

Arm® Mali™ - IV009 ISP Calibration Tool Release Note

Version r0p1-00eac0 / Revision r0p1

28 September 2018

Release Note – Arm® Mali™ - IV009 ISP Calibration Tool r0p1-00eac0

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1 Product deliverables

1.1 Product release status

This is the Early Access (EAC) release of the Arm® ISP Calibration Tool.

Early Access release status has a particular meaning to Arm of which the recipient must be aware. It should be noted that Support for the Early Access release of the deliverable will only be provided by Arm to a recipient who has a current support and maintenance contract for the deliverable. Significant additional verification has been completed on complex products as planned. However, there remain some elements of uncertainty, which cannot finally be validated until the deliverable has been successfully deployed by Partners. Accordingly, the recipient of a deliverable with Early Access (EAC) status may be directly contributing to the final stage of validation of that deliverable. Partners may enter at-risk production with IP at EAC status. In due course, the product deliverables will be released at Full Release (REL) status after final IP and silicon verification/validation is completed. There is still errata risk on complex products. Arm recommends volume production with IP at REL status.

1.2 About the Arm® Mali™-IV009 ISP Calibration Tool

The key features of Arm® Mali™ - IV009 ISP Calibration Tool are:

- Windows only. This software is provided in the form of an installer for 32-bit or 64-bit Windows operating systems.
- Automated initial calibration and fine-tuning of some parameters and algorithms
- Compatibility with ISP driver. The ISP calibration tool generates a .json file which can be parsed into C code to replace static calibrations files in the ISP driver.
- Supports several Bayer image file formats (Arm proprietary formats, .pgm, .dng) and RGB image file formats (Arm proprietary formats, .png, .jpg)
- Access step-by-step instructions for each process from within the ISP calibration tool while it is running, using the information (i) icon.

1.3 About the Arm® Mali™-IV009 release note

This release note contains information about the usage, limitations and quality status of the accompanying deliverables. The tables in section [1.3.1](#) and [1.3.2](#) list the Arm part numbers for the individual deliverables included in the release of this Arm product. The deliverables, including this release note, are provided under their individual part numbers of the format IV009-xx-nnnnn-r0p1-00eac0. These deliverables are released together as a single deliverables bundle, IV009-BU-00000-r0p1-00eac0.

The files are delivered through Arm's IP delivery server (<http://connect.arm.com>). Most parts are grouped into a bundle for ease of unpacking into the working directory structure. Some parts are delivered individually for ease of maintenance and more frequent updates.

1.3.1 Technical documentation

Part Number	Description	Format	Revision
IV009-DC-06003	Arm Mali-IV009 ISP Calibration Tool Release Note (this document). Document number: ARM-EPM-137792	PDF	r0p1-00eac0

1.3.2 Software

Part Number	Description	Version
IV009-SW-70040	ISP Calibration Tool	r0p1-00eac0
IV009-DC-98000	Image Quality Test Report	r0p1-00eac0

2 Installation

The ISP Calibration Tool is delivered as a Windows installer in compressed `tar.gz` format.

Installing the ISP Calibration Tool involves:

- Unzipping the file
- Running the installer and following the on-screen instructions

Note: The ISP calibration tool requires MATLAB Runtime R2015b. If not already installed, MATLAB Runtime R2015b can be installed during the Calibration Tool installation process.

2.1 Unpacking the deliverables

Use a file compression utility such as 7-Zip to unzip the `.tar.gz` to a `.tar` file, and again to an uncompressed directory.

2.2 Running the installer

To run the installer:

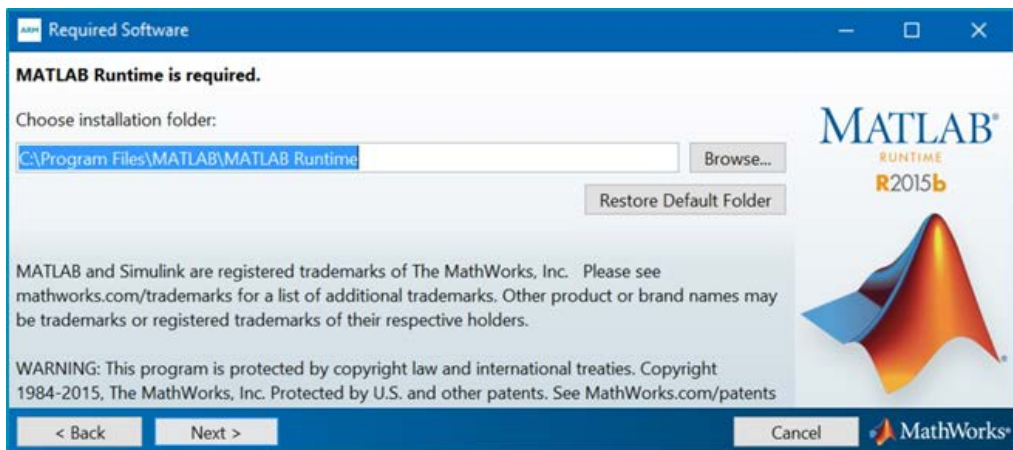
1. Navigate to the folder where you unzipped the installation files.
2. Double-click the installer file `ISP_Calibration_Tool_Install`.
The installation screen appears.



3. Click **Next**.
The Installation Options screen appears.



4. Choose the installation folder and decide whether to add a shortcut icon to the desktop and click **Next**.
5. The installer detects whether MATLAB Runtime R2015b is already installed and may prompt you to install it.



6. Choose the installation folder for MATLAB Runtime and click **Next**.
7. The confirmation screen appears. when the installation is complete.



8. Check if all the information is correct and click **Install**.

3 Running the calibration tool

Navigate to the following directory and double click **ISP_calibration_tool.exe**:

<Installation directory>\ARM-IQ\ISP_Calibration_Tool\application\

4 Change list

This section lists the changes that went into the Arm® Mali™ - IV009 ISP Calibration Tool r0p1 release.

- Improved support for fisheye lenses and WDR sensors.
- Minor bugfixes.

5 Known limitations of this release

The design includes all functionality in-line with the specification and has been assessed by Arm to be at EAC quality status.

6 Revision history

Date	Issue	Confidentiality	Change description
16/01/2018	LAC	Confidential	Initial release
23/03/2018	EAC	Confidential	Initial release for r0p0
28/09/2018	EAC	Confidential	Initial release for r0p1