

Notice of Transition from previous version

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Artray Co., Ltd.

0. Summary

Please read this manual before changing from the previous version (ver1.282) to the new version 1.300 since a few changes are made between these two versions, including samples composition and internal processes. However, the compatibility of function call remains the same between these two versions.

1. Internal changes of SDK function

ArtCam_SetHalfClock(HACAM hACam, LONG Value)

The value setting of previous version was restricted at 1 and 0 but at the current version, it is possible to set up value above 2.

Taking ArtCam-300MI-WOM as an example; when 2 is specified, it can become double-speed (48MHz). Relationships between speed and specified number are as below.

0: standard (24MHz)

1: Half- speed (12MHz)

2: double-speed(48MHz)

Also, all values above are the same to apply on function of call back Artcam-GetHalfClock

ArtCam_SetPreviewWindow(HACAM hACam, HWND hWnd, LONG Left, LONG Top, LONG Right, LONG Bottom)

In previous version, by giving a 0 to hWnd,Left,Top,Right,Bottom, a new display window will appear inside SDK. But this version does not support the same function. If a window during preview is not necessary while using functions of CallBackPreview and Trigger, we suggest to call 0 in this function.

LONG ArtCam_GetColorMode (HACAM hACam)

In previous version, one of 8/16/24/32/48/64 will be returned but value according to the effective bits of the camera is returned in the current version.

When color mode is 8,24,32bit,it is the same value as previous version.

When color mode is 16 bit on 10 bit value camera, it will call back 10bit. On 12 bit

effective camera, it will call back 12.

When color mode is 48 bit, it calls back 42 on effective 10 bit camera and 44 on effective 12 bit camera.

The same applies on 64 bit color mode, it calls back on 58 on effective 10 bit camera and 60 on effective 12 bit camera.

Color Mode and returned value

	16bit Mode	48bit Mode	64bit Mode
10bit camera	10	42	58
12bit camera	12	44	60
14bit camera	14	46	62
16bit camera	16	48	64

In sample program, by using $((\text{GetColorMode}() + 7) \& \sim 7)$, remains compatibility with previous versions. Please refer to each sample program for details.

ArtCam_SetSubSample / ArtCam_GetSubSample

In this version, some cameras support binning function depending on camera models.

The accessible value of sub-sample can be assigned/obtained is as below:

```
SUBSAMPLE_1 = 0x00, // Full
SUBSAMPLE_2 = 0x01, // 1/2 Skip
SUBSAMPLE_4,= 0x02 // 1/4 Skip
SUBSAMPLE_8,= 0x03 // 1/8 Skip
BINNING_2   = 0x11, // 1/2 Binning
BINNING_4   = 0x12, // 1/4 Binning
```

Obtaining of size in sample program is compatible by using $(\text{GetSubSample}() \& 0x03)$.

For detail usage, please refer to each sample program.

2. About transition to new version of C#.NET / VB.NET

This version has major changes on class header.

Different from previous versions, the header file is compatible to all models from the current version. However, header file and operating procedure have changed, so please confirm steps below.

Due to the structural change in class header, the applicable version on 2005(.NET 2.0)version of visual studio later version.

If it is needed to apply on VisualStudio 2002 and 2003, please check the availability of header file with us.

Modifications of head file

We will use ArtCam 130MI here as an example.

*C#.NET

1. Delete the ArtCamSdk_130MI.cs or ArtCamSdkBase.cs and ArtCamSdk130MI.cs
2. Copy the CArtCamSdk.cs from the Lib¥C# file folder of SDK to project folder.

*VB.NET

1. Delete the ArtCamSdk_130MI.vb or ArtCamSdkBase.vb and ArtCamSdk130MI.vb
2. Copy CArtCamSdk.vb from Lib¥VB.NET folder of SDK to project folder.

Step of using SDK

ArtCam 130MI is used for example as below;

1. If the class "CArtCam130MI" is instantiated within a program, please change it into "CArtCam".

(C# Case)

```
//private CArtCam m_CArtCam = new CArtCam130MI ();  
private CArtCam m_CArtCam = new CArtCam ();
```

(VB.NET Case)

```
'Dim m_ArtCam As CArtCam = New CArtCam130MI  
Dim m_ArtCam As CArtCam = New CArtCam
```

2. In case of using function of library, it has to perform CArtCam::LoadLibrary() and call other functions until the returns of TRUE.
3. When using 16/48/64bit color mode, call GetColorMode as previous
4. To end the function of library, please call CArtCam::FreeLibrary

3. Revision History

Updated date	Updates	Reference
2011.09.16	first draft	
2012.07.30	revision on "transition to new version on 2.C#.NET / VB.NET"	