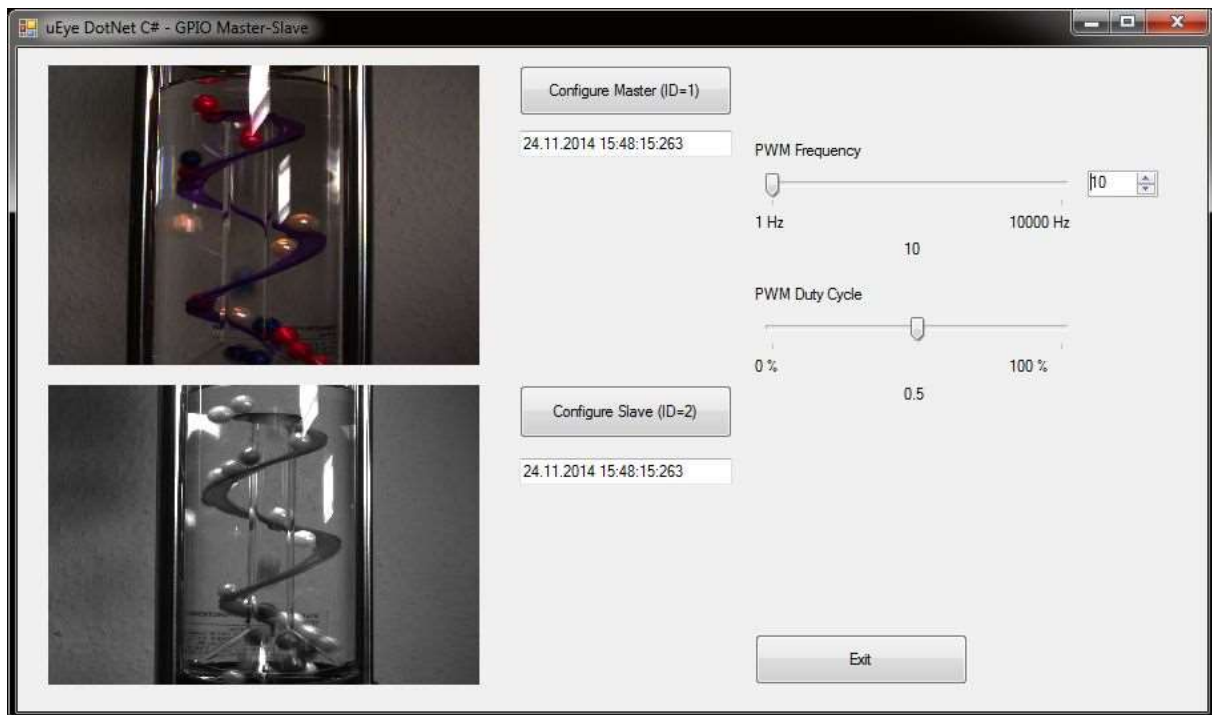


## Name

uEye\_DotNet\_CSharp\_GPIO\_MasterSlave\_ProgrammingExample



## Programming language and interface

C# using the uEyeDotNet.dll

## Description

This sample shows how to synchronize the image acquisition of two cameras by using the PWM output of the Master camera. Both cameras (master and slave) are running in hardware triggered mode (rising edge) and wait for a trigger signal on their GPIO1 as trigger input. The trigger signal is generated by the PWM output on the GPIO2 of the Master camera.

Thus, the image acquisition of both cameras is done simultaneously.

## Among others, uEye API functions/methods used

```
Camera.Trigger.Set  
Camera.IO.Gpio.SetConfiguration  
Camera.IO.Pwm.SetMode  
Camera.IO.Pwm.SetParams
```

## Comments

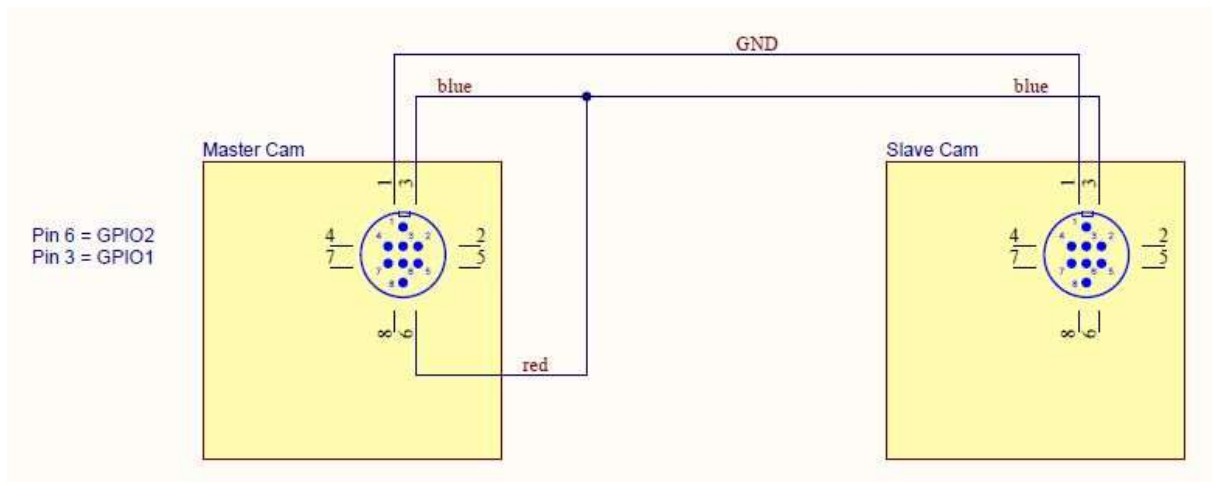
Please configure the Master camera with camera ID = 1 and slave camera with camera ID = 2 in IDS Cameramanager (→ Camera Information).

Hardware: The GPIO2 of the Master camera (which is configured in the project as PWM output) must be connected to the GPIO1 of the Master and the Slave camera.

When executing the sample, the master camera is running in freerun mode. By clicking the button **“Configure Master”** the master camera is set into hardware triggered mode. The trigger signal can be modified with the sliders for the PWM.

By clicking the button **“Configure Slave”** the slave camera is set into hardware triggered mode (GPIO1) and acquires images with every trigger pulse.

### Sample Wiring



### Accessories

I/O, standard cable, straight, 3 m	AD00044.03
or	
I/O, standard cable, straight, 5 m	AD00044.05

### Cameras

USB3 uEye ML and CP

### Contact

IDS Imaging Development Systems GmbH  
Dimbacher Straße 6-8  
74182 Obersulm, Germany

Phone: +49 7134 96196-0

Fax: +49 7134 96196-99

Email: [info@ids-imaging.com](mailto:info@ids-imaging.com)