# Changelog SVC2 builds:

Information:

- New functionality
- Tested encoders
- Solved issues (with AHD reference)
- Known issues related to required functionality specific to this build.

## Firmware Release 2

### Known issues in latest firmware

- AHD65325 Random freeze of a part of streamed images on one screen while on other screens the stream is displayed correctly. Seen on Hydra with VOS2 and VOS3 and Bosch streams.
- Transform A windriver 4.5.1 with new mpg3012.bin file requiried.
- QA not completed for all available encoders.

### SVC2.2.1.0.1 (11/12/2008)

Solved bugs:

- mpeg2 Release 26: Prevent black/blue screen to occur: do not report decode_bufferoverflow to PPC but continue with the generic resynchronisation within the decoding instance

### SVC2.2.1.0.0 (11/12/2008)

Solved bugs:

- mpeg2 Release 25: Change error handling in case of decode-fault, update frameNbr (towards PPC) is moved to the input

Added:

- GE Security VOS4 decoding (H264)

### SVC2.2.0.5.60 (10/12/2008)

Solved bugs:

- mpeg2 Release 24: In case a decoder error is encoutered, resychronize the library using synchro=1

### SVC2.2.0.5.59 (09/12/2008)

Solved bugs:

- mpeg2 Release 23:
  - Reduce size of Circular buffering (to about 3 frames@15Mbps)
  - Change error handling

## SVC2.2.0.5.58 (08/12/2008)

Solved bugs:

- mpeg2 Release 22:
  - remove the external sync to output the decoded image
  - an ouput TASK has been created (with the highest priority)

## SVC2.2.0.5.57 (08/12/2008)

Solved bugs:

- mpeg2 Release 21: remove the external sync to output the decoded image

## SVC2.2.0.5.56 (04/12/2008)

Solved bugs:

- mpeg2 Release 20: wrong picture rate was passed to the FPGA
- add keep-alive option/support in controlRTSP plugin + modified nkf_mpeg4_elem_rtsp_uni template (AHD 68626)

## SVC2.2.0.5.55 (03/12/2008)

Solved bugs:

- mpeg2 Release 19: Picture rate is passed to location (+0x0000000A) of FPGA
- 3 templates changed name

## SVC2.2.0.5.54 (03/12/2008)

Solved bugs:

- H264 build 7, changed the soft-reset and now the restarting is faster
- changed trailling bytes from 0x00 to 0xC4 before sending to DSP (to prevent invalid start code notification)
- fixed bug in internal databuffer function (bug was only triggered on special occasions)

Added:

- add/report DSP errors to log files
- initial support for parsing sdp from HTTP answer (similar to RTSP)
- option to controlReportSender plugin to support vbrick encoder
- option to filterStartMpeg4 to support vorx encoder
- support for empty path in controlRtsp plugin

- extra check for path_extension in controlRtsp plugin
- XML templates for supported encoders (coretec_mpeg2_elem_udp, Siemens_OTN_mpeg4_sys_rtp, Siemens_OTN_mpeg4_sys_udp, Siemens_OTN_mpeg2_sys_rtp, Siemens_OTN_mpeg2_sys_udp, ateme_mpeg4_elem_rtp, ateme_mpeg4_elem_rtsp_multi, ateme_mpeg4_elem_rtsp_uni, bosch_VIP1000_h263_rtp, cieffe_mpeg4_elem_http, coretec_mpeg2PS_sys_udp, dallmeier_mpeg4_elem_rtp, funkwerk_mpeg4_elem_rtp, hitron_mpeg4_elem_rtp_multi, mavix_mpeg2_elem_udp_multi, nkf_mpeg4_elem_rtsp_uni, path1_mpeg2_elem_udp, path1_mpeg2_sys_rtp, pelconet_h263__rtp, vbrick_mpeg2_sys_udp_multi, vorx_mpeg2_sys_udp, vorx_mpeg2_sys_rtp, vorx_mpeg2PS_sys_udp, vorx_mpeg2PS_sys_rtp, vorx_mpeg2_elem_udp, vorx_mpeg2_elem_rtp, vorx_mpeg4_sys_udp, vorx_mpeg4_sys_rtp, vorx_mpeg4PS_sys_udp, vorx_mpeg4PS_sys_rtp, vorx_mpeg4_elem_udp, vorx_mpeg4_elem_rtp, vbrick_mpeg4_elem_rtsp_uni, vbrick_mpeg4_elem_rtsp_multi)

## SVC2.2.0.5.53 (24/11/2008)

Solved bugs:

- The maximum size of a NAL (frame) buffer is now 512Kb instead of 128Kb, to support some low framerate, high bandwidth CBR streams (see Ateme).

## SVC2.2.0.5.52 (20/11/2008)

Solved bugs:

- internals:
  - removed unused header
  - fixed small bugs
  - some minor code re-alignment

Added:

- support for NAL type 12 (H.264)

## SVC2.2.0.5.51 (19/11/2008)

Solved bugs

- mpeg4 build 34:
  - output free runnign (FPGA sync ignored)
  - management of incoming packets chaged to handle "VOP after VOP" situations
  - before displaying the output the firmware is now waiting to see if the stream contains b frames

## SVC2.2.0.5.50 (19/11/2008)

Solved bugs

- release 18 mpeg2: in case a decode error is observed, this error is passed to the PPC and the

decoding instance is deleted and re-created. This should prevent the lagging behind issue to occur
- H264 build 5: Tandberg works again.
- PPC fix now only 1 VOP in buffer
- PPC fix now vop is at the end of the buffer

Added

- add flag to force to display only correct decoded frames

### SVC2.2.0.5.49 (13/11/2008)

Solved bugs

- the SVC2 NTP client works on another principle

### SVC2.2.0.5.48 (07/11/2008)

Solved bugs

- the SVC2 is accessable again
- Axis multiple unicast stream issue solved

### SVC2.2.0.5.47 (07/11/2008)

Added

- Siemens OTN templates
- Coretec mpeg2 templates

Known Issue

- Can not access the card anymore through ssh, scp and browser

### SVC2.2.0.5.46 (07/11/2008)

Solved bugs

- mpeg4 Release 33: decoding is now free running, FPGA signaled every time the DSP restarts.

### SVC2.2.0.5.45 (06/11/2008)

Solved bugs

- mpeg2 Release 17: The software restart acknowledge (ioCtrl->restartDecodeTask=0) is done JUST BEFORE the STREAM_pending. Prevent Lagging behind

### SVC2.2.0.5.44 (06/11/2008)

Solved bugs

- MPEG4 build 32 file:
  - Input buffer overrun handling added
  - ctrl block error reset forced at the beginning
  - default frame rate NTSC if format is not recognized as PAL

## SVC2.2.0.5.43 (04/11/2008)

Solved bugs

- Mpeg2 release 15: fault on cif resolution solved.
- HPI priority set to urgent for mpeg2

## SVC2.2.0.5.42 (31/10/2008)

Solved bugs

- Mjpeg release 6 :
  - fault solved when switching 4:2:0 to 4:2:2 (or visa versa) and some resolution
  - flashes into to video are solved

## SVC2.2.0.5.41 (29/10/2008)

Solved bugs

- The build 31 handles differently B frames, sorting the frames within a single I-I blocks instead of sorting the whole stream together. Moreover code related to the second channel has been removed.
- Build 3 of MJPEG for SVC2 Solve visual artefacts by
  - waiting for completion of previous EDMA completion
  - use DAT_wait() at the input (to prevent missing of soft restart)
- Release 4 of MJPEG for SVC2: Spurious artifacts solved for low resolutions. Added CACHE_clean() before videoOut()

## SVC2.2.0.5.40 (23/10/2008)

Solved bugs

- GE Security stream visiowave switching takes 2 to 3s (AHD66767)

## SVC2.2.0.5.39 (17/10/2008)

Solved bugs

- fixed api-call encoderNeedIPSettings
- SSM fixed
- ethernet mode is removed
- replaced buttons by links for the logfiles

## SVC2.2.0.5.38 (15/10/2008)

- New mpeg4 build 30

## SVC2.2.0.5.37 (15/10/2008)

- SCN decoder faster

## SVC2.2.0.5.36 (02/10/2008)

Solved bugs

- previous mpeg4 version is restored

## SVC2.2.0.5.35 (02/10/2008)

Solved bugs

- mpeg 4 build 29: faster restart (AHD65246)
- bugfix: time register was wrongly documented - hours/minutes could be wrong.
- added 2000 to buildyear.

Known Issues

- **mpeg4 does not work**

## SVC2.2.0.5.34 (25/09/2008)

New functionality

- added FPGA builddate

Solved bugs

- removed ssm from unicast plugin: ssm doesn't make sense here
- disabled setting of ethernet mode: driver contains a bug
- updated the audio plugin: soft reset is now implemented (and working)
- updated dspMpeg2: this plugin will fill the packets with '0'
- bugfix: added 2 months to the audio month array
- mpeg2 - version 12

## SVC2.2.0.5.33 (23/09/2008)

Solved bugs

- added mxpeg plugin to list - testing
- re-added the upload functionality (webinterface)
- added mpeg4 version 27 - restart improved (AHD65766)
- added mpeg2 version 10: VRESMAX is increased (1080 -> 1088)

## SVC2.2.0.5.32 (23/09/2008)

Solved bugs

- added a plugin for mxpeg - it is not useable atm.
- the "error-detected" flag will now be cleared when the dsp's are reloaded.
- added functionality to display the fpga manufacturer, fpga device, fpga cnt, fpga revision, fpga builddate & fpga buildtime to the webinterface. NOTE: the fpga must support this as well, otherwise, you will see rubbish.

Known Issues

- Update from webinterface does not work

## SVC2.2.0.5.31 (18/09/2008)

Solved bugs

- mpeg4 long delay before first output is displayed solved
- h264 solved freezes

Known Issues

- Update from webinterface does not work

## SVC2.2.0.5.30 (10/09/2008)

Solved bugs

- Axis frame input/output bug
    - Symptom: On DSP status page decoder input frames 25/output frames 0
- improvement Axis multi-stream

## SVC2.2.0.5.29 (04/09/2008)

Tested encoders

- Verint
- Bosch

Solved bugs (with AHD reference)

- H263 bugfix DSP status (AHD65502)
- mpeg4 Verint resolution change solved
- bug in VOL header parsing solved (AHD64469)

Known Issues

- Windriver 4.5 required
- Stream status information is not visible in Internet Explorer (AHD65003)
- Ethernet Interface speed is displayed incorrectly

### SVC2.2.0.5.28 (21/08/2008)

Solved bugs

- change mpeg4 lib for multiresolution stream (AHD64469)
- Macroblocks in mpeg4 SP solved (AHD64469)

Known issues

- Windriver 4.5 required
- new: fault in mpeg4 VOL header parsing due to check in wrong PPC code (AHD64469)
- Stream status information is not visible in Internet Explorer (AHD65003)

### SVC2.2.0.5.26 (13/08/2008)

New functionality

- Multi resolution axis stream handling improvements (AHD64469)

Solved issues

- Stream status information is not visible in Internet Explorer (AHD65003)

Known issues

- Windriver 4.5 required
- macroblocks in mpeg4 SP streams
- Stream status information is not visible in Internet Explorer (AHD65003)

### SVC2.2.0.5.25 (07/08/2008)

New functionality

- SCN support
- Bosch support

Tested encoders

- SCN
- Bosch VIP-X

Known issues

- Windriver 4.5 required
- Stream status information is not visible in Internet Explorer (AHD65003)

# Firmware Release 1

**towards v37 (SVN rev 19574):**

- Streams will be stopped during upgrade (only when they restart)
- Minor changes to RTP plugin for RTCP packets
- Support for SSM

**towards v38 (SVN rev 19635):**

- Transport/Program stream plugins are not any longer based on ffmpeg
- RTSP plugin is not any longer based on ffmpeg

**towards v39 (SVN rev 19777):**

- Nice encoder support (without B-frames)
- admin passwd is set to default "barco" when board starts up for first time

**towards v40 (SVN rev 19959):**

- RTSP authentication

**towards v41 (SVN rev 19987):**

- Solved issue during switching SSM

**towards v42 (SVN rev 20107):**

- External ffmpeg libraries have been removed (filesystem is now 3.31 MB, former footprint was 5.74 MB)

**towards v43 (SVN rev 20199):**

- COE encoder is adapted to work with new TS plugin
- 0 as port number will stop the stream