

THE CAM EMBEDDED

Knowledge Transfer report



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1. INTRODUCTION

Controllers used are 1) PIC 16f1938, 2) DSP Chip NT96655

Camera works in 2 modes, 1) Setup, 2) Auto

~~Here, PIC uC works as the master of the board while in auto mode “ON”. PIC uC is connected to different power controlling circuits responsible for controlling different segments of device like, GSM, PIR, LEDs, Camera, DSP chip power, etc. In auto mode, the PIC uC stays active with PIR sensor and IR LEDs (if required). If PIR sensor detects any motion, It triggers the power circuit for DSP chip, GSM and other circuitry.~~

~~The DSP Chip — NT96655, communicates with PIC uC over I2C protocol. NT96655’s pipelines are programmed to capture image/video and take further actions like to sending these image/video packet over SMTP, FTP, MMS protocols to the end-user’s credentials configured in the camera. To configure any credentials or to make any changes in settings of the device, it should be set in Setup mode. In setup mode you can do multiple setting by clicking the ‘OK’ and 4 ‘arrow’ buttons available on device like Capture mode, date-time, Zone, Quality of capturing, credentials for internet service provider APN, port, email-ids, phone numbers with country code, many more, Auto/Manual setting for pushing data packets over SMTP, FTP, MMS protocols, a lot more. These configurations can even be automated by using a .txt file in SD-Card. You can find this in documentation.~~

2. HARDWARE PART

2.1. Connectivity of different section of the product

** I/O = Input Output Pins

a) DSP Chip	→	I2C	→	PIC uC
b) DSP Chip	→	UART	→	GSM communication
c) DSP Chip	→	I/O	→	GSM controlling
d) DSP Chip	→	I/O	→	Camera
e) DSP Chip	→	I/O	→	Buttons

(Variable resistance technique, to save number of I/Os and traces)

f) PIC uC	→	I/O	→	Power control button (ON/OFF/SETUP)
g) PIC uC	→	I/O	→	GSM module
h) PIC uC	→	I/O	→	PIR sensor
i) PIC uC	→	I/O	→	IR blaster array
j) PIC uC	→	I/O	→	Indicator LEDs

2.2. Hardware Images and Descriptions

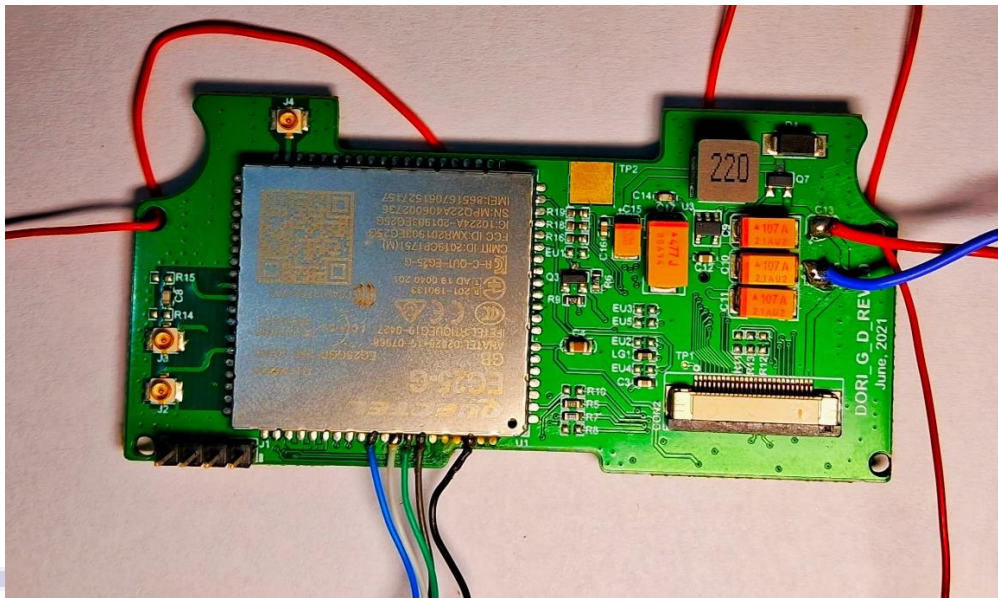
** Details are explained below the images tagged.



Red wire is +ve terminal. (to power up the CAMERA via external source)

Blue wire is -ve terminal. (to power up the CAMERA via external source)

Operating power recommended 6V and 2Amps.



This is the GSM module for New Model. They have different chips, Quectel EC20, EG25 etc.

Quectel these series have similar pinouts, so, they are using same PCB boards and common method to control these chips. To control the module, send data, communicate with Pic uc or DSP chip, you need to control some specific to HIGH signal or set to HIGH for few seconds and again pull LOW, to keep it ON.

Operating Voltage 4V 1Amp recommended.

2.2.1. Wires CONNECTED!

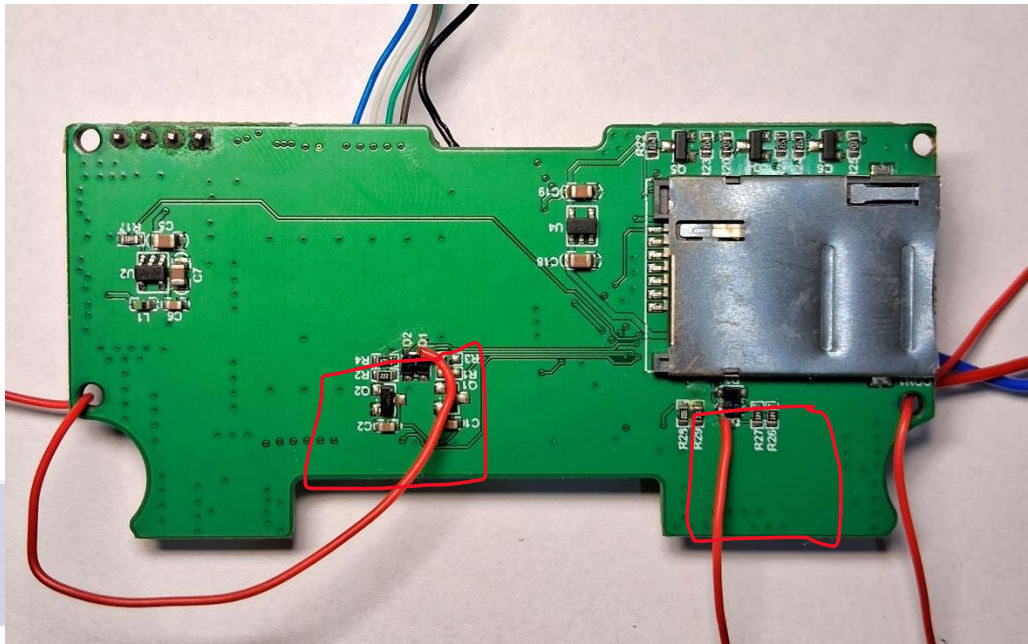
Blue, White, Green, Brown are connected to CTS, DTR, Tx, Rx

&

Black is connected to GND of PCB.

Red wire is +ve terminal. (to power up the GSM module externally)

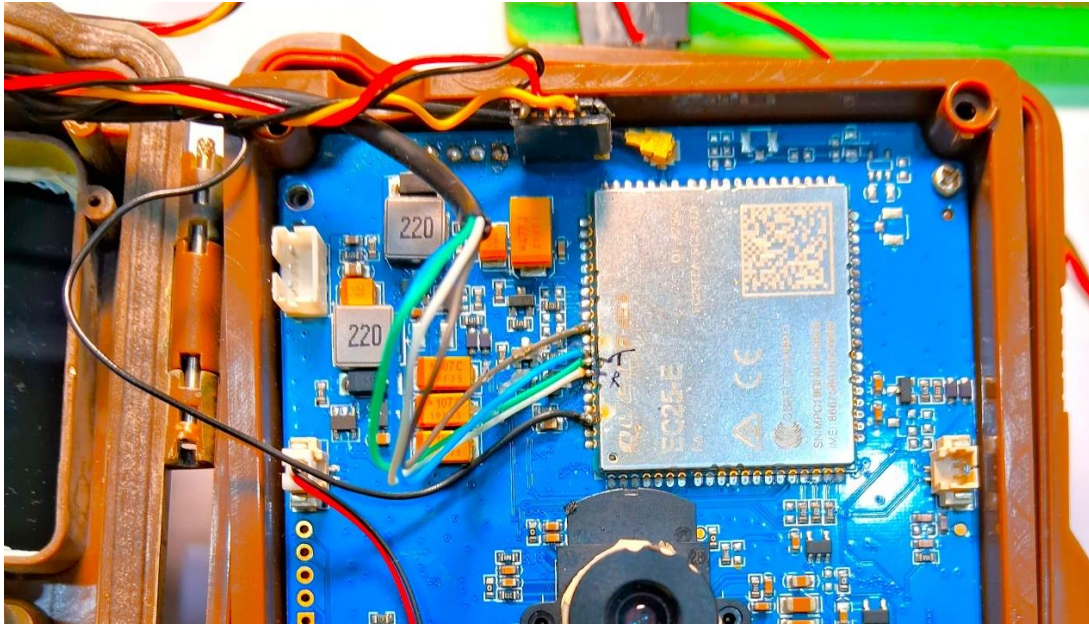
Blue wire is -ve terminal. (to power up the GSM module externally)



{In case of testing or trying to use the GSM module without master board you have to power up the GSM module PCB and enable few pins in case to use it and to keep it active}

3.3 V signal recommended for transistors D1, D2 connected to red hard wires. These wires are connected to diode and transistor circuits those are responsible turning ON the Quectel chip and start communication with respective controller {uC, uP}.

{While using Master PCB along with the GSM module} These all pins are connected to the 30 pin connector used to connect MASTER PCB, and the 2 red wires connected to diodes and transistor circuit will be controlled by the GPIO pins coming from DSP chip and PIC uC



Serial Cables are soldered for debugging and capturing the frames on UART port by DSP Chip, PIC controller and the GSM module respectively.

You may refer Data sheet given by Quectel for these chips to read pins name and Schematic to know the Male Header on the upper side of the PCB.

The Male header on upper side is connected to the DSP Chip and for GSM module wires are solder directly with the Chip itself , as shown in the image above.

3. SOFTWARE PART

3.1. FLOW OF PROJECT- Starting

~~Here UI plays the master role to initiating the 'main' function of the project! While the camera is in SETUP mode or the main function {" int NvtMain(int arge, char *argv[]) }, present on PATH "...\\DSP\\NT96655_BG8304_IQ_V1.0.70\\Project\\BskCamera\\SrcCode\\System\\" and the file name is "main.c".~~

~~To understand the flow of project, you will be needing SDK manual provided by the vendor itself. If you want to start with understanding the project source code for DSP chip, just follow function "int NvtMain(int arge, char *argv[]" on the path just mentioned above. By following it you can figure out the flow of backend source code for DSP chip. To know more about image capturing pipelines or data handing, or image handling pipelines and other pipelines like for SD card and all, you will be required to go through the operation manual/or programming manual provided by the vender of DSP chip.~~

For changes in UI and functionality of UI, You have different files shared in same folder "/1DSP_source_code/UI/...". Need to go through to it and understand the flow, what happens on clicking in respective area of screen / icons on screen.

Now talking about PIC controller. The MCU source code is modified and compiled and flashed using Microchip's own development tools. The flow of PIC micro controller is just basic and standard one. The main() func and other functions being called with pointers and times for controlling the things.

~~Here PIC uC works as master, as mentioned in Introduction as well, the mode set on camera depends on position of button on camers. The modes are ON, OFF, SETUP. The state of button is read by the PIC uC, and it controls the power of the master PCB of the product. It is only responsible for powering up the DSP chip, IR blaster, GSM, which device will communicate over GSM data lines {via a transistor based circuits, it controls the control lines for DSP and PIC ICs}, PIC, voltage level, and what all Functions of camera will work !!.~~

~~PIC uC is only responsible for controlling DSP chip in ON mode {to capture single image or set of images, video of specific time length as per camera is configured using the configuration file }~~

3.2. Installing Software and Dependencies

Refer to the Chapter [“Tips and Key Notes”](#)

4. MQTT WITH EG25G

~~Refer to the USER MANUAL for EG25 for 4G modules provided by the vender.~~

~~And in case you are using EC20, it is a 3G supported module! So, select the SIM card or the service provider accordingly, the one who supports 3G signals as well. Like in INDIA, JIO4G does NOT support 2G, 3G at all, so JIO SIM card will never work in EC20. So for trial JIO SIM card we used EG25 only !!.~~



5. TIPS AND KEY NOTES

→" I am able to set up the SDK and load the current firm into a commercial BG8304 I have here? Is that possible, or is it just compatible with other hardware? "

STEPS to write new firmware to CAMERA are !

Step 1: Get an SD card and format it;

Step 2: Put the FW96655A.bin file into the SD card;

Step 3: Lock the card and insert the SD card into the camera; - Keep CAMERA power == OFF

Step 4: Turn the camera switch to power ON the camera;

Step 5: Wait for about 30s, the camera will display a blue interface, and the upgrade is complete;

Step 6: Pull out the SD card and unlock it, insert the camera and restart it, enter the menu to confirm the version.

**** The developer can use any Text editor to write code for DSP chip, what so ever editor you are comfortable!**

After making changes to the source code, Compilation can be done as mentioned in Step 2. Just take care you have install NMAKE and other required dependences, and software for getting project compiled without errors.

Basic steps to compile DSP code and make .bin files to be written to the camera are:-

1. To read the code, you can install the SourceInsight tool (shared with backup) to read and modify the code.
2. Compile and directly run build.bat or build-all.bat in the root directory.

STEPS to INSTALL all dependences and required software's...

1. Install ADS1.2 first, and there is a cracking method after decompressing the file;
2. Install MIPS, NT96655 platform is a processor using MIPS instruction set;

3. Install the C language compilation tool NMake.

YOU WILL FIND BUILD OUTPUT BIN FILE AND OTHER '.o' , '.a' files in 'release' folder

...\DSP\NT96655_BG8304_IQ_V1.0.70\NT96655_BG8304_IQ_V1.0.70\Project\BskCamera\BskCamera_Data\Release\...



Two burning methods:

1. Self-made burning fixture, using BG830 motherboard, welding burning seat, directly using SD card lock card upgrade method of burning;
2. Use ordinary burner to burn, and burn directly;

6. CONFIGURATION FILE FORMAT

File name = “BG8304.txt”

Here, “.txt” is extension

Copy the below all parameters and save them in a .txt file with name “BG8304” and keep it in a folder name “GSM”. Once this folder is ready, copy this folder to the SD card with Lock open. You can use the same SD-Card you are using to store images and videos in Camera without formatting it {In the same condition and state, no changes required, just keep LOCK-OPEN of SD-Card}.

Below is given a sample with sample value. The sample values used here are tested and they work very well.

*****STARTs from below line {ignore the currentline}*****

[BSKFilelMark]

Model=BG8304

[Via WAPSettings]

URL=http://mmsc.myuni.com.cn

APN=3gwap

IP=10.0.0.172

Port=80

Account=

Password=

[Via Internet Settings]

GPRSAPN=JioNet

GPRSAccount=

GPRSPassword=

SendEmailServer=sh017.hostgator.in

SendEmailPort=465

SendEmailAddr=charanmakkar@itechnolabs.tech

SendEmailPassword=12345@adgjm

[Receive number and receive email]

AdministratorNum=+1xxxxxxxxx

PhoneNum2=+91xxxxxxxxxx

PhoneNum3=+1xxxxxxxxx

PhoneNum4=+254xxxxxxxxxx

ReceiveEmail1=charanmakkar@itechnolabs.tech

ReceiveEmail2=rajat.sharma@itechnolabs.biz

ReceiveEmail3=xxxxxxxxxxxxxx@xxxxx.xxx

ReceiveEmail4=xxxxxxxxxxxxxx@xxxxx.xxx

*****ENDs Here {Just ignore the currentline}*****

7. LOGS OF COMPILING SOURCE CODE

Checking uITRON - IPL_MN34110_BG8304_FF_CAL_ITEM release target ...

Compiling IPL_Cal_Setting_MN34110_BG8304_FF.c

Compiling IPL_Cal_Item_MN34110_BG8304_FF.c

Compiling IPL_Cal_Ctrl_MN34110_BG8304_FF.c

Creating library IPL_MN34110_BG8304_FF_CAL_ITEM.a ...

***** build IPL_MN34110_BG8304_FF...

Clean IPL_MN34110_BG8304_FF ...

Checking uITRON - IPL_MN34110_BG8304_FF release target ...

Compiling IPL_Isr_MN34110_BG8304_FF.c

Compiling IPL_Buf_MN34110_BG8304_FF.c

Compiling IPL_Mode_MN34110_BG8304_FF.c

Compiling IPL_Cmd_MN34110_BG8304_FF.c

Compiling IPL_Ctrl_MN34110_BG8304_FF.c

Compiling IPL_dzoomTab_MN34110_BG8304_FF.c

Compiling IPL_CtrlNormal_MN34110_BG8304_FF.c

Compiling IPL_CtrlFWPPProc_MN34110_BG8304_FF.c

Compiling IPL_CtrlFW_MN34110_BG8304_FF.c

Compiling IPL_D2DCB_MN34110_BG8304_FF.c

Compiling IPL_FlowCB_MN34110_BG8304_FF.c

Compiling IQS_SettingTable_MN34110_BG8304_FF.c

Compiling IQS_SettingFlow_MN34110_BG8304_FF.c

Compiling IQS_ImageEffectTable_MN34110_BG8304_FF.c

Creating library IPL_MN34110_BG8304_FF.a ...

***** build DevLens...

Clean Lens ...

Checking uITRON - Lens release target ...

Compiling LensCtrlTsk.c

Compiling LensAPI.c

Compiling LensCtrlTsk2.c

Compiling Lens_Cmd.c

Compiling LensCtrl_ID.c

Compiling LensCtrl2_ID.c

Creating library Lens.a ...

***** build PBXRedEye...

Clean PBXRedEye ...

Checking uITRON - PBXRedEye release target ...

Compiling PBXRedEye.c

Creating library PBXRedEye.a ...

***** build AE_MN34110_BG8304_FF...

Clean AE_MN34110_BG8304_FF ...

Checking uITRON - AE_MN34110_BG8304_FF release target ...

Compiling ae_MN34110_BG8304_FF_param.c

Compiling ae_MN34110_BG8304_FF.c

Creating library AE_MN34110_BG8304_FF.a ...

***** build AWB_MN34110_BG8304_FF...

Clean AWB_MN34110_BG8304_FF ...

Checking uITRON - AWB_MN34110_BG8304_FF release target ...

Compiling awb_MN34110_BG8304_FF_param.c

Compiling awb_MN34110_BG8304_FF.c

Creating library AWB_MN34110_BG8304_FF.a ...

***** build LDWS...

Clean LDWS ...

Checking uITRON - LDWS release target ...

Compiling ldws_lib.c

Creating library LDWS.a ...

***** build Project...

Clean BskCamera ...

Checking uITRON - BskCamera release target ...

Assembling CodeInfo.s

Compiling _main.c

Compiling BinInfo.c

Compiling main.c

Compiling SysCfg.c

Compiling SysMain_Flow_Init.c

Compiling SysMain.c

Compiling SysMain_Exe.c

Compiling SysMain_Flow_Exit.c

Compiling SysMain_Flow_Mode.c

Compiling SysMain_State.c

Compiling SysLock.c

Compiling SysMain_Flow_Sleep.c

Compiling SysDumpVerInfo.c

Compiling SysSoundCB.c

Compiling SysCmdCB.c

Compiling SysOutput_Exe.c

Compiling SysVideo_Exe.c

Compiling SysAudio_Exe.c

Compiling SysStrg_Exe.c

Compiling SysUsb_Exe.c

Compiling SysSensor_Exe.c

Compiling SysInput_Exe.c

Compiling SysPower_Exe.c

Compiling SysLens_Exe.c

Compiling ProjectInfo.c

Compiling UIConfig.c

Compiling SysUICB.c

Compiling UIDisplay.c

Compiling UIGraphics.c

Compiling PlaybackView.c

Compiling UIGraphicsID.c

Compiling UIView.c

Compiling PhotoView.c

Compiling MovieView.c

Compiling UIAppObj.c

Compiling UIMovieRecObj.c

Compiling UIMoviePlayObj.c

Compiling UIPlayObj.c

Compiling UIPhotoObj.c

Compiling DpofVendor.c

Compiling DateStampFont10x16.c

Compiling DateStampFont12x20.c

Compiling UIPrinterObj.c

Compiling ExifVendor.c

Compiling DateStampFont18x30.c

Compiling MovieStamp.c

Compiling DateStampFont20x44.c

Compiling DateStampFont26x44.c

Compiling MsdcNvtCb.c

Compiling MsdcNvtCb_Adj.c

Compiling MsdcNvtCb_CustomSi.c

Compiling MsdcNvtCb_UpdFw.c

Compiling MsdcNvtCb_IQSim.c

Compiling MsdcNvtCb_Photo.c

Compiling DevCtrl_Lens.c

Compiling DevCtrlPhoto.c Compiling DevCtrlMovie.c Compiling
DevCtrlPlayback.c Compiling

ling DevCtrlSetup.c

Compiling CalibrationAPI.c

Compiling CalibrationTbl.c

Compiling CalibrationItem.c

Compiling CalSensor.c

Compiling Cal_UICB_MN34110_650.c

Compiling Cal_MN34110_650.c

Compiling CalibrationInt.c

Compiling CalLens_FF.c

Compiling CalLens.c

Compiling UIModeMain.c

Compiling UIMode.c

Compiling UILensObj.c

Compiling UIMovieMapping.c

Compiling UIInfo.c

Compiling UISetupMapping.c

Compiling UIPhotoMapping.c

Compiling DateTimeInfo.c

Compiling BskMenu_ParaDisplay.c

Compiling BskMenu_ParaSettings.c

Compiling BskMenu_ParaStore.c

Compiling UIMenuWndCameraID.c

Compiling UIMenuWndStudyCodeHint.c

Compiling UIMenuWndStudyCode.c

Compiling UIMenuWndGameCall.c

Compiling UIMenuWndWorkDay.c

Compiling UIMenuWndDspVersion.c

Compiling UIMenuWndWorkHour.c

Compiling UIMenuWndCALLSetting.c

Compiling UIMenuWndInstantMaxNum.c

Compiling UIMenuWndDailyReport.c

Compiling UIMenuWndMMSEmailSetting.c

Compiling UIMenuWndMMSPhoneSetting.c

Compiling UIMenuWndFtpSetting.c

Compiling UIMenuWndSMTPEmailSetting.c

Compiling Bsk4GCommand.c

Compiling UIMenuWndMenuPlaybackSendTo.c

Compiling UIMenuWndRegularWakeUp.c

Compiling Bsk4GCommon.c

Compiling Bsk4GMMS.c

Compiling Bsk4GParameter.c

Compiling Bsk4GSMTP.c

Compiling BskStringTable_SMS_EN.c

Compiling UIFlowWndWarnMsg.c

Compiling UIFlowWndWaitMoment.c

Compiling UIFlowWndWrnMsg.c

Compiling UIFlowWndUSB.c

Compiling UIFlowWndHome.c

Compiling UIFlowWndMovie.c

Compiling UIFlowWndPhoto.c

Compiling UIFlowMovieFuncs.c

Compiling UIFlowMovieIcons.c

Compiling UIFlowPhotoIcons.c

Compiling UIFlowPhotoFuncs.c

Compiling MenuCommonMix.c

Compiling TabMenu.c

Compiling MenuPhoto.c

Compiling MenuMovie.c

Compiling MenuPlayback.c

Compiling UIMenuWndPlayDel.c

Compiling UIMenuWndPlayConfirmDel.c

Compiling UIMenuWndPlaySlideShowCB.c

Compiling UIMenuWndPlaySlideShow.c

Compiling UIMenuWndPlayQuickConfirmDel.c

Compiling MenuSetup.c

Compiling UIMenuWndSetupDateTime.c

Compiling UIMenuWndSetupDefaultSetting.c

Compiling UIMenuWndSetupFormat.c

Compiling UIMenuWndSetupFormatConfirm.c

Compiling UIMenuWndSetupVersion.c

Compiling UIMenuWndUSB.c

Compiling UIMenuWndMenuGSMPara.c

Compiling UIMenuWndCalibration.c

Compiling UIMenuWndMenuSetTime.c

Compiling UIMenuWndMenuOtherUsage.c

Compiling BskMenuWndkeyboard.c

Compiling BskUIMenuCommonItem.c

Compiling UIMenuWndMenuWorkMode.c

Compiling UIFlowWndPlay.c

Compiling UIFlowWndPlayMagnify.c

Compiling UIFlowWndPlayThumb.c

Compiling UIFlowPlayFuncs.c

Compiling SensorFP.c

Compiling UIFlowPlayIcons.c

Compiling UIModeCalibration.c

Compiling UIModeMovie.c

Compiling UIAppMovie_Exe.c

Compiling UIAppMovie_AudNR_Spec_Zoom.c

Compiling UIAppMovie_CB.c

Compiling UIAppMovie_3DNR.c

Compiling UIAppMovie_AudNR_Spec_Focus.c

Compiling UIAppMovie_AudNR_Spec_Iris.c

Compiling UIAppPhoto_Exe.c

Compiling UIModePhoto.c

Compiling UIAppPhoto_CB.c

Compiling UIDateImprint.c

Compiling UIModePlayback.c

Compiling UIStorageCheck.c

Compiling UIModeSlideshow.c

Compiling UIAppPlay_CB.c

Compiling UIAppPlay_Exe.c

Compiling UIPlayWallpaper.c

Compiling UIPlaySlide.c

Compiling UIPlayComm.c

Compiling UIModeSetup.c

Compiling UISetup_Exe.c
Compiling UIBackgroundObj.c
Compiling UIAppUsbCam_Exe.c
Compiling UIModeUsbCam.c
Compiling UIModeUsbDisk.c
Compiling UIAppUsbDisk_Exe.c
Compiling UIModeUsbCharge.c
Compiling UIAppUsbCharge_Exe.c
Compiling UIModeUsbMenu.c
Compiling UIResource.c
Compiling UIResource2.c
Compiling BG_Images.c
Compiling BG_Opening.c
Compiling screen_160x120.c
Compiling BskProj_Font.c
Compiling BskProj_Font_8M.c
Compiling SoundData.c
Compiling BskProj_Font_3M.c
Compiling BskProj_Font_5M.c
Compiling BskProj_Font_Snail.c
Compiling BskProj_Image.c

Compiling BskProj_Palette.c

Compiling BSKProject_Stamp_Icon.c

Compiling BskProj_String_ENGLISH.c

Compiling BskProj_String_FINNISH.c

Compiling BskProj_String_GERMANY.c

Compiling BskProj_String_SWEDISH.c

Compiling BskProj_String_DANISH.c

Compiling BskProj_String_CESKY.c

Compiling BskProj_String_ITALIAN.c

Compiling BskProj_String_NORWEGIAN.c

Compiling BskProj_String_RUSSIAN.c

Compiling BskProj_String_CHINESE.c

Copying ObjectLds: Startup.a

Compiling BskProj_String_SLOVAK.c

Copying ObjectLds: Driver_Codec.a

Extracting: BskCamera_Data/Release/ObjectLds/Startup/exception_MIPS.o

Copying ObjectLds: GxGfx.a

Extracting: BskCamera_Data/Release/ObjectLds/Driver_Codec/jpeg.o

Copying ObjectLds: GxStrg.a

Extracting: BskCamera_Data/Release/ObjectLds/GxGfx/DC.o

Extracting: BskCamera_Data/Release/ObjectLds/Startup/isr_MIPS.o

Extracting: BskCamera_Data/Release/ObjectLds/Driver_Codec/jpeg_int.o

Extracting: BskCamera_Data/Release/ObjectLds/GxStrg/GxStrg_p1.o

Extracting: BskCamera_Data/Release/ObjectLds/Startup/Loader_MIPS.o

Extracting:

BskCamera_Data/Release/ObjectLds/GxGfx/DC_Fmt_JPEG_ndk08.o

Extracting: BskCamera_Data/Release/ObjectLds/Startup/Startup_MIPS.o

Linking ...

Creating image BskCamera_Data/Release/BskCamera.axf ...

Creating executable BskCamera_Data/Release/FW96655A.bin ...

Encrypt binary file BskCamera_Data/Release/FW96655A.bin ...

Reading 'BskCamera_Data/Release/FW96655A.bin'...

File size = 4309456

==Display binary file info== Begin

Model Name: NT96650

VersionNumber: 10000000

ReleaseDate: 20130101

==Display binary file info== End

Total binary size after padding: 4309456

##ui32BinDataSumValue: 0x290ABC5C

Checksum: 0x43A4

Writing 'BskCamera_Data/Release/FW96655A.bin'...

Write size = 4309456

Save binary OK.

Build Complete.

Press any key to continue . . .



8. GSM LOGS

8.1. LOG File 1

12:20:48.221 -> AT+CSQ	12:20:54.818 ->
12:20:48.221 -> +CSQ: 99,99	12:20:54.818 -> OK
12:20:48.221 ->	12:20:55.940 -> AT+CSQ
12:20:48.221 -> OK	12:20:55.940 -> +CSQ: 99,99
12:20:49.344 -> AT+CSQ	12:20:55.940 ->
12:20:49.344 -> +CSQ: 99,99	12:20:55.940 -> OK
12:20:49.344 ->	12:20:57.014 -> AT+CSQ
12:20:49.344 -> OK	12:20:57.014 -> +CSQ: 99,99
12:20:50.429 -> AT+CSQ	12:20:57.014 ->
12:20:50.429 -> +CSQ: 99,99	12:20:57.014 -> OK
12:20:50.429 ->	12:20:58.138 -> AT+CSQ
12:20:50.429 -> OK	12:20:58.138 -> +CSQ: 99,99
12:20:51.507 -> AT+CSQ	12:20:58.138 ->
12:20:51.507 -> +CSQ: 99,99	12:20:58.138 -> OK
12:20:51.507 ->	12:20:59.213 -> AT+CSQ
12:20:51.507 -> OK	12:20:59.213 -> +CSQ: 99,99
12:20:52.631 -> AT+CSQ	12:20:59.213 ->
12:20:52.631 -> +CSQ: 99,99	12:20:59.213 -> OK
12:20:52.631 ->	12:21:00.336 -> AT+CSQ
12:20:52.631 -> OK	12:21:00.336 -> +CSQ: 99,99
12:20:53.738 -> AT+CSQ	12:21:00.336 ->
12:20:53.738 -> +CSQ: 99,99	12:21:00.336 -> OK
12:20:53.738 ->	
12:20:53.738 -> OK	
12:20:54.818 -> AT+CSQ	
12:20:54.818 -> +CSQ: 99,99	

12:21:01.411 -> AT+COPS?	12:21:12.022 -> OK
12:21:01.411 -> +COPS: 0	12:21:12.116 -> AT+COPS?
12:21:01.411 ->	12:21:12.116 -> +COPS: 0
12:21:01.411 -> OK	12:21:12.116 ->
12:21:01.505 -> AT+CREG?	12:21:12.116 -> OK
12:21:01.505 -> +CREG: 0,0	12:21:12.256 -> AT+CREG?
12:21:01.505 ->	12:21:12.256 -> +CREG: 0,0
12:21:01.505 -> OK	12:21:12.256 ->
12:21:01.598 -> AT+GSN	12:21:12.256 -> OK
12:21:01.644 -> 866758045540693	12:21:22.361 ->
12:21:01.644 ->	AT+QCFG="nwscanmode",0,1
12:21:01.644 -> OK	12:21:22.361 -> OK
12:21:01.737 -> AT+CSCS="IRA"	12:21:22.455 -> AT+QCCID
12:21:01.737 -> OK	12:21:22.455 -> +QCCID: 89918670400365684867
12:21:11.834 ->	12:21:22.455 ->
AT+QCFG="nwscanmode",0,1	12:21:22.455 -> OK
12:21:11.834 -> OK	12:21:22.548 -> AT+CSQ
12:21:11.928 -> AT+QCCID	12:21:22.548 -> +CSQ: 99,99
12:21:11.928 -> +QCCID: 89918670400365684867	12:21:22.548 ->
12:21:11.928 ->	12:21:22.548 -> OK
12:21:11.928 -> OK	12:21:22.642 -> AT+COPS?
12:21:12.022 -> AT+CSQ	12:21:22.642 -> +COPS: 0
12:21:12.022 -> +CSQ: 99,99	12:21:22.642 ->
12:21:12.022 ->	12:21:22.642 -> OK

12:21:22.736 -> AT+CREG?

12:21:22.736 -> OK

12:21:22.736 -> +CREG: 0,0

12:21:22.736 ->

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12:29:38.849 ->

12:29:41.562

->

12:29:38.849 -> RDY

AT+QCFG="nwscanmode",0,1

12:29:38.896 ->

12:29:41.562 -> OK

12:29:38.896 -> +CFUN: 1

12:29:41.655 -> AT+QCCID

12:29:39.599 ->

12:29:41.655 -> +QCCID:

12:29:39.599 -> +CPIN: READY

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12:29:39.599 ->

12:29:41.655 ->

12:29:39.599 -> +QUSIM: 1

12:29:41.655 -> OK

12:29:40.439 ->

12:29:41.749 -> AT+CSQ

12:29:40.439 -> +QIND: SMS DONE

12:29:41.749 -> +CSQ: 99,99

12:29:41.280 ->

12:29:41.749 ->

12:29:41.280 -> +QIND: PB DONE

12:29:41.749 -> OK

12:29:41.328 -> AT

12:29:42.820 -> AT+CSQ

12:29:41.328 -> OK

12:29:42.820 -> +CSQ: 99,99

12:29:41.421

->

12:29:42.820 ->

AT+QCFG="urc/ri/other","off",120,1

12:29:42.820 -> OK

12:29:41.421 -> OK

12:29:43.941 -> AT+CSQ

12:29:43.941 -> +CSQ: 99,99

12:29:43.941 ->
12:29:43.941 -> OK
12:29:45.064 -> AT+CSQ
12:29:45.064 -> +CSQ: 99,99
12:29:45.064 ->
12:29:45.064 -> OK
12:29:46.142 -> AT+CSQ
12:29:46.142 -> +CSQ: 99,99
12:29:46.142 ->
12:29:46.142 -> OK
12:29:46.142 -> OK
12:29:47.259 -> AT+CSQ
12:29:47.259 -> +CSQ: 99,99
12:29:47.259 ->
12:29:47.259 -> OK
12:29:48.333 -> AT+CSQ
12:29:48.333 -> +CSQ: 99,99
12:29:48.333 ->
12:29:48.333 -> OK
12:29:49.455 -> AT+CSQ
12:29:49.455 -> +CSQ: 99,99
12:29:49.455 ->
12:29:49.455 -> OK
12:29:49.455 -> OK
12:29:50.532 -> AT+CSQ
12:29:50.532 -> +CSQ: 99,99
12:29:50.532 ->
12:29:50.532 -> OK
12:29:50.532 -> OK
12:29:51.653 -> AT+CSQ
12:29:51.653 -> +CSQ: 99,99
12:29:51.653 ->
12:29:51.653 -> OK
12:29:52.728 -> AT+CSQ
12:29:52.728 -> +CSQ: 99,99
12:29:52.728 ->
12:29:52.728 -> OK
12:29:53.849 -> AT+CSQ
12:29:53.849 -> +CSQ: 99,99
12:29:53.849 ->
12:29:53.849 -> OK
12:29:54.925 -> AT+CSQ
12:29:54.925 -> +CSQ: 99,99
12:29:54.925 ->
12:29:54.925 -> OK
12:29:56.052 -> AT+CSQ
12:29:56.052 -> +CSQ: 99,99
12:29:56.052 ->
12:29:56.052 -> OK
12:29:57.127 -> AT+CSQ
12:29:57.127 -> +CSQ: 99,99
12:29:57.127 ->
12:29:57.127 -> OK

12:29:58.248 -> AT+CSQ	12:30:01.848 -> 866758045540693
12:29:58.248 -> +CSQ: 99,99	12:30:01.848 ->
12:29:58.248 ->	12:30:01.848 -> OK
12:29:58.248 -> OK	12:30:01.940 -> AT+CSCS="IRA"
12:29:59.324 -> AT+CSQ	12:30:01.940 -> OK
12:29:59.324 -> +CSQ: 99,99	12:31:13.811 ->
12:29:59.324 ->	AT+QCFG="nwscanmode",0,1
12:29:59.372 -> OK	12:31:13.811 -> OK
12:30:00.445 -> AT+CSQ	12:31:13.904 -> AT+QCCID
12:30:00.445 -> +CSQ: 99,99	12:31:13.904 -> +QCCID:
12:30:00.445 ->	89918670400365684867
12:30:00.445 -> OK	12:31:13.904 ->
12:30:01.520 -> AT+CSQ	12:31:13.904 -> OK
12:30:01.566 -> +CSQ: 5,99	12:31:13.998 -> AT+CSQ
12:30:01.566 ->	12:31:13.998 -> +CSQ: 2,99
12:30:01.566 -> OK	12:31:13.998 ->
12:30:01.660 -> AT+COPS?	12:31:13.998 -> OK
12:30:01.660 -> +COPS: 0	12:31:14.092 -> AT+COPS?
12:30:01.660 ->	12:31:14.092 -> +COPS: 0
12:30:01.660 -> OK	12:31:14.092 ->
12:30:01.753 -> AT+CREG?	12:31:14.092 -> OK
12:30:01.753 -> +CREG: 0,2	12:31:14.184 -> AT+CREG?
12:30:01.753 ->	12:31:14.184 -> +CREG: 0,2
12:30:01.753 -> OK	12:31:14.184 ->
12:30:01.848 -> AT+GSN	12:31:14.184 -> OK

12:31:24.322	->	12:31:34.930 ->
AT+QCFG="nwscanmode",0,1		12:31:34.930 -> OK
12:31:24.322 -> OK		12:31:35.023 -> AT+CSQ
12:31:24.415 -> AT+QCCID		12:31:35.023 -> +CSQ: 2,99
12:31:24.415 ->	+QCCID:	12:31:35.023 ->
89918670400365684867		12:31:35.023 -> OK
12:31:24.415 ->		12:31:35.118 -> AT+COPS?
12:31:24.415 -> OK		12:31:35.118 -> +COPS: 0
12:31:24.508 -> AT+CSQ		12:31:35.118 ->
12:31:24.508 -> +CSQ: 2,99		12:31:35.118 -> OK
12:31:24.508 ->		12:31:35.213 -> AT+CREG?
12:31:24.508 -> OK		12:31:35.213 -> +CREG: 0,2
12:31:24.602 -> AT+COPS?		12:31:35.213 ->
12:31:24.602 -> +COPS: 0		12:31:35.213 -> OK
12:31:24.602 ->		12:31:45.313 ->
12:31:24.602 -> OK		AT+QCFG="nwscanmode",0,1
12:31:24.696 -> AT+CREG?		12:31:45.313 -> OK
12:31:24.696 -> +CREG: 0,2		12:31:45.405 -> AT+QCCID
12:31:24.696 ->		12:31:45.405 ->
12:31:24.696 -> OK		+QCCID:
		89918670400365684867
12:31:34.837 ->	->	12:31:45.452 ->
AT+QCFG="nwscanmode",0,1		12:31:45.452 -> OK
12:31:34.837 -> OK		12:31:45.545 -> AT+CSQ
12:31:34.930 -> AT+QCCID		12:31:45.545 -> +CSQ: 2,99
12:31:34.930 ->	+QCCID:	12:31:45.545 ->
89918670400365684867		

12:31:45.545 -> OK	12:31:56.128 ->
12:31:45.639 -> AT+COPS?	12:31:56.128 -> OK
12:31:45.639 -> +COPS: 0	12:31:56.222 -> AT+CREG?
12:31:45.639 ->	12:31:56.222 -> +CREG: 0,2
12:31:45.639 -> OK	12:31:56.222 ->
12:31:45.731 -> AT+CREG?	12:31:56.222 -> OK
12:31:45.731 -> +CREG: 0,2	12:31:57.395 -> AT
12:31:45.731 ->	12:32:06.336 ->
12:31:45.731 -> OK	AT+QCFG="nwscanmode",0,1
12:31:47.303 -> AT	12:32:06.336 -> OK
12:31:54.539 -> at	12:32:06.431 -> AT?
12:31:55.847 ->	12:32:06.431 -> AT+QCCID
AT+QCFG="nwscanmode",0,1	12:32:06.431 -> +QCCID:
12:31:55.847 -> OK	89918670400365684867
12:31:55.941 -> AT+QCCID	12:32:06.478 ->
12:31:55.941 -> +QCCID:	12:32:06.478 -> OK
89918670400365684867	12:32:06.570 -> AT+CSQ
12:31:55.941 ->	12:32:06.570 -> +CSQ: 5,99
12:31:55.941 -> OK	12:32:06.570 ->
12:31:56.034 -> AT+CSQ	12:32:06.570 -> OK
12:31:56.034 -> +CSQ: 2,99	12:32:06.664 -> AT+COPS?
12:31:56.034 ->	12:32:06.664 -> +COPS: 0
12:31:56.034 -> OK	12:32:06.664 ->
12:31:56.128 -> AT+COPS?	12:32:06.664 -> OK
12:31:56.128 -> +COPS: 0	12:32:06.757 -> AT+CREG?

12:32:06.757 -> +CREG: 0,2	12:32:27.370 -> OK
12:32:06.757 ->	12:32:27.463 -> AT+QCCID
12:32:06.757 -> OK	12:32:27.463 -> +QCCID:
12:32:09.330 -> AT?	89918670400365684867
12:32:16.855 ->	12:32:27.463 ->
AT+QCFG="nwscanmode",0,1	12:32:27.463 -> OK
12:32:16.855 -> OK	12:32:27.557 -> AT+CSQ
12:32:16.950 -> AT+QCCID	12:32:27.557 -> +CSQ: 5,99
12:32:16.950 -> +QCCID:	12:32:27.604 ->
89918670400365684867	12:32:27.604 -> OK
12:32:16.950 ->	12:32:27.696 -> AT+COPS?
12:32:16.950 -> OK	12:32:27.696 -> +COPS: 0
12:32:17.043 -> AT+CSQ	12:32:27.696 ->
12:32:17.089 -> +CSQ: 5,99	12:32:27.696 -> OK
12:32:17.089 ->	12:32:27.791 -> AT+CREG?
12:32:17.089 -> OK	12:32:27.791 -> +CREG: 0,2
12:32:17.184 -> AT+COPS?	12:32:27.791 ->
12:32:17.184 -> +COPS: 0	12:32:27.791 -> OK
12:32:17.184 ->	12:32:37.897 ->
12:32:17.184 -> OK	AT+QCFG="nwscanmode",0,1
12:32:17.278 -> AT+CREG?	12:32:37.897 -> OK
12:32:17.278 -> +CREG: 0,2	12:32:37.990 -> AT+QCCID
12:32:17.278 ->	12:32:37.990 -> +QCCID:
12:32:17.278 -> OK	89918670400365684867
12:32:27.370 ->	12:32:37.990 ->
AT+QCFG="nwscanmode",0,1	12:32:37.990 -> OK

12:32:38.084 -> AT+CSQ	12:32:48.715 -> +COPS: 0
12:32:38.084 -> +CSQ: 2,99	12:32:48.715 ->
12:32:38.084 ->	12:32:48.715 -> OK
12:32:38.084 -> OK	12:32:48.808 -> AT+CREG?
12:32:38.177 -> AT+COPS?	12:32:48.808 -> +CREG: 0,2
12:32:38.177 -> +COPS: 0	12:32:48.808 ->
12:32:38.177 ->	12:32:48.808 -> OK
12:32:38.177 -> OK	12:32:58.942 ->
12:32:38.272 -> AT+CREG?	AT+QCFG="nwscanmode",0,1
12:32:38.318 -> 7CREG: 0,2	12:32:58.942 -> OK
12:32:38.318 ->	12:32:59.037 -> AT+QCCID
12:32:38.318 -> OK	12:32:59.037 -> +QCCID:
12:32:48.389 ->	89918670400365684867
AT+QCFG="nwscanmode",0,1	12:32:59.037 ->
12:32:48.389 -> OK	12:32:59.037 -> OK
12:32:48.529 -> AT+QCCID	12:32:59.131 -> AT+CSQ
12:32:48.529 -> +QCCID:	12:32:59.131 -> +CSQ: 2,99
89918670400365684867	12:32:59.131 ->
12:32:48.529 ->	12:32:59.131 -> OK
12:32:48.529 -> OK	12:32:59.224 -> AT+COPS?
12:32:48.622 -> AT+CSQ	12:32:59.224 -> +COPS: 0
12:32:48.622 -> +CSQ: 2,99	12:32:59.224 ->
12:32:48.622 ->	12:32:59.224 -> OK
12:32:48.622 -> OK	12:32:59.316 -> AT+CREG?
12:32:48.715 -> AT+COPS?	12:32:59.316 -> +CREG: 0,2

12:32:59.316 ->		12:33:20.062 ->	+QCCID:
12:32:59.316 -> OK		89918670400365684867	
12:33:09.452	->	12:33:20.062 ->	
AT+QCFG="nwscanmode",0,1		12:33:20.062 -> OK	
12:33:09.452 -> OK		12:33:20.154 -> AT+CSQ	
12:33:09.545 -> AT+QCCID		12:33:20.154 -> +CSQ: 6,99	
12:33:09.545 ->	+QCCID:	12:33:20.154 ->	
89918670400365684867		12:33:20.154 -> OK	
12:33:09.545 ->		12:33:20.247 -> AT+COPS?	
12:33:09.545 -> OK		12:33:20.247 -> +COPS: 0	
12:33:09.639 -> AT+CSQ		12:33:20.247 ->	
12:33:09.639 -> +CSQ: 2,99		12:33:20.247 -> OK	
12:33:09.639 ->		12:33:20.340 -> AT+CREG?	
12:33:09.639 -> OK		12:33:20.340 -> +CREG: 0,2	
12:33:09.732 -> AT+COPS?		12:33:20.340 ->	
12:33:09.732 -> +COPS: 0		12:33:20.340 -> OK	
12:33:09.732 ->		12:33:30.446 ->	
12:33:09.732 -> OK		AT+QCFG="nwscanmode",0,1	
12:33:09.812 -> AT+CREG?		12:33:30.446 -> OK	
12:33:09.857 -> +CREG: 0,2		12:33:30.539 -> AT+QCCID	
12:33:09.857 ->		12:33:30.586 ->	+QCCID:
12:33:09.857 -> OK		89918670400365684867	
12:33:19.968	->	12:33:30.586 ->	
AT+QCFG="nwscanmode",0,1		12:33:30.586 -> OK	
12:33:19.968 -> OK		12:33:30.680 -> AT+CSQ	
12:33:20.062 -> AT+QCCID		12:33:30.680 -> +CSQ: 6,99	

12:33:30.680 ->	12:33:41.293 -> OK
12:33:30.680 -> OK	12:33:41.387 -> AT+CREG?
12:33:30.774 -> AT+COPS?	12:33:41.387 -> +CREG: 0,2
12:33:30.774 -> +COPS: 0	12:33:41.387 ->
12:33:30.774 ->	12:33:41.387 -> OK
12:33:30.774 -> OK	12:33:51.500 ->
12:33:30.867 -> AT+CREG?	AT+QCFG="nwscanmode",0,1
12:33:30.867 -> +CREG: 0,2	12:33:51.500 -> OK
12:33:30.867 ->	12:33:51.593 -> AT+QCCID
12:33:30.867 -> OK	12:33:51.593 -> +QCCID: 89918670400365684867
12:33:40.966 ->	12:33:51.593 ->
AT+QCFG="nwscanmode",0,1	12:33:51.593 -> OK
12:33:40.966 -> OK	12:33:51.686 -> AT+CSQ
12:33:41.060 -> AT+QCCID	12:33:51.686 -> +CSQ: 6,99
12:33:41.060 -> +QCCID: 89918670400365684867	12:33:51.686 ->
12:33:41.060 ->	12:33:51.686 -> OK
12:33:41.060 -> OK	12:33:51.780 -> AT+COPS?
12:33:41.154 -> AT+CSQ	12:33:51.780 -> +COPS: 0
12:33:41.154 -> +CSQ: 6,99	12:33:51.780 ->
12:33:41.200 ->	12:33:51.780 -> OK
12:33:41.200 -> OK	12:33:51.873 -> AT+CREG?
12:33:41.293 -> AT+COPS?	12:33:51.873 -> +CREG: 0,2
12:33:41.293 -> +COPS: 0	12:33:51.873 ->
12:33:41.293 ->	12:33:51.873 -> OK

12:34:02.012	->	12:37:04.437 -> +CPIN: READY
AT+QCFG="nwscanmode",0,1		12:37:04.437 ->
12:34:02.012 -> OK		12:37:04.437 -> +QUSIM: 1
12:34:02.106 -> AT+QCCID		12:37:05.283 ->
12:34:02.106 ->	+QCCID:	12:37:05.283 -> +QIND: SMS DONE
89918670400365684867		12:37:06.125 ->
12:34:02.106 ->		12:37:06.125 -> +QIND: PB DONE
12:34:02.106 -> OK		12:37:06.172 -> AT
12:34:02.200 -> AT+CSQ		12:37:06.172 -> OK
12:34:02.200 -> +CSQ: 6,99		12:37:06.265 ->
12:34:02.200 ->		AT+QCFG="urc/ri/other","off",120,1
12:34:02.200 -> OK		12:37:06.265 -> OK
12:34:02.294 -> AT+COPS?		12:37:06.359 ->
12:34:02.294 -> +COPS: 0		AT+QCFG="nwscanmode",0,1
12:34:02.294 ->		12:37:06.359 -> OK
12:34:02.294 -> OK		12:37:06.452 -> AT+QCCID
12:34:02.388 -> AT+CREG?		12:37:06.452 -> +QCCID:
12:34:02.388 -> +CREG: 0,2		89918670400365684867
12:34:02.388 ->		12:37:06.452 ->
12:34:02.388 -> OK		12:37:06.452 -> OK
12:37:03.640 ->		12:37:06.547 -> AT+CSQ
12:37:03.640 -> RDY		12:37:06.547 -> +CSQ: 99,99
12:37:03.734 ->		12:37:06.547 ->
12:37:03.734 -> +CFUN: 1		12:37:06.547 -> OK
12:37:04.437 ->		12:37:07.668 -> AT+CSQ
		12:37:07.668 -> +CSQ: 99,99

12:37:07.668 ->
12:37:07.668 -> OK
12:37:08.745 -> AT+CSQ
12:37:08.745 -> +CSQ: 99,99
12:37:08.745 ->
12:37:08.745 -> OK
12:37:08.745 -> OK
12:37:09.868 -> AT+CSQ
12:37:09.868 -> +CSQ: 99,99
12:37:09.868 ->
12:37:09.868 -> OK
12:37:09.868 -> OK
12:37:10.943 -> AT+CSQ
12:37:10.943 -> +CSQ: 99,99
12:37:10.943 ->
12:37:10.943 -> OK
12:37:12.063 -> AT+CSQ
12:37:12.063 -> +CSQ: 99,99
12:37:12.063 ->
12:37:12.063 -> OK
12:37:12.063 -> OK
12:37:13.137 -> AT+CSQ
12:37:13.137 -> +CSQ: 99,99
12:37:13.137 ->
12:37:13.137 -> OK
12:37:13.137 -> OK
12:37:14.265 -> AT+CSQ
12:37:14.265 -> +CSQ: 99,99
12:37:14.265 ->
12:37:14.265 ->
12:37:14.265 -> OK
12:37:15.338 -> AT+CSQ
12:37:15.338 -> +CSQ: 99,99
12:37:15.338 ->
12:37:15.338 -> OK
12:37:16.458 -> AT+CSQ
12:37:16.458 -> +CSQ: 99,99
12:37:16.458 ->
12:37:16.458 -> OK
12:37:17.566 -> AT+CSQ
12:37:17.566 -> +CSQ: 99,99
12:37:17.566 ->
12:37:17.566 -> OK
12:37:18.643 -> AT+CSQ
12:37:18.643 -> +CSQ: 99,99
12:37:18.643 ->
12:37:18.643 -> OK
12:37:19.749 -> AT+CSQ
12:37:19.749 -> +CSQ: 99,99
12:37:19.749 ->
12:37:19.749 -> OK
12:37:20.873 -> AT+CSQ
12:37:20.873 -> +CSQ: 99,99
12:37:20.873 ->
12:37:20.873 -> OK

12:37:21.956 -> AT+CSQ	12:37:27.571 -> +COPS: 0
12:37:21.956 -> +CSQ: 99,99	12:37:27.571 ->
12:37:21.956 ->	12:37:27.571 -> OK
12:37:21.956 -> OK	12:37:27.664 -> AT+CREG?
12:37:23.060 -> AT+CSQ	12:37:27.664 -> +CREG: 0,2
12:37:23.060 -> +CSQ: 99,99	12:37:27.664 ->
12:37:23.060 ->	12:37:27.664 -> OK
12:37:23.060 -> OK	12:37:27.760 -> AT+GSN
12:37:24.151 -> AT+CSQ	12:37:27.760 -> 866758045540693
12:37:24.151 -> +CSQ: 99,99	12:37:27.760 ->
12:37:24.151 ->	12:37:27.760 -> OK
12:37:24.151 -> OK	12:37:27.852 -> AT+CSCS="IRA"
12:37:25.272 -> AT+CSQ	12:37:27.852 -> OK
12:37:25.272 -> +CSQ: 99,99	12:37:37.954 ->
12:37:25.272 ->	AT+QCFG="nwscanmode",0,1
12:37:25.272 -> OK	12:37:37.954 -> OK
12:37:26.349 -> AT+CSQ	12:37:38.098 -> AT+QCCID
12:37:26.349 -> +CSQ: 99,99	12:37:38.098 -> +QCCID:
12:37:26.349 ->	89918670400365684867
12:37:26.349 -> OK	12:37:38.098 ->
12:37:27.475 -> AT+CSQ	12:37:38.098 -> OK
12:37:27.475 -> +CSQ: 4,99	12:37:38.189 -> AT+CSQ
12:37:27.475 ->	12:37:38.189 -> +CSQ: 4,99
12:37:27.475 -> OK	12:37:38.189 ->
12:37:27.571 -> AT+COPS?	12:37:38.189 -> OK

12:37:38.281 -> AT+COPS?	12:37:48.909 -> +CREG: 0,2
12:37:38.281 -> +COPS: 0	12:37:48.909 ->
12:37:38.281 ->	12:37:48.909 -> OK
12:37:38.281 -> OK	12:37:59.022 ->
12:37:38.376 -> AT+CREG?	AT+QCFG="nwscanmode",0,1
12:37:38.376 -> +CREG: 0,2	12:37:59.022 -> OK
12:37:38.376 ->	12:37:59.116 -> AT+QCCID
12:37:38.376 -> OK	12:37:59.116 -> +QCCID: 89918670400365684867
12:37:48.488 ->	12:37:59.116 ->
AT+QCFG="nwscanmode",0,1	12:37:59.116 -> OK
12:37:48.488 -> OK	12:37:59.209 -> AT+CSQ
12:37:48.582 -> AT+QCCID	12:37:59.209 -> +CSQ: 4,99
12:37:48.582 -> +QCCID: 89918670400365684867	12:37:59.209 ->
12:37:48.582 ->	12:37:59.209 -> OK
12:37:48.582 -> OK	12:37:59.303 -> AT+COPS?
12:37:48.676 -> AT+CSQ	12:37:59.303 -> +COPS: 0
12:37:48.676 -> +CSQ: 4,99	12:37:59.303 ->
12:37:48.676 ->	12:37:59.303 -> OK
12:37:48.676 -> OK	12:37:59.397 -> AT+CREG?
12:37:48.770 -> AT+COPS?	12:37:59.397 -> +CREG: 0,2
12:37:48.770 -> +COPS: 0	12:37:59.397 ->
12:37:48.770 ->	12:37:59.397 -> OK
12:37:48.770 -> OK	12:38:09.509 ->
12:37:48.909 -> AT+CREG?	AT+QCFG="nwscanmode",0,1
	12:38:09.509 -> OK

12:38:09.604 -> AT+QCCID	12:38:20.242 -> +CSQ: 4,99
12:38:09.604 -> +QCCID: 89918670400365684867	12:38:20.242 ->
12:38:09.604 ->	12:38:20.242 -> OK
12:38:09.604 -> OK	12:38:20.335 -> AT+COPS?
12:38:09.698 -> AT+CSQ	12:38:20.335 -> +COPS: 0
12:38:09.698 -> +CSQ: 4,99	12:38:20.335 ->
12:38:09.698 ->	12:38:20.335 -> OK
12:38:09.698 -> OK	12:38:20.429 -> AT+CREG?
12:38:09.790 -> AT+COPS?	12:38:20.429 -> +CREG: 0,2
12:38:09.837 -> +COPS: 0	12:38:20.429 ->
12:38:09.837 ->	12:38:20.429 -> OK
12:38:09.837 -> OK	12:38:30.533 -> AT+QCFG="nwscanmode",0,1
12:38:09.932 -> AT+CREG?	12:38:30.533 -> OK
12:38:09.932 -> +CREG: 0,2	12:38:30.627 -> AT+QCCID
12:38:09.932 ->	12:38:30.627 -> +QCCID: 89918670400365684867
12:38:09.932 -> OK	12:38:30.627 ->
12:38:20.009 -> AT+QCFG="nwscanmode",0,1	12:38:30.627 -> OK
12:38:20.009 -> OK	12:38:30.720 -> AT+CSQ
12:38:20.149 -> AT+QCCID	12:38:30.720 -> +CSQ: 4,99
12:38:20.149 -> +QCCID: 89918670400365684867	12:38:30.720 ->
12:38:20.149 ->	12:38:30.720 -> OK
12:38:20.149 -> OK	12:38:30.859 -> AT+COPS?
12:38:20.242 -> AT+CSQ	12:38:30.859 -> +COPS: 0

12:38:30.859 ->	12:38:41.469 -> OK	
12:38:30.859 -> OK	12:38:51.560	->
12:38:30.952 -> AT+CREG?	AT+QCFG="nwscanmode",0,1	
12:38:30.952 -> +CREG: 0,2	12:38:51.560 -> OK	
12:38:30.952 ->	12:38:51.654 -> AT+QCCID	
12:38:30.952 -> OK	12:38:51.654 ->	+QCCID:
12:38:41.046		89918670400365684867
AT+QCFG="nwscanmode",0,1	12:38:51.654 ->	
12:38:41.046 -> OK	12:38:51.654 -> OK	
12:38:41.140 -> AT+QCCID	12:38:51.748 -> AT+CSQ	
12:38:41.140 ->	12:38:51.748 -> +CSQ: 12,99	+QCCID:
899186XXXXXXXXXXXX84867	12:38:51.748 ->	
12:38:41.140 ->	12:38:51.748 -> OK	
12:38:41.140 -> OK	12:38:51.876 -> AT+COPS?	
12:38:41.234 -> AT+CSQ	12:38:51.876 -> +COPS: 0,0,"JIO 4G Jio",7	
12:38:41.234 -> +CSQ: 31,99	12:38:51.876 ->	
12:38:41.234 ->	12:38:51.876 -> OK	
12:38:41.234 -> OK	12:38:51.969 -> AT+CREG?	
12:38:41.375 -> AT+COPS?	12:38:51.969 -> +CREG: 0,1	
12:38:41.375 -> +COPS: 0,0,"JIO 4G Jio",7	12:38:51.969 ->	
12:38:41.375 ->	12:38:51.969 -> OK	
12:38:41.375 -> OK	12:39:02.089	->
12:38:41.469 -> AT+CREG?	AT+QCFG="nwscanmode",0,1	
12:38:41.469 -> +CREG: 0,1	12:39:02.089 -> OK	
12:38:41.469 ->	12:39:02.181 -> AT+QCCID	

12:39:02.181	->	+QCCID:	12:39:12.790 ->
89918670400365684867			12:39:12.790 -> OK
12:39:02.181 ->			12:39:12.886 -> AT+COPS?
12:39:02.181 -> OK			12:39:12.886 -> +COPS: 0,0,"JIO 4G Jio",7
12:39:02.275 -> AT+CSQ			12:39:12.886 ->
12:39:02.275 -> +CSQ: 12,99			12:39:12.886 -> OK
12:39:02.275 ->			12:39:12.978 -> AT+CREG?
12:39:02.275 -> OK			12:39:12.978 -> +CREG: 0,1
12:39:02.368 -> AT+COPS?			12:39:12.978 ->
12:39:02.368 -> +COPS: 0,0,"JIO 4G Jio",7			12:39:12.978 -> OK
12:39:02.368 ->			12:39:23.131 ->
12:39:02.368 -> OK			AT+QCFG="nwscanmode",0,1
12:39:02.462 -> AT+CREG?			12:39:23.131 -> OK
12:39:02.462 -> +CREG: 0,1			12:39:23.225 -> AT+QCCID
12:39:02.462 ->			12:39:23.225 -> +QCCID:
12:39:02.462 -> OK			89918670400365684867
12:39:12.602 ->			12:39:23.225 ->
AT+QCFG="nwscanmode",0,1			12:39:23.225 -> OK
12:39:12.602 -> OK			12:39:23.319 -> AT+CSQ
12:39:12.696 -> AT+QCCID			12:39:23.319 -> +CSQ: 12,99
12:39:12.696 -> +QCCID:			12:39:23.319 ->
89918670400365684867			12:39:23.319 -> OK
12:39:12.696 ->			12:39:23.414 -> AT+COPS?
12:39:12.696 -> OK			12:39:23.414 -> +COPS: 0,0,"JIO 4G Jio",7
12:39:12.790 -> AT+CSQ			12:39:23.414 ->
12:39:12.790 -> +CSQ: 12,99			

12:39:23.414 -> OK	12:39:44.144	->
12:39:23.509 -> AT+CREG?	AT+QCFG="nwscanmode",0,1	
12:39:23.509 -> +CREG: 0,1	12:39:44.144 -> OK	
12:39:23.509 ->	12:39:44.238 -> AT+QCCID	
12:39:23.509 -> OK	12:39:44.238 -> +QCCID:	
12:39:33.632	89918670400365684867	
AT+QCFG="nwscanmode",0,1	12:39:44.238 ->	
12:39:33.632 -> OK	12:39:44.238 -> OK	
12:39:33.726 -> AT+QCCID	12:39:44.333 -> AT+CSQ	
12:39:33.726 -> +QCCID:	12:39:44.333 -> +CSQ: 12,99	
89918670400365684867	12:39:44.333 ->	
12:39:33.726 ->	12:39:44.333 -> OK	
12:39:33.726 -> OK	12:39:44.425 -> AT+COPS?	
12:39:33.819 -> AT+CSQ	12:39:44.425 -> +COPS: 0,0,"JIO 4G Jio",7	
12:39:33.819 -> +CSQ: 12,99	12:39:44.425 ->	
12:39:33.819 ->	12:39:44.425 -> OK	
12:39:33.819 -> OK	12:39:44.519 -> AT+CREG?	
12:39:33.913 -> AT+COPS?	12:39:44.519 -> +CREG: 0,1	
12:39:33.913 -> +COPS: 0,0,"JIO 4G Jio",7	12:39:44.519 ->	
12:39:33.913 ->	12:39:44.519 -> OK	
12:39:33.913 -> OK	12:39:54.640	->
12:39:34.005 -> AT+CREG?	AT+QCFG="nwscanmode",0,1	
12:39:34.005 -> +CREG: 0,1	12:39:54.640 -> OK	
12:39:34.005 ->	12:39:54.736 -> AT+QCCID	
12:39:34.005 -> OK	12:39:54.736 -> +QCCID:	
	89918670400365684867	

12:39:54.736 ->	12:40:05.262	->	+QCCID:
12:39:54.736 -> OK	89918670400365684867		
12:39:54.830 -> AT+CSQ	12:40:05.262 ->		
12:39:54.830 -> +CSQ: 12,99	12:40:05.262 -> OK		
12:39:54.830 ->	12:40:05.355 -> AT+CSQ		
12:39:54.830 -> OK	12:40:05.355 -> +CSQ: 12,99		
12:39:54.970 -> AT+COPS?	12:40:05.355 ->		
12:39:54.970 -> +COPS: 0,0,"JIO 4G Jio",7	12:40:05.355 -> OK		
12:39:54.970 ->	12:40:05.447 -> AT+COPS?		
12:39:54.970 -> OK	12:40:05.447 -> +COPS: 0,0,"JIO 4G Jio",7		
12:39:55.063 -> AT+CREG?	12:40:05.447 ->		
12:39:55.063 -> +CREG: 0,1	12:40:05.447 -> OK		
12:39:55.063 ->	12:40:05.542 -> AT+CREG?		
12:39:55.063 -> OK	12:40:05.542 -> +CREG: 0,1		
12:40:05.167	12:40:05.542 ->	->	
AT+QCFG="nwscanmode",0,1	12:40:05.588 -> OK		
12:40:05.167 -> OK			
12:40:05.262 -> AT+QCCID			

9. DSP LOGS

9.1. Log 1

16:15:29.734 ->

16:15:29.734 ->

16:15:29.734 -> RFlsh

16:15:29.734 -> R

16:15:29.734 -> PL

16:15:29.734 -> R

> BmcFunc_InitMcuModeLight Fail: I2C? = 2 McuLight = 0!

16:15:30.201 -> [31mERR:ramdisk_setParam() No Implement! uiEvt 1

16:15:30.201 -> [0m[31mERR:pll_setClockFreq() Target(4) freq can not be divided with no remainder!
Result is 49500000Hz.

16:15:30.342 -> [0m[31mERR:DrvLCDState() state=0x06 not support!

16:15:30.762 -> [0m[31mERR:dai_setI2SClkRatio() f/m clk ratio 0x800f8ae4 not support

16:15:30.762 -> [0m###GxSound_InitAudio OK### 0

16:15:30.762 -> UserWaitEvent(): [33mMSG: get event 04000010!

16:15:30.762 -> [0m[31mERR:Ux_GetRootWindow() wnd not created[0mUserWaitEvent():
[33mMSG: get event 0400001d!

16:15:30.856 -> [0m[31mERR:Ux_GetRootWindow() wnd not created[0mUserWaitEvent():
[33mMSG: get event 04000009!

16:15:30.856 -> [0m@@@SD Card Remove!@@@

16:15:30.856 -> [31mERR:fs_ParingDiskInfo() Parsing PBR FAIL

16:15:30.856 -> .[0m[31mERR:fs_StorageDrvInit() Parsing Disk info fail.

16:15:30.856 -> [0m[31mERR:FST_CMDSysInit() File system init fail and will idle. -259

16:15:30.856 -> [0m[31mERR:Ux_GetRootWindow() wnd not created[0mUserWaitEvent():
[33mMSG: get event 0400000c!

16:15:30.902 -> [0m[33mWRN:fs_format() UserData 0x3c not align 0x10 ,relatSec=25, RsvSec=1,
SecPerFat=1, root=32

16:15:30.902 -> [0m[31mERR:Ux_GetRootWindow() wnd not created[0mStart BMC3G receive task

16:15:30.949 -> ModePhoto Start Time =900

16:15:31.183 -> EXIT DSC

16:15:31.183 -> Byebye, World!

16:15:31.183 -> (pwr-off)

16:15:34.273 ->

16:25:43.348 -> NPT

16:25:43.348 -> Loader NT96655 Start ...

16:25:43.348 ->

16:25:43.348 -> 655B_DDR3_LV1_3_2048Mb 08/18/2014 09:22:56

16:25:43.348 ->

16:25:43.348 ->

16:25:43.348 -> RFlsh

16:25:43.348 ->

R

16:25:43.348 -> PL

16:25:43.348 ->

R> BmcFunc_InitMcuModeLight Succ: I2C? = 2 McuLight = 15!

16:25:43.814 -> [31mERR:ramdisk_setParam() No Implement! uiEvt 1

16:25:43.814 -> [0m[31mERR:DrvLCDState() state=0x06 not support!

16:25:43.955 -> [0m[31mERR:dai_setI2SClkRatio() f/m clk ratio 0x800f8ae4 not support
16:25:43.955 -> [0m[33mWRN:aud_init() I2S format not support: 0x1
16:25:44.002 -> [0m###GxSound_InitAudio OK### 0
16:25:44.002 -> Start BMC3G receive task
16:25:44.002 -> ModePhoto Start Time =300
16:25:44.237 -> EXIT DSC
16:25:44.237 -> Byebye, World!
16:25:44.237 -> (pwr-off)
16:25:44.423 ->

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9.2. Log 1

16:05:56.365 -> NPT
16:05:56.412 -> Loader NT96655 Start ...
16:05:56.412 ->
16:05:56.412 -> 655B_DDR3_LV1_3_2048Mb 08/18/2014 09:22:56
16:05:56.412 ->
16:05:56.601 -> RRRR
16:05:56.647 -> RFlsh
16:05:56.647 ->
R
16:05:56.647 -> PL
16:05:56.647 ->

R> [31mERR:ramdsk_setParam() No Implement! uiEvt 1

16:05:57.114 -> [0m[31mERR:pll_setClockFreq() Target(4) freq can not be divided with no remainder!
Result is 49500000Hz.

16:05:57.254 -> [0m[31mERR:DrvLCDState() state=0x06 not support!

16:05:57.674 -> [0m[31mERR:dai_setI2SClkRatio() f/m clk ratio 0x800f8b24 not support

16:05:57.674 -> [0m[33mWRN:aud_init() I2S format not support: 0x1

16:05:57.674 -> [0mUserWaitEvent(): [33mMSG: get event 0400001d!

16:05:57.674 -> [0m[31mERR:Ux_GetRootWindow() wnd not created[0mUserWaitEvent():
[33mMSG: get event 04000010!

16:05:57.674 -> [0m[31mERR:Ux_GetRootWindow() wnd not created[0mUserWaitEvent():
[33mMSG: get event 04000008!

16:05:57.767 -> [0m[31mERR:Ux_GetRootWindow() wnd not
created[0m[33mWRN:sdioHost_setBusClk() SDIO host0 : real clock (396694Hz) is not equal to
desired (399000Hz)

16:05:57.955 -> [0mUserWaitEvent(): [33mMSG: get event 0400000c!

16:05:58.424 -> [0m[31mERR:Ux_GetRootWindow() wnd not created[0mStart BMC3G receive task

16:05:58.470 -> ModePhoto Start Time =1534

16:05:58.517 -> [35mMODE -1->1

16:05:58.517 -> [0mIPL_SEL_PRVSENMODE 7

16:05:58.517 -> [31mERR:pre_open() PLL6 selected but not enabled...

16:05:58.517 -> [0m[33mWRN:_IME_ChgPar() don't work under IMEALG_INTEGRATION

16:05:58.517 -> [0m[31mERR:IPL_FCB_AlgIE() [32mWDR OFF..

16:05:58.658 -> [0m[31mERR:AEAlg_Allot() AEAlg_allot parameter error AeCurve = 0x00000000
and Info = 0x805995d4

16:05:58.704 -> [0mModePhoto End Time =1822

16:05:58.844 -> [31mERR:IPL_FCB_AlgIE() [32mWDR OFF..

16:05:58.844 -> [0m[31mERR:AE_setWin() SetWin 2

16:05:58.891 -> [0mOpen Start Time =2031

16:05:59.171 -> [31mERR:IPL_FCB_AlgIE() [32mWDR OFF..

16:05:59.171 -> [0mIPL_SEL_PRVSENMODE 7

16:05:59.407 -> [31mERR:IPL_CTRLRunTimeChg() current chg = 6 , current status = 16

16:05:59.454 -> [0m[31mERR:IPL_CTRLRunTimeChg_IQ() current chg = 1073741824 , current status = 16

16:05:59.454 -> [0m[31mERR:IPL_CTRLRunTimeChg_IQ() current chg = 1610612736 , current status = 16

16:05:59.454 -> [0m[31mERR:IPL_FCB_AlgIE() [32mWDR OFF..

16:05:59.454 -> [0m[31mERR:SetGain_MN34110() sensor digital gain is large than 575!!

16:05:59.595 -> [0m--- Fast WakeUp --- IPL_FCB_GetCapRawNormal end: 2847082

16:05:59.923 -> [31mERR:IPL_FCB_SetCapAWB() Raw Size = 4320 3240 8640

16:05:59.923 -> [0m[31mERR:sie_getCAResultManual() Window Size 0x0 = 0

16:05:59.923 -> [0mRAW End Time =2966

16:06:00.110 -> [33mWRN:_IFE2_ChgPar() Counting TH must be 0

16:06:00.110 -> [0mUIFlowWndPhoto_OnUpdateInfo():

16:06:00.110 -> UIAPPPHOTO_CB_QVSTART

16:06:00.110 -> UIAPPPHOTO_CB_QVSTART

16:06:00.436 -> Return = 0

16:06:00.436 -> Return = 0

16:06:00.436 -> Return = 0

16:06:00.436 -> [33mWRN:jpeg_setCmpStartAddr() Buffer size must <= 33554431

16:06:00.436 -> [0mIPL_SEL_PRVSENMODE 7

16:06:00.717 -> UIFlowWndPhoto_OnUpdateInfo():

16:06:00.717 -> UIAPPPHOTO_CB_JPGOK

16:06:00.717 -> UIAPPPHOTO_CB_JPGOK

16:06:00.764 -> [33mWRN:_IME_ChgPar() don't work under IMEALG_INTEGRATION

16:06:00.764 -> [0mUIFlowWndPhoto_OnUpdateInfo():

16:06:00.856 -> UIAPPPHOTO_CB_FSTOK

16:06:00.856 -> UIAPPPHOTO_CB_FSTOK

16:06:01.093 -> [31mERR:IPL_FCB_AlgIE() [32mWDR OFF..

16:06:01.093 -> [0mUIAPPPHOTO_CB_CAPTUREEND

16:06:01.093 -> ###2 NextDirNum = 100, NextFileNum = 26

16:06:01.093 -> [31mERR:AF_Close() AF proc all closed!!

16:06:01.138 -> [0m[35mMODE 1->2

16:06:01.513 -> [0mIPL_SEL_PRVSENMODE 7

16:06:01.513 -> [33mWRN:_IME_ChgPar() don't work under IMEALG_INTEGRATION

16:06:01.513 -> [0m[31m no CB2222222

16:06:01.794 -> [0m[31mERR:IPL_FCB_Alg3DNR() [32m3DNR on..

16:06:01.794 -> [0m[31mERR:IPL_FCB_AlgIE() [32mWDR OFF..

16:06:01.980 -> [0m[31mERR:IPL_FCB_AlgIE() [32mWDR OFF..

16:06:02.122 -> [0m[31mERR:IPL_FCB_AlgIE() [32mWDR OFF..

16:06:02.356 -> [0mIPL_SEL_PRVSENMODE 9

16:06:03.572 -> [33mWRN:_IME_ChgPar() don't work under IMEALG_INTEGRATION

16:06:03.572 -> [0m[31mERR:Movie_IPLChangeCB() Wait IME ready timeout!

16:06:04.038 -> [0m@Rec Current Time@ = 0 Free Space = 30287 Video Legth = 0

16:06:05.164 -> @Rec Current Time@ = 1 Free Space = 30287 Video Legth = 0

16:06:06.152 -> @Rec Current Time@ = 2 Free Space = 30287 Video Legth = 0

16:06:07.139 -> @Rec Current Time@ = 3 Free Space = 30286 Video Legth = 0

16:06:08.120 -> @Rec Current Time@ = 4 Free Space = 30286 Video Legth = 0

16:06:09.157 -> @Rec Current Time@ = 5 Free Space = 30286 Video Legth = 0

16:06:09.157 -> @@@RecStop111!!@@@

16:06:09.391 -> [31mERR:IPL_FCB_AlgIE() [32mWDR OFF..

16:06:09.391 -> [0mIPL_SEL_PRVSENMODE 9

16:06:09.531 -> [33mWRN:_IME_ChgPar() don't work under IMEALG_INTEGRATION

16:06:09.531 -> [0m[31mERR:Movie_IPLChangeCB() Wait IME ready timeout!

16:06:09.951 -> [0m@@FlowMovie_StopRec@@

16:06:10.515 -> >>test4

16:06:10.515 -> >>BSK_Sevic3GFunctions

16:06:10.562 ->

16:06:10.562 -> [31mWrite sys param success

16:06:10.562 -> [0mModePhoto Start Time =8878

16:06:10.657 -> [35mMODE 2->1

16:06:10.657 -> [0mIPL_SEL_PRVSENMODE 7

16:06:10.657 -> [33mWRN:_IME_ChgPar() don't work under IMEALG_INTEGRATION

16:06:10.657 -> [0mEXIT DSC

16:06:10.895 -> Byebye, World!

16:06:10.895 -> (pwr-off)

9.3. LOG 3

Link to the file Due to very big size it attached here [LINK](#)