


Application Note AN-1701**Enabling/Disabling PoCL Detection on marathon and LightBridge Camera Link Frame Grabbers**

Regarding the use of microEnable 5 marathon ACL, microEnable 5 marathon VCL, and LightBridge 2 VCL with a **Power over Camera Link (PoCL)** camera starting with Acquisition Applets set v2.0.

	<p>The described handling is implemented up from:</p> <ul style="list-style-type: none">▪ <i>marathon 5 ACL</i> – Runtime 5.5.1 with Standard Acquisition Applet set v2.0▪ <i>marathon 5 VCL</i> - Runtime 5.5.1 and Standard Acquisition Applet set v2.0▪ <i>LightBridge 2 VCL</i> - Runtime 5.5.1 and Standard Acquisition Applet set v2.0 ▪ <i>marathon VCL and LightBridge 2 VCL with individual VA designs (*.hap-files)</i> created with VisualApplets version 3.0.6 (or higher)
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Summary

This application note shows how to enable/disable Power over Camera Link (PoCL) on the Silicon Software Camera Link frame grabbers microEnable 5 marathon ACL, microEnable 5 marathon VCL, and LightBridge 2 VCL.

Introduction

microEnable 5 marathon ACL, microEnable 5 marathon VCL, and Lightbridge 2 VCL support Power over Camera Link (PoCL) with SafePower and 4W at 12V per port.

The Camera Link specification does not specify a hot-plug capability to the camera. In certain cases, ESD events may occur when hot-plugging a camera.

Especially for safe connection of an externally powered camera to the frame grabber, starting with applet set version 2.0 (released together with Runtime 5.5.1), first delivery in August 2017), **PoCL detection is disabled per default.**

This document describes how to enable PoCL detection for using the frame grabber with Power over Camera Link.

Enable PoCL Support (marathon and LightBridge)

If you want to use the frame grabber with PoCL detection, you need to enable the PoCL detection feature once. The frame grabber will then support PoCL until you deliberately disable PoCL detection (see below).

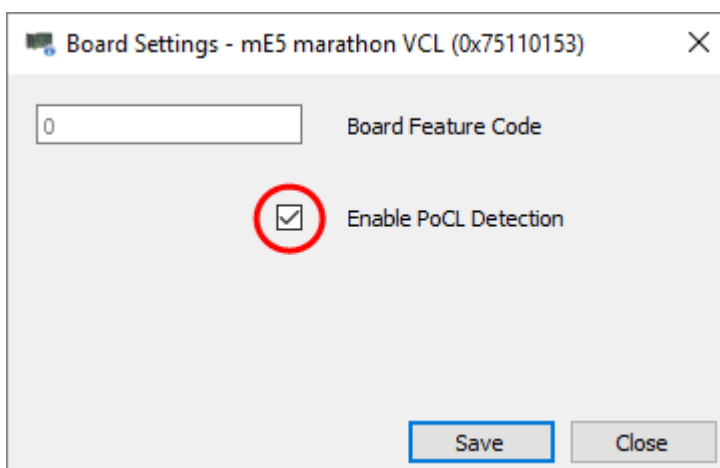
You need to enable PoCL support on the frame grabber if you want to use the following components together:

- Power over Camera Link (PoCL) camera
- mE 5 marathon or LightBridge Camera Link frame grabber
- Applet set 2.0 (or higher) or individual applet (*.hap file) created with VisualApplets 3.0.6 (or higher)

For enabling PoCL, Runtime 5.5.1 or higher needs to be installed on your host PC.

To activate PoCL support for using a PoCL camera with a marathon or LightBridge frame grabber:

1. Open microDiagnostics (<installation directory>/bin/microDiagnostics.exe).
2. In the **Frame Grabber** pane of microDiagnostics, select the board you want to activate the PoCL support for.
3. From the **Tools** menu, select **Board Settings**.
4. In the dialog, select **Enable PoCL Detection**.



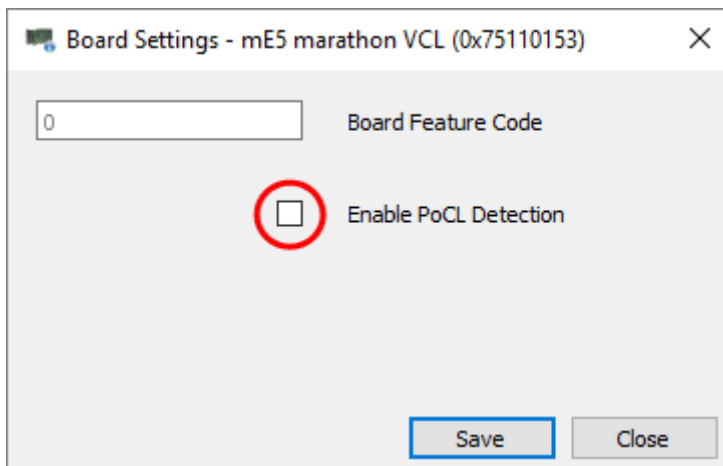
4. To activate this setting, you need to re-configure the FPGA on the frame grabber. To do so, you can either
 - activate/load another applet, or
 - cold-boot your host PC.

Now, PoCL support on the frame grabber is enabled.

Disable PoCL Support (marathon and LightBridge)

To **disable** PoCL support with a marathon or LightBridge frame grabber:

1. In the **Frame Grabber** pane of microDiagnostics, select the board you want to deactivate the PoCL support for.
2. From the **Tools** menu, select **Board Settings**.
3. In the dialog, **deselect** **Enable PoCL Detection**.



Re-configure the FPGA on the frame grabber. To do so, you can either

- activate/load another applet, or
- cold-boot your host PC.

Now, automatic PoCL detection for your frame grabber is disabled.

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