Name

uEyeImageQueue

Programming language and interface

uEye Software Version:	V4.90.3	
uEye SDK	☒ Core SDK (C/C++)	☐ .NET SDK (C#)
Platform of exe file:	☐ 32bit	☒ 64bit
Development platform:	Visual Studio 2015	
Operating System	☒ Windows	☐ Linux

Description

This sample shows the basic idea how to continuously capture images without losing frames. A ring image buffer sequence with at least 3 buffers is used. These buffers are put into the image queue. Images are acquired into the buffer system. Using the image queue, the oldest buffer can always be fetched. The image buffer is automatically locked. After safely processing the image data, the buffer is unlocked and put back into the queue to be re-used.

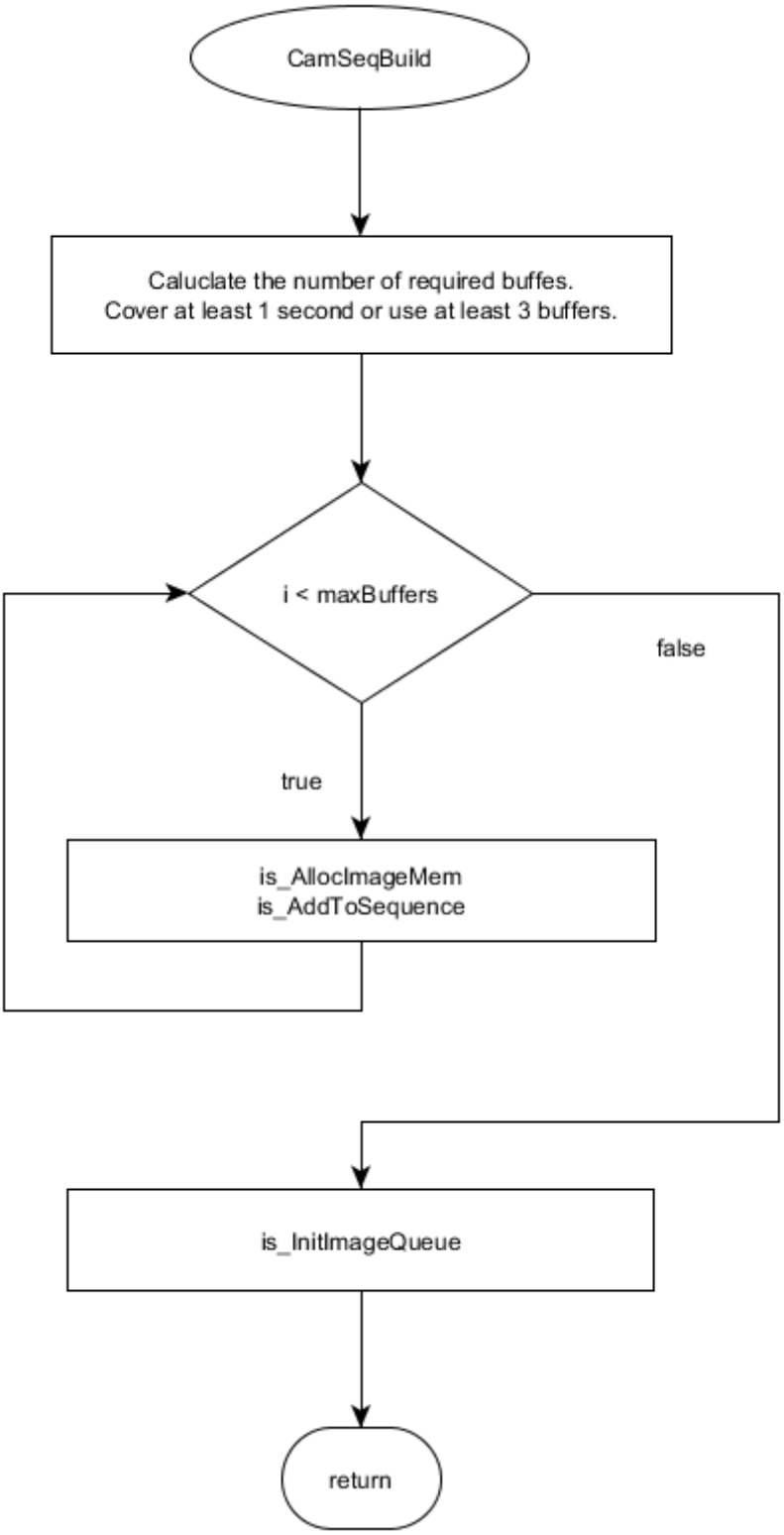
Collecting the image buffers is done in a detached thread. That thread does not depend on GUI interaction and allows collecting images without being interrupted.

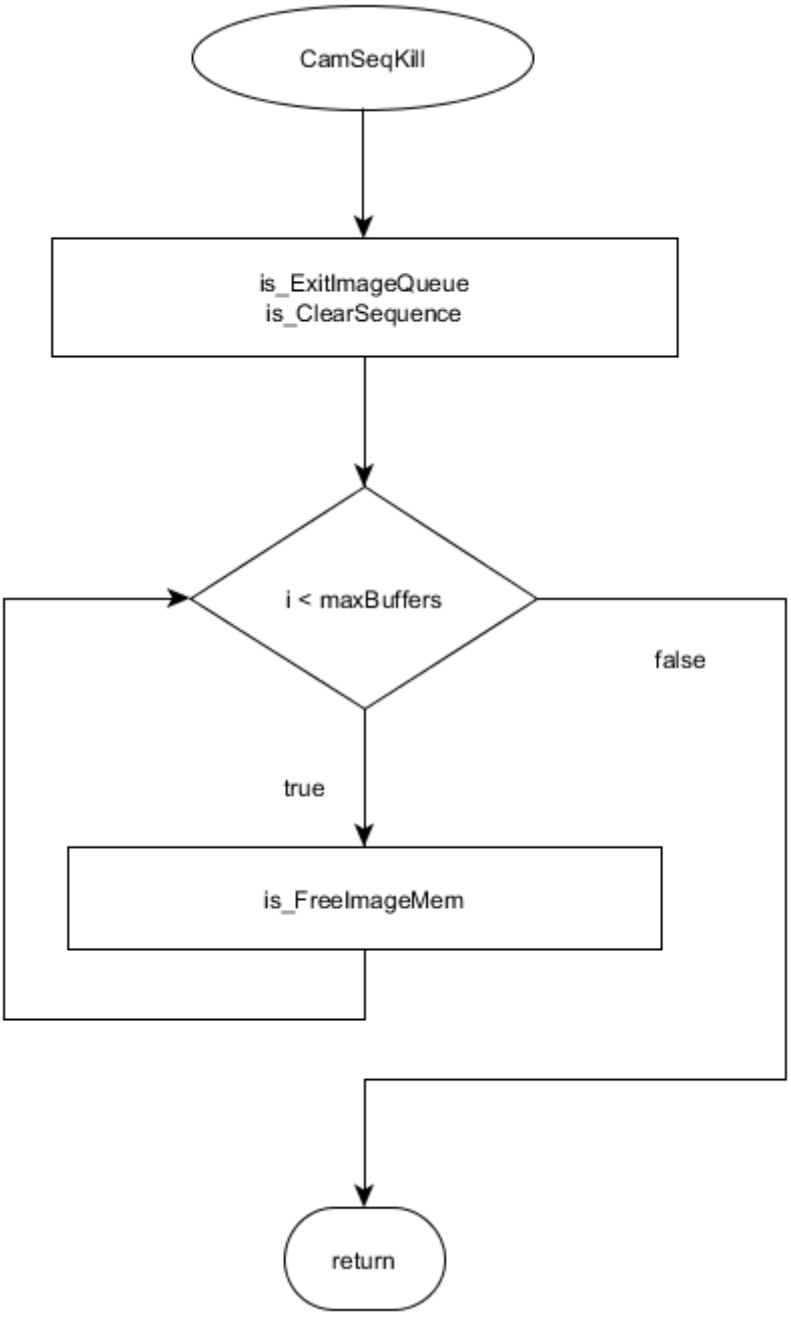
Among others, uEye API functions/methods used

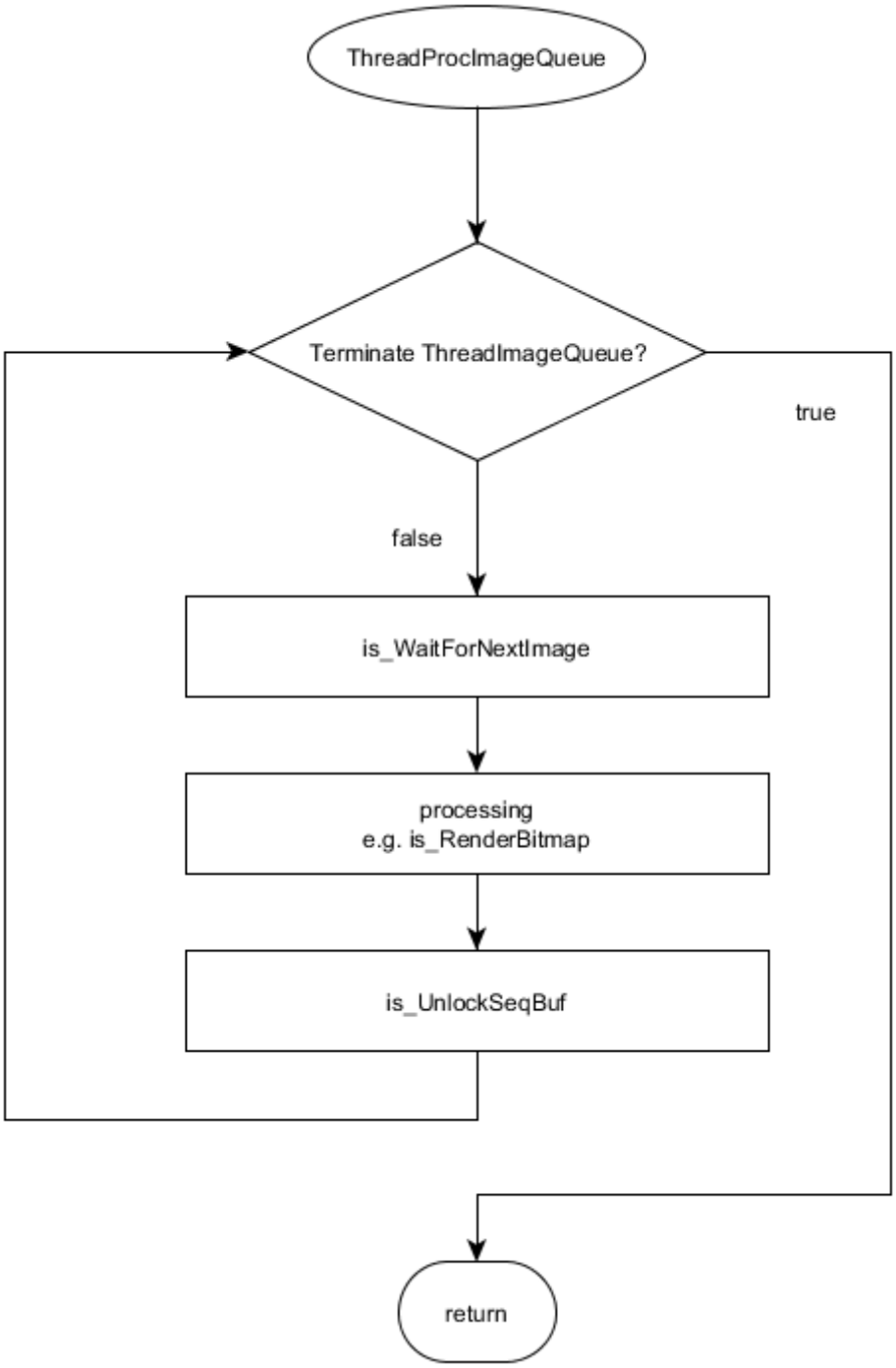
```
is_AllocImageMem
is_FreeImageMem
is_AddToSequence
is_ClearSequence
is_InitImageQueue
is_ExitImageQueue
is_WaitForNextImage
```

Flowcharts

The flowcharts below show how the most interesting parts of the sample software work. The flowcharts do not cover the whole application.







Cameras

All uEye camera models. Note that XS and UI-3013XC camera might require an extra handling.

Contact

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