Latest firmware version for your Alvium G1 model

The following table lists the latest firmware version for your Alvium G1 camera.

<table>
<thead>
<tr>
<th>Models</th>
<th>FW version</th>
<th>Document release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alvium G1-030 VSWIR, G1-040m/c, G1-130 VSWIR, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-510m/c, G1-811m/c, G1-812 UV, G1-895m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c</td>
<td>FW 00.12.00.00611a22e</td>
<td>2023-Jul-04</td>
</tr>
</tbody>
</table>

Table 3: Latest firmware version by model
supported models

<table>
<thead>
<tr>
<th>Camera family</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alvium</td>
<td>Alvium G1-030 VSWIR, G1-040m/c, G1-130 VSWIR, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-510m/c, G1-811m/c, G1-812 UV, G1-895m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c</td>
</tr>
</tbody>
</table>

Table 4: Supported models

new model

Alvium G1-895m/c

changed features

- Added Sensor option for BinningSelector. The existence of this option depends on the sensor. Please see the Alvium G1 User Guide or model data sheets.
- Added 12-bit sensor formats for cameras with 10-bit sensors for PixelFormat.
- Added Mono12Packed and BayerGR12Packed (G1-500c) or BayerRG12Packed (other models) for PixelFormat.

New features

- Support for mandatory features according to GenICam SFNC V2.7
- GigE Vision V2.2 support
- Scheduled action commands: Can be used the same way as action commands.
- LutValueAll to write a complete LUT in one access
- MultipleRegions subcategory in the ImageFormatControl category. The existence of this feature and available arrangement modes depend on the sensor. Please see the Alvium G1 User Guide or model data sheets.
- Added TestPendingAck in the TestControl category.

Resolved issues

<table>
<thead>
<tr>
<th>Alvium ID</th>
<th>Affected models</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>251</td>
<td>G1-2050m/c</td>
<td>If ShutterMode is changed after image acquisition, the ExposoureActive signal disappears.</td>
</tr>
<tr>
<td>854</td>
<td>All</td>
<td>GP02 trigger direction error: GP02 can be set for both input and output, despite having only output capabilities.</td>
</tr>
<tr>
<td>890</td>
<td>All</td>
<td>GP02 is high during camera boot up for several seconds (usually 1 to 3 s).</td>
</tr>
<tr>
<td>967</td>
<td>All</td>
<td>BlackLevel is wrongly set after loading settings file: The camera incorrectly reports a BlackLevel value of θ, requiring it to be set to a different value and then reset to 0 in order to actually achieve a value of θ.</td>
</tr>
</tbody>
</table>

Table 5: Resolved issues (Sheet 1 of 2)
### Known issues

<table>
<thead>
<tr>
<th>Alvium ID</th>
<th>Affected models</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>253</td>
<td>All</td>
<td>Auto mode feature <code>IntensityControllerOutliersDark</code> does not work properly.</td>
</tr>
<tr>
<td>338</td>
<td>G1-500m/c, G1-2050m/c</td>
<td>If <code>AcquisitionStop</code> is executed shortly after <code>AcquisitionStart</code>, no image is transmitted.</td>
</tr>
<tr>
<td>856</td>
<td>All</td>
<td>DHCP server timeout issue: Acquisition may stop. Typically, temperature status still works.</td>
</tr>
<tr>
<td>961</td>
<td>All</td>
<td>Running with GigE Validation Framework v2.2 RC4, Alvium GigE cameras failed DataPacketHeaders_ByteOrder test.</td>
</tr>
</tbody>
</table>

Table 5: Known issues (Sheet 2 of 2)

---

### FAQs

#### 976

**All**  
Opto-isolated Input GPI3 status is inverted. As a workaround, the rising edge signal must be treated as a falling edge, and vice versa.  
**Note:** If you want to keep your existing setup using GPI3 unchanged, please keep the firmware version V 00.11 or below and do not update the firmware to higher versions for your Alvium G1 camera.

#### 984

**All**  
`TransferQueueMaxBlockCount` is incorrect when `TransferControlMode` is set to `Automatic`.

#### 996

**G1-510m/c**  
Sensor binning not working after digital binning has been used: After activating and deactivating sensor bining, binning cannot be set back to digital binning.

#### 997

**G1-510m/c**  
Disable of burst not working: Once the burst mode is activated by setting `TransferControlMode` to `Automatic`, it cannot be deactivated without performing a power cycle.

#### 1041

**G1-500m/c, G1-501m/c NIR, G1-1240m/c, G1-2050m/c**  
DPC (defect pixel correction) is not working when `ReverseY` is turned on: For rolling shutter models, defect pixels may appear after turning on `ReverseY`.

Table 6: Known issues
GigE Firmware Release Notes

FW 00.12.00.00611a22e
Date of document release: 2023-Jun-15

Supported models

<table>
<thead>
<tr>
<th>Camera family</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alvium</td>
<td>Alvium G1-030 VSWIR, G1-040m/c, G1-130 VSWIR, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-510m/c, G1-811m/c, G1-812 UV, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c</td>
</tr>
</tbody>
</table>

Table 7: Supported models

New model
No new models were added.

Changed features

- Added Sensor option for BinningSelector. The existence of this option depends on the sensor. Please see the Alvium G1 User Guide or model data sheets.
- Added 12-bit sensor formats for cameras with 10-bit sensors for PixelFormat.
- Added Mono12Packed and BayerGR12Packed (G1-500c) or BayerRG12Packed (other models) for PixelFormat.

New features

- Support for mandatory features according to GenICam SFNC V2.7
- GigE Vision V2.2 support
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- LutValueAll to write a complete LUT in one access
- MultipleRegions subcategory in the ImageFormatControl category. The existence of this feature and available arrangement modes depend on the sensor. Please see the Alvium G1 User Guide or model data sheets.
- Added TestPendingAck in the TestControl category.

Resolved issues

<table>
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<tr>
<th>Alvium ID</th>
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</table>

Table 8: Resolved issues (Sheet 1 of 2)
### Known issues

<table>
<thead>
<tr>
<th>Alvium ID</th>
<th>Affected models</th>
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</thead>
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<tr>
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<td>Opto-isolated Input GPI3 status is inverted. As a workaround, the rising edge signal must be treated as a falling edge, and vice versa. <strong>Note:</strong> If you want to keep your existing setup using GPI3 unchanged, please keep the firmware version V 00.11 or below and do not update the firmware to higher versions for your Alvium G1 camera.</td>
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<tr>
<td>984</td>
<td>All</td>
<td><strong>TransferQueueMaxBlockCount</strong> is incorrect when <strong>TransferControlMode</strong> is set to <strong>Automatic</strong>.</td>
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<td>996</td>
<td>G1-510m/c</td>
<td>Sensor binning not working after digital binning has been used: After activating and deactivating sensor bining, bining cannot be set back to digital binning.</td>
</tr>
<tr>
<td>997</td>
<td>G1-510m/c</td>
<td>Disable of burst not working: Once the burst mode is activated by setting <strong>TransferControlMode</strong> to <strong>Automatic</strong>, it cannot be deactivated without performing a power cycle.</td>
</tr>
<tr>
<td>1041</td>
<td>G1-500m/c, G1-501m/c NIR, G1-1240m/c, G1-2050m/c</td>
<td><strong>DPC</strong> (defect pixel correction) is not working when <strong>ReverseY</strong> is turned on: For rolling shutter models, defect pixels may appear after turning on <strong>ReverseY</strong>.</td>
</tr>
</tbody>
</table>

### Table 8: Resolved issues (Sheet 2 of 2)

<table>
<thead>
<tr>
<th>Alvium ID</th>
<th>Affected models</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>253</td>
<td>All</td>
<td>Auto mode feature <strong>IntensityControllerOutliersDark</strong> does not work properly.</td>
</tr>
<tr>
<td>338</td>
<td>G1-500m/c, G1-2050m/c</td>
<td>If <strong>AcquisitionStop</strong> is executed shortly after <strong>AcquisitionStart</strong>, no image is transmitted.</td>
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<tr>
<td>961</td>
<td>All</td>
<td>Running with GigE Validation Framework v2.2 RC4, Alvium GigE cameras failed DataPacketHeaders_ByteOrder test.</td>
</tr>
</tbody>
</table>

### Table 9: Known issues
Supported models

<table>
<thead>
<tr>
<th>Camera family</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alvium</td>
<td>G1-030 VSWIR, G1-040m/c, G1-130 VSWIR, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-510m/c, G1-811m/c, G1-812 UV, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c</td>
</tr>
</tbody>
</table>

Table 10: Supported models

New model
Alvium **G1-030 VSWIR, G1-130 VSWIR, G1-510m/c, G1-812 UV**

Changed features
- **ActionControl** features have been tested and validated for proper function.
- The maximum value for **Gain** is increased to 48 dB for all models with Sony IMX global shutter sensors.
- Increments for **OffsetX** and **OffsetY** for camera models with Sony IMX global shutter sensor
- Reduced options for **SoftwareSignalSelector**

New features
- Counter features in the **CounterAndTimerControl** category
- Ethernet Flow Control (configurable on NICs and Ethernet devices)
- **LineDebounceDuration** and **LineDebounceMode** in the **DeviceControl** category
- **SequencerControl** category
- **TransferControl** category with features to acquire a sequence of images as a burst

Resolved issues

<table>
<thead>
<tr>
<th>Alvium ID</th>
<th>Affected models</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>806</td>
<td>Color models</td>
<td>Error in color transformation has been fixed.</td>
</tr>
</tbody>
</table>

Table 11: Resolved issues

Known issues

<table>
<thead>
<tr>
<th>Alvium ID</th>
<th>Affected models</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>251</td>
<td>G1-2050m/c</td>
<td>If <strong>ShutterMode</strong> is changed after image acquisition, the <strong>ExposoureActive</strong> signal disappears.</td>
</tr>
<tr>
<td>253</td>
<td>All</td>
<td>Auto mode feature <strong>IntensityControllerOutliersDark</strong> does not work properly.</td>
</tr>
<tr>
<td>338</td>
<td>G1-500m/c, G1-2050m/c</td>
<td>If <strong>AcquisitionStop</strong> is executed shortly after <strong>AcquisitionStart</strong>, no image is transmitted.</td>
</tr>
</tbody>
</table>

Table 12: Known issues
FW 00.11.00.9cf0c21e
Date of document release: 2022-Nov-14

Supported models

<table>
<thead>
<tr>
<th>Camera family</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alvium</td>
<td>Alvium G1-040m/c, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-510m/c, G1-811m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c</td>
</tr>
</tbody>
</table>

Table 13: Supported models

New model
Alvium G1-510m/c

Changed features

- **ActionControl** features have been tested and validated for proper function.
- The maximum value for **Gain** is increased to 48 dB for all models with Sony IMX global shutter sensors.
- Increments for **OffsetX** and **OffsetY** for camera models with Sony IMX global shutter sensor
- Reduced options for **SoftwareSignalSelector**

New features

- Counter features in the **CounterAndTimerControl** category
- Ethernet Flow Control (configurable on NICs and Ethernet devices)
- **LineDebounceDuration** and **LineDebounceMode** in the **DeviceControl** category
- **SequencerControl** category
- **TransferControl** category with features to acquire a sequence of images as a burst

Resolved issues

<table>
<thead>
<tr>
<th>Alvium ID</th>
<th>Affected models</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>806</td>
<td>Color models</td>
<td>Error in color transformation has been fixed.</td>
</tr>
</tbody>
</table>

Table 14: Resolved issues

Known issues

<table>
<thead>
<tr>
<th>Alvium ID</th>
<th>Affected models</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>251</td>
<td>G1-2050m/c</td>
<td>If <strong>ShutterMode</strong> is changed after image acquisition, the <strong>ExposoureActive</strong> signal disappears.</td>
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</tr>
<tr>
<td>338</td>
<td>G1-500m/c, G1-2050m/c</td>
<td>If <strong>AcquisitionStop</strong> is executed shortly after <strong>AcquisitionStart</strong>, no image is transmitted.</td>
</tr>
</tbody>
</table>

Table 15: Known issues
Supported models

**Corrected:** Alvium **G1-235m/c** is not included.

<table>
<thead>
<tr>
<th>Camera family</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alvium</td>
<td>Alvium G1-040m/c, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-811m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c</td>
</tr>
</tbody>
</table>

*Table 16: Supported models*

New model

Alvium G1-234m/c

Changed features

In previous firmware versions, **BlackLevel** values were adjusted to the pixel formats: 8-bit values for 8-bit pixel formats, 10 for 10, and 12 for 12. With this firmware update, the representation of **BlackLevel** is independent from the pixel format: 12-bit values are used for all pixel formats. Therefore, you may have to adjust your settings used with previous firmware versions.

**Corrected:** The maximum value for **Gain** is still **24 dB** for all models with Sony IMX global shutter sensors.

New features

- **ActionControl** category: The features are not working properly yet. This will be fixed in the next firmware release.
- **GVCP** subcategory
- **PTPControl** category
- **SerialHub** subcategory for I/O control by UART
- **SoftwareSignalControl** subcategory to enable external devices to trigger actions within the camera by software commands (The features in this category are still in the testing phase and not fully validated.)

Known issues

<table>
<thead>
<tr>
<th>Alvium ID</th>
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<tbody>
<tr>
<td>251</td>
<td>G1-2050m/c</td>
<td>If <strong>ShutterMode</strong> is changed after image acquisition, the <strong>ExposureActive</strong> signal disappears.</td>
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<tr>
<td>253</td>
<td>All</td>
<td>Auto mode feature <strong>IntensityControllerOutliersDark</strong> does not work properly.</td>
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<tr>
<td>338</td>
<td>G1-500m/c, G1-2050m/c</td>
<td>If <strong>AcquisitionStop</strong> is executed shortly after <strong>AcquisitionStart</strong>, no image is transmitted.</td>
</tr>
</tbody>
</table>

*Table 17: Known issues*
**FW 00.10.00.2cf3b22e**

Date of document release: 2022-Jul-20

**Note:** Data on this page is incorrect. Please see Chapter FW 00.10.00.2cf3b22e | corrected on page 8.

### Supported models

<table>
<thead>
<tr>
<th>Camera family</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alvium</td>
<td>Alvium G1-040m/c, G1-158m/c, G1-234m/c, G1-235m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-811m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c</td>
</tr>
</tbody>
</table>

*Table 18: Supported models*

### New models

Alvium G1-234m/c, G1-235m/c

### Changed features

In previous firmware versions, **BlackLevel** values were adjusted to the pixel formats: 8-bit values for 8-bit pixel formats, 10 for 10, and 12 for 12. With this firmware update, the representation of **BlackLevel** is independent from the pixel format: 12-bit values are used for all pixel formats. Therefore, you may have to adjust your settings used with previous firmware versions.

The maximum value for **Gain** was increased from 24 to 48 dB for all models with Sony IMX global shutter sensors.

### New features

- **ActionControl** category: The features are not working properly yet. This will be fixed in the next firmware release.
- **GVCP** subcategory
- **PTPControl** category
- **SerialHub** subcategory for I/O control by UART
- **SoftwareSignalControl** subcategory to enable external devices to trigger actions within the camera by software commands (The features in this category are still in the testing phase and not fully validated.)

### Known issues

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<td>If <strong>AcquisitionStop</strong> is executed shortly after <strong>AcquisitionStart</strong>, no image is transmitted.</td>
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*Table 19: Known issues*
Supported models

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<thead>
<tr>
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</tr>
</tbody>
</table>

Table 20: Supported models

New models

Initial commercial release of Alvium G1-040m/c, G1-158m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-811m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2050m/c, G1-2050m/c, G1-2460m/c

New features

Initial feature set

Known issues

<table>
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<tr>
<th>Alvium ID</th>
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<td>If <strong>AcquisitionStop</strong> is executed shortly after <strong>AcquisitionStart</strong>, no image is transmitted.</td>
</tr>
</tbody>
</table>

Table 21: Known issues
Contact us

Website, email

General
www.alliedvision.com/en/contact
info@alliedvision.com

Distribution partners
www.alliedvision.com/en/avt-locations/avt-distributors

Support
www.alliedvision.com/en/support

Current firmware and release notes

Offices

Europe, Middle East, and Africa
(Headquarters)
Allied Vision Technologies GmbH
Taschenweg 2a
07646 Stadtroda, Germany
T// +49 36428 677-0 (Reception)
T// +49 36428 677-230 (Sales)
F// +49 36428 677-28

Asia-Pacific

China
Allied Vision Technologies (Shanghai) Co., Ltd.
2-2109 Hongwell Int. Plaza
1602# ZhongShanXi Road
Shanghai 200235, China
T// +86 21 64861133

Singapore
Allied Vision Technologies Asia Pte. Ltd
82 Playfair Rd, #07-01 D’Lithium
Singapore 368001
T// +65 6634 9027

North, Central, and South America

Canada
Allied Vision Technologies Canada Inc.
300 – 4621 Canada Way
Burnaby, BC V5G 4X8, Canada
T// +1 604 875 8855

USA
Allied Vision Technologies, Inc.
102 Pickering Way- Suite 502
Exton, PA 19341, USA
Toll-free// +1-877-USA-1394
T// +1 978 225 2030

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