Release Notes Firmware Version 5.0.0

We welcome any suggestions, questions, and bug reports. Please send your enquiries to: support@chromasens.de

Camera series: allPIXA evo 16K CXP

Changes and new Features

- Support multi ROI (Region1-4)
- Added MultRegionMerge feature to enable single virtual region RegionStream0
- Allow user set loading even if flat field correction calibration mode is active
- Support new feature InfoBlockTriggerSource to trigger the first line info block by an IO
- Refactoring on Gain Control (Application supports 12-Ch-BV mono)
- The gain control width and offset is limited to certain multiples
 - o If the gain control is outside an ROI the start of the ROI is expected to be precise.
- Changed EachLineInfoBlock to the used 8 pixels 2 markers
- Adaption of log level of some camera loggings
- Added support for new power board 921
- Power file upload can be done outside maintenance mode (if supported)
- Extended the power board version string in the DeviceVersion feature
- Support Digital IO User Output
- Common sensor control (anactrl) for all sensors.
- Introduced sensor/acquisition locking (Package must match for camera)
- New desegmentation IP

Bug Fixes

- Fixed the bug to download DSNU/PRNU files to the PC when the description was changed
- Fixed the bug to set image height correctly during internal reference capturing
- Fixed the bug in preparing the parameters for internal reference capturing.
- Fix for FlatFieldCorrectionCalibrationMode
 - Changing between DSNU/PRNU mode was not working.
- Fixed the bug to set line trigger to off whenever updating the slave trigger parameters
- Fixed the bug in applying digital io user settings for evo
- Fixed the bug in initializing the device voltage selector correctly
- Improvements on reset level control
 - o Increased the reset level settle time
 - Improved reset level offset calibration
- Fixed the salt and pepper bug

Incompatibilities

- Removed the truncation support of the gain control region
- The gain control region width and offset is limited to certain multiples of an internal constant.
 - Therefore the offsetX and Width of the gain control region may not be as precise as before.
 - o If the gain control is outside an ROI the start of the ROI should be precise.
 - o For more information like inaccuracies check the feature reference.
- The each line info block size has been reduced.
 - o Unused parts were removed.
- Black level is not compatible anymore because sensor timings have changed

Errata

- The Internal DSNU/PRNU creation may not work properly. Please check the result is good or not.
- In Master Slave Mode there may be a constant shift between the cameras
- The gain control is not working when gain control region is outside the ROI
- The pixels 10 and 11 contain wrong data when enabling the each line info block.
 - o In future those pixels should contain image data

Docs

- Adapted the description of LineStatus in Each Line Info Block
- Added new device status code and error codes
- Adapted the notes for the gain control region offset X and width regarding the precision
- Added MultiRegionMerge feature and updated RegionSelector enum entries
- Adapted the description of Flat Field Correction Calibration Mode
- Replaced in many places the text:
 - It will be removed from package 3.0.0
 - o By a text without version information.
- Adapted Feature Availability for Multi ROI and removed ax_dsxge.