eYs3D Android SDK

ver: 1.2.0.0

Generated by Doxygen 1.8.13

Contents

1 Deprecated List 1

2 Hierarchical Index 3

2.1 Class Hierarchy . . . 3

3 Class Index 5

3.1 Class List . . . 5

4 Class Documentation 7

4.1 com.esp.android.usb.camera.core.ApcCamera Class Reference . . . 7

4.1.1 Detailed Description . . . 10

4.1.2 Constructor & Destructor Documentation . . . 10

4.1.2.1 ApcCamera() . . . 11

4.1.3 Member Function Documentation . . . 11

4.1.3.1 close() . . . 11

4.1.3.2 closeIMU() . . . 11

4.1.3.3 doIMUCalibration() . . . 11

4.1.3.4 enableIMUDataOutput() . . . 12

4.1.3.5 enableSenorIF() . . . 12

4.1.3.6 generateLUTFile() . . . 12

4.1.3.7 getAEStatusEnabled() . . . 12

4.1.3.8 getAutoWhiteBalance() . . . 12

4.1.3.9 getCurrentFileIndex() . . . 13

4.1.3.10 getCurrentFrameRate() . . . 13

4.1.3.11 getCurrentPowerlineFrequency() . . . 13

4.1.3.12 getCurrentWhiteBalance() . . . 14
4.1.3.13 getDepthDataType() . . . 14
4.1.3.14 getDeviceFocalLength() . . . 14
4.1.3.15 getDeviceType() . . . 14
4.1.3.16 getDistanceLimitInZDTable() . . . 15
4.1.3.17 getExposureAbsoluteTime() . . . 15
4.1.3.18 getExposureMode() . . . 15
4.1.3.19 getExposurePriority() . . . 15
4.1.3.20 getFileData() . . . 15
4.1.3.21 getFileIDHeader() . . . 16
4.1.3.22 getFileIDVersion() . . . 16
4.1.3.23 getFlashFocalLength() . . . 16
4.1.3.24 getFWRegisterValue() [1/2] . . . 17
4.1.3.25 getFWRegisterValue() [2/2] . . . 17
4.1.3.26 getFwVersionValue() . . . 17
4.1.3.27 getHWPostProcess() . . . 17
4.1.3.28 getHWRegisterValue() . . . 17
4.1.3.29 getIMUDataFormat() . . . 18
4.1.3.30 getIMUDataOutputByte() . . . 18
4.1.3.31 getIMUFWVersion() . . . 18
4.1.3.32 getIMUModuleName() . . . 19
4.1.3.33 getIndexOfStreamInfo() [1/2] . . . 19
4.1.3.34 getIndexOfStreamInfo() [2/2] . . . 19
4.1.3.35 getIRCurrentValue() . . . 19
4.1.3.36 getIRMaxValue() . . . 20
4.1.3.37 getIRMinValue() . . . 20
4.1.3.38 getIRMode() . . . 20
4.1.3.39 getIsUSB3() . . . 20
4.1.3.40 getLogDataValue() . . . 20
4.1.3.41 getPid() . . . 21

4.1.3.42 getPidValue() . . . 21
4.1.3.43 getPowerlineFrequencyLimit() . . . 21
4.1.3.44 getProductVersion() . . . 21
4.1.3.45 getRectifyLogData() . . . 21
4.1.3.46 getRectifyTableValue() [1/2] . . . 22
4.1.3.47 getRectifyTableValue() [2/2] . . . 22
4.1.3.48 getSDKVerion() . . . 22
4.1.3.49 getSensorRegisterValue() . . . 23
4.1.3.50 getSerialNumberValue() . . . 23
4.1.3.51 getStreamInfoList() . . . 23
4.1.3.52 getSurfaceHeight() . . . 24
4.1.3.53 getSurfaceWidth() . . . 24
4.1.3.54 getVideoMode() . . . 24
4.1.3.55 getVidValue() . . . 24
4.1.3.56 getWhiteBalanceLimit() . . . 24
4.1.3.57 getYOffsetValue() [1/2] . . . 24
4.1.3.58 getYOffsetValue() [2/2] . . . 24
4.1.3.59 getZDTableValue() [1/3] . . . 25
4.1.3.60 getZDTableValue() [2/3] . . . 25
4.1.3.61 getZDTableValue() [3/3] . . . 25
4.1.3.62 isIMUEnabled() . . . 25
4.1.3.63 isIRSupported() . . . 26
4.1.3.64 onStartLivePly() . . . 26
4.1.3.65 onStopLivePly() . . . 26
4.1.3.66 open() [1/2] . . . 26
4.1.3.67 open() [2/2] . . . 27
4.1.3.68 readFlashData() . . . 28
4.1.3.69 readIMUData() [1/2] . . . 28
4.1.3.70 readIMUData() [2/2] . . . 28
4.1.3.71 saveStaticPly() . . . 29

4.1.3.72 saveStaticPlyWithFilter() . . . 29
4.1.3.73 setAutoWhiteBalance() . . . 30
4.1.3.74 setCurrentPowerlineFrequency() . . . 30
4.1.3.75 setCurrentWhiteBalance() . . . 30
4.1.3.76 setDepthDataType() . . . 30
4.1.3.77 setDepthFilterByType() . . . 30
4.1.3.78 setDepthFilters() . . . 31
4.1.3.79 setDisableAE() . . . 31
4.1.3.80 setDistanceFilter() . . . 31
4.1.3.81 setEnableAE() . . . 32
4.1.3.82 setExposureAbsoluteTime() . . . 32
4.1.3.83 setExposureMode() . . . 32
4.1.3.84 setExposurePriority() . . . 32
4.1.3.85 setFileData() . . . 33
4.1.3.86 setFishTag() . . . 33
4.1.3.87 setFishTag_eYs3D() . . . 33
4.1.3.88 SetFWRegisterValue() . . . 33
4.1.3.89 setHWPostProcess() . . . 33
4.1.3.90 setHWRegisterValue() . . . 34
4.1.3.91 setIMUDataFormat() . . . 34
4.1.3.92 setInterleaveMode() . . . 34
4.1.3.93 setIRCurrentValue() . . . 34
4.1.3.94 setIRMaxValue() . . . 34
4.1.3.95 SetIRMode() . . . 35
4.1.3.96 setLogDataValue() . . . 35
4.1.3.97 setModuleSync() . . . 35
4.1.3.98 setMonitorFrameRate() . . . 35
4.1.3.99 setPidVidValue() . . . 36
4.1.3.100 setPreviewSize() [1/2] . . . 36
4.1.3.101 setPreviewSize() [2/2] . . . 36

4.1.3.102 setPreviewTexture() . . . 37
4.1.3.103 setRectifyTableValue() . . . 37
4.1.3.104 setSensorRegisterValue() . . . 37
4.1.3.105 setSerialNumberValue() . . . 37
4.1.3.106 setVideoMode() . . . 38
4.1.3.107 setYOffsetValue() . . . 38
4.1.3.108 setZDTableValue() . . . 38
4.1.3.109 startIMULogData() . . . 39
4.1.3.110 stopIMULogData() . . . 39
4.1.3.111 stopPreview() . . . 39
4.1.3.112 stopReadIMUData() . . . 39
4.1.3.113 writeFlashData() . . . 40
4.1.3.114 writeFlashDataASIC() . . . 40
4.1.4 Member Data Documentation . . . 40
4.1.4.1 DEPTH_DATA_11_BITS . . . 40
4.1.4.2 DEPTH_DATA_11_BITS_RAW . . . 41
4.1.4.3 DEPTH_DATA_14_BITS . . . 41
4.1.4.4 DEPTH_DATA_14_BITS_RAW . . . 41
4.1.4.5 DEPTH_DATA_8_BITS . . . 41
4.1.4.6 DEPTH_DATA_8_BITS_RAW . . . 41
4.1.4.7 DEPTH_DATA_8_BITS_x80 . . . 42
4.1.4.8 DEPTH_DATA_8_BITS_x80_RAW . . . 42
4.1.4.9 DEPTH_DATA_OFF_RAW . . . 42
4.1.4.10 DEPTH_DATA_OFF_RECTIFY . . . 42
4.1.4.11 DO_DEPTH_FILTER . . . 42
4.2 com.esp.android.usb.camera.core.ApcCamera.CurrentFrameRate Class Reference . . . 42
4.2.1 Detailed Description . . . 43
4.2.2 Member Data Documentation . . . 43
4.2.2.1 mFrameRatePreview . . . 43
4.2.2.2 mFrameRateUvc . . . 43

4.3 com.esp.android.usb.camera.core.IMUData.DataFormat Class Reference . . . 43
4.4 com.esp.android.usb.camera.core.DeviceFilter Class Reference . . . 43
4.4.1 Member Function Documentation . . . 43
4.4.1.1 getDeviceFilters() . . . 43
4.5 com.esp.android.usb.camera.core.ApcCamera.DistanceLimit Class Reference . . . 44
4.6 com.esp.android.usb.camera.core.ApcCamera.eys_error Enum Reference . . . 44
4.7 com.esp.android.usb.camera.core.IErrorCallback Interface Reference . . . 44
4.8 com.esp.android.usb.camera.core.IFrameCallback Interface Reference . . . 44
4.8.1 Detailed Description . . . 44
4.8.2 Member Function Documentation . . . 44
4.8.2.1 onFrame() . . . 44
4.9 com.esp.android.usb.camera.core.IIMUCallback Interface Reference . . . 45
4.9.1 Detailed Description . . . 45
4.9.2 Member Function Documentation . . . 45
4.9.2.1 onCalibration() . . . 45
4.9.2.2 onData() . . . 45
4.10 com.esp.android.usb.camera.core.ILivePlyCallback Interface Reference . . . 46
4.10.1 Member Function Documentation . . . 46
4.10.1.1 onLivePlyCallback() . . . 46
4.11 com.esp.android.usb.camera.core.IMUData Class Reference . . . 46
4.12 com.esp.android.usb.camera.core.USBMonitor.OnDeviceConnectListener Interface Reference . . . 46
4.12.1 Member Function Documentation . . . 47
4.12.1.1 onAttach() . . . 47
4.12.1.2 onCancel() . . . 47
4.12.1.3 onConnect() . . . 47
4.12.1.4 onDetach() . . . 47
4.12.1.5 onDisconnect() . . . 48
4.13 com.esp.android.usb.camera.core.RectifyLogData Class Reference . . . 48
4.13.1 Detailed Description . . . 48
4.13.2 Member Function Documentation . . . 48

4.13.2.1 toString() . . . 48
4.14 com.esp.android.usb.camera.core.StreamInfo Class Reference . . . 48
4.14.1 Detailed Description . . . 49
4.14.2 Member Data Documentation . . . 49
4.14.2.1 interfaceNumber . . . 49
4.15 com.esp.android.usb.camera.core.USBMonitor.UsbControlBlock Class Reference . . . 49
4.15.1 Constructor & Destructor Documentation . . . 49
4.15.1.1 UsbControlBlock() . . . 49
4.15.2 Member Function Documentation . . . 49
4.15.2.1 close() [1/2] . . . 50
4.15.2.2 close() [2/2] . . . 50
4.15.2.3 open() . . . 50
4.16 com.esp.android.usb.camera.core.USBMonitor.UsbDeviceInfo Class Reference . . . 50
4.17 com.esp.android.usb.camera.core.USBMonitor Class Reference . . . 50
4.17.1 Member Function Documentation . . . 51
4.17.1.1 dumpDevices() . . . 51
4.17.1.2 getDeviceCount() . . . 51
4.17.1.3 getDeviceList() [1/3] . . . 51
4.17.1.4 getDeviceList() [2/3] . . . 51
4.17.1.5 getDeviceList() [3/3] . . . 52
4.17.1.6 getDevices() . . . 52
4.17.1.7 hasPermission() . . . 52
4.17.1.8 register() . . . 53
4.17.1.9 requestPermission() . . . 53
4.17.1.10 setDeviceFilter() [1/2] . . . 53
4.17.1.11 setDeviceFilter() [2/2] . . . 53
4.17.1.12 unregister() . . . 54
4.18 com.esp.android.usb.camera.core.UVCCamera Class Reference . . . 54
4.18.1 Constructor & Destructor Documentation . . . 55
4.18.1.1 UVCCamera() . . . 55

4.18.2 Member Function Documentation . . . 55
4.18.2.1 close() . . . 55
4.18.2.2 destroy() . . . 56
4.18.2.3 getDevice() . . . 56
4.18.2.4 getDeviceName() . . . 56
4.18.2.5 getUsbControlBlock() . . . 56
4.18.2.6 open() . . . 56
4.18.2.7 setFrameCallback() . . . 57
4.18.2.8 setPreviewDisplay() [1/2] . . . 57
4.18.2.9 setPreviewDisplay() [2/2] . . . 57
4.18.2.10 setPreviewSize() [1/4] . . . 58
4.18.2.11 setPreviewSize() [2/4] . . . 58
4.18.2.12 setPreviewSize() [3/4] . . . 58
4.18.2.13 setPreviewSize() [4/4] . . . 59
4.18.2.14 setPreviewTexture() . . . 59
4.18.2.15 startPreview() . . . 60
4.18.2.16 stopPreview() . . . 60
4.19 com.esp.android.usb.camera.core.ApcCamera.VideoMode Class Reference . . . 60
4.19.1 Detailed Description . . . 61

Index **63**

Chapter 1

Deprecated List

Member com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_11_BITS
As of release 1.1.1, replaced by RECTIFY_11_BITS

Member com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_11_BITS_RAW
As of release 1.1.1, replaced by RAW_11_BITS

Member com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_14_BITS
As of release 1.1.1, replaced by RECTIFY_14_BITS

Member com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_14_BITS_RAW
As of release 1.1.1, replaced by RAW_14_BITS

Member com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_8_BITS
As of release 1.1.1, replaced by RECTIFY_8_BITS

Member com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_8_BITS_RAW
As of release 1.1.1, replaced by RAW_8_BITS

Member com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_8_BITS_x80
As of release 1.1.1, replaced by RECTIFY_8_BITS_x80

Member com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_8_BITS_x80_RAW
As of release 1.1.1, replaced by RAW_8_BITS_x80

Member com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_OFF_RAW
As of release 1.1.1, replaced by COLOR_ONLY

Member com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_OFF_RECTIFY
As of release 1.1.1, replaced by OFF_RECTIFY

Member com.esp.android.usb.camera.core.ApcCamera.getDepthDataType ()
As of release 1.1.1, replaced by getVideoMode()

Member com.esp.android.usb.camera.core.ApcCamera.open ()
As of release 1.1.2, replaced by ApcCamera#open(USBMonitor.UsbControlBlock)

Member com.esp.android.usb.camera.core.ApcCamera.setDepthDataType (short type)
As of release 1.1.1, replaced by setVideoMode(int mode)

Member com.esp.android.usb.camera.core.UVCCamera.getDevice ()
As of release 1.1.2, replaced by UVCCamera#getDevice(boolean)

Member com.esp.android.usb.camera.core.UVCCamera.getDeviceName ()
As of release 1.1.2, replaced by UVCCamera#getDeviceName(boolean)

Member com.esp.android.usb.camera.core.UVCCamera.getUsbControlBlock ()
As of release 1.1.2, replaced by UVCCamera#getUsbControlBlock(boolean)

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

com.esp.android.usb.camera.core.ApcCamera.CurrentFrameRate 42
com.esp.android.usb.camera.core.IMUData.DataFormat 43
com.esp.android.usb.camera.core.DeviceFilter 43
com.esp.android.usb.camera.core.ApcCamera.DistanceLimit 44
com.esp.android.usb.camera.core.ApcCamera.eys_error 44
com.esp.android.usb.camera.core.IErrorCallback 44
com.esp.android.usb.camera.core.IFrameCallback 44
com.esp.android.usb.camera.core.IIMUCallback 45
com.esp.android.usb.camera.core.ILivePlyCallback 46
com.esp.android.usb.camera.core.IMUData 46
com.esp.android.usb.camera.core.USBMonitor.OnDeviceConnectListener 46
com.esp.android.usb.camera.core.RectifyLogData 48
com.esp.android.usb.camera.core.StreamInfo 48
com.esp.android.usb.camera.core.USBMonitor.UsbControlBlock 49
com.esp.android.usb.camera.core.USBMonitor.UsbDeviceInfo 50
com.esp.android.usb.camera.core.USBMonitor 50
com.esp.android.usb.camera.core.UVCCamera 54
    com.esp.android.usb.camera.core.ApcCamera 7
com.esp.android.usb.camera.core.ApcCamera.VideoMode 60

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

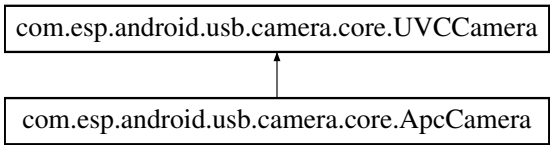
com.esp.android.usb.camera.core.ApcCamera 7
com.esp.android.usb.camera.core.ApcCamera.CurrentFrameRate 42
com.esp.android.usb.camera.core.IMUData.DataFormat 43
com.esp.android.usb.camera.core.DeviceFilter 43
com.esp.android.usb.camera.core.ApcCamera.DistanceLimit 44
com.esp.android.usb.camera.core.ApcCamera.eys_error 44
com.esp.android.usb.camera.core.IErrorCallback 44
com.esp.android.usb.camera.core.IFrameCallback 44
com.esp.android.usb.camera.core.IIMUCallback 45
com.esp.android.usb.camera.core.ILivePlyCallback 46
com.esp.android.usb.camera.core.IMUData 46
com.esp.android.usb.camera.core.USBMonitor.OnDeviceConnectListener 46
com.esp.android.usb.camera.core.RectifyLogData 48
com.esp.android.usb.camera.core.StreamInfo 48
com.esp.android.usb.camera.core.USBMonitor.UsbControlBlock 49
com.esp.android.usb.camera.core.USBMonitor.UsbDeviceInfo 50
com.esp.android.usb.camera.core.USBMonitor 50
com.esp.android.usb.camera.core.UVCCamera 54
com.esp.android.usb.camera.core.ApcCamera.VideoMode 60

Chapter 4

Class Documentation

4.1 com.esp.android.usb.camera.core.ApcCamera Class Reference

Inheritance diagram for com.esp.android.usb.camera.core.ApcCamera:



Classes

- class CurrentFrameRate
- class DistanceLimit
- enum eys_error
- class VideoMode

Public Member Functions

- ApcCamera ()
- int open ()
- int open (final USBMonitor.UsbControlBlock ctrlBlock)
- void close ()
- void setPreviewTexture (final SurfaceTexture texture, final int camera_switch)
- void stopPreview (final int camera_switch)
- int generateLUTFile ()
- int getDeviceType ()
- boolean getIsUSB3 ()
- StreamInfo [ ] getStreamInfoList (int interfaceNumber)
- void setPreviewSize (StreamInfo streamInfo)
- void setPreviewSize (StreamInfo streamInfo, int maxFps)
- int getIndexOfStreamInfo (int width, int height, int interfaceNumber, boolean isFormatMJPEG)
- int getIndexOfStreamInfo (StreamInfo streamInfo)
- byte [ ] getFileData (int nID)
- int setFileData (byte[ ] buffer, int nID)

- int getSensorRegisterValue (String[ ] value, int nId, int address, int flag)
- int setSensorRegisterValue (int nId, int address, int nValue, int flag)
- boolean isIRSupported ()
- int getFWRegisterValue (String[ ] value, int address)
- int getFWRegisterValue (int[ ] pValue, int address)
- int SetFWRegisterValue (int address, int nValue)
- int getHWRegisterValue (String[ ] value, int address)
- int setHWRegisterValue (int address, int nValue)
- String getFwVersionValue ()
- String getProductVersion ()
- int setIRCurrentValue (int value)
- int getIRCurrentValue ()
- int getIRMinValue ()
- int getIRMaxValue ()
- int setIRMaxValue (int value)
- int getIRMode ()
- int SetIRMode (int value)
- int getPid ()
- String getPidValue ()
- String getVidValue ()
- int setPidVidValue (int nPid, int nVid)
- int enableSenorIF (boolean bIsEnable)
- String getSerialNumberValue ()
- int setSerialNumberValue (String str)
- byte [ ] getYOffsetValue ()
- byte [ ] getYOffsetValue (int index)
- int setYOffsetValue (byte[ ] buffer, int index)
- byte [ ] getRectifyTableValue ()
- byte [ ] getRectifyTableValue (int index)
- int setRectifyTableValue (byte[ ] buffer, int index)
- int [ ] getZDTableValue ()
- int [ ] getZDTableValue (int index)
- int [ ] getZDTableValue (int index, int type)
- int setZDTableValue (byte[ ] buffer, int index, int type)
- short getDepthDataType ()
- int setDepthDataType (short type)
- int getVideoMode ()
- int setVideoMode (int mode)
- RectifyLogData getRectifyLogData (int index)
- byte [ ] getLogDataValue (int index, int type)
- int setLogDataValue (byte[ ] buffer, int index, int type)
- boolean getHWPostProcess ()
- int setHWPostProcess (boolean enable)
- byte [ ] readFlashData ()
- int writeFlashData (byte[ ] buffer, boolean bIsSerialNumberKeep, boolean bIsSensorPositionKeep, boolean bIsRectificationTableKeep, boolean bIsZDTableKeep, boolean bIsCalibrationLogKeep, boolean bIsParaLut↩ Keep, boolean bIsKeepISP, boolean bSetFWTag)
- int writeFlashDataASIC (byte[ ] buffer, byte[ ] bufferOri)
- boolean getAEStatusEnabled ()
- int setEnableAE ()
- int setDisableAE ()
- int getAutoWhiteBalance ()
- int setAutoWhiteBalance (boolean on)
- int [ ] getWhiteBalanceLimit ()
- int getCurrentWhiteBalance ()

- int setCurrentWhiteBalance (int value)
- int [ ] getPowerlineFrequencyLimit ()
- int getCurrentPowerlineFrequency ()
- int setCurrentPowerlineFrequency (int value)
- int setExposureMode (int mode)
- int getExposureMode ()
- int setExposureAbsoluteTime (int time)
- int getExposureAbsoluteTime ()
- int getExposurePriority ()
- int setExposurePriority (int priority)
- int setFishTag_eYs3D (String output_file, boolean audio_in)
- int setFishTag (String input_file, boolean audio_in)
- int getSurfaceWidth ()
- int getSurfaceHeight ()
- CurrentFrameRate getCurrentFrameRate (final int camera_switch)
- void setMonitorFrameRate (boolean enable, final int camera_switch)
- int getFileIDHeader (final int camera_switch)
- int getFileIDVersion (final int camera_switch)
- boolean setInterleaveMode (boolean enabled)
- DistanceLimit getDistanceLimitInZDTable ()
- int setDistanceFilter (int zNear, int zFar)
- int getCurrentFileIndex ()
- int saveStaticPly (String filename)
- int saveStaticPlyWithFilter (String filename, boolean isPlyFilterEnabled)
- int setDepthFilterByType (int which, boolean isEnable)
- int setDepthFilters (boolean bDoDepthFilter, boolean bSubSample, boolean bEdgePreservingFilter, boolean bHoleFill, boolean bTemporalFilter, boolean bFlyingDepthCancellation)
- int onStartLivePly (ILivePlyCallback livePlyCallback)
- int onStopLivePly ()
- int setModuleSync ()
- void closeIMU ()
- boolean isIMUEnabled ()
- String getIMUModuleName ()
- String getIMUFWVersion ()
- int getIMUDataOutputByte (int format)
- int setIMUDataFormat (int format)
- int getIMUDataFormat ()
- int enableIMUDataOutput (boolean enable)
- IMUData readIMUData ()
- int readIMUData (IIMUCallback callback)
- int stopReadIMUData ()
- int doIMUCalibration (IIMUCallback callback)
- int startIMULogData (String fileName)
- int stopIMULogData ()
- int [ ] getDeviceFocalLength ()
- int [ ] getFlashFocalLength (int width, int height)

Static Public Member Functions

- static String getSDKVerion ()

Static Public Attributes

- static final int DO_DEPTH_FILTER = 0

Product Version

- static final String **PRODUCT_VERSION_EX8029** ="EX8029"
- static final String **PRODUCT_VERSION_EX8030** ="EX8030"
- static final String **PRODUCT_VERSION_EX8031** ="EX8031"
- static final String **PRODUCT_VERSION_EX8032** ="EX8032"
- static final String **PRODUCT_VERSION_EX8036** ="EX8036"
- static final String **PRODUCT_VERSION_EX8037** ="EX8037"
- static final String **PRODUCT_VERSION_EX8038** ="EX8038"
- static final String **PRODUCT_VERSION_EX8059** ="EX8059"
- static final String **PRODUCT_VERSION_YX8059** ="YX8059"
- static final String **PRODUCT_VERSION_YX8062** ="YX8062"

Depth Data Type

- static final short DEPTH_DATA_OFF_RAW = 0
- static final short DEPTH_DATA_8_BITS = 1
- static final short DEPTH_DATA_14_BITS = 2
- static final short DEPTH_DATA_8_BITS_x80 = 3
- static final short DEPTH_DATA_11_BITS = 4
- static final short DEPTH_DATA_OFF_RECTIFY = 5
- static final short DEPTH_DATA_8_BITS_RAW = 6
- static final short DEPTH_DATA_14_BITS_RAW = 7
- static final short DEPTH_DATA_8_BITS_x80_RAW = 8
- static final short DEPTH_DATA_11_BITS_RAW = 9
- static final short **DEPTH_DATA_11_BITS_COMBINED_RECTIFY** = 13

error code

- static final int **EYS_OK** = 1
- static final int **EYS_ParaLUT_ERROR** = -2487
- static final int **EYS_MapLUT_ERROR** = -2488
- static final int **EYS_AppendFront_ERROR** = -2489
- static final int **EYS_LoadLUT_ERROR** = -2490
- static final int **EYS_ERROR** = -1
- static final int **EYS_UVCCAMERA_NOT_OPEN** = -2
- static final int **UVC_ERROR_ACCESS** = -3
- static final int **DEVICE_FIND_FAIL** = -25
- static final int **DEVICE_NOT_SUPPORT** = -33

4.1.1 Detailed Description

ApcCamera

4.1.2 Constructor & Destructor Documentation

4.1.2.1 ApcCamera()

```
com.esp.android.usb.camera.core.ApcCamera.ApcCamera ( )
```

the constructor of this class should be call within the thread that has a looper (UI thread or a thread that called Looper.prepare)

4.1.3 Member Function Documentation

4.1.3.1 close()

```
void com.esp.android.usb.camera.core.ApcCamera.close ( )
```

close and release UVC camera

4.1.3.2 closeIMU()

```
void com.esp.android.usb.camera.core.ApcCamera.closeIMU ( )
```

This is for multiple IMU devices. If you open multiple IMU devices and want to close them. Please check all the IMU devices called closeIMU() first then call close() or destroy() ()}

4.1.3.3 doIMUCalibration()

```
int com.esp.android.usb.camera.core.ApcCamera.doIMUCalibration (
            IIMUCallback callback )
```

IMU Calibration

Parameters

callback	callback

See also

IIMUCallback::onCalibration(boolean)

Returns

APC_OK means successfully start IMU calibration. Check the calibration result by callback IIMUCallback↩ ::onCalibration

4.1.3.4 enableIMUDataOutput()

```
int com.esp.android.usb.camera.core.ApcCamera.enableIMUDataOutput (
            boolean enable )
```

Enable/Disable IMU data output

Parameters

enable	boolean

Returns

APC_OK means successfully set IMU data output

4.1.3.5 enableSenorIF()

```
int com.esp.android.usb.camera.core.ApcCamera.enableSenorIF (
            boolean bIsEnable )
```

enable sensor IF

Parameters

bIsEnable	set true to enable sensor IF

4.1.3.6 generateLUTFile()

```
int com.esp.android.usb.camera.core.ApcCamera.generateLUTFile ( )
```

Generate LUT file

4.1.3.7 getAEStatusEnabled()

```
boolean com.esp.android.usb.camera.core.ApcCamera.getAEStatusEnabled ( )
```

Get status of auto exposure

4.1.3.8 getAutoWhiteBalance()

```
int com.esp.android.usb.camera.core.ApcCamera.getAutoWhiteBalance ( )
```

Get status of auto white balance.

Returns

result 0 : OFF 1 : ON -1 : EYS_ERROR -3 : UVC_ERROR_ACCESS -33 : DEVICE_NOT_SUPPORT

4.1.3.9 getCurrentFileIndex()

```
int com.esp.android.usb.camera.core.ApcCamera.getCurrentFileIndex ( )
```

Get current file index, ex : ZD table, Rectify log data Note : This function should use after setPreviewSize (depth)

Returns

current file index

4.1.3.10 getCurrentFrameRate()

```
CurrentFrameRate com.esp.android.usb.camera.core.ApcCamera.getCurrentFrameRate (
            final int camera_switch )
```

Get the frame rate of uvc and preview.

Parameters

camera_switch	target switch [CAMERA_COLOR,CAMERA_DEPTH]

Returns

current frame rate

See also

CurrentFrameRate

4.1.3.11 getCurrentPowerlineFrequency()

```
int com.esp.android.usb.camera.core.ApcCamera.getCurrentPowerlineFrequency ( )
```

Get current value of light source.

Returns

result -1 : EYS_ERROR -33 : DEVICE_NOT_SUPPORT else : Current value of light source

4.1.3.12 getCurrentWhiteBalance()

```
int com.esp.android.usb.camera.core.ApcCamera.getCurrentWhiteBalance ( )
```

Get current value of white balance.

Returns

result -1 : EYS_ERROR -33 : DEVICE_NOT_SUPPORT else : Current value of white balance

4.1.3.13 getDepthDataType()

```
short com.esp.android.usb.camera.core.ApcCamera.getDepthDataType ( )
```

Get type of depth.

Deprecated As of release 1.1.1, replaced by getVideoMode()

4.1.3.14 getDeviceFocalLength()

```
int [] com.esp.android.usb.camera.core.ApcCamera.getDeviceFocalLength ( )
```

Get device focal length

Returns

int[], index {leftFx, leftFy, rightFx, rightFy}.

4.1.3.15 getDeviceType()

```
int com.esp.android.usb.camera.core.ApcCamera.getDeviceType ( )
```

Get device type.

Returns

0:OTHERS, 1:AXES1, 2:PUMA

4.1.3.16 getDistanceLimitInZDTable()

```
DistanceLimit com.esp.android.usb.camera.core.ApcCamera.getDistanceLimitInZDTable ( )
```

This function parse ZD table and return minimum distance and maximum distance. And this function should use after setPreviewSize. According to the provided resolutions, we could know which ZDTable is suitable for calculating distance. And the index of 0, 1 represent the z nearest, z farthest respectively. In addition, the length unit here is millimeter.

4.1.3.17 getExposureAbsoluteTime()

```
int com.esp.android.usb.camera.core.ApcCamera.getExposureAbsoluteTime ( )
```

Get exposure time: Gets the absolute exposure time.

Returns

result -25 : DEVICE_FIND_FAIL -33 : DEVICE_NOT_SUPPORT else : Current value of exposure time (-13 $\sim$ 3)

4.1.3.18 getExposureMode()

```
int com.esp.android.usb.camera.core.ApcCamera.getExposureMode ( )
```

Get Camera Terminal exposure mode

Returns

1 : manual mode 2 : auto mode 4 : shutter priority mode 8 : aperture priority mode -1 : EYS_ERROR -3 : UVC_ERROR_ACCESS -33 : DEVICE_NOT_SUPPORT

4.1.3.19 getExposurePriority()

```
int com.esp.android.usb.camera.core.ApcCamera.getExposurePriority ( )
```

Get value of exposure priority.

Returns

result -1 -> EYS_ERROR -3 -> UVC_ERROR_ACCESS -33 -> DEVICE_NOT_SUPPORT other -> Exposure priority

4.1.3.20 getFileData()

```
byte [] com.esp.android.usb.camera.core.ApcCamera.getFileData (
            int nID )
```

Get file data.

Parameters

nID	file ID

Returns

data of specified file ID APC_Y_OFFSET_FILE_ID_0 30 APC_RECTIFY_FILE_ID_0 40 APC_ZD_TABL↩ E_FILE_ID_0 50 APC_ISP_FILE_ID_0 120 APC_LSC_FILE_ID_0 150 APC_USER_DATA_FILE_ID_0 200 APC_CALIB_LOG_FILE_ID_0 240

4.1.3.21 getFileIDHeader()

```
int com.esp.android.usb.camera.core.ApcCamera.getFileIDHeader (
            final int camera_switch )
```

Get file ID header.

Parameters

camera_switch	target switch [CAMERA_COLOR,CAMERA_DEPTH]

4.1.3.22 getFileIDVersion()

```
int com.esp.android.usb.camera.core.ApcCamera.getFileIDVersion (
            final int camera_switch )
```

Get file ID version.

Parameters

camera_switch	target switch [CAMERA_COLOR,CAMERA_DEPTH]

4.1.3.23 getFlashFocalLength()

```
int [] com.esp.android.usb.camera.core.ApcCamera.getFlashFocalLength (
            int width,
            int height )
```

Get flash focal length

Returns

int[], index {leftFx, leftFy, rightFx, rightFy, pixelUnit}.

4.1.3.24 getFWRegisterValue() [1/2]

```
int com.esp.android.usb.camera.core.ApcCamera.getFWRegisterValue (
            String [] value,
            int address )
```

Get value of firmware register.

Parameters

value	value of register

4.1.3.25 getFWRegisterValue() [2/2]

```
int com.esp.android.usb.camera.core.ApcCamera.getFWRegisterValue (
            int [] pValue,
            int address )
```

Get value of firmware register.

Parameters

pValue	value of register

4.1.3.26 getFwVersionValue()

```
String com.esp.android.usb.camera.core.ApcCamera.getFwVersionValue ( )
```

Get firmware version.

Returns

firmware version

4.1.3.27 getHWPostProcess()

```
boolean com.esp.android.usb.camera.core.ApcCamera.getHWPostProcess ( )
```

Check if hardware post process is on.

4.1.3.28 getHWRegisterValue()

```
int com.esp.android.usb.camera.core.ApcCamera.getHWRegisterValue (
            String [] value,
            int address )
```

Get value of hardware register.

Parameters

value	value of register

4.1.3.29 getIMUDataFormat()

```
int com.esp.android.usb.camera.core.ApcCamera.getIMUDataFormat ( )
```

Get IMU data format

See also

IMUData.DataFormat

Returns

IMUData.DataFormat

4.1.3.30 getIMUDataOutputByte()

```
int com.esp.android.usb.camera.core.ApcCamera.getIMUDataOutputByte (
            int format )
```

Get IMU data output byte

Parameters

format	int

See also

IMUData.DataFormat

4.1.3.31 getIMUFWVersion()

```
String com.esp.android.usb.camera.core.ApcCamera.getIMUFWVersion ( )
```

Get IMU firmware version.

Returns

IMU module name

4.1.3.32 getIMUModuleName()

```
String com.esp.android.usb.camera.core.ApcCamera.getIMUModuleName ( )
```

Get IMU module name.

Returns

IMU module name

4.1.3.33 getIndexOfStreamInfo() [1/2]

```
int com.esp.android.usb.camera.core.ApcCamera.getIndexOfStreamInfo (
            int width,
            int height,
            int interfaceNumber,
            boolean isFormatMJPEG )
```

Get index of StreamInfo in the supported resolution list by specifying size and format.

Returns

index of StreamInfo in the supported list, return -1 if the input was not supported

4.1.3.34 getIndexOfStreamInfo() [2/2]

```
int com.esp.android.usb.camera.core.ApcCamera.getIndexOfStreamInfo (
            StreamInfo streamInfo )
```

Get index of StreamInfo in the supported resolution list

Returns

index of StreamInfo in the supported list, return -1 if the input was not supported

4.1.3.35 getIRCurrentValue()

```
int com.esp.android.usb.camera.core.ApcCamera.getIRCurrentValue ( )
```

Get intensity of IR emitter. range [getIRMinValue, getIRMaxValue]

4.1.3.36 getIRMaxValue()

```
int com.esp.android.usb.camera.core.ApcCamera.getIRMaxValue ( )
```

Get maximum intensity of IR emitter. It was not supported on EX8029 If return value equals 0xff means the module is not support IR control

4.1.3.37 getIRMinValue()

```
int com.esp.android.usb.camera.core.ApcCamera.getIRMinValue ( )
```

Get minimum intensity of IR emitter. It was not supported with EX8029

4.1.3.38 getIRMode()

```
int com.esp.android.usb.camera.core.ApcCamera.getIRMode ( )
```

Get mode of IR emitter. It was not supported on EX8029

4.1.3.39 getIsUSB3()

```
boolean com.esp.android.usb.camera.core.ApcCamera.getIsUSB3 ( )
```

Get the state of usb.

Returns

Return true if current device was running on USB 3.

4.1.3.40 getLogDataValue()

```
byte [] com.esp.android.usb.camera.core.ApcCamera.getLogDataValue (
            int index,
            int type )
```

Get log data.

Returns

log data (null if failed)

4.1.3.41 getPid()

```
int com.esp.android.usb.camera.core.ApcCamera.getPid ( )
```

Get pID.

4.1.3.42 getPidValue()

```
String com.esp.android.usb.camera.core.ApcCamera.getPidValue ( )
```

Get pID.

4.1.3.43 getPowerlineFrequencyLimit()

```
int [] com.esp.android.usb.camera.core.ApcCamera.getPowerlineFrequencyLimit ( )
```

Get min/max/default of light source.

Returns

result NULL : FAIL intArray : index -> 0 (min), 1 (max), 2 (def) index value : 1 => 50Hz, 2 => 60Hz ...

4.1.3.44 getProductVersion()

```
String com.esp.android.usb.camera.core.ApcCamera.getProductVersion ( )
```

Get product version. Depth module:EX8029,EX8036,EX8037 360 module: EX8030,EX8032

Returns

product version

4.1.3.45 getRectifyLogData()

```
RectifyLogData com.esp.android.usb.camera.core.ApcCamera.getRectifyLogData (
            int index )
```

Get rectify log data.

Parameters

index	index of rectify log data

Returns

RectifyLogData

See also

RectifyLogData

4.1.3.46 getRectifyTableValue() [1/2]

```
byte [] com.esp.android.usb.camera.core.ApcCamera.getRectifyTableValue ( )
```

Get rectify table with index 0.

Returns

rectify table

4.1.3.47 getRectifyTableValue() [2/2]

```
byte [] com.esp.android.usb.camera.core.ApcCamera.getRectifyTableValue (
            int index )
```

Get rectify table.

Parameters

index	index of rectify table

Returns

rectify table (null if failed)

4.1.3.48 getSDKVerion()

```
static String com.esp.android.usb.camera.core.ApcCamera.getSDKVerion ( )  [static]
```

Get SDK version

Returns

Version of SDK.

4.1.3.49 getSensorRegisterValue()

```
int com.esp.android.usb.camera.core.ApcCamera.getSensorRegisterValue (
            String [] value,
            int nId,
            int address,
            int flag )
```

Get value of sensor register.

Parameters

value	value of register

4.1.3.50 getSerialNumberValue()

```
String com.esp.android.usb.camera.core.ApcCamera.getSerialNumberValue ( )
```

Get serial number.

Returns

serial number

4.1.3.51 getStreamInfoList()

```
StreamInfo [] com.esp.android.usb.camera.core.ApcCamera.getStreamInfoList (
            int interfaceNumber )
```

Get supported resolution list of the device. StreamInfo contains supported resolution and format.

See also

StreamInfo

Parameters

interfaceNumber	[INTERFACE_NUMBER_DEPTH,INTERFACE_NUMBER_COLOR]

Returns

array of supported resolution and format

4.1.3.52 getSurfaceHeight()

```
int com.esp.android.usb.camera.core.ApcCamera.getSurfaceHeight ( )
```

Get the surface height of panorama buffer.

4.1.3.53 getSurfaceWidth()

```
int com.esp.android.usb.camera.core.ApcCamera.getSurfaceWidth ( )
```

Get the surface width of panorama buffer

4.1.3.54 getVideoMode()

```
int com.esp.android.usb.camera.core.ApcCamera.getVideoMode ( )
```

Get video mode.

4.1.3.55 getVidValue()

```
String com.esp.android.usb.camera.core.ApcCamera.getVidValue ( )
```

Get vID.

4.1.3.56 getWhiteBalanceLimit()

```
int [] com.esp.android.usb.camera.core.ApcCamera.getWhiteBalanceLimit ( )
```

Get min/max/default of white balance.

Returns

result NULL : FAIL intArray : index -> 0 (min), 1 (max), 2 (def)

4.1.3.57 getYOffsetValue() [1/2]

```
byte [] com.esp.android.usb.camera.core.ApcCamera.getYOffsetValue ( )
```

Get Y offset.

Returns

Y offset

4.1.3.58 getYOffsetValue() [2/2]

```
byte [] com.esp.android.usb.camera.core.ApcCamera.getYOffsetValue (
            int index )
```

Get Y offset.

Parameters

index	index of Y offset

Returns

Y offset

4.1.3.59 getZDTableValue() [1/3]

```
int [] com.esp.android.usb.camera.core.ApcCamera.getZDTableValue ( )
```

Get ZD table with index = 0, type = 0.

4.1.3.60 getZDTableValue() [2/3]

```
int [] com.esp.android.usb.camera.core.ApcCamera.getZDTableValue (
            int index )
```

Get ZD table with type = 0.

4.1.3.61 getZDTableValue() [3/3]

```
int [] com.esp.android.usb.camera.core.ApcCamera.getZDTableValue (
            int index,
            int type )
```

Get ZD table. Size of ZD table: AXES = 256 PUMA = 2048

Parameters

index	index of ZD table for different resolution
type	type of depth

Returns

ZD table.(null if failed.)

4.1.3.62 isIMUEnabled()

```
boolean com.esp.android.usb.camera.core.ApcCamera.isIMUEnabled ( )
```

Get IMU status

Returns

true is on, false is off

4.1.3.63 isIRSupported()

```
boolean com.esp.android.usb.camera.core.ApcCamera.isIRSupported ( )
```

Check if IR emitter was supported with the device.

4.1.3.64 onStartLivePly()

```
int com.esp.android.usb.camera.core.ApcCamera.onStartLivePly (
            ILivePlyCallback livePlyCallback )
```

onStartLivePly will callback color array (R, G, B) and vertex position array (x, y, z). Stride is 3, which means r = color[0], g = color[1], b = color[2] x = vertex[0], y = vertex[1], z = vertex[2]

Parameters

livePlyCallback	

Returns

eys_error.EYS_SUCCESS means successfully setup.

4.1.3.65 onStopLivePly()

```
int com.esp.android.usb.camera.core.ApcCamera.onStopLivePly ( )
```

onStopLivePly

Returns

eys_error.EYS_SUCCESS means successfully closed.

4.1.3.66 open() [1/2]

```
int com.esp.android.usb.camera.core.ApcCamera.open ( )
```

Deprecated As of release 1.1.2, replaced by ApcCamera#open(USBMonitor.UsbControlBlock)

4.1.3.67 open() [2/2]

```
int com.esp.android.usb.camera.core.ApcCamera.open (
            final USBMonitor.UsbControlBlock ctrlBlock )
```

connect to a UVC camera USB permission is necessary before this method is called

Parameters

ctrlBlock	from USBMonitor

4.1.3.68 readFlashData()

```
byte [] com.esp.android.usb.camera.core.ApcCamera.readFlashData ( )
```

Get flash data of firmware.

Returns

flash data

4.1.3.69 readIMUData() [1/2]

```
IMUData com.esp.android.usb.camera.core.ApcCamera.readIMUData ( )
```

Read IMU data directly (current IMU data format)

Returns

IMUData.

4.1.3.70 readIMUData() [2/2]

```
int com.esp.android.usb.camera.core.ApcCamera.readIMUData (
            IIMUCallback callback )
```

Read IMU data by callback

Parameters

callback	callback

See also

IIMUCallback::onData(IMUData)

Returns

APC_OK means successfully set callback and "read thread" start

4.1.3.71 saveStaticPly()

```
int com.esp.android.usb.camera.core.ApcCamera.saveStaticPly (
            String filename )
```

This function will capture a depth data frame with infrared projection and a color frame without infrared projection, generating a PLY file (Polygon File Format) in the designated path assigned by nativeSetExternalStoragePublic↩ Directory. Logs pattern is esp_ply in both Java and native side. If you enable SAVE_PLY_RAW macro in the PlyWriter.h, SDK saves color and depth raw data files in the provided folder.

Parameters

filename	This file will save to filename.ply at the designated path.

Returns

EysdCameara.eys_error

4.1.3.72 saveStaticPlyWithFilter()

```
int com.esp.android.usb.camera.core.ApcCamera.saveStaticPlyWithFilter (
            String filename,
            boolean isPlyFilterEnabled )
```

This function will capture a depth data frame with infrared projection and a color frame without infrared projection, generating a PLY file (Polygon File Format) in the designated path assigned by nativeSetExternalStoragePublic↩ Directory. Logs pattern is esp_ply in both Java and native side. If you enable SAVE_PLY_RAW macro in the PlyWriter.h, SDK saves color and depth raw data files in the provided folder.

Parameters

filename	This file will save to filename.ply at the designated path.
isPlyFilterEnabled	Enable post-processing to make a enhanced PLY file.

Returns

EysdCameara.eys_error

4.1.3.73 setAutoWhiteBalance()

```
int com.esp.android.usb.camera.core.ApcCamera.setAutoWhiteBalance (
            boolean on )
```

Turn on/off auto white balance.

Parameters

on	false : Turn OFF true : Turn ON

Returns

result 0 : SUCCESS -1 : EYS_ERROR -3 : UVC_ERROR_ACCESS -33 : DEVICE_NOT_SUPPORT

4.1.3.74 setCurrentPowerlineFrequency()

```
int com.esp.android.usb.camera.core.ApcCamera.setCurrentPowerlineFrequency (
            int value )
```

Set current value of light source.

Returns

result 0 : SUCCESS -1 : EYS_ERROR -33 : DEVICE_NOT_SUPPORT

4.1.3.75 setCurrentWhiteBalance()

```
int com.esp.android.usb.camera.core.ApcCamera.setCurrentWhiteBalance (
            int value )
```

Set current value of white balance.

Returns

result 0 : SUCCESS -1 : EYS_ERROR -33 : DEVICE_NOT_SUPPORT

4.1.3.76 setDepthDataType()

```
int com.esp.android.usb.camera.core.ApcCamera.setDepthDataType (
            short type )
```

Set depth data type, 11 bit for disparity data, 14 bit for Z data

Deprecated As of release 1.1.1, replaced by setVideoMode(int mode)

4.1.3.77 setDepthFilterByType()

```
int com.esp.android.usb.camera.core.ApcCamera.setDepthFilterByType (
            int which,
            boolean isEnable )
```

Parameters

which	Decide which filter type you want to set.
isEnable	boolean value to set.

Returns

`EysdCamera.eys_error`
Either EYS_SUCCESS or EYS_VERIFY_DATA_FAIL.

4.1.3.78 setDepthFilters()

```
int com.esp.android.usb.camera.core.ApcCamera.setDepthFilters (
            boolean bDoDepthFilter,
            boolean bSubSample,
            boolean bEdgePreservingFilter,
            boolean bHoleFill,
            boolean bTemporalFilter,
            boolean bFlyingDepthCancellation )
```

Parameters

bDoDepthFilter	The following functions of filter. If not enable this flag, none of filter would work.
bSubSample	Enable sub-sampling.
bEdgePreservingFilter	Enable edge preserving filter.
bHoleFill	Enable depth hole filling algorithm.
bTemporalFilter	Enable temporal filter which filters out noise.
bFlyingDepthCancellation	if want to filter out flying point.

Returns

4.1.3.79 setDisableAE()

```
int com.esp.android.usb.camera.core.ApcCamera.setDisableAE ( )
```

Turn off auto exposure.

4.1.3.80 setDistanceFilter()

```
int com.esp.android.usb.camera.core.ApcCamera.setDistanceFilter (
            int zNear,
            int zFar )
```

This function should be called after getDistanceLimitInZDTable to ensure SDK reads the nearest supported distance and the farthest one in ZDTable. And regenerate color palette which is a table whose domain from HSV color model 'Hue value' belong [0, 270] to Distance belong [m, n] which m <= n in millimeter. Native library will check for zNear zFar, if setting out of range. It will set back to the nearest extreme value.

4.1.3.81 setEnableAE()

```
int com.esp.android.usb.camera.core.ApcCamera.setEnableAE ( )
```

Turn on auto exposure.

4.1.3.82 setExposureAbsoluteTime()

```
int com.esp.android.usb.camera.core.ApcCamera.setExposureAbsoluteTime (
            int time )
```

Set exposure time: Sets the absolute exposure time. The time parameter should be provided in units of 0.0001 seconds (e.g., use the value 100 for a 10ms exposure period). Auto exposure should be set to manual or shutter↩ _priority before attempting to change this setting.

4.1.3.83 setExposureMode()

```
int com.esp.android.usb.camera.core.ApcCamera.setExposureMode (
            int mode )
```

Set exposure mode to camera terminal

Parameters

mode	1 : manual mode 2 : auto mode 4 : shutter priority mode 8 : aperture priority mode

Returns

result 0 : SUCCESS -1 : EYS_ERROR -3 : UVC_ERROR_ACCESS -33 : DEVICE_NOT_SUPPORT

4.1.3.84 setExposurePriority()

```
int com.esp.android.usb.camera.core.ApcCamera.setExposurePriority (
            int priority )
```

Chooses whether the camera may vary the frame rate for exposure control reasons. A priority value of zero means the camera may not vary its frame rate. A value of 1 means the frame rate is variable. This setting has no effect outside of the auto and shutter_priority auto-exposure modes.

Parameters

priority	

Returns

4.1.3.85 setFileData()

```
int com.esp.android.usb.camera.core.ApcCamera.setFileData (
            byte [] buffer,
            int nID )
```

Set file data.

Parameters

nID	file ID APC_Y_OFFSET_FILE_ID_0 30 APC_RECTIFY_FILE_ID_0 40 APC_ZD_TABLE_FILE_ID_0 50 APC_ISP_FILE_ID_0 120 APC_LSC_FILE_ID_0 150 APC_USER_DATA_FILE_ID_0 200 APC_CALIB_LOG_FILE_ID_0 240

4.1.3.86 setFishTag()

```
int com.esp.android.usb.camera.core.ApcCamera.setFishTag (
            String input_file,
            boolean audio_in )
```

Set 360 metadata to file

4.1.3.87 setFishTag_eYs3D()

```
int com.esp.android.usb.camera.core.ApcCamera.setFishTag_eYs3D (
            String output_file,
            boolean audio_in )
```

Set 360 metadata to file eys

4.1.3.88 SetFWRegisterValue()

```
int com.esp.android.usb.camera.core.ApcCamera.SetFWRegisterValue (
            int address,
            int nValue )
```

Set value of firmware register.

4.1.3.89 setHWPostProcess()

```
int com.esp.android.usb.camera.core.ApcCamera.setHWPostProcess (
            boolean enable )
```

Set hardware post process.

4.1.3.90 setHWRegisterValue()

```
int com.esp.android.usb.camera.core.ApcCamera.setHWRegisterValue (
            int address,
            int nValue )
```

Set value of hardware register.

4.1.3.91 setIMUDataFormat()

```
int com.esp.android.usb.camera.core.ApcCamera.setIMUDataFormat (
            int format )
```

Set IMU data format

Parameters

format	int

See also

IMUData.DataFormat

Returns

APC_OK means successfully set IMU data format

4.1.3.92 setInterleaveMode()

```
boolean com.esp.android.usb.camera.core.ApcCamera.setInterleaveMode (
            boolean enabled )
```

Change the status of the interleave mode. This function includes drop frames and set fw registers. Note that setting fw register should after preview.

4.1.3.93 setIRCurrentValue()

```
int com.esp.android.usb.camera.core.ApcCamera.setIRCurrentValue (
            int value )
```

Set intensity of IR emitter.

4.1.3.94 setIRMaxValue()

```
int com.esp.android.usb.camera.core.ApcCamera.setIRMaxValue (
            int value )
```

This will extend the default IR maximum value

Parameters

value	to set the maximum

Returns

4.1.3.95 SetIRMode()

```
int com.esp.android.usb.camera.core.ApcCamera.SetIRMode (
            int value )
```

Set mode of IR emitter. It was not supported on EX8029

4.1.3.96 setLogDataValue()

```
int com.esp.android.usb.camera.core.ApcCamera.setLogDataValue (
            byte [] buffer,
            int index,
            int type )
```

Set log data.

4.1.3.97 setModuleSync()

```
int com.esp.android.usb.camera.core.ApcCamera.setModuleSync ( )
```

Module sync Frame count change to serial count

Returns

eys_error.EYS_SUCCESS means successfully set module sync register.

4.1.3.98 setMonitorFrameRate()

```
void com.esp.android.usb.camera.core.ApcCamera.setMonitorFrameRate (
            boolean enable,
            final int camera_switch )
```

Turn on/off monitoring frame rate

Parameters

camera_switch	target switch [CAMERA_COLOR,CAMERA_DEPTH]

4.1.3.99 setPidVidValue()

```
int com.esp.android.usb.camera.core.ApcCamera.setPidVidValue (
            int nPid,
            int nVid )
```

Set pID and vID.

Parameters

nPid	pID
nVid	vID

4.1.3.100 setPreviewSize() [1/2]

```
void com.esp.android.usb.camera.core.ApcCamera.setPreviewSize (
            StreamInfo streamInfo )
```

Set preview size by StreamInfo with default fps [0,30]

Parameters

streamInfo	

4.1.3.101 setPreviewSize() [2/2]

```
void com.esp.android.usb.camera.core.ApcCamera.setPreviewSize (
            StreamInfo streamInfo,
            int maxFps )
```

Set preview size by StreamInfo with specified fps.

Parameters

streamInfo	
maxFps	

4.1.3.102 setPreviewTexture()

```
void com.esp.android.usb.camera.core.ApcCamera.setPreviewTexture (
            final SurfaceTexture texture,
            final int camera_switch )
```

set preview surface with SurfaceTexture. this method require API >= 14

Parameters

texture	for preview
camera_switch	target switch [CAMERA_COLOR,CAMERA_DEPTH]

4.1.3.103 setRectifyTableValue()

```
int com.esp.android.usb.camera.core.ApcCamera.setRectifyTableValue (
            byte [] buffer,
            int index )
```

Set rectify table.

Parameters

buffer	input
index	index of rectify table

4.1.3.104 setSensorRegisterValue()

```
int com.esp.android.usb.camera.core.ApcCamera.setSensorRegisterValue (
            int nId,
            int address,
            int nValue,
            int flag )
```

Set sensor Register

4.1.3.105 setSerialNumberValue()

```
int com.esp.android.usb.camera.core.ApcCamera.setSerialNumberValue (
            String str )
```

Set serial number.

4.1.3.106 setVideoMode()

```
int com.esp.android.usb.camera.core.ApcCamera.setVideoMode (
            int mode )
```

Set video mode. Notice: only PUMA type IC can support this setting. This function has not been supported since it could be running on USB3 only.

Parameters

mode	video mode

See also

VideoMode

4.1.3.107 setYOffsetValue()

```
int com.esp.android.usb.camera.core.ApcCamera.setYOffsetValue (
            byte [] buffer,
            int index )
```

Set Y offset.

Parameters

buffer	input Y offset
index	index

4.1.3.108 setZDTableValue()

```
int com.esp.android.usb.camera.core.ApcCamera.setZDTableValue (
            byte [] buffer,
            int index,
            int type )
```

Set ZD table.

Parameters

buffer	input
index	index of ZD table
type	type of depth

4.1.3.109 startIMULogData()

```
int com.esp.android.usb.camera.core.ApcCamera.startIMULogData (
            String fileName )
```

Start save IMU raw data (sdcard/eYs3D/fileName_imu_log.txt)

Parameters

fileName	file name

Returns

APC_OK means successfully start to save IMU raw data.

4.1.3.110 stopIMULogData()

```
int com.esp.android.usb.camera.core.ApcCamera.stopIMULogData ( )
```

Stop save IMU raw data

Returns

APC_OK means successfully stop to save IMU raw data.

4.1.3.111 stopPreview()

```
void com.esp.android.usb.camera.core.ApcCamera.stopPreview (
            final int camera_switch )
```

stop preview

Parameters

camera_switch	target switch [CAMERA_COLOR,CAMERA_DEPTH]

4.1.3.112 stopReadIMUData()

```
int com.esp.android.usb.camera.core.ApcCamera.stopReadIMUData ( )
```

Stop read IMU data thread

Returns

APC_OK means successfully stop read thread

4.1.3.113 writeFlashData()

```
int com.esp.android.usb.camera.core.ApcCamera.writeFlashData (
            byte [] buffer,
            boolean bIsSerialNumberKeep,
            boolean bIsSensorPositionKeep,
            boolean bIsRectificationTableKeep,
            boolean bIsZDTableKeep,
            boolean bIsCalibrationLogKeep,
            boolean bIsParaLutKeep,
            boolean bIsKeepISP,
            boolean bSetFWTag )
```

write firmware code(.bin) to flash The firmware code is the combination of boot loader, firmware body and plug-in data, also can keep original functions(Serial Number, Sensor Position, RectificationTable, ZD Table and CalibrationLog) on camera flash by KEEP_DATA_CTRL control

Parameters

buffer	input data

4.1.3.114 writeFlashDataASIC()

```
int com.esp.android.usb.camera.core.ApcCamera.writeFlashDataASIC (
            byte [] buffer,
            byte [] bufferOri )
```

Write firmware flash data to device with backup file.

Parameters

buffer	input data
bufferOri	backup data

4.1.4 Member Data Documentation

4.1.4.1 DEPTH_DATA_11_BITS

```
final short com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_11_BITS = 4  [static]
```

Deprecated As of release 1.1.1, replaced by RECTIFY_11_BITS

4.1.4.2 DEPTH_DATA_11_BITS_RAW

```
final short com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_11_BITS_RAW = 9  [static]
```

Deprecated As of release 1.1.1, replaced by RAW_11_BITS

4.1.4.3 DEPTH_DATA_14_BITS

```
final short com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_14_BITS = 2  [static]
```

Deprecated As of release 1.1.1, replaced by RECTIFY_14_BITS

4.1.4.4 DEPTH_DATA_14_BITS_RAW

```
final short com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_14_BITS_RAW = 7  [static]
```

Deprecated As of release 1.1.1, replaced by RAW_14_BITS

4.1.4.5 DEPTH_DATA_8_BITS

```
final short com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_8_BITS = 1  [static]
```

Deprecated As of release 1.1.1, replaced by RECTIFY_8_BITS

4.1.4.6 DEPTH_DATA_8_BITS_RAW

```
final short com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_8_BITS_RAW = 6  [static]
```

Deprecated As of release 1.1.1, replaced by RAW_8_BITS

4.1.4.7 DEPTH_DATA_8_BITS_x80

```
final short com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_8_BITS_x80 = 3  [static]
```

Deprecated As of release 1.1.1, replaced by RECTIFY_8_BITS_x80

4.1.4.8 DEPTH_DATA_8_BITS_x80_RAW

```
final short com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_8_BITS_x80_RAW = 8  [static]
```

Deprecated As of release 1.1.1, replaced by RAW_8_BITS_x80

4.1.4.9 DEPTH_DATA_OFF_RAW

```
final short com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_OFF_RAW = 0  [static]
```

Deprecated As of release 1.1.1, replaced by COLOR_ONLY

4.1.4.10 DEPTH_DATA_OFF_RECTIFY

```
final short com.esp.android.usb.camera.core.ApcCamera.DEPTH_DATA_OFF_RECTIFY = 5  [static]
```

Deprecated As of release 1.1.1, replaced by OFF_RECTIFY

4.1.4.11 DO_DEPTH_FILTER

```
final int com.esp.android.usb.camera.core.ApcCamera.DO_DEPTH_FILTER = 0  [static]
```

These const value decide which depth filter you want to en(dis)able. See {<code> setDepthFilterByType }

4.2 com.esp.android.usb.camera.core.ApcCamera.CurrentFrameRate Class Reference

Public Attributes

- double mFrameRateUvc = -1
- double mFrameRatePreview = -1

4.2.1 Detailed Description

Container for monitoring frame rate. Enabled by calling setMonitorFrameRate(boolean enable,final int camera_↩ switch).

4.2.2 Member Data Documentation

4.2.2.1 mFrameRatePreview

```
double com.esp.android.usb.camera.core.ApcCamera.CurrentFrameRate.mFrameRatePreview = -1
```

Frame rate of preview

4.2.2.2 mFrameRateUvc

```
double com.esp.android.usb.camera.core.ApcCamera.CurrentFrameRate.mFrameRateUvc = -1
```

Frame rate of device

4.3 com.esp.android.usb.camera.core.IMUData.DataFormat Class Reference

4.4 com.esp.android.usb.camera.core.DeviceFilter Class Reference

Static Public Member Functions

- static List< DeviceFilter > getDeviceFilters (final Context context, final int deviceFilterXmlId)

4.4.1 Member Function Documentation

4.4.1.1 getDeviceFilters()

```
static List<DeviceFilter> com.esp.android.usb.camera.core.DeviceFilter.getDeviceFilters (
            final Context context,
            final int deviceFilterXmlId )  [static]
```

Get device filter with id at xml

Parameters

context	
deviceFilter↩ XmlId	

Returns

4.5 com.esp.android.usb.camera.core.ApcCamera.DistanceLimit Class Reference

4.6 com.esp.android.usb.camera.core.ApcCamera.eys_error Enum Reference

4.7 com.esp.android.usb.camera.core.IErrorCallback Interface Reference

4.8 com.esp.android.usb.camera.core.IFrameCallback Interface Reference

Public Member Functions

- void onFrame (ByteBuffer frame, int frameCount)

4.8.1 Detailed Description

Callback interface for UVCCamera class If you need frame data as ByteBuffer, you can use this callback interface with UVCCamera::setFrameCallback

4.8.2 Member Function Documentation

4.8.2.1 onFrame()

```
void com.esp.android.usb.camera.core.IFrameCallback.onFrame (
            ByteBuffer frame,
            int frameCount )
```

This method is called from native library via JNI on the same thread as UVCCamera::startCapture. You can use both UVCCamera::startCapture and #setFrameCallback but it is better to use either for better performance. You can also pass pixel format type to UVCCamera::setFrameCallback for this method. Some frames may drops if this method takes a time.

Parameters

frame	ByteBuffer
frameCount	int

4.9 com.esp.android.usb.camera.core.IIMUCallback Interface Reference

Public Member Functions

- void onData (IMUData data)
- void onCalibration (boolean isSuccess)

4.9.1 Detailed Description

Callback interface for UVCCamera class If you need IMU data by callback, you can use this callback interface with UVCCamera::getIMUData(IIMUCallback callback). This callback also include calibration result.

4.9.2 Member Function Documentation

4.9.2.1 onCalibration()

```
void com.esp.android.usb.camera.core.IIMUCallback.onCalibration (
            boolean isSuccess )
```

This method is called from native library via JNI.

Parameters

isSuccess	boolean

4.9.2.2 onData()

```
void com.esp.android.usb.camera.core.IIMUCallback.onData (
            IMUData data )
```

This method is called from native library via JNI. You can also call UVCCamera::getIMUData() to get IMUData directly.

Parameters

data	IMUData

See also

IMUData

4.10 com.esp.android.usb.camera.core.ILivePlyCallback Interface Reference

Public Member Functions

- void onLivePlyCallback (float[ ] colorArray, float[ ] depthVertex)

4.10.1 Member Function Documentation

4.10.1.1 onLivePlyCallback()

```
void com.esp.android.usb.camera.core.ILivePlyCallback.onLivePlyCallback (
            float [] colorArray,
            float [] depthVertex )
```

Parameters

colorArray	desc
depthVertex	desc

4.11 com.esp.android.usb.camera.core.IMUData Class Reference

Classes

- class DataFormat

4.12 com.esp.android.usb.camera.core.USBMonitor.OnDeviceConnectListener Interface Reference

Public Member Functions

- void onAttach (UsbDevice device)
- void onDetach (UsbDevice device)
- void onConnect (UsbDevice device, UsbControlBlock ctrlBlock, boolean createNew)
- void onDisconnect (UsbDevice device, UsbControlBlock ctrlBlock)
- void onCancel ()

4.12.1 Member Function Documentation

4.12.1.1 onAttach()

```
void com.esp.android.usb.camera.core.USBMonitor.OnDeviceConnectListener.onAttach (
            UsbDevice device )
```

called when device attached

Parameters

device	attached device

4.12.1.2 onCancel()

```
void com.esp.android.usb.camera.core.USBMonitor.OnDeviceConnectListener.onCancel ( )
```

called when canceled or could not get permission from user

4.12.1.3 onConnect()

```
void com.esp.android.usb.camera.core.USBMonitor.OnDeviceConnectListener.onConnect (
            UsbDevice device,
            UsbControlBlock ctrlBlock,
            boolean createNew )
```

called after device opend

Parameters

device	connected device
createNew	new device has been connected

4.12.1.4 onDetach()

```
void com.esp.android.usb.camera.core.USBMonitor.OnDeviceConnectListener.onDetach (
            UsbDevice device )
```

called when device detach(after onDisconnect)

Parameters

device	detached device

4.12.1.5 onDisconnect()

```
void com.esp.android.usb.camera.core.USBMonitor.OnDeviceConnectListener.onDisconnect (
            UsbDevice device,
            UsbControlBlock ctrlBlock )
```

called when USB device removed or its power off (this callback is called after device closing)

Parameters

device	disconnected device
ctrlBlock	control block

4.13 com.esp.android.usb.camera.core.RectifyLogData Class Reference

Public Member Functions

- String toString ()

4.13.1 Detailed Description

Rectify Log Data

4.13.2 Member Function Documentation

4.13.2.1 toString()

```
String com.esp.android.usb.camera.core.RectifyLogData.toString ( )
```

retrun rectify table as string

4.14 com.esp.android.usb.camera.core.StreamInfo Class Reference

Public Attributes

- int interfaceNumber

4.14.1 Detailed Description

Container for resolution and format information from device.

4.14.2 Member Data Documentation

4.14.2.1 interfaceNumber

```
int com.esp.android.usb.camera.core.StreamInfo.interfaceNumber
```

for different endpoint

4.15 com.esp.android.usb.camera.core.USBMonitor.UsbControlBlock Class Reference

Public Member Functions

- UsbControlBlock (final USBMonitor monitor, final UsbDevice device)
- synchronized UsbInterface open (final int interfaceIndex)
- void close (final int interfaceIndex)
- synchronized void close ()

4.15.1 Constructor & Destructor Documentation

4.15.1.1 UsbControlBlock()

```
com.esp.android.usb.camera.core.USBMonitor.UsbControlBlock.UsbControlBlock (
            final USBMonitor monitor,
            final UsbDevice device )
```

this class needs permission to access USB device before constructing

Parameters

monitor	
device	

4.15.2 Member Function Documentation

4.15.2.1 close() [1/2]

```
void com.esp.android.usb.camera.core.USBMonitor.UsbControlBlock.close (
            final int interfaceIndex )
```

close specified interface. USB device itself still keep open.

Parameters

interfaceIndex	

4.15.2.2 close() [2/2]

```
synchronized void com.esp.android.usb.camera.core.USBMonitor.UsbControlBlock.close ( )
```

close specified interface. USB device itself still keep open.

4.15.2.3 open()

```
synchronized UsbInterface com.esp.android.usb.camera.core.USBMonitor.UsbControlBlock.open (
            final int interfaceIndex )
```

open specific interface

Parameters

interfaceIndex	

Returns

4.16 com.esp.android.usb.camera.core.USBMonitor.UsbDeviceInfo Class Reference

4.17 com.esp.android.usb.camera.core.USBMonitor Class Reference

Classes

- interface OnDeviceConnectListener
- class UsbControlBlock
- class UsbDeviceInfo

Public Member Functions

- synchronized void register ()
- synchronized void unregister ()
- boolean hasPermission (final UsbDevice device)
- synchronized void requestPermission (final UsbDevice device)
- void setDeviceFilter (final DeviceFilter filter)
- void setDeviceFilter (final List< DeviceFilter > filters)
- int getDeviceCount ()
- Iterator< UsbDevice > getDevices ()
- List< UsbDevice > getDeviceList ()
- List< UsbDevice > getDeviceList (final DeviceFilter filter)
- List< UsbDevice > getDeviceList (final List< DeviceFilter > filters)
- final void dumpDevices ()

4.17.1 Member Function Documentation

4.17.1.1 dumpDevices()

```
final void com.esp.android.usb.camera.core.USBMonitor.dumpDevices ( )
```

output device list to LogCat

4.17.1.2 getDeviceCount()

```
int com.esp.android.usb.camera.core.USBMonitor.getDeviceCount ( )
```

return the number of connected USB devices that matched device filter

Returns

4.17.1.3 getDeviceList() [1/3]

```
List<UsbDevice> com.esp.android.usb.camera.core.USBMonitor.getDeviceList ( )
```

return device list, return empty list if no device matched

Returns

4.17.1.4 getDeviceList() [2/3]

```
List<UsbDevice> com.esp.android.usb.camera.core.USBMonitor.getDeviceList (
            final DeviceFilter filter )
```

return device list, return empty list if no device matched

Parameters

filter	

Returns

device list

4.17.1.5 getDeviceList() [3/3]

```
List<UsbDevice> com.esp.android.usb.camera.core.USBMonitor.getDeviceList (
            final List< DeviceFilter > filters )
```

return device list, return empty list if no device matched

Parameters

filters	

Returns

device list

4.17.1.6 getDevices()

```
Iterator<UsbDevice> com.esp.android.usb.camera.core.USBMonitor.getDevices ( )
```

get USB device list

Returns

device list

4.17.1.7 hasPermission()

```
boolean com.esp.android.usb.camera.core.USBMonitor.hasPermission (
            final UsbDevice device )
```

return whether the specific Usb device has permission

Parameters

device	

Returns

4.17.1.8 register()

```
synchronized void com.esp.android.usb.camera.core.USBMonitor.register ( )
```

register BroadcastReceiver to monitor USB events

4.17.1.9 requestPermission()

```
synchronized void com.esp.android.usb.camera.core.USBMonitor.requestPermission (
            final UsbDevice device )
```

request permission to access to USB device

Parameters

device	

4.17.1.10 setDeviceFilter() [1/2]

```
void com.esp.android.usb.camera.core.USBMonitor.setDeviceFilter (
            final DeviceFilter filter )
```

set device filter

Parameters

filter	

4.17.1.11 setDeviceFilter() [2/2]

```
void com.esp.android.usb.camera.core.USBMonitor.setDeviceFilter (
            final List< DeviceFilter > filters )
```

set device filters

Parameters

filters	

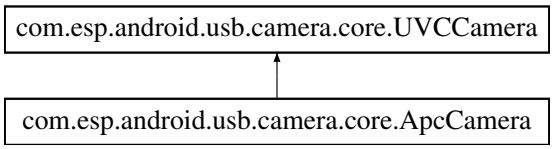
4.17.1.12 unregister()

```
synchronized void com.esp.android.usb.camera.core.USBMonitor.unregister ( )
```

unregister BroadcastReceiver

4.18 com.esp.android.usb.camera.core.UVCCamera Class Reference

Inheritance diagram for com.esp.android.usb.camera.core.UVCCamera:



Public Member Functions

- UVCCamera ()
- abstract int open (final UsbControlBlock ctrlBlock)
- abstract void close ()
- UsbDevice getDevice ()
- String getDeviceName ()
- UsbControlBlock getUsbControlBlock ()
- void setPreviewSize (final int width, final int height, final int camera_switch)
- void setPreviewSize (final int width, final int height, final int mode, final int camera_switch)
- void setPreviewSize (final int width, final int height, final int mode, final float bandwidth, final int camera_↩ switch)
- void setPreviewSize (final int width, final int height, final int min_fps, final int max_fps, final int mode, final float bandwidth, final int camera_switch)
- void setPreviewDisplay (final SurfaceHolder holder, final int camera_switch)
- abstract void setPreviewTexture (final SurfaceTexture texture, final int camera_switch)
- void setPreviewDisplay (final Surface surface, final int camera_switch)
- void setFrameCallback (final IFrameCallback callback, final int pixelFormat, final int camera_switch)
- void startPreview (final int camera_switch)
- abstract void stopPreview (final int camera_switch)
- void destroy ()

Static Public Attributes

camera switch

To specify endpoint

- static final int **CAMERA_COLOR** = 0
- static final int **CAMERA_DEPTH** = 1
- static final int **CAMERA_360** = 2

interface number for color , depth

- static final int **INTERFACE_NUMBER_COLOR** = 1
- static final int **INTERFACE_NUMBER_DEPTH** = 2

default value for preview setting

- static final int **DEFAULT_PREVIEW_WIDTH** = 640
- static final int **DEFAULT_PREVIEW_HEIGHT** = 480
- static final int **DEFAULT_PREVIEW_MODE** = 0
- static final int **DEFAULT_PREVIEW_MIN_FPS** = 1
- static final int **DEFAULT_PREVIEW_MAX_FPS** = 30
- static final float **DEFAULT_BANDWIDTH** = 1.0f

frame format of requested stream

- static final int **FRAME_FORMAT_YUYV** = 0
- static final int **FRAME_FORMAT_MJPEG** = 1

format for call back function (support RGBX only for now)

- static final int **PIXEL_FORMAT_RGBX** = 3

4.18.1 Constructor & Destructor Documentation

4.18.1.1 UVCCamera()

```
com.esp.android.usb.camera.core.UVCCamera.UVCCamera ( )
```

the constructor of this class should be call within the thread that has a looper (UI thread or a thread that called Looper.prepare)

4.18.2 Member Function Documentation

4.18.2.1 close()

```
abstract void com.esp.android.usb.camera.core.UVCCamera.close ( )  [abstract]
```

close and release UVC camera

4.18.2.2 destroy()

```
void com.esp.android.usb.camera.core.UVCCamera.destroy ( )
```

destroy UVCCamera object

4.18.2.3 getDevice()

```
UsbDevice com.esp.android.usb.camera.core.UVCCamera.getDevice ( )
```

Deprecated As of release 1.1.2, replaced by UVCCamera#getDevice(boolean)

4.18.2.4 getDeviceName()

```
String com.esp.android.usb.camera.core.UVCCamera.getDeviceName ( )
```

Deprecated As of release 1.1.2, replaced by UVCCamera#getDeviceName(boolean)

4.18.2.5 getUsbControlBlock()

```
UsbControlBlock com.esp.android.usb.camera.core.UVCCamera.getUsbControlBlock ( )
```

Deprecated As of release 1.1.2, replaced by UVCCamera#getUsbControlBlock(boolean)

4.18.2.6 open()

```
abstract int com.esp.android.usb.camera.core.UVCCamera.open (
            final UsbControlBlock ctrlBlock )  [abstract]
```

connect to a UVC camera USB permission is necessary before this method is called

Parameters

ctrlBlock	

4.18.2.7 setFrameCallback()

```
void com.esp.android.usb.camera.core.UVCCamera.setFrameCallback (
            final IFrameCallback callback,
            final int pixelFormat,
            final int camera_switch )
```

set frame callback

Parameters

callback	callbackfunction

See also

IFrameCallback

Parameters

pixelFormat	support PIXEL_FORMAT_RGBX only
camera_switch	target switch [CAMERA_COLOR,CAMERA_DEPTH]

4.18.2.8 setPreviewDisplay() [1/2]

```
void com.esp.android.usb.camera.core.UVCCamera.setPreviewDisplay (
            final SurfaceHolder holder,
            final int camera_switch )
```

set preview surface with SurfaceHolder you can use SurfaceHolder came from SurfaceView/GLSurfaceView

Parameters

holder	
camera_switch	target switch [CAMERA_COLOR, CAMERA_DEPTH]

4.18.2.9 setPreviewDisplay() [2/2]

```
void com.esp.android.usb.camera.core.UVCCamera.setPreviewDisplay (
            final Surface surface,
            final int camera_switch )
```

set preview surface with Surface

Parameters

surface	
camera_switch	target switch [CAMERA_COLOR, CAMERA_DEPTH]

4.18.2.10 setPreviewSize() [1/4]

```
void com.esp.android.usb.camera.core.UVCCamera.setPreviewSize (
            final int width,
            final int height,
            final int camera_switch )
```

Set preview size and preview mode

Parameters

width	
height	

4.18.2.11 setPreviewSize() [2/4]

```
void com.esp.android.usb.camera.core.UVCCamera.setPreviewSize (
            final int width,
            final int height,
            final int mode,
            final int camera_switch )
```

Set preview size and preview mode

Parameters

width	
height	
mode	0:yuyv, other:MJPEG

4.18.2.12 setPreviewSize() [3/4]

```
void com.esp.android.usb.camera.core.UVCCamera.setPreviewSize (
            final int width,
            final int height,
            final int mode,
```

```
            final float bandwidth,
            final int camera_switch )
```

Set preview size and preview mode

Parameters

width	
height	
mode	0:yuyv, other:MJPEG
bandwidth	[0.0f,1.0f]

4.18.2.13 setPreviewSize() [4/4]

```
void com.esp.android.usb.camera.core.UVCCamera.setPreviewSize (
            final int width,
            final int height,
            final int min_fps,
            final int max_fps,
            final int mode,
            final float bandwidth,
            final int camera_switch )
```

Set preview size and preview mode

Parameters

width	
height	
min_fps	
max_fps	
mode	
bandwidth	

4.18.2.14 setPreviewTexture()

```
abstract void com.esp.android.usb.camera.core.UVCCamera.setPreviewTexture (
            final SurfaceTexture texture,
            final int camera_switch )  [abstract]
```

set preview surface with SurfaceTexture. this method require API >= 14

Parameters

texture	
camera_switch	target switch [CAMERA_COLOR, CAMERA_DEPTH]

4.18.2.15 startPreview()

```
void com.esp.android.usb.camera.core.UVCCamera.startPreview (
            final int camera_switch )
```

start preview

Parameters

camera_switch	target switch [CAMERA_COLOR,CAMERA_DEPTH]

4.18.2.16 stopPreview()

```
abstract void com.esp.android.usb.camera.core.UVCCamera.stopPreview (
            final int camera_switch )  [abstract]
```

stop preview

Parameters

camera_switch	target switch [CAMERA_COLOR,CAMERA_DEPTH]

4.19 com.esp.android.usb.camera.core.ApcCamera.VideoMode Class Reference

Static Public Attributes

Video mode

- static final int **COLOR_ONLY** = 0
- static final int **RECTIFY_8_BITS** = 1
- static final int **RECTIFY_14_BITS** = 2
- static final int **RECTIFY_8_BITS_x80** = 3
- static final int **RECTIFY_11_BITS** = 4
- static final int **OFF_RECTIFY** = 5
- static final int **RAW_8_BITS** = 6
- static final int **RAW_14_BITS** = 7
- static final int **RAW_8_BITS_x80** = 8
- static final int **RAW_11_BITS** = 9
- static final int **COLOR_ONLY_INTERLEAVE_MODE** = 16
- static final int **RECTIFY_8_BITS_INTERLEAVE_MODE** = 17
- static final int **RECTIFY_14_BITS_INTERLEAVE_MODE** = 18
- static final int **RECTIFY_8_BITS_x80_INTERLEAVE_MODE** = 19
- static final int **RECTIFY_11_BITS_INTERLEAVE_MODE** = 20
- static final int **OFF_RECTIFY_INTERLEAVE_MODE** = 21
- static final int **RAW_8_BITS_INTERLEAVE_MODE** = 22
- static final int **RAW_14_BITS_INTERLEAVE_MODE** = 23
- static final int **RAW_8_BITS_x80_INTERLEAVE_MODE** = 24
- static final int **RAW_11_BITS_INTERLEAVE_MODE** = 25

4.19.1 Detailed Description

Video mode define.

Index

ApcCamera
    com::esp::android::usb::camera::core::Apc↩
        Camera, 10

close
    com::esp::android::usb::camera::core::Apc↩
        Camera, 11
    com::esp::android::usb::camera::core::USB↩
        Monitor::UsbControlBlock, 49, 50
    com::esp::android::usb::camera::core::UVC↩
        Camera, 55
closeIMU
    com::esp::android::usb::camera::core::Apc↩
        Camera, 11
com.esp.android.usb.camera.core.ApcCamera, 7
com.esp.android.usb.camera.core.ApcCamera.↩
        CurrentFrameRate, 42
com.esp.android.usb.camera.core.ApcCamera.↩
        DistanceLimit, 44
com.esp.android.usb.camera.core.ApcCamera.eys_↩
        error, 44
com.esp.android.usb.camera.core.ApcCamera.Video↩
        Mode, 60
com.esp.android.usb.camera.core.DeviceFilter, 43
com.esp.android.usb.camera.core.IErrorCallback, 44
com.esp.android.usb.camera.core.IFrameCallback, 44
com.esp.android.usb.camera.core.IIMUCallback, 45
com.esp.android.usb.camera.core.ILivePlyCallback, 46
com.esp.android.usb.camera.core.IMUData, 46
com.esp.android.usb.camera.core.IMUData.Data↩
        Format, 43
com.esp.android.usb.camera.core.RectifyLogData, 48
com.esp.android.usb.camera.core.StreamInfo, 48
com.esp.android.usb.camera.core.USBMonitor, 50
com.esp.android.usb.camera.core.USBMonitor.On↩
        DeviceConnectListener, 46
com.esp.android.usb.camera.core.USBMonitor.Usb↩
        ControlBlock, 49
com.esp.android.usb.camera.core.USBMonitor.Usb↩
        DeviceInfo, 50
com.esp.android.usb.camera.core.UVCCamera, 54
com::esp::android::usb::camera::core::ApcCamera
    ApcCamera, 10
    close, 11
    closeIMU, 11
    DEPTH_DATA_11_BITS_RAW, 41
    DEPTH_DATA_11_BITS, 40
    DEPTH_DATA_14_BITS_RAW, 41
    DEPTH_DATA_14_BITS, 41
    DEPTH_DATA_8_BITS_RAW, 41
    DEPTH_DATA_8_BITS_x80, 41
    DEPTH_DATA_8_BITS_x80_RAW, 42
    DEPTH_DATA_8_BITS, 41
    DEPTH_DATA_OFF_RAW, 42
    DEPTH_DATA_OFF_RECTIFY, 42
    DO_DEPTH_FILTER, 42
    doIMUCalibration, 11
    enableIMUDataOutput, 11
    enableSenorIF, 12
    generateLUTFile, 12
    getAEStatusEnabled, 12
    getAutoWhiteBalance, 12
    getCurrentFileIndex, 12
    getCurrentFrameRate, 13
    getCurrentPowerlineFrequency, 13
    getCurrentWhiteBalance, 13
    getDepthDataType, 14
    getDeviceFocalLength, 14
    getDeviceType, 14
    getDistanceLimitInZDTable, 14
    getExposureAbsoluteTime, 15
    getExposureMode, 15
    getExposurePriority, 15
    getFWRegisterValue, 16, 17
    getFileData, 15
    getFileIDHeader, 16
    getFileIDVersion, 16
    getFlashFocalLength, 16
    getFwVersionValue, 17
    getHWPostProcess, 17
    getHWRegisterValue, 17
    getIMUDataFormat, 18
    getIMUDataOutputByte, 18
    getIMUFWVersion, 18
    getIMUModuleName, 18
    getIRCurrentValue, 19
    getIRMaxValue, 19
    getIRMinValue, 20
    getIRMode, 20
    getIndexOfStreamInfo, 19
    getIsUSB3, 20
    getLogDataValue, 20
    getPid, 20
    getPidValue, 21
    getPowerlineFrequencyLimit, 21
    getProductVersion, 21
    getRectifyLogData, 21
    getRectifyTableValue, 22
    getSDKVerion, 22

getSensorRegisterValue, 22
getSerialNumberValue, 23
getStreamInfoList, 23
getSurfaceHeight, 23
getSurfaceWidth, 24
getVidValue, 24
getVideoMode, 24
getWhiteBalanceLimit, 24
getYOffsetValue, 24
getZDTableValue, 25
isIMUEnabled, 25
isIRSupported, 26
onStartLivePly, 26
onStopLivePly, 26
open, 26
readFlashData, 28
readIMUData, 28
saveStaticPly, 29
saveStaticPlyWithFilter, 29
setAutoWhiteBalance, 29
setCurrentPowerlineFrequency, 30
setCurrentWhiteBalance, 30
setDepthDataType, 30
setDepthFilterByType, 30
setDepthFilters, 31
setDisableAE, 31
setDistanceFilter, 31
setEnableAE, 31
setExposureAbsoluteTime, 32
setExposureMode, 32
setExposurePriority, 32
SetFWRegisterValue, 33
setFileData, 33
setFishTag, 33
setFishTag_eYs3D, 33
setHWPostProcess, 33
setHWRegisterValue, 33
setIMUDataFormat, 34
setIRCurrentValue, 34
setIRMaxValue, 34
SetIRMode, 35
setInterleaveMode, 34
setLogDataValue, 35
setModuleSync, 35
setMonitorFrameRate, 35
setPidVidValue, 36
setPreviewSize, 36
setPreviewTexture, 37
setRectifyTableValue, 37
setSensorRegisterValue, 37
setSerialNumberValue, 37
setVideoMode, 37
setYOffsetValue, 38
setZDTableValue, 38
startIMULogData, 38
stopIMULogData, 39
stopPreview, 39
stopReadIMUData, 39
writeFlashData, 40
writeFlashDataASIC, 40
com::esp::android::usb::camera::core::ApcCamera::↩
CurrentFrameRate
mFrameRatePreview, 43
mFrameRateUvc, 43
com::esp::android::usb::camera::core::DeviceFilter
getDeviceFilters, 43
com::esp::android::usb::camera::core::IFrameCallback
onFrame, 44
com::esp::android::usb::camera::core::IIMUCallback
onCalibration, 45
onData, 45
com::esp::android::usb::camera::core::ILivePlyCallback
onLivePlyCallback, 46
com::esp::android::usb::camera::core::RectifyLogData
toString, 48
com::esp::android::usb::camera::core::StreamInfo
interfaceNumber, 49
com::esp::android::usb::camera::core::USBMonitor
dumpDevices, 51
getDeviceCount, 51
getDeviceList, 51, 52
getDevices, 52
hasPermission, 52
register, 53
requestPermission, 53
setDeviceFilter, 53
unregister, 54
com::esp::android::usb::camera::core::USBMonitor::↩
OnDeviceConnectListener
onAttach, 47
onCancel, 47
onConnect, 47
onDetach, 47
onDisconnect, 48
com::esp::android::usb::camera::core::USBMonitor::↩
UsbControlBlock
close, 49, 50
open, 50
UsbControlBlock, 49
com::esp::android::usb::camera::core::UVCCamera
close, 55
destroy, 55
getDevice, 56
getDeviceName, 56
getUsbControlBlock, 56
open, 56
setFrameCallback, 56
setPreviewDisplay, 57
setPreviewSize, 58, 59
setPreviewTexture, 59
startPreview, 60
stopPreview, 60
UVCCamera, 55

DEPTH_DATA_11_BITS_RAW
com::esp::android::usb::camera::core::Apc↩
Camera, 41

DEPTH_DATA_11_BITS
com::esp::android::usb::camera::core::Apc↩
Camera, 40
DEPTH_DATA_14_BITS_RAW
com::esp::android::usb::camera::core::Apc↩
Camera, 41
DEPTH_DATA_14_BITS
com::esp::android::usb::camera::core::Apc↩
Camera, 41
DEPTH_DATA_8_BITS_RAW
com::esp::android::usb::camera::core::Apc↩
Camera, 41
DEPTH_DATA_8_BITS_x80
com::esp::android::usb::camera::core::Apc↩
Camera, 41
DEPTH_DATA_8_BITS_x80_RAW
com::esp::android::usb::camera::core::Apc↩
Camera, 42
DEPTH_DATA_8_BITS
com::esp::android::usb::camera::core::Apc↩
Camera, 41
DEPTH_DATA_OFF_RAW
com::esp::android::usb::camera::core::Apc↩
Camera, 42
DEPTH_DATA_OFF_RECTIFY
com::esp::android::usb::camera::core::Apc↩
Camera, 42
DO_DEPTH_FILTER
com::esp::android::usb::camera::core::Apc↩
Camera, 42
destroy
com::esp::android::usb::camera::core::UVC↩
Camera, 55
doIMUCalibration
com::esp::android::usb::camera::core::Apc↩
Camera, 11
dumpDevices
com::esp::android::usb::camera::core::USB↩
Monitor, 51

enableIMUDataOutput
com::esp::android::usb::camera::core::Apc↩
Camera, 11
enableSenorIF
com::esp::android::usb::camera::core::Apc↩
Camera, 12

generateLUTFile
com::esp::android::usb::camera::core::Apc↩
Camera, 12
getAEStatusEnabled
com::esp::android::usb::camera::core::Apc↩
Camera, 12
getAutoWhiteBalance
com::esp::android::usb::camera::core::Apc↩
Camera, 12
getCurrentFileIndex
com::esp::android::usb::camera::core::Apc↩
Camera, 12
getCurrentFrameRate
com::esp::android::usb::camera::core::Apc↩
Camera, 13
getCurrentPowerlineFrequency
com::esp::android::usb::camera::core::Apc↩
Camera, 13
getCurrentWhiteBalance
com::esp::android::usb::camera::core::Apc↩
Camera, 13
getDepthDataType
com::esp::android::usb::camera::core::Apc↩
Camera, 14
getDevice
com::esp::android::usb::camera::core::UVC↩
Camera, 56
getDeviceCount
com::esp::android::usb::camera::core::USB↩
Monitor, 51
getDeviceFilters
com::esp::android::usb::camera::core::Device↩
Filter, 43
getDeviceFocalLength
com::esp::android::usb::camera::core::Apc↩
Camera, 14
getDeviceList
com::esp::android::usb::camera::core::USB↩
Monitor, 51, 52
getDeviceName
com::esp::android::usb::camera::core::UVC↩
Camera, 56
getDeviceType
com::esp::android::usb::camera::core::Apc↩
Camera, 14
getDevices
com::esp::android::usb::camera::core::USB↩
Monitor, 52
getDistanceLimitInZDTable
com::esp::android::usb::camera::core::Apc↩
Camera, 14
getExposureAbsoluteTime
com::esp::android::usb::camera::core::Apc↩
Camera, 15
getExposureMode
com::esp::android::usb::camera::core::Apc↩
Camera, 15
getExposurePriority
com::esp::android::usb::camera::core::Apc↩
Camera, 15
getFWRegisterValue
com::esp::android::usb::camera::core::Apc↩
Camera, 16, 17
getFileData
com::esp::android::usb::camera::core::Apc↩
Camera, 15
getFileIDHeader
com::esp::android::usb::camera::core::Apc↩
Camera, 16
getFileIDVersion

com::esp::android::usb::camera::core::Apc↩
Camera, 16
getFlashFocalLength
com::esp::android::usb::camera::core::Apc↩
Camera, 16
getFwVersionValue
com::esp::android::usb::camera::core::Apc↩
Camera, 17
getHWPostProcess
com::esp::android::usb::camera::core::Apc↩
Camera, 17
getHWRegisterValue
com::esp::android::usb::camera::core::Apc↩
Camera, 17
getIMUDataFormat
com::esp::android::usb::camera::core::Apc↩
Camera, 18
getIMUDataOutputByte
com::esp::android::usb::camera::core::Apc↩
Camera, 18
getIMUFWVersion
com::esp::android::usb::camera::core::Apc↩
Camera, 18
getIMUModuleName
com::esp::android::usb::camera::core::Apc↩
Camera, 18
getIRCurrentValue
com::esp::android::usb::camera::core::Apc↩
Camera, 19
getIRMaxValue
com::esp::android::usb::camera::core::Apc↩
Camera, 19
getIRMinValue
com::esp::android::usb::camera::core::Apc↩
Camera, 20
getIRMode
com::esp::android::usb::camera::core::Apc↩
Camera, 20
getIndexOfStreamInfo
com::esp::android::usb::camera::core::Apc↩
Camera, 19
getIsUSB3
com::esp::android::usb::camera::core::Apc↩
Camera, 20
getLogDataValue
com::esp::android::usb::camera::core::Apc↩
Camera, 20
getPid
com::esp::android::usb::camera::core::Apc↩
Camera, 20
getPidValue
com::esp::android::usb::camera::core::Apc↩
Camera, 21
getPowerlineFrequencyLimit
com::esp::android::usb::camera::core::Apc↩
Camera, 21
getProductVersion
com::esp::android::usb::camera::core::Apc↩
Camera, 21
getRectifyLogData
com::esp::android::usb::camera::core::Apc↩
Camera, 21
getRectifyTableValue
com::esp::android::usb::camera::core::Apc↩
Camera, 22
getSDKVerion
com::esp::android::usb::camera::core::Apc↩
Camera, 22
getSensorRegisterValue
com::esp::android::usb::camera::core::Apc↩
Camera, 22
getSerialNumberValue
com::esp::android::usb::camera::core::Apc↩
Camera, 23
getStreamInfoList
com::esp::android::usb::camera::core::Apc↩
Camera, 23
getSurfaceHeight
com::esp::android::usb::camera::core::Apc↩
Camera, 23
getSurfaceWidth
com::esp::android::usb::camera::core::Apc↩
Camera, 24
getUsbControlBlock
com::esp::android::usb::camera::core::UVC↩
Camera, 56
getVidValue
com::esp::android::usb::camera::core::Apc↩
Camera, 24
getVideoMode
com::esp::android::usb::camera::core::Apc↩
Camera, 24
getWhiteBalanceLimit
com::esp::android::usb::camera::core::Apc↩
Camera, 24
getYOffsetValue
com::esp::android::usb::camera::core::Apc↩
Camera, 24
getZDTableValue
com::esp::android::usb::camera::core::Apc↩
Camera, 25

hasPermission
com::esp::android::usb::camera::core::USB↩
Monitor, 52

interfaceNumber
com::esp::android::usb::camera::core::StreamInfo,
49
isIMUEnabled
com::esp::android::usb::camera::core::Apc↩
Camera, 25
isIRSupported
com::esp::android::usb::camera::core::Apc↩
Camera, 26

mFrameRatePreview

com::esp::android::usb::camera::core::Apc↩
Camera::CurrentFrameRate, 43
mFrameRateUvc
com::esp::android::usb::camera::core::Apc↩
Camera::CurrentFrameRate, 43

onAttach
com::esp::android::usb::camera::core::USB↩
Monitor::OnDeviceConnectListener, 47
onCalibration
com::esp::android::usb::camera::core::IIMU↩
Callback, 45
onCancel
com::esp::android::usb::camera::core::USB↩
Monitor::OnDeviceConnectListener, 47
onConnect
com::esp::android::usb::camera::core::USB↩
Monitor::OnDeviceConnectListener, 47
onData
com::esp::android::usb::camera::core::IIMU↩
Callback, 45
onDetach
com::esp::android::usb::camera::core::USB↩
Monitor::OnDeviceConnectListener, 47
onDisconnect
com::esp::android::usb::camera::core::USB↩
Monitor::OnDeviceConnectListener, 48
onFrame
com::esp::android::usb::camera::core::IFrame↩
Callback, 44
onLivePlyCallback
com::esp::android::usb::camera::core::ILivePly↩
Callback, 46
onStartLivePly
com::esp::android::usb::camera::core::Apc↩
Camera, 26
onStopLivePly
com::esp::android::usb::camera::core::Apc↩
Camera, 26
open
com::esp::android::usb::camera::core::Apc↩
Camera, 26
com::esp::android::usb::camera::core::USB↩
Monitor::UsbControlBlock, 50
com::esp::android::usb::camera::core::UVC↩
Camera, 56

readFlashData
com::esp::android::usb::camera::core::Apc↩
Camera, 28
readIMUData
com::esp::android::usb::camera::core::Apc↩
Camera, 28
register
com::esp::android::usb::camera::core::USB↩
Monitor, 53
requestPermission
com::esp::android::usb::camera::core::USB↩
Monitor, 53

saveStaticPly
com::esp::android::usb::camera::core::Apc↩
Camera, 29
saveStaticPlyWithFilter
com::esp::android::usb::camera::core::Apc↩
Camera, 29
setAutoWhiteBalance
com::esp::android::usb::camera::core::Apc↩
Camera, 29
setCurrentPowerlineFrequency
com::esp::android::usb::camera::core::Apc↩
Camera, 30
setCurrentWhiteBalance
com::esp::android::usb::camera::core::Apc↩
Camera, 30
setDepthDataType
com::esp::android::usb::camera::core::Apc↩
Camera, 30
setDepthFilterByType
com::esp::android::usb::camera::core::Apc↩
Camera, 30
setDepthFilters
com::esp::android::usb::camera::core::Apc↩
Camera, 31
setDeviceFilter
com::esp::android::usb::camera::core::USB↩
Monitor, 53
setDisableAE
com::esp::android::usb::camera::core::Apc↩
Camera, 31
setDistanceFilter
com::esp::android::usb::camera::core::Apc↩
Camera, 31
setEnableAE
com::esp::android::usb::camera::core::Apc↩
Camera, 31
setExposureAbsoluteTime
com::esp::android::usb::camera::core::Apc↩
Camera, 32
setExposureMode
com::esp::android::usb::camera::core::Apc↩
Camera, 32
setExposurePriority
com::esp::android::usb::camera::core::Apc↩
Camera, 32
SetFWRegisterValue
com::esp::android::usb::camera::core::Apc↩
Camera, 33
setFileData
com::esp::android::usb::camera::core::Apc↩
Camera, 33
setFishTag
com::esp::android::usb::camera::core::Apc↩
Camera, 33
setFishTag_eYs3D
com::esp::android::usb::camera::core::Apc↩
Camera, 33
setFrameCallback

com::esp::android::usb::camera::core::UVC↩
Camera, 56
setHWPostProcess
com::esp::android::usb::camera::core::Apc↩
Camera, 33
setHWRegisterValue
com::esp::android::usb::camera::core::Apc↩
Camera, 33
setIMUDataFormat
com::esp::android::usb::camera::core::Apc↩
Camera, 34
setIRCurrentValue
com::esp::android::usb::camera::core::Apc↩
Camera, 34
setIRMaxValue
com::esp::android::usb::camera::core::Apc↩
Camera, 34
SetIRMode
com::esp::android::usb::camera::core::Apc↩
Camera, 35
setInterleaveMode
com::esp::android::usb::camera::core::Apc↩
Camera, 34
setLogDataValue
com::esp::android::usb::camera::core::Apc↩
Camera, 35
setModuleSync
com::esp::android::usb::camera::core::Apc↩
Camera, 35
setMonitorFrameRate
com::esp::android::usb::camera::core::Apc↩
Camera, 35
setPidVidValue
com::esp::android::usb::camera::core::Apc↩
Camera, 36
setPreviewDisplay
com::esp::android::usb::camera::core::UVC↩
Camera, 57
setPreviewSize
com::esp::android::usb::camera::core::Apc↩
Camera, 36
com::esp::android::usb::camera::core::UVC↩
Camera, 58, 59
setPreviewTexture
com::esp::android::usb::camera::core::Apc↩
Camera, 37
com::esp::android::usb::camera::core::UVC↩
Camera, 59
setRectifyTableValue
com::esp::android::usb::camera::core::Apc↩
Camera, 37
setSensorRegisterValue
com::esp::android::usb::camera::core::Apc↩
Camera, 37
setSerialNumberValue
com::esp::android::usb::camera::core::Apc↩
Camera, 37
setVideoMode
com::esp::android::usb::camera::core::Apc↩
Camera, 37
setYOffsetValue
com::esp::android::usb::camera::core::Apc↩
Camera, 38
setZDTableValue
com::esp::android::usb::camera::core::Apc↩
Camera, 38
startIMULogData
com::esp::android::usb::camera::core::Apc↩
Camera, 38
startPreview
com::esp::android::usb::camera::core::UVC↩
Camera, 60
stopIMULogData
com::esp::android::usb::camera::core::Apc↩
Camera, 39
stopPreview
com::esp::android::usb::camera::core::Apc↩
Camera, 39
com::esp::android::usb::camera::core::UVC↩
Camera, 60
stopReadIMUData
com::esp::android::usb::camera::core::Apc↩
Camera, 39

toString
com::esp::android::usb::camera::core::Rectify↩
LogData, 48

UVCCamera
com::esp::android::usb::camera::core::UVC↩
Camera, 55
unregister
com::esp::android::usb::camera::core::USB↩
Monitor, 54
UsbControlBlock
com::esp::android::usb::camera::core::USB↩
Monitor::UsbControlBlock, 49

writeFlashData
com::esp::android::usb::camera::core::Apc↩
Camera, 40
writeFlashDataASIC
com::esp::android::usb::camera::core::Apc↩
Camera, 40