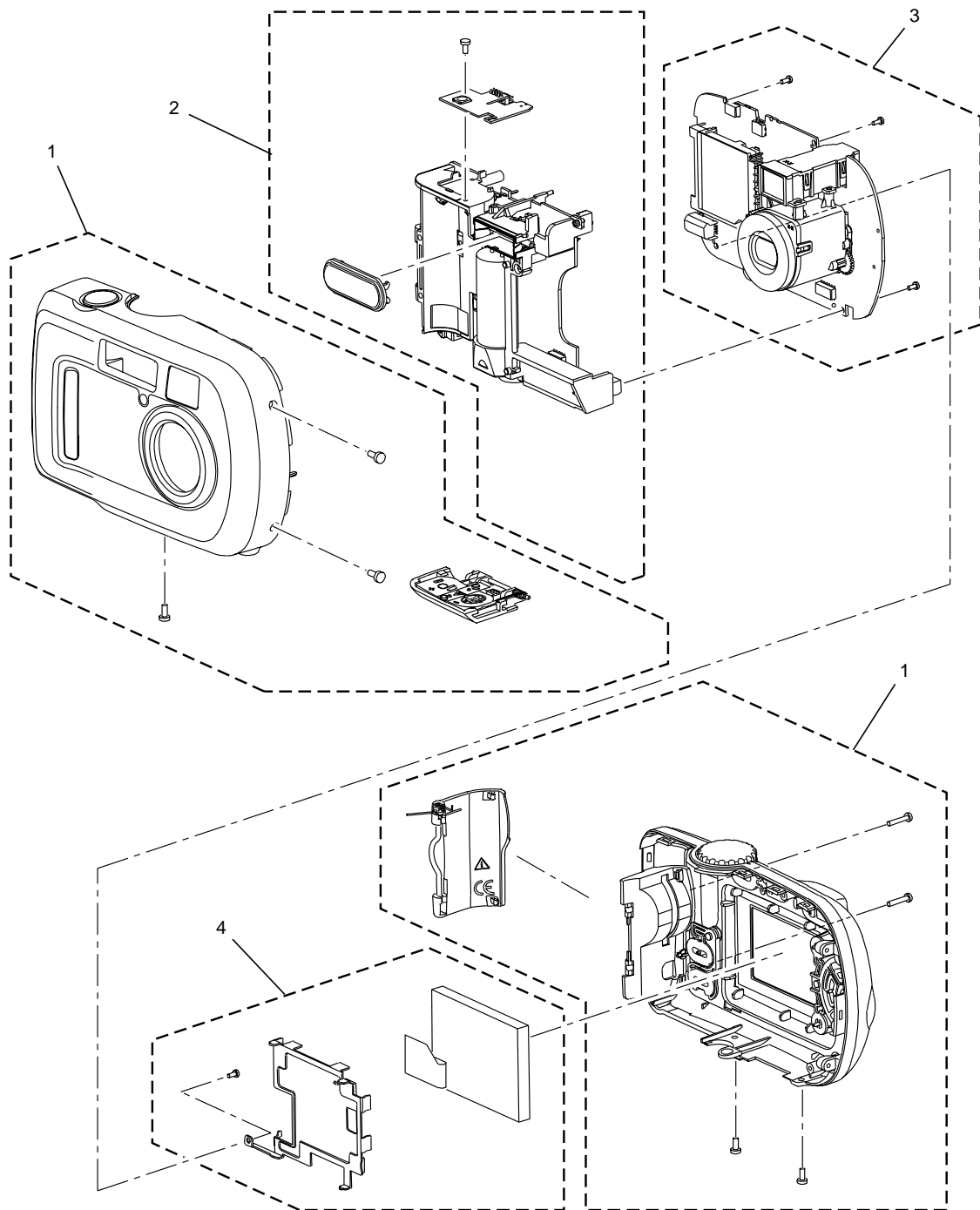
Region	Language	Catalog No.
Americas - with CHECKPOINT TAG	<ul style="list-style-type: none"> <li>English</li> <li>French</li> <li>Spanish</li> </ul>	127 1980
Americas - without CHECKPOINT TAG	<ul style="list-style-type: none"> <li>English</li> <li>French</li> <li>Spanish</li> </ul>	152 7621
Brazil	<ul style="list-style-type: none"> <li>Italian</li> <li>Portuguese</li> <li>Spanish</li> </ul>	145 4420
European, African and Middle Eastern Region	<ul style="list-style-type: none"> <li>English</li> <li>French</li> <li>German</li> </ul>	197 0912
Greater China/Taiwan	<ul style="list-style-type: none"> <li>English</li> <li>Chinese               <ul style="list-style-type: none"> <li>simplified</li> <li>traditional</li> </ul> </li> <li>Korean</li> </ul>	155 0086
Peoples Republic of China	<ul style="list-style-type: none"> <li>English</li> <li>Chinese               <ul style="list-style-type: none"> <li>simplified</li> <li>traditional</li> </ul> </li> <li>Korean</li> </ul>	846 5601
Asia Pacific/Korea	<ul style="list-style-type: none"> <li>English</li> <li>Chinese               <ul style="list-style-type: none"> <li>simplified</li> <li>traditional</li> </ul> </li> <li>Korean</li> </ul>	837 6618
Japan	Japanese	806 8843
Kodak Service & Support - class A, bulk	English	SP 147 2760
Kodak Service & Support - class A, retail	English	SP 127 1980
Kodak Service & Support - class B, bulk	English	SP 818 4020
Kodak Service & Support - class B, retail	English	SP 128 3605

## Reference Table for Adjustment Procedures

After the installation of the following component, do these procedures:

Component	Procedure
MCU BOARD AND LENS AY	<ul style="list-style-type: none"> <li><a href="#">“SHUTTER - Delay” on Page 22</a></li> <li><a href="#">CCD - White Balance on Page 23</a></li> </ul>

# Visual Index



P238\_6501ECA  
P238\_6501EC

Item	Description
1	<a href="#">"COVERS" on Page 8</a>
2	<a href="#">"POWER BOARD AND FRAME AY and TAKE BOARD" on Page 11</a>
3	<a href="#">"MCU BOARD AND LENS AY" on Page 10</a>
4	<a href="#">"MONITOR LCD" on Page 9</a>

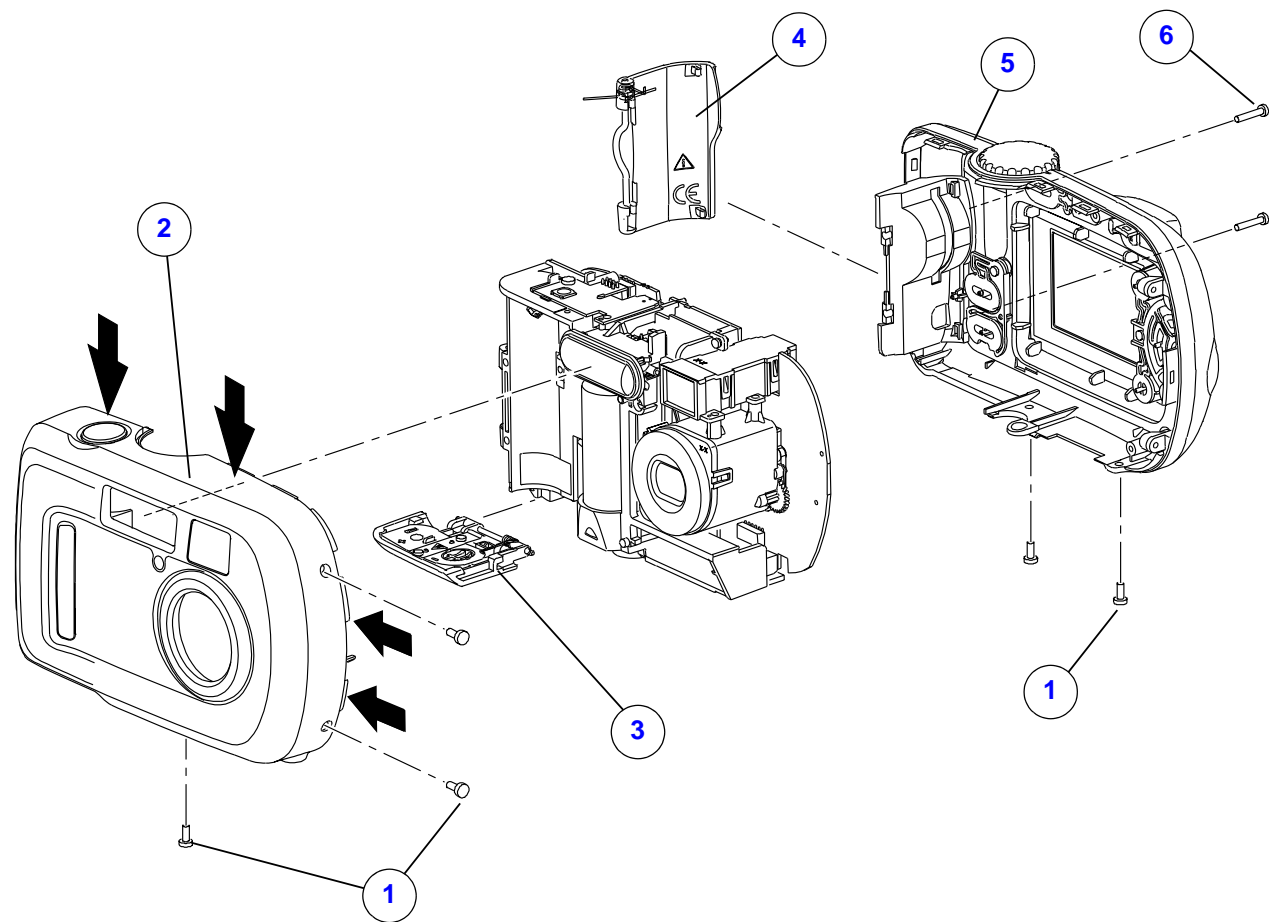
Equipment Parts



Caution

- Dangerous Voltage
- You must discharge the STROBE CAPACITOR after removing the COVERS.

Figure 1 COVERS



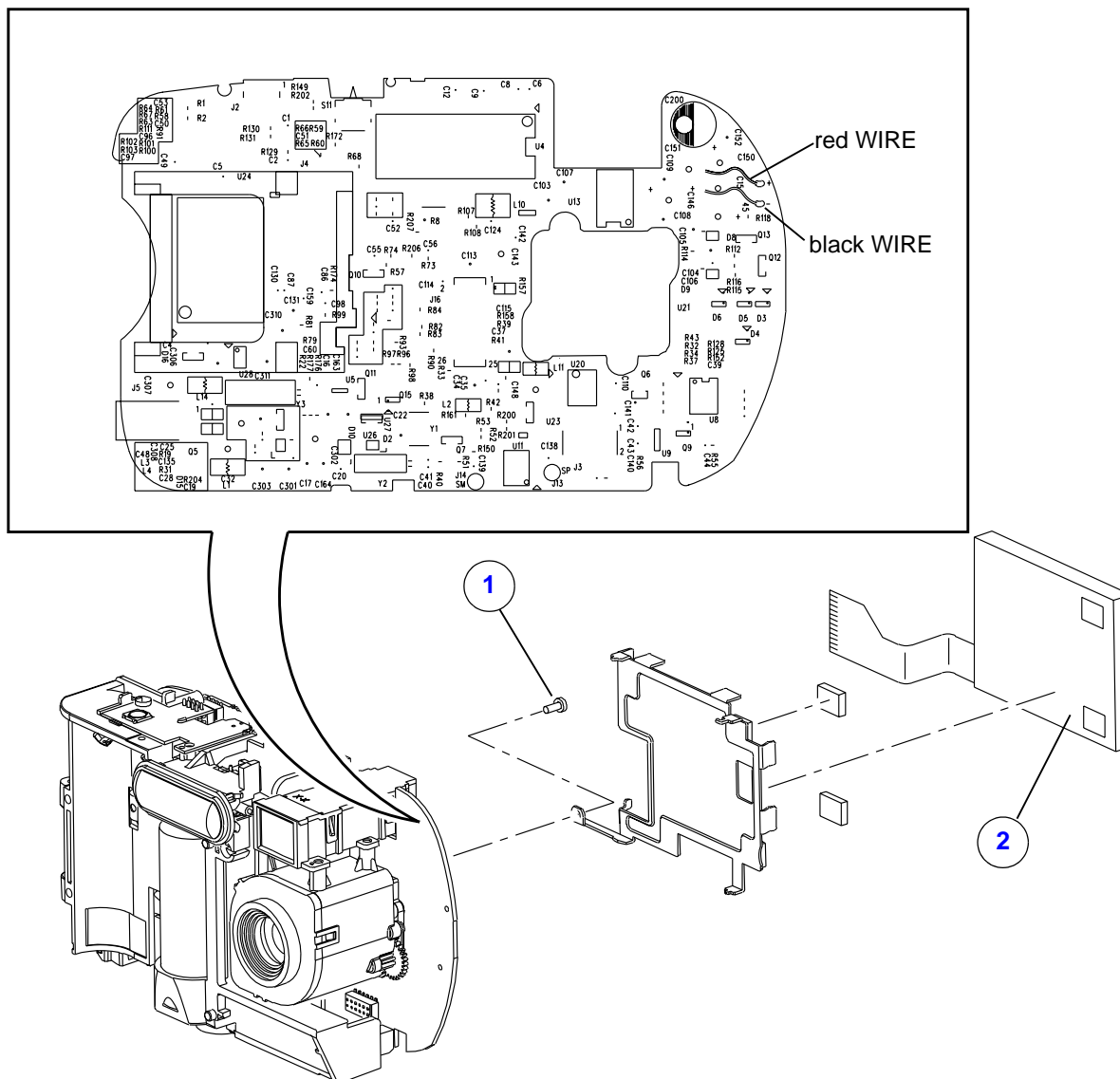
P238\_6500DCA  
P238\_6500DC

Figure 1 COVERS

Item	Part No.	Description	Quantity	Notes
1	3F2144	SCREW - tapping, 1.7 x 4.0, nickel	5	
2	3F6198	COVER - front	1	
3	3F6200	COVER - battery	1	
4	3F6197	DOOR - memory card	1	
5	3F6199	COVER - back	1	
6	3F2243	SCREW - tapping, 1.7 x 8.0, nickel	2	



Figure 2 MONITOR LCD

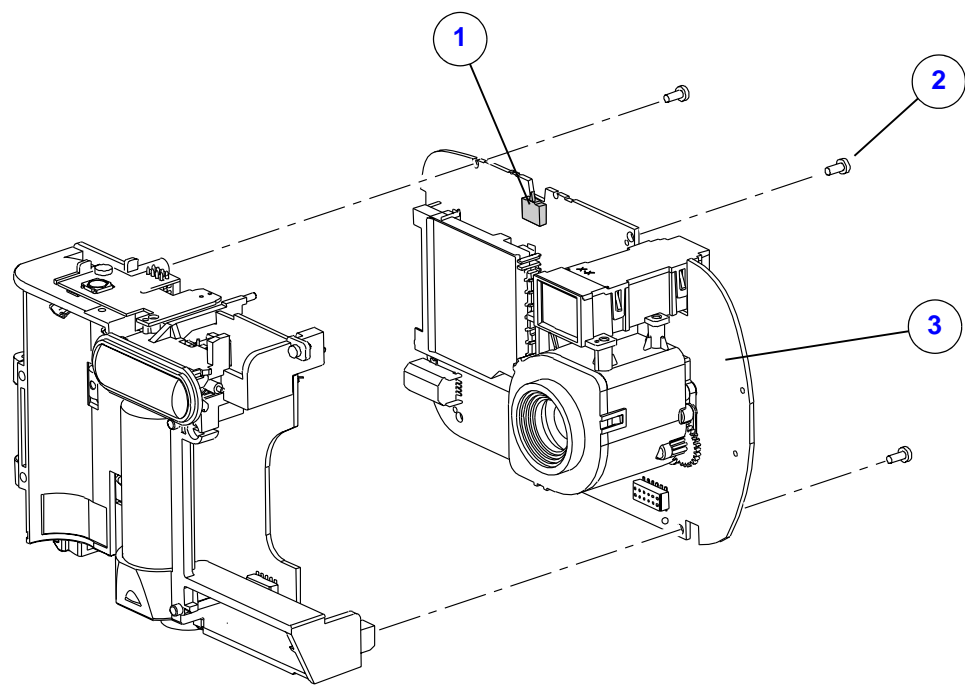


P238\_6503DCA  
P238\_6503DC

Figure 2 MONITOR LCD

Item	Part No.	Description	Quantity	Notes
1	5E8393	SCREW - tapping, 1.7 x 3.0, black	1	
2	3F2207	LCD - monitor	1	

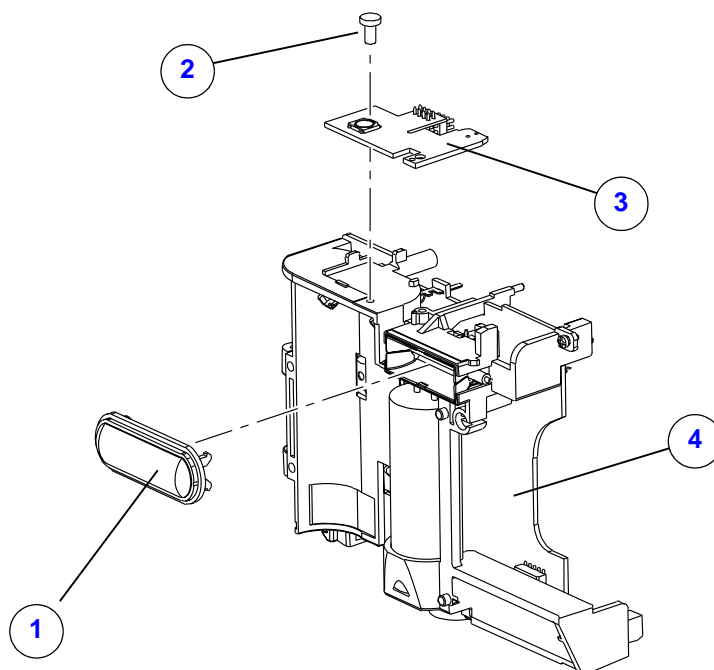
Figure 3 MCU BOARD AND LENS AY



P238\_6504HCA  
P238\_6504HC

Figure 3 MCU BOARD AND LENS AY

Item	Part No.	Description	Quantity	Notes
1	3F2148	SWITCH - detector, 3 position	1	
2	5E8393	SCREW - tapping, 1.7 x 3.0, black	3	
3	3F6201	MCU BOARD AND LENS AY	1	

**Figure 4 POWER BOARD AND FRAME AY and TAKE BOARD**

P238\_6502DCA  
P229\_6502DC

**Figure 4 POWER BOARD AND FRAME AY and TAKE BOARD**

Item	Part No.	Description	Quantity	Notes
<b>1</b>	3F2244	WINDOW - flash	1	
<b>2</b>	5E8393	SCREW - tapping, 1.7 x 3.0, black	3	
<b>3</b>	3F6202	BOARD - take	1	
<b>4</b>	3F6203	POWER BOARD AND FRAME AY	1	
-----	3F2252	SWITCH - detector, 2 position	1	Not visible in the graphic. Located on the TAKE BOARD - see <a href="#">"TAKE BOARD" on Page 43.</a>
-----	3F6204	FUSE - 1.25 A, F4	1	Not visible in the graphic. Located on the POWER BOARD - see <a href="#">"POWER BOARD" on Page 42.</a>
-----	3F6205	FUSE - 2.50 A, F1, F2, F3	3	Not visible in the graphic. Located on the POWER BOARD - see <a href="#">"POWER BOARD" on Page 42.</a>

## Section 2: Alphabetical Index

### Alphabetical Index

Part No.	Description	Figure No.
3F6202	BOARD - take	<a href="#">4</a>
3F6199	COVER - back	<a href="#">1</a>
3F6200	COVER - battery	<a href="#">1</a>
3F6198	COVER - front	<a href="#">1</a>
3F6197	DOOR - memory card	<a href="#">1</a>
3F6204	FUSE - 1.25 A, F4	<a href="#">4</a>
3F6205	FUSE - 2.50 A, F1, F2, F3	<a href="#">4</a>
3F2207	LCD - monitor	<a href="#">2</a>
3F6201	MCU BOARD AND LENS AY	<a href="#">3</a>
3F6203	POWER BOARD AND FRAME AY	<a href="#">4</a>
5E8393	SCREW - tapping, 1.7 x 3.0, black	<a href="#">2, 3, 4</a>
3F2144	SCREW - tapping, 1.7 x 4.0, nickel	<a href="#">1</a>
3F2243	SCREW - tapping, 1.7 x 8.0, nickel	<a href="#">1</a>
3F2252	SWITCH - detector, 2 position	<a href="#">4</a>
3F2148	SWITCH - detector, 3 position	<a href="#">3</a>
3F2244	WINDOW - flash	<a href="#">4</a>

## Section 3: Diagnostics

### Error Codes

#### E00

Description	Recommended Action
A communication error occurred between the MAIN CPU and the 8-BIT MCU.	<ul style="list-style-type: none"><li>• Do <a href="#">“Upgrading the Firmware Using the MEMORY CARD” on Page 28.</a></li><li>• Install a new MCU BOARD AND LENS AY.</li></ul>

#### E20

Description	Recommended Action
A failure occurred when writing to the NAND FLASH.	<ul style="list-style-type: none"><li>• Do <a href="#">“Upgrading the Firmware Using the MEMORY CARD” on Page 28.</a></li><li>• Install a new MCU BOARD AND LENS AY.</li></ul>

## Diagnostic Tests

### Checking for Low Voltage



#### Important

The BATTERY VOLTAGE ADJUSTMENT TOOL does not have a 2.50 V input. You must use the 2.6 V input.

[1] Connect the DIGITAL MULTIMETER to the BATTERY VOLTAGE ADJUSTMENT TOOL:

Color of Wire	DIGITAL MULTIMETER	BATTERY VOLTAGE ADJUSTMENT TOOL
red	“+”	“2.5 V”
black	“Ground”	“Ground”

[2] Energize the DIGITAL MULTIMETER.

[3] Set the voltage on the DIGITAL MULTIMETER to 2.5 V.

[4] Install the CAMERA on the BATTERY VOLTAGE ADJUSTMENT TOOL.

[5] Set the SWITCHES on the BATTERY VOLTAGE ADJUSTMENT TOOL to:

- “2.5 V”
- “ON”

[6] Energize the CAMERA.

[7] Press the FLASH/STATUS BUTTON continually until the MONITOR LCD displays “FILL FLASH”.

[8] Press the SHUTTER BUTTON.

[9] Check:

- FLASH energizes
- image displays correctly
- MONITOR LCD displays the low BATTERY icon



#### Note

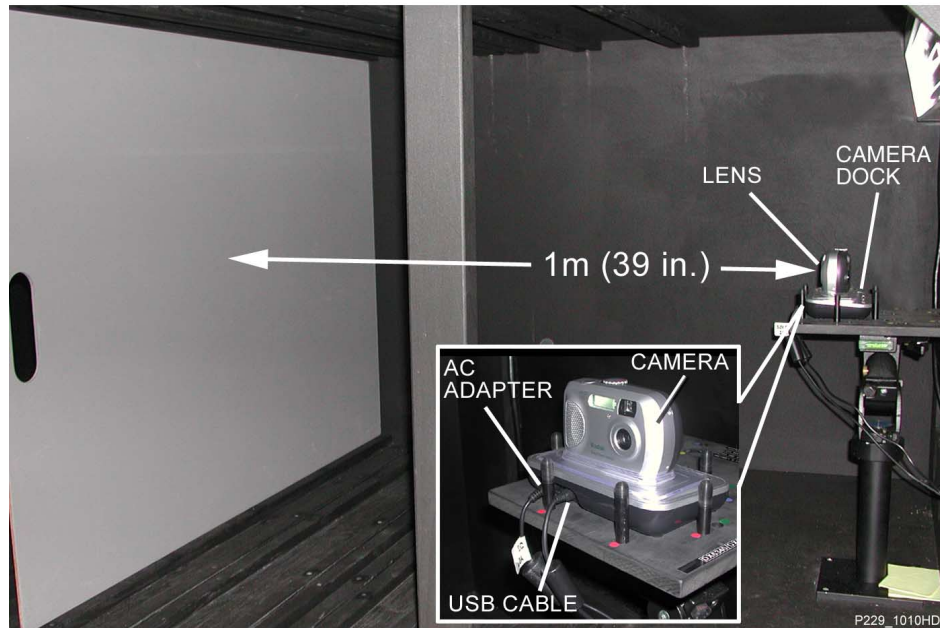
The results are not within specification if any of the following occurs:

- READY LIGHT next to the VIEWFINDER blinks red
- BATTERY icon blinks
- MONITOR LCD displays an error code

[10] Delete the image.

[11] De-energize the CAMERA.

## Checking for Uniform Flash



### Important

- A dark room or the GEN 2 CUSTOM TEST FIXTURE can be used.
- The distance is measured from the surface of the TARGET to the front of the LENS.

[1] If using:

Dark Room	GEN 2 CUSTOM TEST FIXTURE with Controlled Light
Place the TARGET 1 m (39.4 in.) from the front surface of the CAMERA.	Place the TARGET in SLOT 5.

[2] Install the CAMERA and the CAMERA DOCK on the CAMERA NEST.

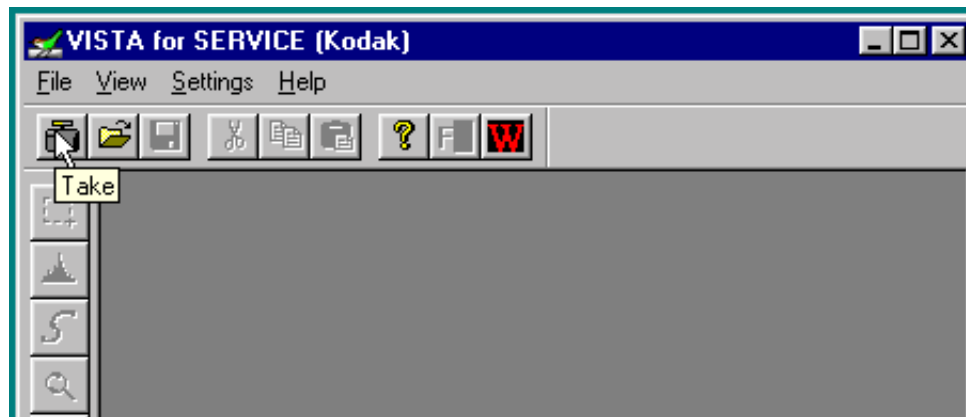
[3] Connect to the CAMERA DOCK:

- AC ADAPTER
- USB CABLE

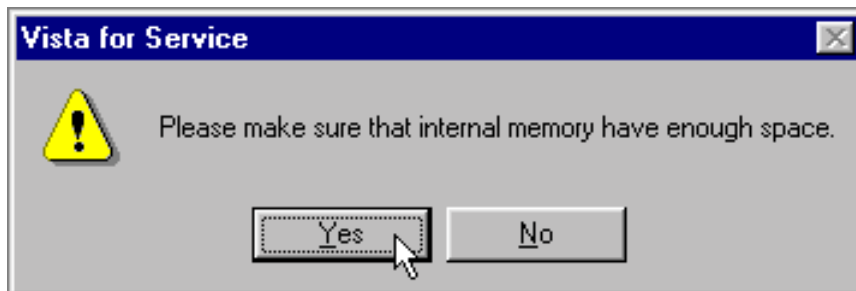
[4] Double-click the “Vista for Service” icon on the computer.

[5] If the MONITOR LCD displays “Date and time have been reset”, select “CANCEL”.

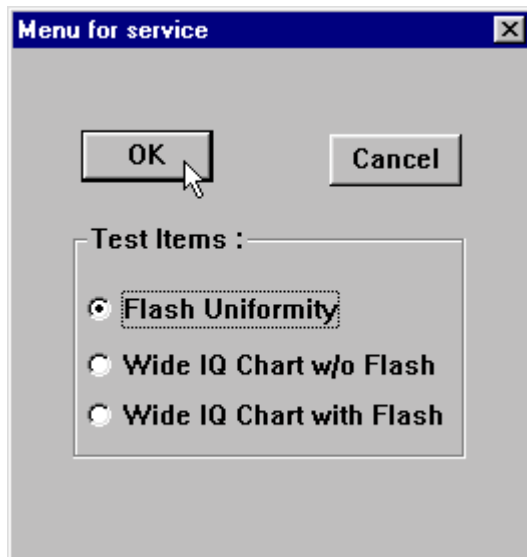
[6] Press the [Transfer] BUTTON on the CAMERA DOCK.



[7] Click the “Take” icon in the service software.

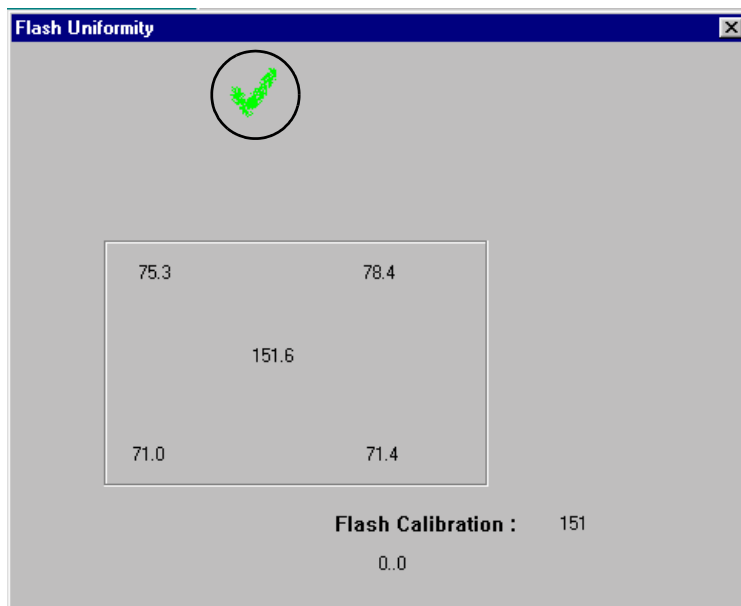


[8] Click [Yes].



[9] Select "Flash Uniformity".

[10] Click [OK].



[11] Check the mark on the computer screen.

Green "✓"	Red "X"
The test was successful.	A failure occurred.

[12] Close the "Flash Uniformity" window.



## Checking the Power-On Self-Test

- [1] Do [Making the “C300\\_Self\\_Test” MEMORY CARD on Page 26](#).
- [2] Do either of the following:
- Install the CAMERA on the CAMERA DOCK.
  - Insert the BATTERIES in the CAMERA.
- [3] Insert the “C300\_Self\_Test” MEMORY CARD into the CAMERA.
- [4] Energize the CAMERA to execute the test.
- [5] If the MONITOR LCD displays “Date and time have been reset”, click [CANCEL].
- [6] For each test displaying on the MONITOR LCD, check for the following:

Test	Check:
“F/W: n.nnnn”	version of firmware
“RGB Level Checking...”	quality of the 6 colors
“Gray Level Checking...”	quality of the 6 gray areas
“LEDs On/Off testing”	<ul style="list-style-type: none"> <li>• green LED on the front of the CAMERA illuminates</li> <li>• red and green LEDs on the back of the CAMERA illuminate</li> </ul>
“LCD On/Off testing”	MONITOR LCD blinks
“Strobe testing”	STROBE energizes once
“SDRAM testing”	<ul style="list-style-type: none"> <li>• “SDRAM OK”</li> <li>• “IDRAM OK”</li> <li>• “SD Card OK”</li> <li>• “NAND Flash OK”</li> </ul>
“IDRAM testing”	
“SD card testing”	
“NAND flash testing”	
“Temperature checking...”	message “OK”
“LCD Bad pixel testing”	MONITOR LCD for: <ul style="list-style-type: none"> <li>• dark pixels in the white screen</li> <li>• white pixels in the dark screen</li> </ul>

- [7] When the test is completed, de-energize the CAMERA.
- [8] Remove the “C300\_Self\_Test” MEMORY CARD.

## Checkout Procedures

---

### Checking the General Functions of the CAMERA



#### Important

Do these procedures before you return the CAMERA to the customer.

- [1] Remove the BATTERY from the CAMERA.
- [2] Install the CAMERA on the CAMERA DOCK.
- [3] Check that the READY LIGHT LED on the CAMERA DOCK illuminates green.
- [4] Remove the CAMERA from the CAMERA DOCK.
- [5] Install:
  - CRV3 BATTERY into the CAMERA
  - CAMERA on the CAMERA DOCK
- [6] Check:
  - READY LIGHT LED on the CAMERA DOCK illuminates green
  - STATUS LEDs on the CAMERA DOCK do not illuminate
- [7] Remove:
  - CAMERA from the CAMERA DOCK
  - BATTERY from the CAMERA
- [8] Insert a MEMORY CARD into the CAMERA.
- [9] Install the CAMERA on the CAMERA DOCK.
- [10] Rotate the MODE DIAL on the CAMERA to the “AUTO” position.
- [11] Check the energizing sequence.
  - (a) The green LED on the CAMERA DOCK illuminates.
  - (b) The READY LIGHT LED on the CAMERA:
    - blinks green during the energizing sequence
    - remains illuminated green after the energizing sequence
  - (c) No error code displays on the MONITOR LCD.
- [12] De-energize the CAMERA.
- [13] Remove the CAMERA from the CAMERA DOCK.
- [14] Install a new BATTERY or BATTERY PACK that has a full charge.
- [15] Rotate the MODE DIAL on the CAMERA to the “AUTO” position.
- [16] Check the energizing sequence.
  - (a) The READY LIGHT LED on the CAMERA:
    - blinks green during the energizing sequence
    - remains illuminated green after the energizing sequence
  - (b) No error code displays on the MONITOR LCD.

**[17]** Check:

BUTTON	Do:
<ul style="list-style-type: none"> <li>• “menu”</li> <li>• UP CONTROLLER</li> <li>• DOWN CONTROLLER</li> <li>• “OK”</li> <li>• SHUTTER</li> </ul>	<ol style="list-style-type: none"> <li>1. Press the “menu” BUTTON.</li> <li>2. Check that the MONITOR LCD illuminates.</li> <li>3. Press the following to move through the menu: <ul style="list-style-type: none"> <li>• UP CONTROLLER BUTTON</li> <li>• DOWN CONTROLLER BUTTON</li> </ul> </li> <li>4. Press: <ul style="list-style-type: none"> <li>• “OK” BUTTON to view the options</li> <li>• “OK” BUTTON again to return to the preceding screen</li> <li>• “menu” BUTTON</li> <li>• “OK” BUTTON again</li> </ul> </li> <li>5. Check that the MONITOR LCD displays the “liveview” mode.</li> <li>6. Press the SHUTTER BUTTON.</li> <li>7. Check that the MONITOR LCD displays the captured image.</li> </ol>
<ul style="list-style-type: none"> <li>• “review”</li> <li>• LEFT CONTROLLER</li> <li>• RIGHT CONTROLLER</li> <li>• “share”</li> </ul>	<ol style="list-style-type: none"> <li>1. Press the “review” BUTTON.</li> <li>2. Check that the MONITOR LCD displays an image.</li> <li>3. Press: <ul style="list-style-type: none"> <li>• LEFT CONTROLLER BUTTON</li> <li>• RIGHT CONTROLLER BUTTON</li> </ul> </li> <li>4. Check that the images displayed on the MONITOR LCD change.</li> <li>5. Press the “share” BUTTON.</li> <li>6. Check that the options display.</li> <li>7. Press: <ul style="list-style-type: none"> <li>• “share” BUTTON again</li> <li>• “review” BUTTON</li> </ul> </li> <li>8. Check that the MONITOR LCD de-energizes.</li> <li>9. Press: <ul style="list-style-type: none"> <li>• “review” BUTTON again</li> <li>• SHUTTER BUTTON</li> </ul> </li> <li>10. Check that the MONITOR LCD displays the captured image.</li> </ol>
FLASH	<ol style="list-style-type: none"> <li>1. Press the FLASH BUTTON.</li> <li>2. Check that the MONITOR LCD: <ul style="list-style-type: none"> <li>• illuminates</li> <li>• de-energizes after 5 seconds</li> </ul> </li> <li>3. Press the FLASH BUTTON continually.</li> <li>4. Check that the MONITOR LCD displays: <ul style="list-style-type: none"> <li>• “AUTO FLASH”</li> <li>• “FLASH OFF”</li> <li>• “FILL FLASH”</li> <li>• “RED EYE”</li> </ul> </li> <li>5. Press the SHUTTER BUTTON.</li> <li>6. Check that the MONITOR LCD displays the captured image.</li> </ol>

BUTTON	Do:
SHUTTER	<ol style="list-style-type: none"> <li>1. Press the SHUTTER BUTTON.</li> <li>2. Check: <ul style="list-style-type: none"> <li>• green LED blinks once before the CAMERA captures the image</li> <li>• green LED blinks during the time the CAMERA stores the image</li> </ul> </li> </ol>
"delete"	<ol style="list-style-type: none"> <li>1. Press: <ul style="list-style-type: none"> <li>• "review" BUTTON</li> <li>• "delete" BUTTON</li> </ul> </li> <li>2. Check that options display.</li> <li>3. Press: <ul style="list-style-type: none"> <li>• "OK" BUTTON to select the option "EXIT"</li> <li>• "review" BUTTON</li> <li>• "review" BUTTON again</li> <li>• "delete" BUTTON</li> <li>• SHUTTER BUTTON</li> </ul> </li> <li>4. Check that the image is not deleted.</li> <li>5. Press: <ul style="list-style-type: none"> <li>• "review" BUTTON</li> <li>• "delete" BUTTON</li> </ul> </li> <li>6. Select "PICTURE".</li> <li>7. Press the "OK" BUTTON.</li> <li>8. Check that the image is deleted.</li> <li>9. Press: <ul style="list-style-type: none"> <li>• "OK" BUTTON</li> <li>• "review" BUTTON</li> </ul> </li> </ol>

**[18]** Press the "OK" BUTTON to start the "Liveview" mode.

**[19]** Press and hold the RIGHT CONTROLLER BUTTON to start the "Zoom" mode.

**[20]** Check that the magnification of the image on the MONITOR LCD increases.

**[21]** Press and hold the LEFT CONTROLLER BUTTON.

**[22]** Check that the magnification of the image on the MONITOR LCD decreases.

**[23]** Press:

- "OK" BUTTON to exit the "Liveview" mode
- SHUTTER BUTTON to capture an image

**[24]** Check that the following display on the MONITOR LCD:

- image
- mode of the FLASH icon
- image quality icon
- internal memory or MEMORY CARD icon
- number of remaining images that can be captured

## Checking the ACTUATION, FLASH, and POWER-ON COUNTERS

- [1] Energize the CAMERA.
- [2] Press the "menu" BUTTON.
- [3] Select "SETUP MENU".
- [4] Press the "OK" BUTTON.
- [5] Select "ABOUT...".
- [6] Press the "OK" BUTTON.
- [7] At the same time, press:
  - left CONTROLLER BUTTON
  - "delete" BUTTON
- [8] Press the top CONTROLLER BUTTON.
- [9] Record the information for the COUNTERS in the FEEDBACK SOFTWARE.

COUNTERS on the CAMERA	Description on the FEEDBACK SOFTWARE
ID	"ID of production Serial Number"
BV	"Boot code Version"
MV	"Micro processor code Version"
CS	"Actuation"
CF	"Flash"
CP	"Power On"

- [10] Press the "OK" BUTTON.

## Checking the External Components of the CAMERA

- [1] Check the COVERS for scratches.
- [2] If necessary, install new COVERS.
- [3] Clean:
  - COVERS
  - SCREEN on the MONITOR LCD
  - VIEWFINDER
  - FLASH WINDOW
  - LENS
- [4] Check the LENS for damage.

## Section 4: Adjustments

### SHUTTER - Delay

#### Adjustment Specification

<b>Purpose:</b>	To adjust the delay of the SHUTTER.
<b>Do When:</b>	After installing a new MCU BOARD AND LENS AY.
<b>Specification:</b>	MONITOR LCD displays the message "Shutter Calibrate OK!".
<b>Special Tools:</b>	<ul style="list-style-type: none"> <li>• "C300_Shutter_Delay" MEMORY CARD</li> <li>• LIGHT BOX - Arrowin LBF, 2001</li> <li>• BATTERIES - 2 OXY-ALKALINE or 1 Ni-MH BATTERY PACK, for the CAMERA</li> </ul>

#### Prerequisites:

None

#### To Check:

You cannot check this adjustment.

#### To Adjust:



#### Important

Do not use the CAMERA DOCK for this procedure.

[1] Do ["Making the MEMORY CARDS for Service" on Page 26](#).

[2] Insert in the CAMERA:

- 2 OXY-ALKALINE BATTERIES or 1 Ni-MH BATTERY PACK
- "C300\_Shutter\_Delay" MEMORY CARD



#### Important

The LENS must be 3 mm (0.1 in.) from the LIGHT BOX.

[3] Place the CAMERA to the front of the LIGHT BOX.

[4] Set the LIGHT BOX to LV15.

[5] Energize the CAMERA to execute the test.

[6] If the MONITOR LCD displays "Date and time have been reset", select "CANCEL".

[7] Check that the MONITOR LCD displays "Shutter Calibrate OK!".

[8] When the test is complete, de-energize the CAMERA.

[9] Remove the "C300\_Shutter\_Delay" MEMORY CARD.

#### Postrequisites:

None

## CCD - White Balance

### Adjustment Specification

<b>Purpose:</b>	To measure and store values for color correction.
<b>Do When:</b>	<ul style="list-style-type: none"> <li>• The color of the images is not correct.</li> <li>• After installing a new MCU BOARD AND LENS AY.</li> </ul>
<b>Specification:</b>	MONITOR LCD displays the message "Store bad pixel rec...Calibration OK".
<b>Special Tools:</b>	<ul style="list-style-type: none"> <li>• "C300_AWB_ISO" MEMORY CARD</li> <li>• LIGHT BOX - <i>Arrowin</i> LBF, 2001</li> <li>• BATTERIES - 2 OXY-ALKALINE or 1 Ni-MH BATTERY PACK, for the CAMERA</li> </ul>

### Prerequisites:

None

### To Check:

You cannot check this adjustment.

### To Adjust:



#### Important

Do not use the CAMERA DOCK for this procedure.

- [1] Do ["Making the MEMORY CARDS for Service" on Page 26](#).
- [2] Insert the "C300\_AWB\_ISO" MEMORY CARD into the CAMERA.
- [3] Set the LIGHT BOX to LV10.



#### Important

The CAMERA must be 3 mm (0.1 in.) from the LIGHT BOX.

- [4] Place the CAMERA to the front of the LIGHT BOX.
- [5] Energize the CAMERA to execute the test.
- [6] If the MONITOR LCD displays "Date and time have been reset", select [CANCEL].
- [7] Check that the message "Store bad pixel rec...Calibration OK" displays on the MONITOR LCD.
- [8] De-energize the CAMERA.
- [9] Remove the "C300\_AWB\_ISO" MEMORY CARD.

### Postrequisites:

None

## Section 5: Replacements

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### Important

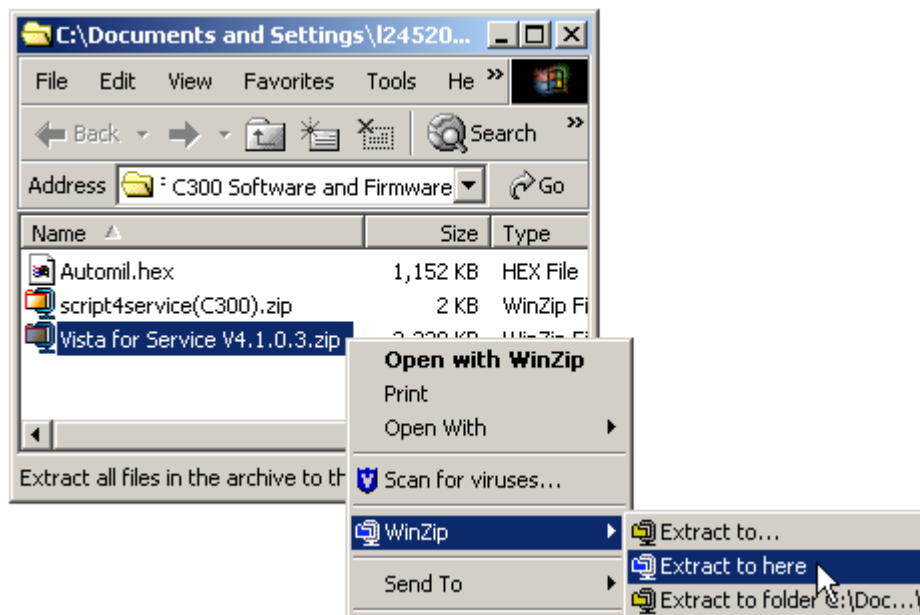
See [“Equipment Parts” on Page 8](#).



## Section 6: Additional Service Procedures

### Installing the *Altek* VISTA SERVICE SOFTWARE on the Computer

- [1] From the Kodak Partner Site, download the software and firmware files for the *Kodak EasyShare C300* DIGITAL CAMERA.



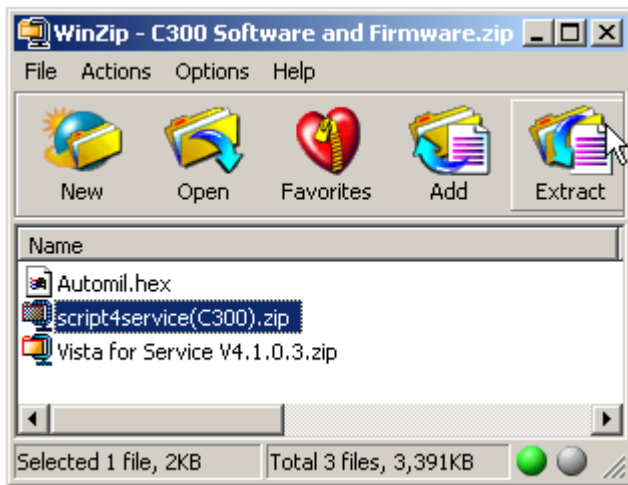
- [2] Right-click the “Vista For Service V4.1.0.3.zip” file.
- [3] Select **Winzip >Extract to here**.
- [4] Open the folders:
- “Vista for Service V4.1.0.3”
  - “Setup”
- [5] Double-click the file “Setup.exe”.
- [6] Do the instructions that appear on the screen.

#### **Note**

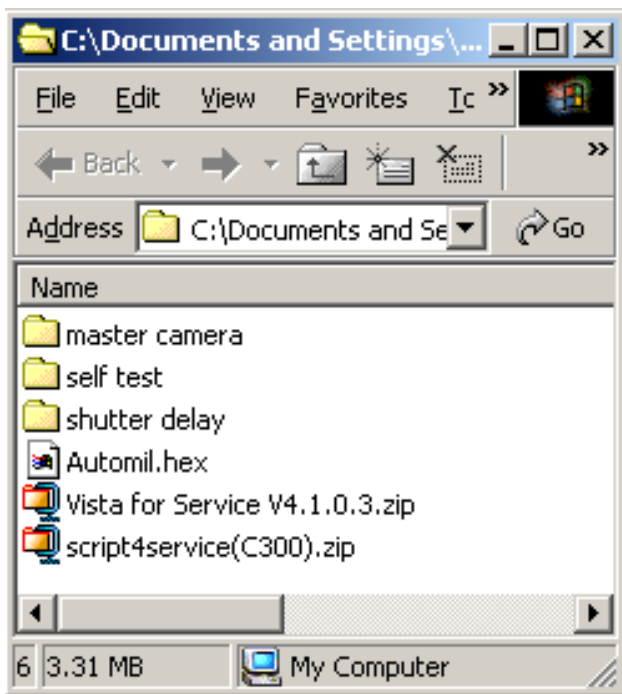
The “Vista for Service” icon is now available on the computer.

## Making the MEMORY CARDS for Service

### Downloading the Files from the Partner Site



- [1] If necessary, from the Kodak Partner Site download the software and firmware files for the *Kodak EasyShare C300 DIGITAL CAMERA*.
- [2] Select the "script4service(C300).zip" file.
- [3] Click [Extract].
- [4] Select a folder.
- [5] Click [Extract] again.



- [6] Check that 3 new folders were written:
  - "master camera"
  - "self test"
  - "shutter delay"

#### Note

These folders have files that you will use to make the following 3 MEMORY CARDS for service:

- "C300\_Self\_Test"
- "C300\_Shutter\_Delay"
- "C300\_AWB\_ISO"

### Making the "C300\_Self\_Test" MEMORY CARD

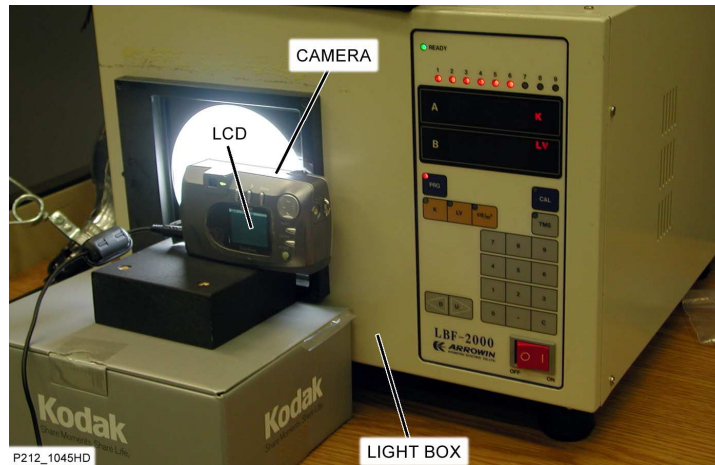
- [1] Double-click the "self test" folder.
- [2] Make a copy of the "autoexe.dsc" file to a blank MEMORY CARD.
- [3] Label the MEMORY CARD "C300\_Self\_Test".

### Making the "C300\_Shutter\_Delay" MEMORY CARD

- [1] Double-click the "shutter delay" folder.
- [2] Make a copy of the "autoexe.dsc" file to a blank MEMORY CARD.
- [3] Label the MEMORY CARD "C300\_Shutter\_Delay".

## Making the “C300\_AWB\_ISO” MEMORY CARD

- [1] Double-click the “master camera” folder.
- [2] Make a copy of the following files to a blank MEMORY CARD:
  - “AUTOEXE.DSC”
  - “wipocali.dsc”
- [3] Label the MEMORY CARD “C300\_AWB\_ISO”.
- [4] Obtain a MASTER CAMERA.
- [5] Insert new BATTERIES or a BATTERY PACK with a full charge into the CAMERA.
- [6] Insert the “C300\_AWB\_ISO” MEMORY CARD into the CAMERA.



- [7] Set the CAMERA in front of the LIGHT BOX:
  - 3 mm (0.1 in.) from the LIGHT BOX
  - center of the LENS at the center of the light
- [8] Set the LIGHT BOX to LV10.
- [9] Energize the CAMERA to execute the test.
- [10] If the MONITOR LCD displays “Date and time have been reset”, select “CANCEL”.
- [11] When the test is completed, check that the MONITOR LCD displays “OK Light Box Cali”.
- [12] De-energize the CAMERA.
- [13] Remove the MEMORY CARD.
- [14] Check that the following files were written on the MEMORY CARD:
  - “AUTOEXE.DSC”
  - “lamplv.inf”
  - “lampwp.inf”
  - “lampcali.dsc”

## Upgrading the Firmware Using the MEMORY CARD

- [1] Insert a blank MEMORY CARD into the MULTI-CARD READER.
- [2] Use the computer to format the MEMORY CARD.
- [3] Make:
  - folder on the MEMORY CARD with the name "System"
  - copy of the new "KC300.fw" file
- [4] Place the new "KC300.fw" file in the "System" folder on the MEMORY CARD.
- [5] Remove the MEMORY CARD from the MULTI-CARD READER.
- [6] Insert the MEMORY CARD into the CAMERA.
- [7] Are you using the CAMERA DOCK to energize the CAMERA?

Yes	No
a. Connect the AC ADAPTER. b. Check that the CAMERA DOCK is not connected to the computer. c. Insert the CAMERA into the CAMERA DOCK. d. Energize the CAMERA.	a. Insert new BATTERIES or a BATTERY PACK with a full charge into the CAMERA. b. Check that the CAMERA is not connected to the computer. c. Energize the CAMERA.

- [8] Select:
  - "UPGRADE"
  - "CONTINUE"
- [9] When the upgrade is complete, select "Exit".
- [10] Remove the MEMORY CARD.
- [11] De-energize the CAMERA.
- [12] Energize the CAMERA.
- [13] Press the "menu" BUTTON.
- [14] Select "SETUP MENU".
- [15] Press the "OK" BUTTON.
- [16] Select "ABOUT...".
- [17] Press the "OK" BUTTON.
- [18] Check:
  - correct firmware version displays on the MONITOR LCD
  - CAMERA operates correctly

## Upgrading the Firmware Using the Internal Memory

[1] Remove the MEMORY CARD from the CAMERA.

[2] Are you using the CAMERA DOCK or BATTERIES to energize the CAMERA?

CAMERA DOCK	BATTERIES
a. Connect: <ul style="list-style-type: none"> <li>• CAMERA DOCK to the computer using the USB CABLE</li> <li>• AC ADAPTER</li> </ul> b. Insert the CAMERA into the CAMERA DOCK.           c. Energize the CAMERA.           d. Press the TRANSFER BUTTON on the CAMERA DOCK.	a. Insert new BATTERIES or a BATTERY PACK with a full charge into the CAMERA.           b. Connect the CAMERA to the computer using the USB CABLE.           c. Energize the CAMERA.

[3] Double-click:

- "My Computer"
- corresponding drive for the C300 DIGITAL CAMERA
- "Internal Memory" folder

[4] Make a copy of the "KC300.fw" file.

[5] Place the copy of the "KC300.fw" file in the "Internal Memory" folder.

[6] De-energize the CAMERA.

[7] Remove either the CAMERA from the CAMERA DOCK or the USB CABLE from the CAMERA.

[8] Energize the CAMERA.

[9] Select:

- "UPGRADE"
- "CONTINUE"

[10] When the upgrade is complete, de-energize the CAMERA.

[11] Energize the CAMERA.

[12] Press the "menu" BUTTON.

[13] Select "SETUP MENU".

[14] Press the "OK" BUTTON.

[15] Select "ABOUT...".

[16] Press the "OK" BUTTON.

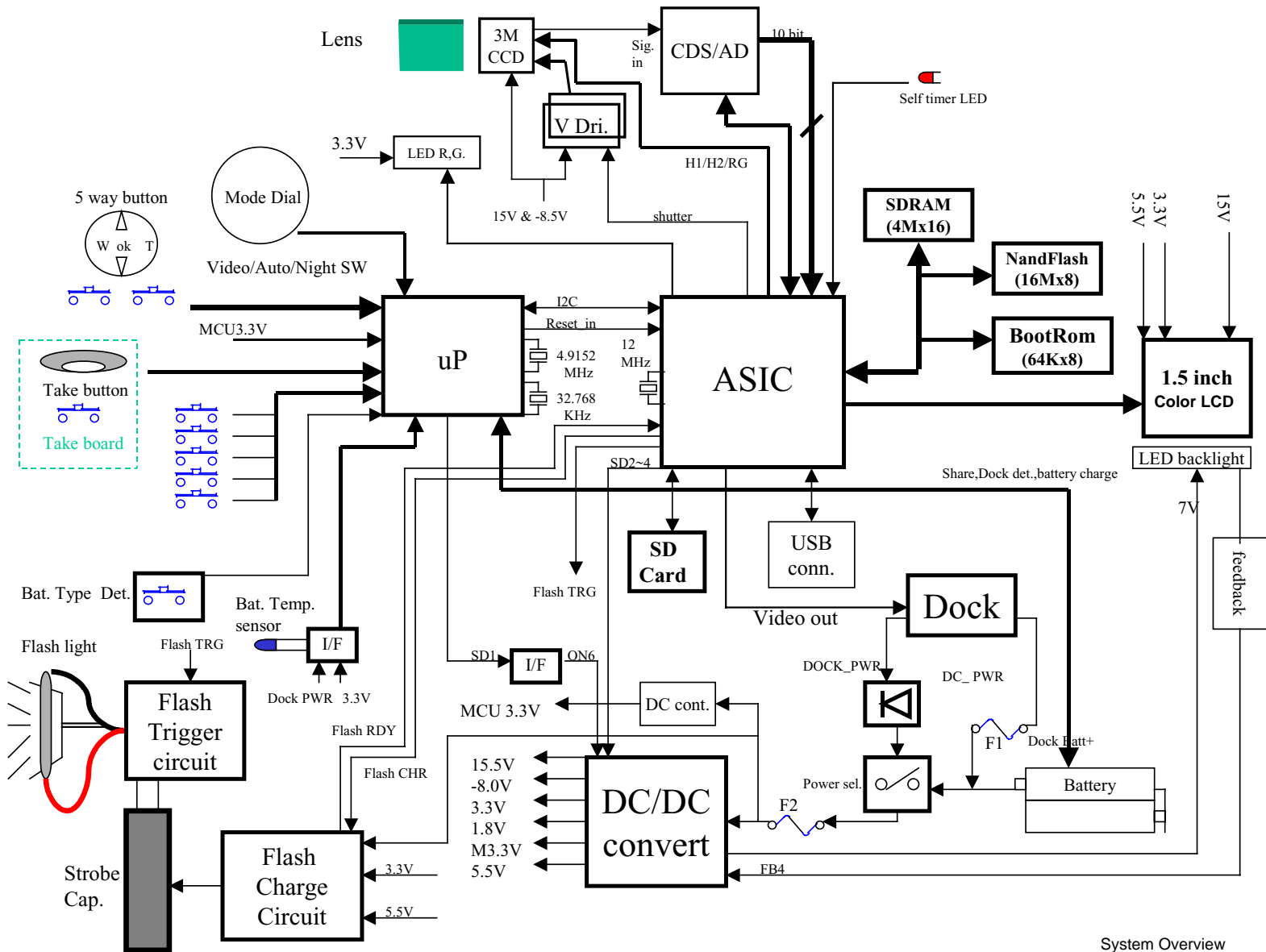
[17] Check:

- correct firmware version displays on the MONITOR LCD
- CAMERA operates correctly

Section 7: Diagrams

Block

System Overview



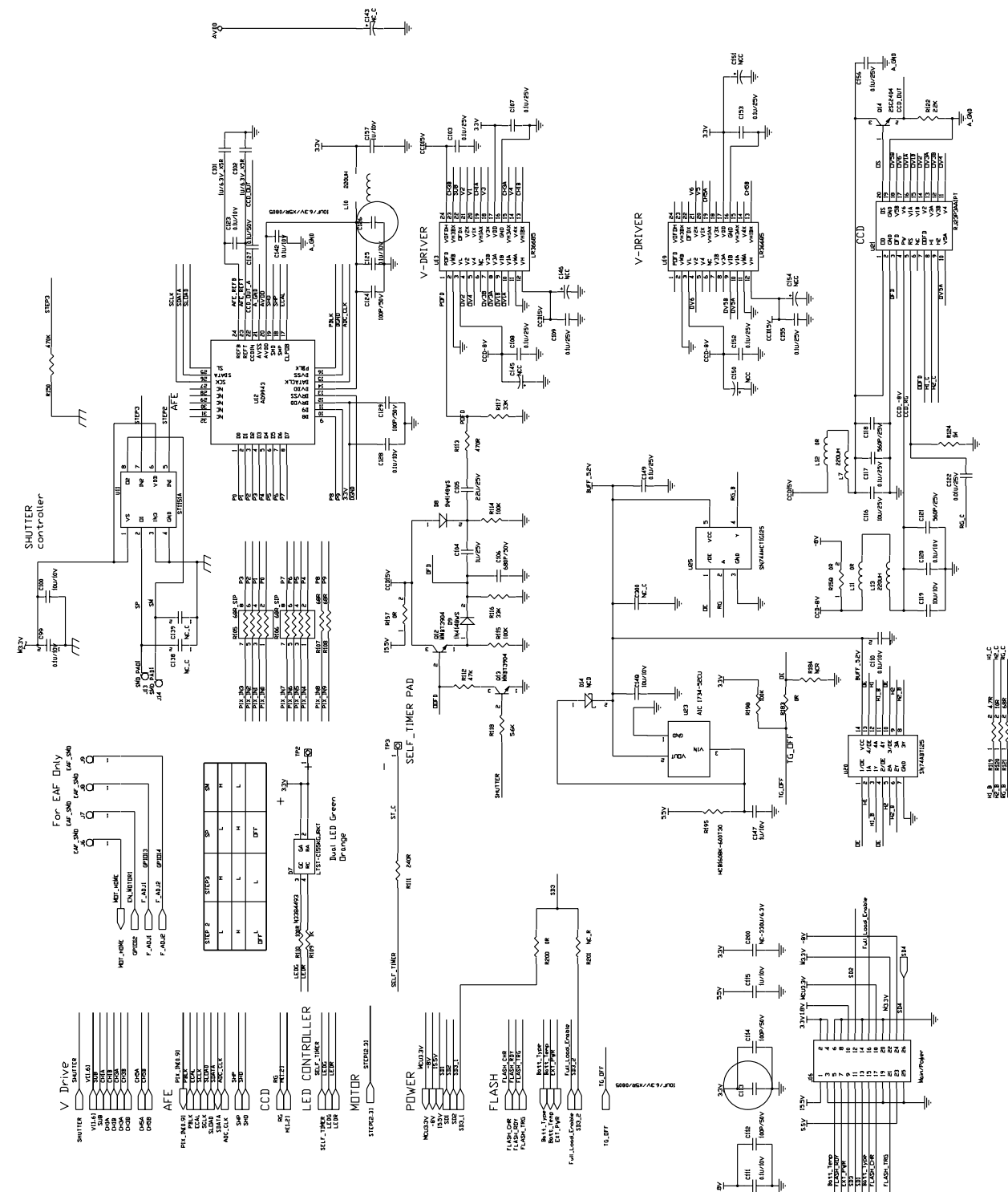
System Overview

P238\_0022FA\_



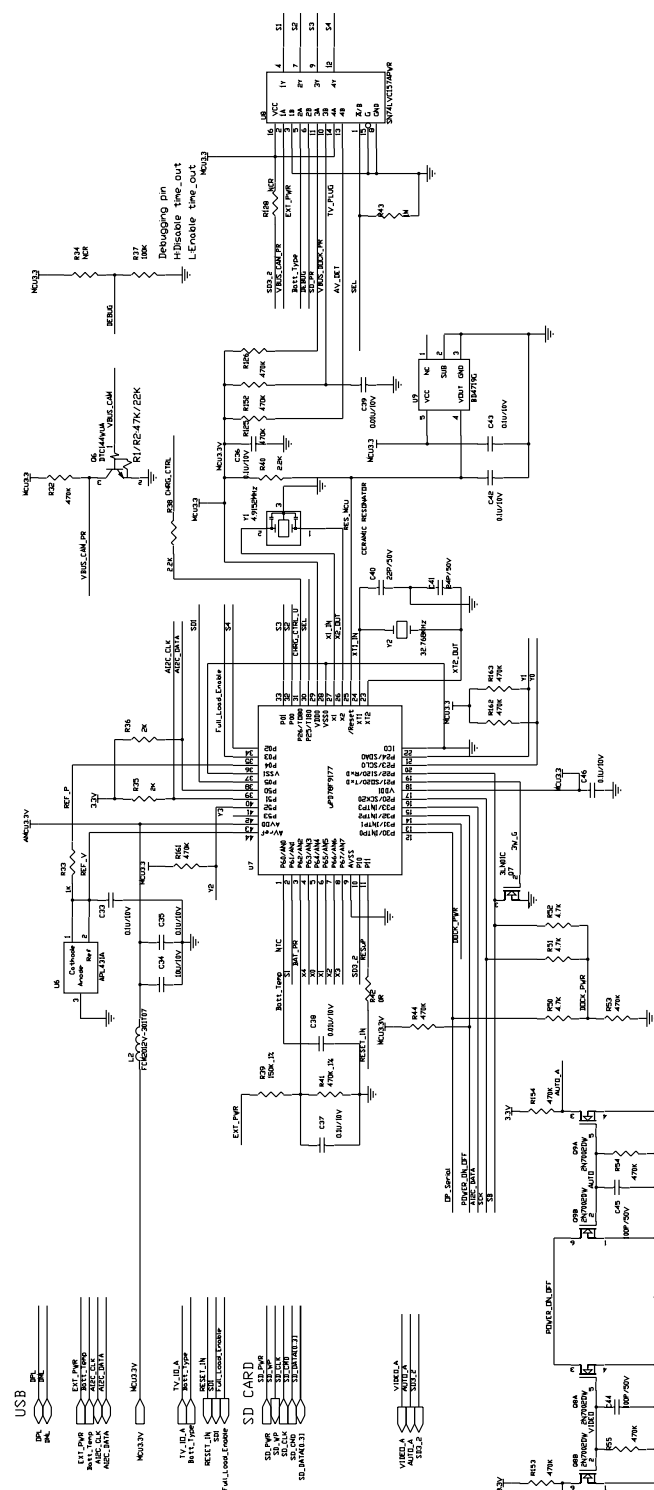




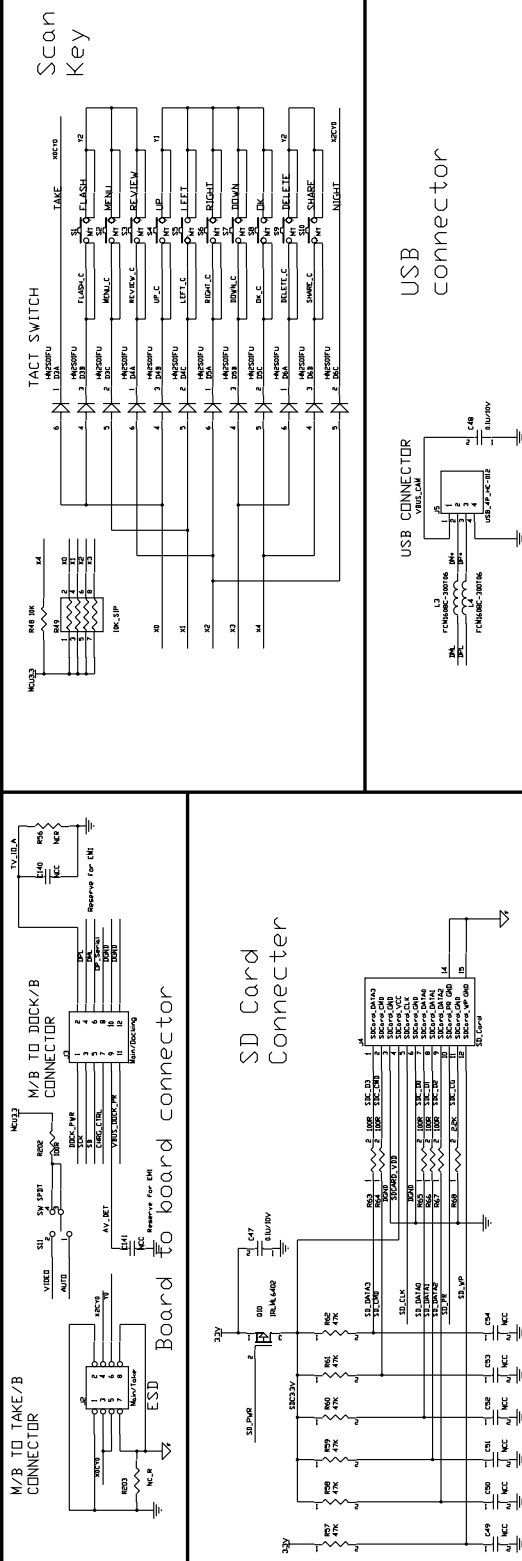


P238\_0032EC\_





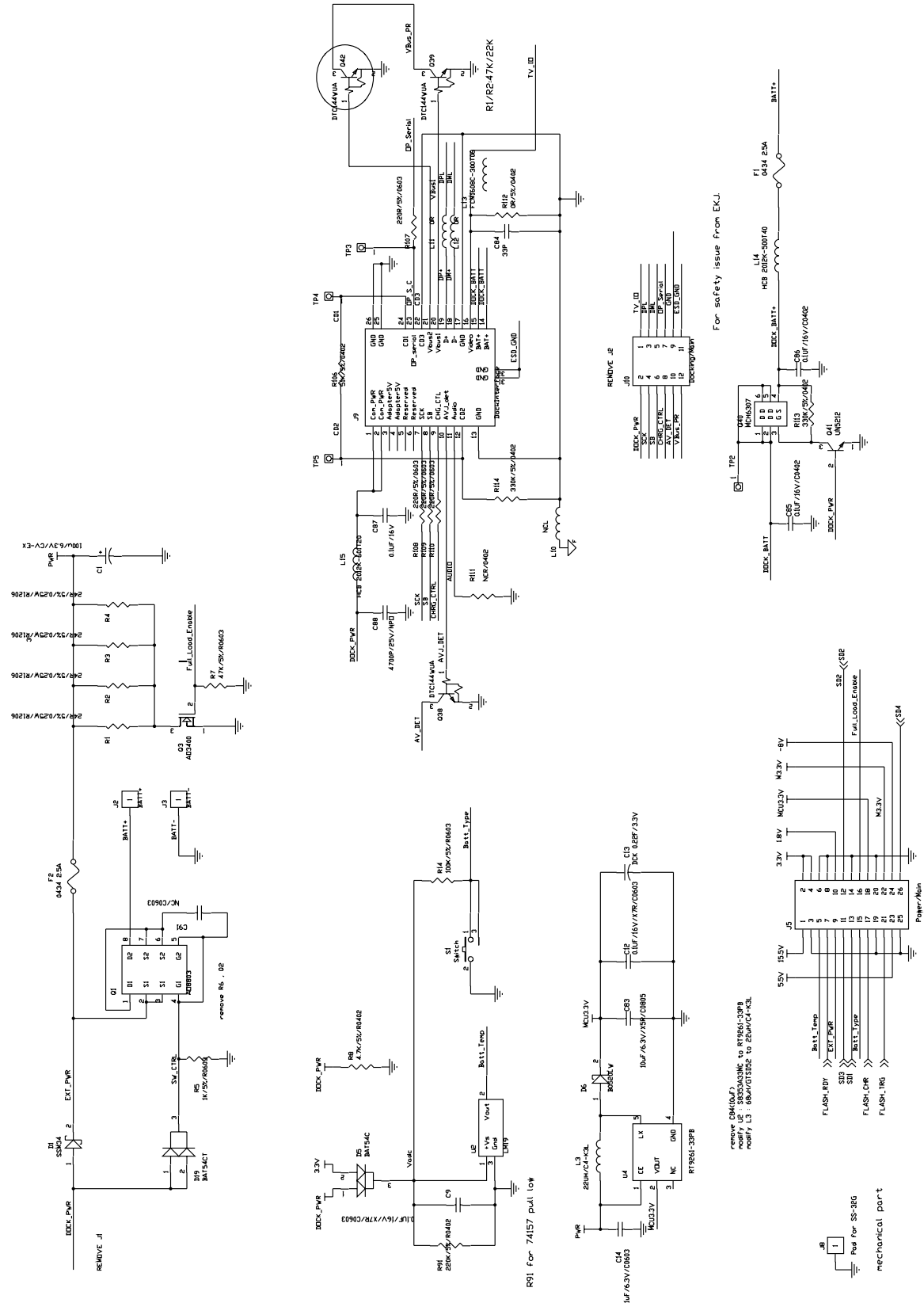
5 RC constant time is 5.716mS

MCU BOARD  
5 of 6

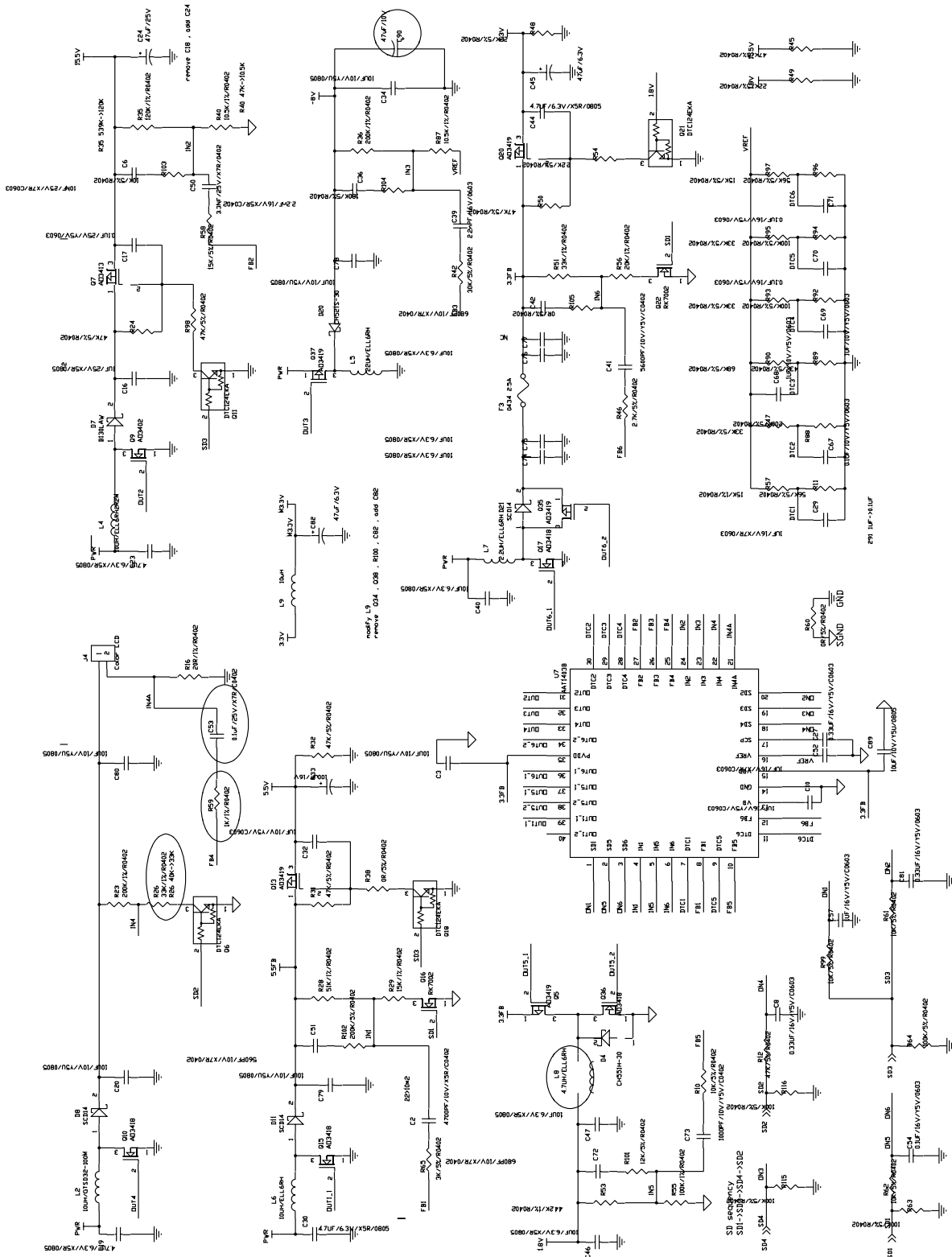


POWER BOARD - 1 of 3

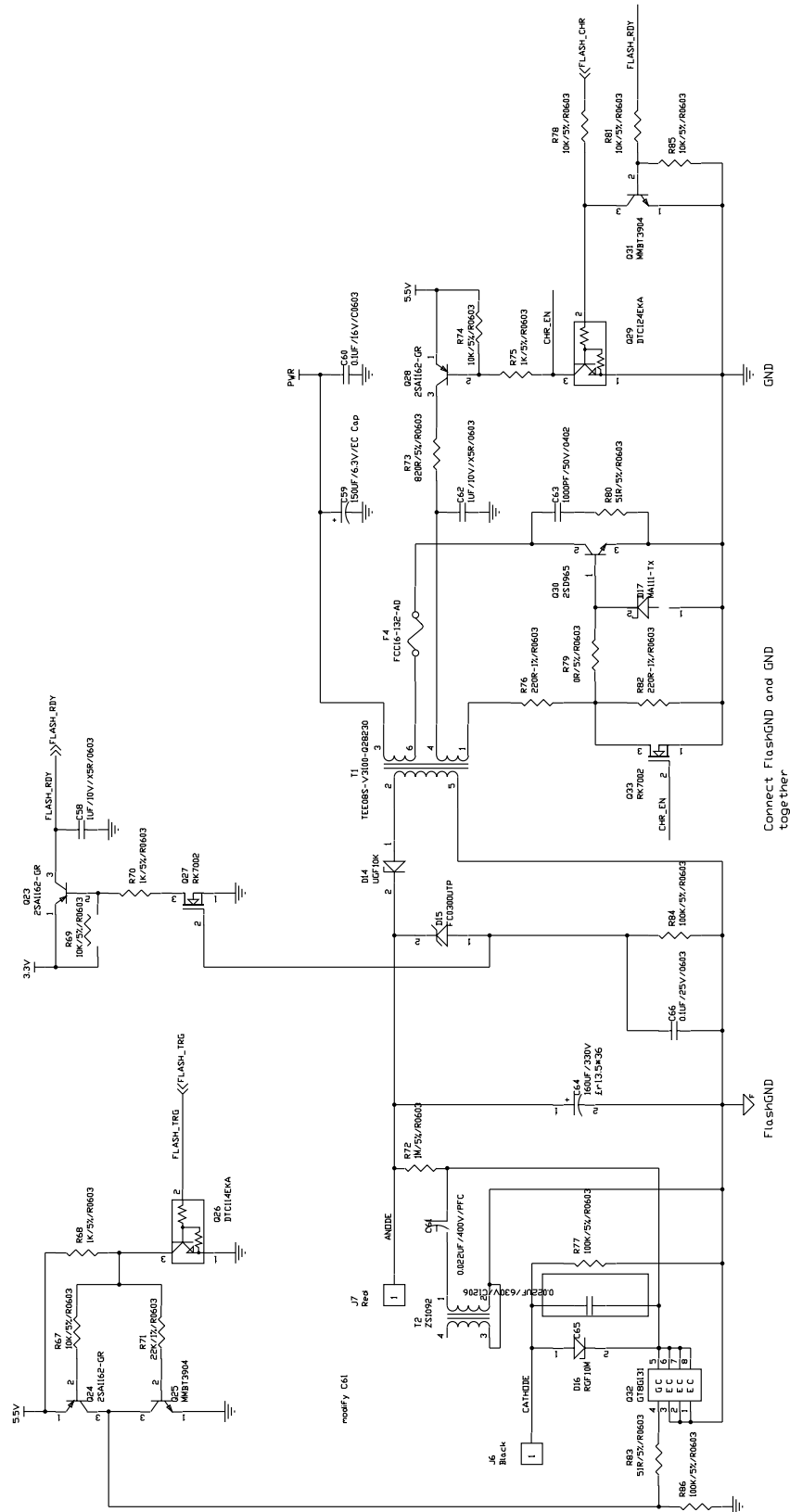
P238\_0027EC\_



## POWER BOARD - 2 of 3

POWER BOARD  
2 of 3

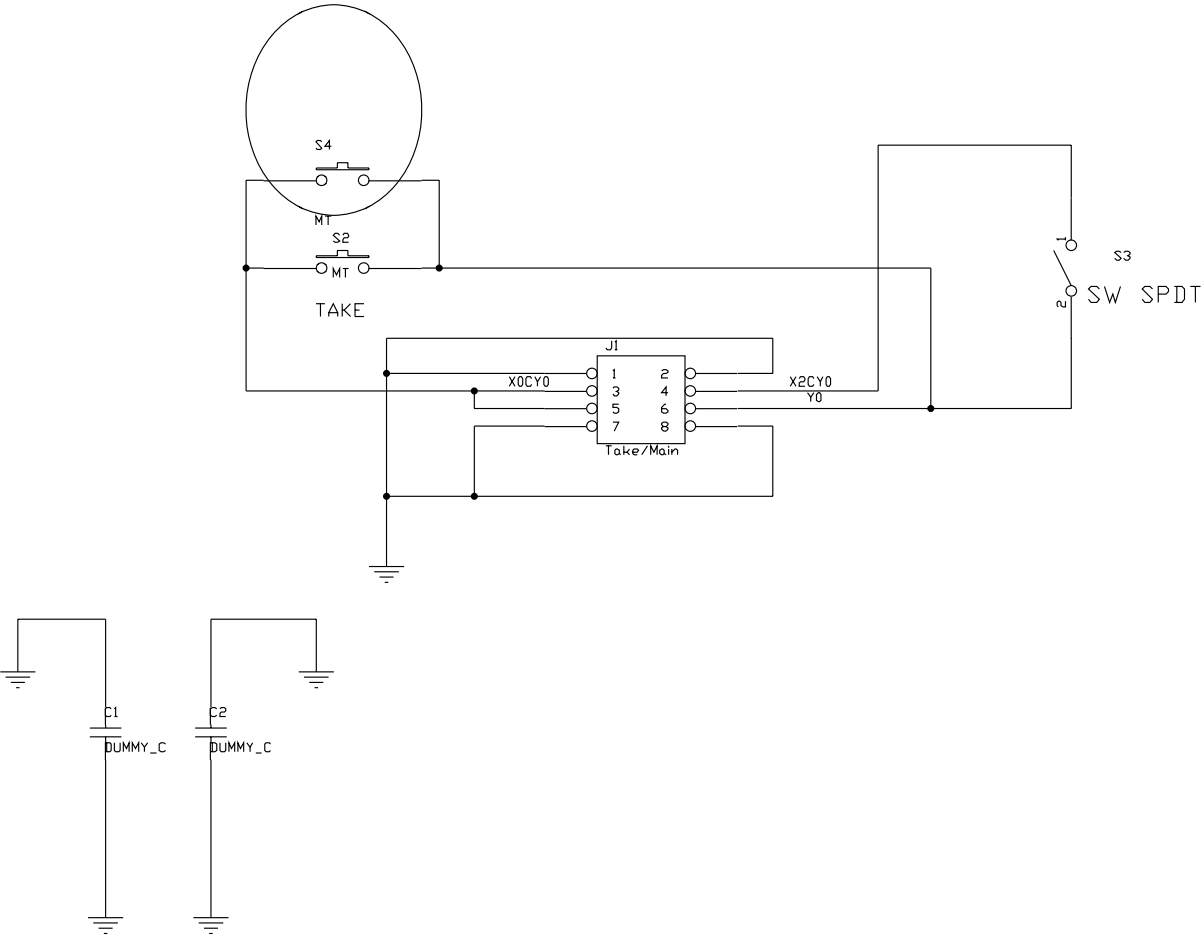
## POWER BOARD - 3 of 3



Connect FlashGND and GND together

P238\_0029EC\_

TAKE BOARD



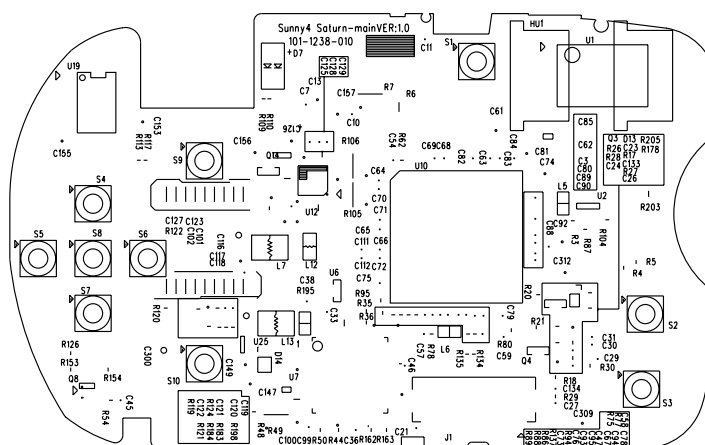
TAKE BOARD

P238\_0026DC\_

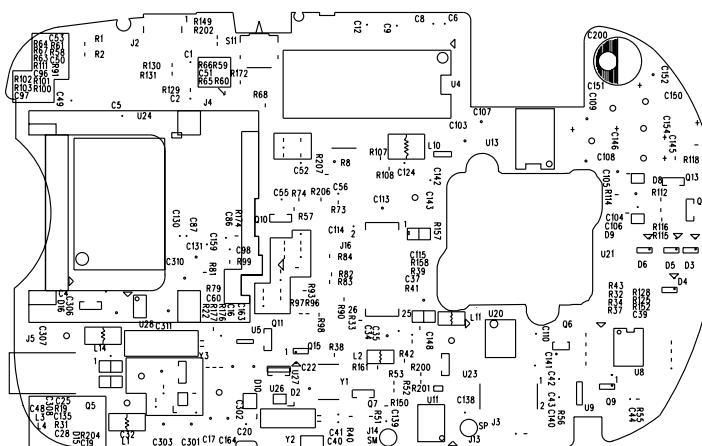


## Component Locator

## MCU BOARD



Top

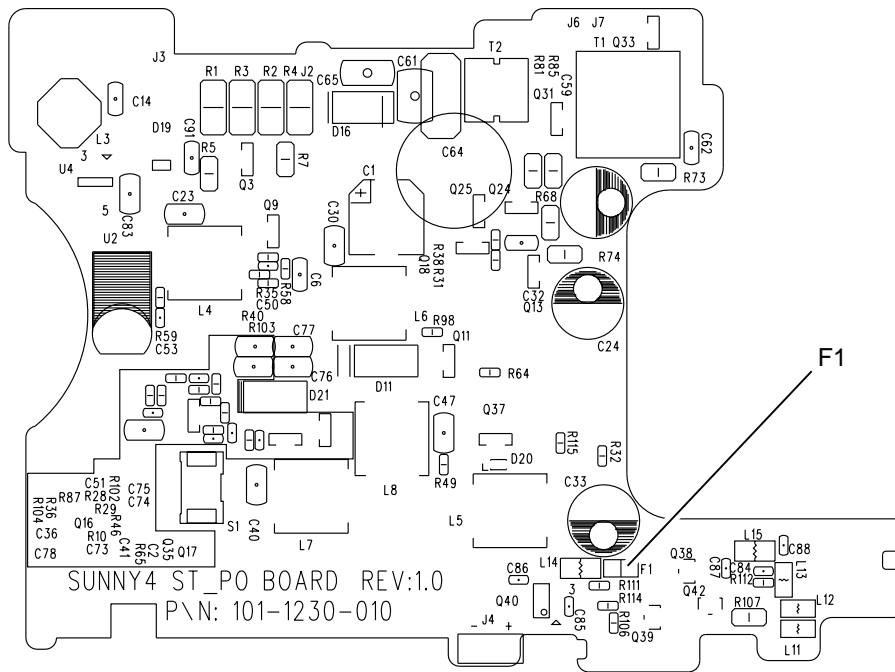


Bottom

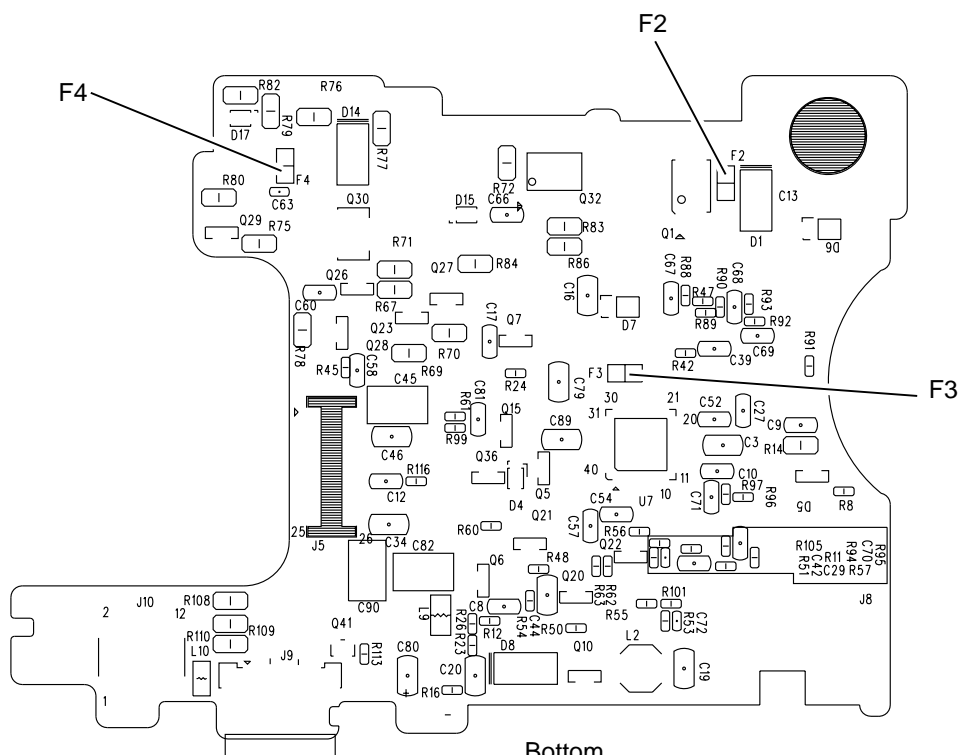
P238\_0023EC\_

MCU BOARD

POWER BOARD



Top

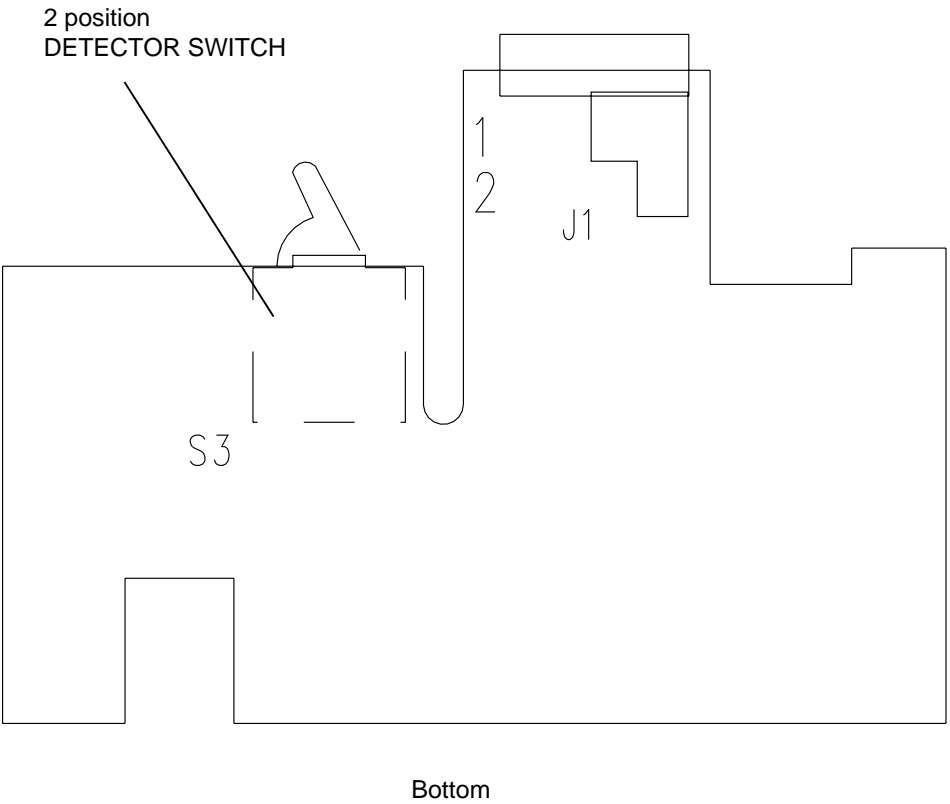
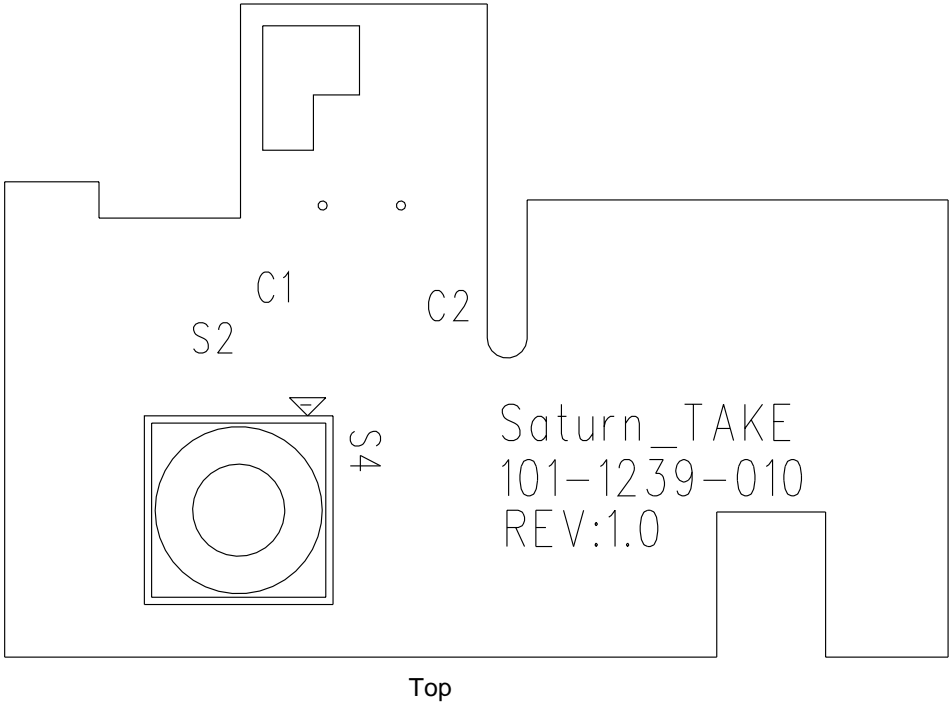


Bottom

POWER BOARD

P238\_0024EC\_

TAKE BOARD



# Section 8: Publication History

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Publication Date	Publication No.	Changed Pages	File Name	Notes
05APR05	SM8784-1	---	sm8784_1.fm	New Publication

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