

# SampleApp Functional Specifications

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! " # \$

Date	What/Why	By
2022/7/19	%&' (	CloudSDK team
2022/10/25	DevPKG&) *	CloudSDK team
2022/xx/xx	TBD	TBD

+ , - .

¥ / O + 1 TypeScript&CloudSDK23456784569: ; < . = > ? @SampleApp. ABC2D  
E F G H I @J DE: ; K L . + 1 TypeScript9M4? @J NOPQRST UVW R X Y R Z  
+ Next.js9M4? @J  
! [ \ ? @SDKPB] ^  
" SDKPB-306  
" SDKPB-591

# 4L\_`L

Terms/Abbreviations	Meaning
CloudSDK	Consolea 2NZ bc 569=>?@SDK
Console	def ghZi j k9I - mnPoRSTU9pq r . st?@m- 2uvDEwxOyz { U  D E 1P  WR} U~DE 1x• z c€• f { U  D E, f„ 9=>?@Zi j k...R†c
‡ ^ %Š	Vision and Sensing Applicationg h 2< Ē2• Ž 1 AI• • ' ' m{ " x R"
" •	Vision and Sensing Applicationg h 2< Ē2• Ž 1 – { i —~ h™CB@z { Rf x R"

Š > œ•

¥ SampleAppH3 4? @TypeScript&CloudSDK  
! <https://github.com/SonySemiconductorSolutions/aitrios-sdk-typescript-dev>

ž Ÿ Rc QRc

¥ TypeScript&CloudSDK23456784569=>Hi @J  
! R¢R+PEf | P¤2NOP9¥| ?@Š~ H1 CloudSDK934¨ mNOP2| ' 9©ª H  
i @J  
! R¢R+nRc« Rk 9©ª ?@Š~ H1 CloudSDK234569©ª Hi @J

DE ¬ - 1N® ¯ P° X

## Functional Overview

¥ ±" " • ~ ±" 2‡ ^ %Š9" ² ³ H©ª Hi @J  
! AI´ x ®+ ObjectDetection2µ) \* ?@J  
¥ DeviceID9¶|· ?@Š~ H1 Start/Stop„ " U—1 ° ' ' @J  
¥ START„ " U9» ¼?@Š~ H1 ±" " • /±" ‡ ^ %Š9½¾¨ " ² , 1 ° ?@J  
¥ STOP„ " U9» ¼?@Š~ H1 ±" " • /±" ‡ ^ %Š2½¾9¿ À?@J

## Algorithm

- " ² 9¥| ?@J
  - getDeviceData—Â Â< ' ' @J

- b.  $\tilde{A} \tilde{A}' \cdot m \times R'' \ni \text{DeviceID} \cdot \tilde{A} \cdot 1^\circ ? @J$
2.  $\text{DeviceID} \ni t \in \cdot 1 \text{ START}_s \cdot \cup \ni \gg \frac{1}{4} ? @J$
- a.  $\text{getCommand} \quad \text{Parameter} \quad \text{File} \text{---} \tilde{A} \tilde{A} < ' ' 1 \text{Æ} \ddot{Y} \zeta \text{---} \tilde{E} \frac{1}{4} 2 \acute{E} \hat{E} \text{HI} @ \S \sim 9 \ddot{E} \backslash e Z ? @$   
 $\text{wError} 2 \acute{I} \hat{I} + \{ e b R f 1^\circ ? @, J$   
 $" \text{Mode} = 1 (\text{Image} \& \text{Inference Result})$   
 $" \text{UploadMethodIR} = " \text{Mqtt}"$
- b.  $\text{startUpload} \text{---} \tilde{A} \tilde{A} < ' ' 1 \ddagger \wedge \% \check{S} \sim " \cdot 2 \text{Ne Oy Rk ---} \ddot{I} ' ' @J$
- c.  $\text{getImageAndInference} \text{---} \ddot{Y} \text{Ð} \tilde{A} \tilde{A} < \cdot \cdot \cdot ' ' 1 \ddagger \wedge \% \check{S} \sim " \cdot 9 \frac{1}{2} \frac{3}{4} ? @J$
- d.  $\frac{1}{2} \frac{3}{4} \cdot m \times R'' + " 2 \cdot 1^\circ ' ' @J$
3.  $\text{STOP}_s \cdot \cup \ni \gg \frac{1}{4} ? @J$
- a.  $\text{stopUpload} \text{---} \tilde{A} \tilde{A} < ' ' @J$

## Under what condition

- ¥  $\text{Console} a 2 \text{NZ} b c \text{---} H_i @ \S \sim J$
- ¥  $\text{TypeScript} 2: ; \tilde{N} \ddot{O} \text{---} \acute{O} \hat{O}' ' C B @ \S \sim J$   
 $! \text{CodeSpaces} \tilde{N} \ddot{O} \ddot{O} 3 4 \ddot{O} E J$   
 $! \text{TypeScript} 2 \text{version} + 4.7 J$
- ¥  $x \cdot z c \text{---} \text{Console} \cdot x \emptyset' ' C \ddot{U} \acute{E} 1 \text{Console} g h 2 \acute{U}' 9 \ddot{U} \ddot{U} A \ddot{U} @ \acute{Y} \text{Ð} \text{HI} @J$

## API

- ¥ GET
- !  $\{\text{baseUrl}\} / \text{getDeviceData}$
- !  $\{\text{baseUrl}\} / \text{getCommandParameterFile} / \text{deviceId}$
- !  $\{\text{baseUrl}\} / \text{getImageAndInference} / \text{deviceId} / \text{subDirectoryName}$
- ¥ POST
- !  $\{\text{baseUrl}\} / \text{startUpload} / \text{deviceId}$
- !  $\{\text{baseUrl}\} / \text{stopUpload} / \text{deviceId}$

## Others Exclusive conditions / specifications

¥ , "

$\acute{U}' \text{ ß F G } 1 " 2 \text{ F G}$

" 2 F G

Ú' ß F G

SampleApp¥ | à H2Ú'

CodeSpaces34á

1. : ; < + â ã 2 ä i j ¢ g h SampleApp2 P £ f | P 9: | CodeSpaces9¥ | ? @J
2. Z i j k H P £ f | P ¤. å æ? @ÆŸVçz ®9š è. « U é ê R9ÓÔ? @J
3. ÓÔ' ' m« U é ê R9ä i j ¢³ à m+ VSCode Appg h 34? @J
4. SampleApp9¥ | ? @J

CodeSpaces934¨ , BÍ Î

1. : ; < + â ã 2 ä i j ¢ g h SampleApp2 P £ f | P 9: | 1 P £ f | P9Clone? @J
2. Clone¨ mSampleApp. è - , ì e QRf 9z Uc | R®? @J
3. SampleApp9¥ | ? @J

SampleApp¥ | í 2Ú'

1. DeviceID9¶· ? @J
2. START\_ " U9» ¼? @§ ~ H1 ±" 2" • /‡ ^ %Š 2½¾9: Ì¨ 1" ²³ , 1 ° ' ' @J
3. STOP\_ " U9» ¼? @§ ~ H1 ±" 2" • /‡ ^ %Š 2½¾—¿ À? @J

# Stack 3 H2 • • 2i '

¥ #SampleAppg h CloudSDK1 ConsoleÖ ñ Hedge AI device. ‡ ^ : Ĩ - ò

¥ \$edge AI deviceg h ‡ ^ %Š 1 " • 9Console. Upload

¥ %CloudSDKÖ ñ HConsoleg h ‡ ^ %Š 1 " • 9½¾

¥ &SampleAppg h CloudSDK1 ConsoleÖ ñ Hedge AI device. ‡ ^ ó ô - ò

## u BlockH2APIì i { R "

### GET

¥ {baseUrl}/getDeviceData

! DeviceID2Pc | 9½¾¨ ÃÄ? @J

Query Parameter's name	Meaning	Range of parameter
------------------------	---------	--------------------

Return value	Meaning
deviceData	DeviceID—Ö Ö ' ' m÷ ä f ì Z

¥ {baseUrl}/getCommandParameterFile/deviceId

! Console. Ø ù ' ' mCommand Parameter File2ú û ½¾¨ 1 Æÿ Ç 9ÃÄ? @J

Query Parameter's name	Meaning	Range of parameter
deviceId	" • ~ ‡ ^ %Š 9Upload" CB @DeviceID	ü Ÿ, "

Return value	Meaning
mode	Console. ø ù ' ' CB@Mode2ÆŸ Ç
uploadMethodIR	Console. ø ù ' ' CB@UploadMethodIR2ÆŸ Ç

¥ {baseUrl}/getImageAndInference/deviceId/subDirectoryName

! ü Ÿ" mx • z c 2 ‡ ^ %Š ~ " • 9½¾" ÄÄ? @J

Query Parameter's name	Meaning	Range of parameter
deviceId	" • ~ ‡ ^ %Š 9Upload" CB @DeviceID	ü Ÿ, "
subDirectoryName	" • —ÖÖ' ' @i c	ü Ÿ, "

Return value	Meaning
imageAndInference	" • i c ~ ‡ ^ %Š —ÖÖ' ' m÷ ä f l Z

## POST

¥ {baseUrl}/startUpload/deviceId

! ü Ÿ" mDeviceID. ) " C ‡ ^ %Š ~ " • 2Upload: ĩ 9- ò? @J

Body Parameter's name	Meaning	Range of parameter
deviceId	" • ~ ‡ ^ %Š 9Upload' ý @DeviceID	ü Ÿ, "

Return value	Meaning
result	SUCCESSg ERROR2p Ÿ!
outputSubDirectory	Input ImageÖÖi c

¥ {baseUrl}/stopUpload/deviceId

! ü Ÿ" mDeviceID. ) " C ‡ ^ %Š ~ " • 2Upload¿ Ä 9- ò? @J

Body Parameter's name	Meaning	Range of parameter
deviceId	" • ~ ‡ ^ %Š 2Upload9¿ Ä ' ý @DeviceID	ü Ÿ, "

Return value	Meaning
result	SUCCESSg ERROR2p ÿ !

" # ß E

¥ , "

\$ % & '

¥ Console2WebUIg h 1 Command Parameter File9Ë ¼2Æÿ . " CÙ( J  
! Mode=1(Image&Inference Result)  
! UploadMethodIR="Mqtt"  
¥ AI´ x ® + 1 Object Detection—x Oy z ´ ´ CB@J

) 2\* + , &'

¥ x • z c g h Z i j k a 2" • Ne Oy Rk á . 1 ± - . / O 1 2 2 3—; 4 ? @ \$ ~ — I @ J  
¥ Command Parameter File2Æÿ API—' ( ´ ´ 5 6 1 CloudSDK Õ ñ HÆÿ H | @ 7 • . , @ J  
¥ NZ b c | R Z U 2 ½¾ + 1 CloudSDK 2 DE 9 M 4 " C 8 • J

9: ÿ &'

¥ , "