



ASR- A25S1

SDK Reference Guide

Supported OS: Android

Target Language: Java

Version: 1.0.0

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Asterisk Inc.

■Revision History

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1. Overview

1.1 Purpose of this book

It describes how to build a development environment and explains the SDK library so that developers can use the ASR-A25S1 SDK library to develop Android applications.

1.2 Development Tools

Please use the following development tools:

The descriptions in the manual use these tools.

Android Studio Giraffe | 2022.3.1 Patch 4

Android SDK 29

Android Gradle 6.1.1

1.3 Supported Version

The supported versions of this SDK are as follows.

Android 10.0 and above

2. Building the Development Environment

2.1 Adding the SDK

1. "app" -> "libs" -> "right click" -> "Open in" Select "Finder". (FIG. 2-1-1)

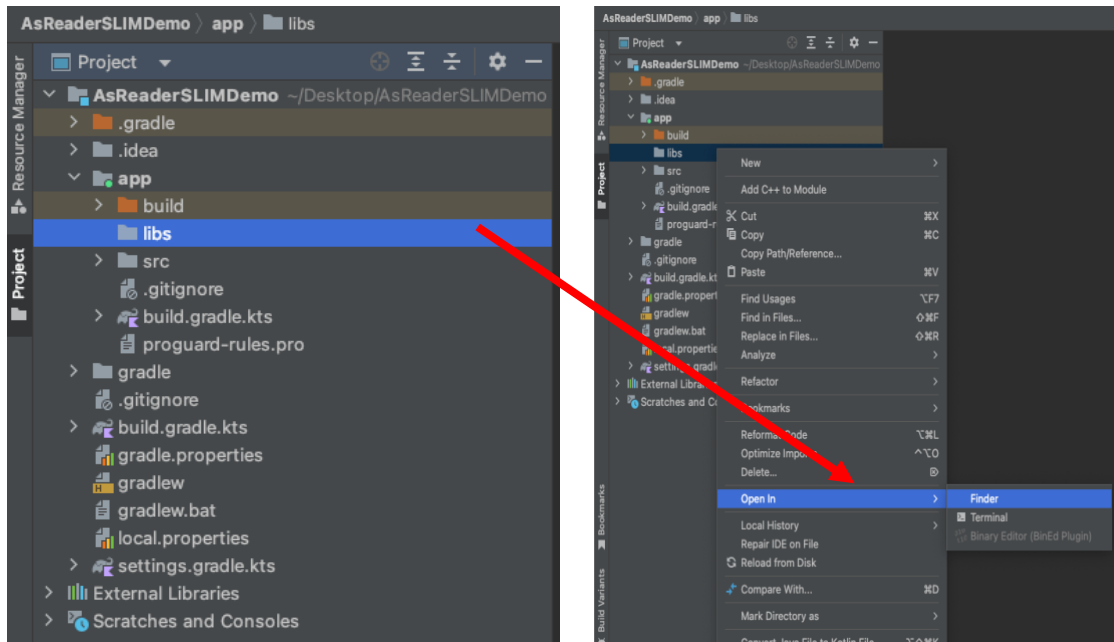


FIG. 2-1-1

2. Select the downloaded "AsReaderSLIM.aar" (FIG. 2-1-2).

"AsReaderSLIM.aar" will appear under "libs" in the project. (FIG. 2-1-3)

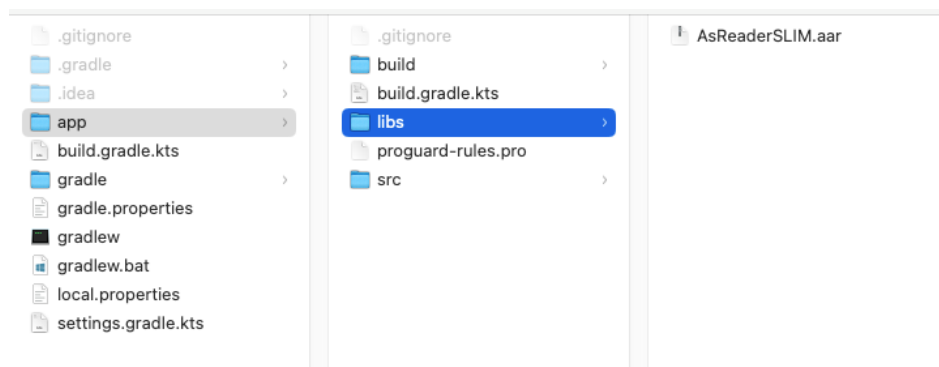


FIG. 2-1-2

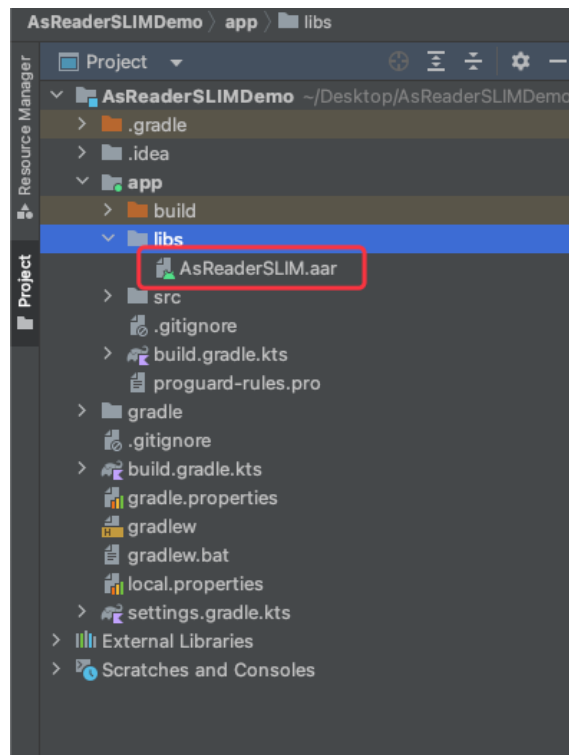


FIG. 2-1-3

3. Double-click "build.gradle". (FIG. 2-1-4)

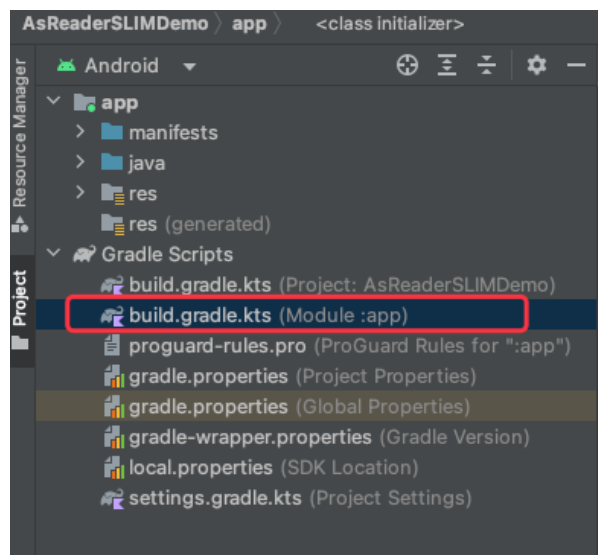


FIG. 2-1-4

4. Import the library into the dependencies. (FIG. 2-1-5 1). Next, click "Sync Now" to synchronize. (FIG. 2-1-5 2)

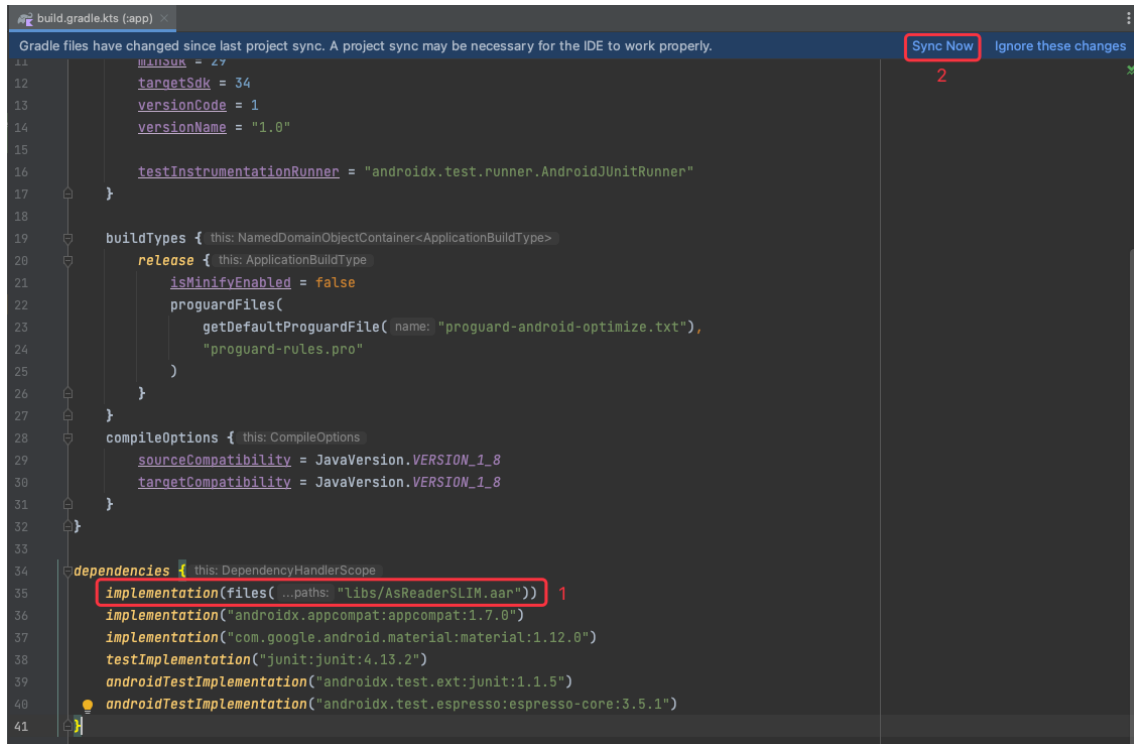


FIG. 2-1-5

5. If the synchronization is successful, the following will be displayed. (FIG. 2-1-6) This indicates that the addition of the SDK is completed.

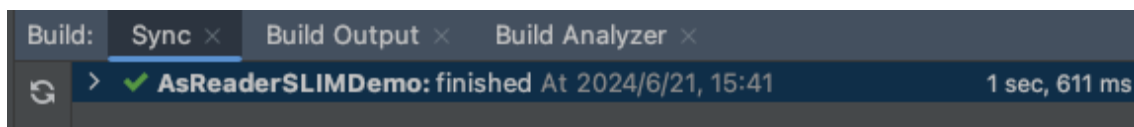


FIG. 2-1-6

3. Function Descriptions

3.1 com.asreader.slim (package)

3.1.1 AsReaderSLIM (class)

3.1.1.1 destroy()

Instance functions/onCreate functions

Destroys the instance.

Modifiers and Types	public void
Functions	destroy()
Description	Destroys the instance.

3.1.1.2 getResultCode()

Instance functions/onCreate functions

Gets the command execution result.

Modifiers and Types	public AsReaderSLIMResultCode
Functions	getResultCode()
Description	Gets the command execution result.
Return Value	
The enum constant with the specified name	

3.1.1.3 connectDevice()

Instance Functions/ onCreate Functions

Connect to A25S1.

Modifiers and Types	public void
Functions	connectDevice (AsReaderSLIMDevice AsReaderSLIMDevice)
Description	Connect to A25S1.

3.1.1.4 disconnectDevice()

Instance functions/onCreate functions

Disconnect from the A25S1.

Modifiers and Types	public void
Functions	disconnectDevice()
Description	Disconnect the A25S1.

3.1.1.5 getCurrentDevice()

Instance functions/onCreate functions

Gets the currently connected AsReaderSLIMDevice object.

Modifiers and Types	public AsReaderSLIMDevice
Functions	getCurrentDevice()
Description	Gets the currently connected AsReaderSLIMDevice object.
Return Value	
AsReaderSLIMDevice object	

3.1.1.6 getState()

Instance functions/onCreate functions

Gets the current connection status of the A25S1.

Modifiers and Types	public AsReaderSLIMConnectionState
Functions	getState()
Description	Gets the current connection status of the A25S1.
Return Value	
The enum constant with the specified name	

3.1.1.7 getAction()

Instance functions/onCreate functions

Gets the current operating status of the AsReaderSLIM instance.

Modifiers and Types	public AsReaderSLIMActionState
Functions	getAction()
Description	Gets the current operating status of the AsReaderSLIM instance.
Return Value	
The enum constant with the specified name	

3.1.1.8 getSDKVersion()

Instance functions/onCreate functions

Gets the A25S1 SDK version information.

Modifiers and Types	public String
Functions	getSDKVersion()
Description	Gets the A25S1 SDK version information.
Return Value	
SDK Version	

3.1.1.9 getFirmwareVersion()

Instance functions/onCreate functions

Gets the A25S1 firmware version information.

Modifiers and Types	public String
Functions	getFirmwareVersion()
Description	Gets the A25S1 firmware version information.
Return Value	
Firmware Version	

3.1.1.10 getHardwareVersion()

Instance functions/onCreate functions

Gets the hardware version information of the A25S1.

Modifiers and Types	public String
Functions	getHardwareVersion()
Description	Gets the hardware version information of the A25S1.
Return Value	
Hardware Version	

3.1.1.11 setEventListener()

Instance functions/onCreate functions

Sets the AsReaderSLIMEventListener listener.

Modifiers and Types	public void
Functions	setEventListener(AsReaderSLIMEventListener listener)
Description	Set the AsReaderSLIMEventListener listener.
Parameters	
Listener	AsReaderSLIMEventListener object

3.1.1.12 removeEventListener()

Instance functions/onCreate functions

Removes the AsReaderSLIMEventListener listener.

Modifiers and Types	public void
Functions	removeEventListener(AsReaderSLIMEventListener listener)
Description	Remove the AsReaderSLIMEventListener listener.
Parameters	
Listener	AsReaderSLIMEventListener object

3.1.1.13 defaultParameter()

Instance functions/onCreate functions

Resets all parameter settings to their default values.

Modifiers and Types	public AsReaderSLIMResultCode
Functions	defaultParameter()
Description	Resets all parameter settings to their default values. Default: • Buzzer : High • Sleep Buzzer: Off • Auto Off Time(s): 600 • Barcode Timeout(s): 4
Return Value	
The enum constant with the specified name	

3.1.1.14 getBuzzer()

Instance functions/onCreate functions

Gets the buzzer parameters.

Modifiers and Types	public AsReaderSLIMBuzzerState
Functions	getBuzzer()
Description	Gets the buzzer parameters.
Return Value	
The enum constant with the specified name	
exception	
AsReaderSLIMException	Throws an exception if there is a problem retrieving the data (e.g. another command is running, crash, etc.).

3.1.1.15 setBuzzer()

Instance functions/onCreate functions

Sets the buzzer parameters.

Modifiers and Types	public void
Functions	setBuzzer (AsReaderSLIMBuzzerState state)
Description	Set the buzzer parameters.
Parameters	
state	The enum constant with the specified name
exception	
AsReaderSLIMException	Throws an exception if there is a problem retrieving the data (e.g. another command is running, crash, etc.).

3.1.1.16 getSleepBuzzer()

Instance functions/onCreate functions

Gets whether the buzzer will beep when the A25S1 is turned off automatically.

Modifiers and Types	public AsReaderSLIMSleepBuzzerState
Functions	getSleepBuzzer()
Description	Gets whether the buzzer will beep when the A25S1 is turned off automatically.
Return Value	
The enum constant with the specified name	
exception	
AsReaderSLIMException	Throws an exception if there is a problem retrieving the data (e.g. another command is running, crash, etc.).

3.1.1.17 setSleepBuzzer()

Instance functions/onCreate functions

Sets whether the buzzer will beep when the A25S1 is turned off automatically.

Modifiers and Types	public void
Functions	setSleepBuzzer (AsReaderSLIMSleepBuzzerState state)
Description	Sets whether the buzzer will beep when the A25S1 is turned off automatically.
Parameters	
state	The enum constant with the specified name
exception	
AsReaderSLIMException	Throws an exception if there is a problem retrieving the data (e.g. another command is running, crash, etc.).

3.1.1.18 getAutoOffTime()

Instance functions/onCreate functions

Gets the time until the power is automatically turned off.

Modifiers and Types	public int
Functions	getAutoOffTime()
Description	Gets the time until the power is automatically turned off.
Return Value	
Auto-off time	
exception	
AsReaderSLIMException	Throws an exception if there is a problem retrieving the data (e.g. another command is running, crash, etc.).

3.1.1.19 setAutoOffTime()

Instance functions/onCreate functions

Sets the time until the power automatically turns off.

Modifiers and Types	public void
Functions	setAutoOffTime (int time)
Description	Sets the time until the power automatically turns off.
Parameters	
time	Auto-off time (0-1800s)
exception	
AsReaderSLIMException	Throws an exception if there is a problem retrieving the data (e.g. another command is running, crash, etc.).

3.1.1.20 getBarcodeTimeOut()

Instance functions/onCreate functions

Gets the timeout period for barcode scanning of the A25S1.

Modifiers and Types	public int
Functions	getBarcodeTimeOut()
Description	Gets the timeout period for barcode scanning of the A25S1.
Return Value	
Scan timeout period	
Exception	
AsReaderSLIMException	Throws an exception if there is a problem retrieving the data (e.g. another command is running, crash, etc.).

3.1.1.21 setBarcodeTimeOut()

Instance functions/onCreate functions

Sets the timeout period for barcode scanning of the A25S1.

Modifiers and Types	public void
Functions	setBarcodeTimeOut (int time)
Description	Sets the timeout period for barcode scanning of the A25S1.
Parameters	
time	Scan timeout (4~300s)
exception	
AsReaderSLIMException	Throws an exception if there is a problem retrieving the data (e.g. another command is running, crash, etc.).

3.1.1.22 getSerialNumber()

Instance functions/onCreate functions

Gets the serial number of the A25S1.

Modifiers and Types	public String
Functions	getSerialNumber()
Description	Gets the serial number of the A25S1.
Return Value	
Serial number	
exception	
AsReaderSLIMException	Throws an exception if there is a problem retrieving the data (e.g. another command is running, crash, etc.).

3.1.1.23 startDecode()

Instance functions/onCreate functions

Starts reading barcodes.

Modifiers and Types	public AsReaderSLIMResultCode
Functions	startDecode()
Description	Starts reading barcodes.
Return Value	
The enum constant with the specified name	

3.1.1.24 stopDecode()

Instance functions/onCreate functions

Stops reading barcodes.

Modifiers and Types	public AsReaderSLIMResultCode
Functions	stopDecode()
Description	Stops reading barcodes.
Return Value	
The enum constant with the specified name	

3.1.1.25 setCharset()

Instance functions/onCreate functions

Sets the encoding type for barcode scanning.

Modifiers and Types	public void
Functions	setCharset(Charset charset)
Description	Sets the encoding type for barcode scanning.
Parameters	
charset	Character Set
exception	
AsReaderSLIMException	Throws an exception if there is a problem retrieving the data (e.g. another command is running, crash, etc.).

3.1.2 AsReaderSLIMManager (class)

3.1.2.1 getInstance()

Static functions/onCreate functions

Gets an instance object of the AsReaderSLIM class.

Modifiers and Types	public static AsReaderSLIM
Functions	getInstance()
Description	Gets an instance object of the AsReaderSLIM class.
Return Value	
Instance object of AsReaderSLIM class	

3.1.2.2 onDestroy()

Static functions/onCreate functions

Destroys the instance object of the AsReaderSLIM class and releases resources.

Modifiers and Types	public static void
Functions	onDestroy()
Description	Destroys the instance object of the AsReaderSLIM class and releases resources.

3.2 com.asreader.slim.barcode (package)

3.2.1 AsReaderSLIMBarcodeType (class)

3.2.1.1 AsReaderSLIMBarcodeType

public static enum BarcodeConst

BarcodeType

Enumeration constants	
BarcodeTypeNoRead	Not read
BarcodeTypeCode39	Code39
BarcodeTypeCode11	Code11
Barcode Type: Codabar	Codabar
BarcodeTypeEAN13	EAN-13
BarcodeTypeCode128	Code128
BarcodeTypeEAN13With2Supps	EAN-13 with 2 Supps.
BarcodeTypeIndustrial2Of5	Industrial 2 of 5
BarcodeTypeEAN13With5Supps	EAN-13 with 5 Supps.
BarcodeTypeIATA2Of5	IATA 2 of 5
BarcodeTypeMSI	MSI
BarcodeTypeInterleaved2Of5	Interleaved 2 of 5
BarcodeTypeEAN128	EAN-128
BarcodeTypeCode93	Code93
BarcodeTypeUPCE1	UPC-E1
BarcodeTypeUPCA	UPC-A
BarcodeTypeUPCE1With2Supps	UPC-E1 with 2 Supps.
BarcodeTypeUPCE1With5Supps	UPC-E1 with 5 Supps.
BarcodeTypeUPCAWith2Supps	UPC-A with 2 Supps.
BarcodeTypeTriopticCode39	Trioptic Code39
BarcodeTypeUPCE0	UPC-E
BarcodeTypeBooklandEAN	Bookland EAN
BarcodeTypeUPCE0With2Supps	UPC-E with 2 Supps.
BarcodeTypeCouponCode	Coupon Code

BarcodeTypeUPCE0With5Supps	UPC-E with 5 Supps.
BarcodeTypeGS1DataBarLimitedRSSLimited	GS1 DataBar Limited (RSS-Limited)
BarcodeTypeEAN8	EAN-8
BarcodeTypeGS1DataBarRSS14	GS1 DataBar (RSS-14)
BarcodeTypeEAN8With2Supps	EAN-8 with 2 Supps.
BarcodeTypeGS1DataBarExpandedRSSExpanded	GS1 DataBar Expanded (RSS-Expanded)
BarcodeTypeEAN8With5Supps	EAN-8 with 5 Supps.
BarcodeTypeMatrix2Of5	Matrix 2 of 5
BarcodeTypeChinaPostChinese2Of5	Chinese 2 of 5
BarcodeTypeCode32	Code32
BarcodeTypeUKPlessey	UK Plessey
BarcodeTypeISBT128	ISBT128
BarcodeTypePDF417	PDF417
BarcodeTypeAztec	Aztec
BarcodeTypeMicroPDF417	MicroPDF417
BarcodeTypeQR	QR
BarcodeTypeDataMatrix	Data Matrix
Barcode Type: MicroQR	Micro QR
BarcodeTypeHanXinCode	HanXin Code
BarcodeTypeMaxicode	Maxicode
BarcodeTypeITF14	ITF-14
BarcodeTypeITF6	ITF-6
BarcodeTypeAIM128	AIM 128
BarcodeTypeISSN	ISSN
BarcodeTypeISBN	ISBN
BarcodeTypeGS1Databar	GS1 Databar

3.2.1.2 toString()

Instance functions/onCreate functions

Gets the barcode type of the enumeration AsReaderSLIMBarcodeType.

Modifiers and Types	public String
Functions	toString()
Description	Gets the barcode type of the enumeration AsReaderSLIMBarcodeType.
Return Value	
Barcode type (see 3.2.1.1 AsReaderSLIMBarcodeType)	

3.3 com.asreader.slim.barcode.event (package)

3.3.1 AsReaderSLIMEventListener (class)

3.3.1.1 onStateChanged()

Instance Functions/ Abstract Functions

AsReaderSLIM connection status changes.

Modifiers and Types	void
Functions	onStateChanged(AsReaderSLIM reader, AsReaderSLIMConnectionState state)
Description	AsReaderSLIM connection status changes.
Parameters	
reader	Instance object of AsReaderSLIM class
state	The enum constant with the specified name

3.3.1.2 onActionChanged()

Instance Functions/ Abstract Functions

the AsReaderSLIM operation status changes.

Modifiers and Types	void
Functions	onActionChanged(AsReaderSLIM reader, AsReaderSLIMActionState action)
Description	the AsReaderSLIM operation status changes.
Parameters	
reader	Instance object of AsReaderSLIM class
action	The enum constant with the specified name

3.3.1.3 onReadBarcode()

Instance Functions/ Abstract Functions

Receives scanned barcode data.

Modifiers and Types	void
Functions	onReadBarcode(AsReaderSLIM reader, AsReaderSLIMBarcodeType type, String barcode)
Description	Receives scanned barcode data.
Parameters	
reader	Instance object of AsReaderSLIM class
type	The enum constant with the specified name
barcode	Barcode Data

3.3.1.4 onReadBarcode()

Instance Functions/ Abstract Functions

Receives scanned barcode data.

Modifiers and Types	void
Functions	onReadBarcode(AsReaderSLIM reader, AsReaderSLIMBarcodeType type, byte[] barcodeData)
Description	Receives scanned barcode data.
Parameters	
reader	Instance object of AsReaderSLIM class
type	The enum constant with the specified name
barcodeData	Barcode data (byte type data)

3.3.1.5 onKeyEvent()

Instance Functions/ Abstract Functions

Called back when the A25S1 Trigger key is pressed or released.

Modifiers and Types	Boolean
Functions	onKeyEvent(AsReaderSLIM reader, AsReaderSLIMKeyState state)
Description	Called back when the A25S1 Trigger key is pressed or released.
Parameters	
reader	Instance object of AsReaderSLIM class
state	The enum constant with the specified name
Return Value	
YES: Execute the SDK's default operation. Press the Trigger key to start scanning. Release the Trigger key to stop scanning. NO: Do not perform the default SDK operation.	

3.4 com.asreader.slim.barcode.type (package)

3.4.1 AsReaderSLIMActionState (class)

Enumeration constants	
StartDecode	Barcode reading
Stop	Operation stopped
WaitForResponse	Waiting for response

3.4.1.1 toString()

Instance Functions / onCreate Functions

Gets the character of the enumeration AsReaderSLIMActionState constant.

Modifiers and Types	public String
Functions	toString()
Description	Gets the character of the enumeration AsReaderSLIMActionState constant.
Return Value	
Characters (see 3.4.1)	

3.4.2 AsReaderSLIMResultCode (class)

Enumeration constants	
InOperation	Working
InvalidParameter	Invalid parameters were sent
InvalidResponse	Invalid Response
NoError	success
NonSpecificError	Unspecified Error
NotConnected	A25S1 not connected
NotSupportedFirmware	Unsupported Firmware
OperationFailed	Operation Failed
OtherError	Unknown Error
Timeout	timeout

3.4.2.1 toString()

Instance Functions /onCreate Functions

Gets the character of the enumeration AsReaderSLIMResultCode constant.

Modifiers and Types	public String
Functions	toString()
Description	Gets the character of the enumeration AsReaderSLIMResultCode constant.
Return Value	
character	

3.5 com.asreader.slim.device (package)

3.5.1 AsReaderSLIMDevice (class)

3.5.1.1 destroy()

instance function / a bstract function

Destroys the instance.

Modifiers and Types	public void
Functions	destroy()
Description	Destroys the instance.

3.5.2 AsReaderSLIMDeviceUsbCdc (class)

constructor		Description
AsReaderSLIMDeviceUsbCdc(Context context)		Constructor
Parameters		
context	the context	

3.6 com.asreader.slim.device.type (package)

3.6.1 AsReaderSLIMKeyState (class)

Enumeration constants	
KeyDown	The Trigger key is pressed.
KeyUp	The Trigger key is released.

ASR- A25S1
SDK Reference Guide

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