

MoCam Middleware Software Development Kit for NINTENDO 3DS Quick Start Guide

Version 1.0.2

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1 Introduction

The MoCam SDK for NINTENDO CTR provides various camera-related algorithms on the CTR platform.

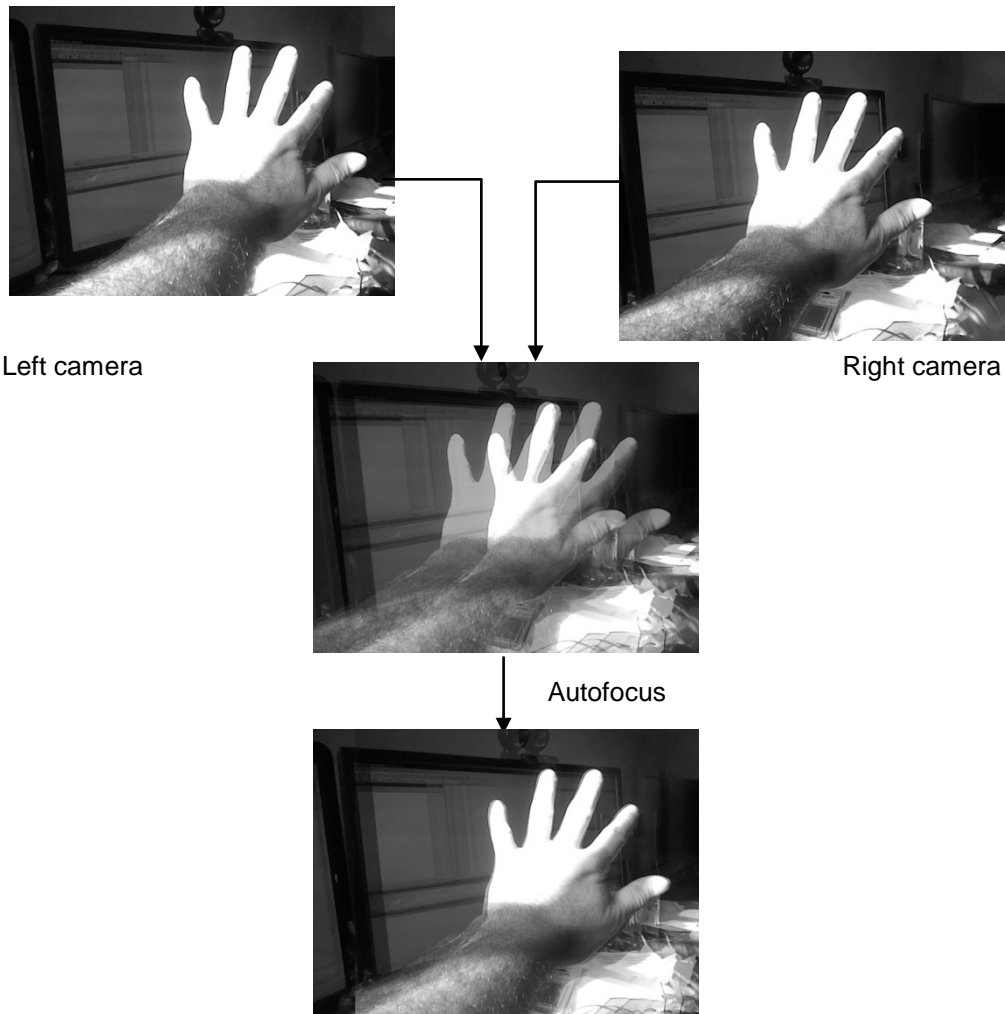
It is divided into different components:

- MoCam library and prototype files.
- Code samples.
- Documentation.

2 MoCam SDK general features

Current version includes automatic 3D focus calculation for stereo camera

It calculates the 3D autofocus between 2 images (typically left-eye and right-eye camera captured images).



3 MoCam SDK documentation

All documentation is available under the directory *CTR_MW-MoCam/documents-en*:

- The *CTR_MW-MoCam/documents-en/Manual/CTR-MoCam_SDK_Quick_Start_Guide-en_US.pdf* document (this file) gives an overview of the MoCam SDK structure and functionalities. It should be read by every user of the MoCam SDK for CTR.
- The *CTR_MW-MoCam /documents-en/Manual/CTR-MoCam_SDK_Programming_Manual-en_US.pdf* document describes the MoCam SDK API usage and philosophy, with programmers as its target audience.
- The *CTR_MW-MoCam /documents-en/API/index.html* is the reference manual of the MoCam SDK API, aimed at programmers too.

4 MoCam SDK API

4.1 Installation

You must perform some preliminary installation steps before using the MoCam SDK API .
This is mandatory in order to use and compile an application using its prototype and library files.
Please execute the file **setup.wsf** found in the *CTR_MW-MoCam* directory by double-clicking it.
This creates or updates the **CTRMW_MOCAM_ROOT** environment variable that should contain the absolute path of the root directory of the package.

4.2 Prototype files

You need to include the ***mocam_Autofocus.h*** file in the source files that make use of the MoCam SDK autofocus API.

The files can be found in *CTR_MW-MoCam/include/mw/mo* directory.

4.3 Library files

The MoCam SDK API is composed of one unique library compiled in six different target modes:

- **noopt** target in **small** mode
- **noopt** target in **fast** mode
- **verbose** target in **small** mode
- **verbose** target in **fast** mode
- **release** target in **small** mode
- **release** target in **fast** mode

Please have a look at the *CTR-MoCam_SDK_Programming_Manual-en_US.pdf* file for more information on the MoCam SDK API library.

5 Sample codes

You will find one sample code in the *CTR_MW-MoCam/build/sampledemos* directory:

- **autofocus3D**: demonstrate real-time autofocus calculation on stereo captured video with user control on CPU time spreading, while another thread is running an CPU intensive task.

In the same *CTR_MW-MoCam/build/sampledemos* directory you will also find the source of a library named **helper**.

This library is used in the code samples described before.

It implements various useful features among which:

- Camera management.
- Y2R management.

Revision History

Version	Revision Date	Category	Description
1.0.2	2011/05/23	-	<ul style="list-style-type: none">• Harmonized capitalization.
1.0.1	2011/05/13	-	<ul style="list-style-type: none">• Removed some typo errors.
1.0.0	2011/03/15	-	<ul style="list-style-type: none">• Initial version.

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