

# Havant IP Core Release Notes

## Overview

The following release note covers all of the products manufactured for the Havant IP Core.

It also covers IP Gateways.

It does not cover product functionality that is not related to either of the above. For example, multiviewer functionality in the MV-820-IP or the UCP25-MV

## Best Practice

When changing the IO configuration of the product it is recommended to clear down the spigot IP addresses, applying defaults is the quickest way of achieving this. Not doing this potentially introduces the risk of unpredictable behaviour.

## Important Notes

From V10.24.50 b0.12.36 the SD card needs to be partitioned and formatted in a specific way. This cannot be done by the customer.

The IQUCP25-MV is a separate build to the rest of the IP core product range, albeit its version number is confusingly near that of the core.

The Tek Prism does not correctly process 2110 compliant extended headers, and will report sequence number errors for video if extended headers are enabled.

Auto detection with between integer and non-integer frame rates that are close to one another, for example 59 and 60, favours the non-integer frame rate. To overcome this the standard has to be selected manually

**The following relates only to the UCP. Other products are unaffected.**

1. The introduction of V14 was all about the need for licensing on the IQUCP to support the Software Defined Cores (SDC).
2. For licensed products a single license file with multiple options must be installed using the existing license management tool found with RollCall Control Panel and RollMechanic.
3. If you upgrade to V14 (and on) on the IQUCP you will need to install a license file on the IQUCP. Transitioning from a non-licensed UCP (say V11.73D) to a licensed version will cause the upgrade to report that it has failed. This is because Control Panel / RollMechanic are expecting to see the same RollCall ID post upgrade. What has actually happened is that the card has reverted into an unlicensed state which has a different RollCall ID to that of the licensed state. This is because the UCP can take on different personalities, each having a different RollCall ID. The unlicensed state is treat no differently. Ethernet addresses are respected and you will still be

able to connect to the UCP post upgrade in order to install a license.

4. UCP25 and UCP50 require different licenses to be installed. The card can only support one license file at time
5. From V15 (but not including) the UCP25-MV release notes are managed separately

The following relates only to the IQUCP50 from V15.5. Other products are unaffected.

Previous IQUCP50-EP images supported both TR-03 and TR-04 senders within the same FPGA image / configuration. The receiver remains unaffected and supports both TR-03 and TR-04.

The table below documents the differences.

	V15.0 and earlier	V15.5 and on
<b>Modified</b>	<b>0000</b> 8xI/8xO ST2022-6, ST2110-20/30/40 <b>0002</b> 16xI/0xO ST2022-6, ST2110-20/30/40 <b>0011</b> 12xI/4xO ST2022-6, ST2110-20/30/40 <b>0012</b> 4xI/12xO ST2022-6, ST2110-20/30/40 <b>0022</b> 0xI/16xO ST2022-6, ST2110-20/30/40	<b>0000</b> 8xI/8xO ST2110-20/30/40 <b>0002</b> 16xI/0xO ST2110-20/30/40 <b>0011</b> 12xI/4xO ST2110-20/30/40 <b>0012</b> 4xI/12xO ST2110-20/30/40 <b>0022</b> 0xI/16xO ST2110-20/30/40
<b>New</b>		<b>0047</b> 8xI/8xO ST2022-6, ST2110-30/40 <b>0048</b> 16xI/0xO ST2022-6, ST2110-30/40 <b>0049</b> 0xI/16xO ST2022-6, ST2110-30/40 <b>0050</b> 12xI/4xO ST2022-6, ST2110-30/40 <b>0051</b> 4xI/12xO ST2022-6, ST2110-30/40

## V15.5 (4th February 2020)

### Summary

This release introduces RS-FEC across all 25GbE and 50GbE products, and it introduces the UCP50-MV. Please note at the time of writing 50GbE RS-FEC is not supported on GV Fabric.

### Products(s) Built

V15.5 .97 b0.23.136	IQMIX00	V15.5 .97 b0.23.136	IQEDGE25_6	V15.5 .97 b0.23.136	IQMIX40	V15.5 .97 b0.23.136	MV-820-IP-REAR
V15.5 .97 b0.23.136	IQMIX10	V15.5 .97 b0.23.136	IQMIX25	V15.5 .97 b0.23.136	KAHUNA IPI40	V15.5 .97 b0.23.136	IQUCP50-EP
V15.5 .97 b0.23.136	IQMIX10_KP	V15.5 .97 b0.23.136	IQUCP25-EP	V15.5 .97 b0.23.136	KAHUNA IPO40	V15.5 .97 b0.23.136	KAHUNA IPI50
V15.5 .97 b0.23.136	IQMIX4010	V15.5.97 b0.1.9	IQUCP25-MV	V15.5 .97 b0.23.136	KAHUNA IPI40T	V15.5 .97 b0.23.136	KAHUNA IPO50
V15.5 .97 b0.23.136	KAHUNA IPI10			V15.5 .97 b0.23.136	KAHUNA IPO40T	V15.5 .97 b0.23.136	KAHUNA IPI40T
V15.5 .97 b0.23.136	KAHUNA IPO10			V15.5 .97 b0.23.136	S800 5960	V15.5 .97 b0.23.136	KAHUNA IPO40T
V15.5 .97 b0.23.136	KAHUNA IPI10T			V15.5 .97 b0.23.136	S800 5970	V15.5 .97 b0.23.136	KULA IP50
V15.5 .97 b0.23.136	KAHUNA IPO10T			V15.5 .97 b0.23.136	IQEDGE40_6	V15.5.97 b0.1.9	IQUCP50-MV

### New

- Add RS-FEC support for 50GbE Interfaces, specifically this is required for supporting PSM4 QSFP modules that recommend the use of RS-FEC, required custom SFP settings {0x12, 0x0, 0x12, 0x1}
- Add VPID overloading for HDR/Colorimetry support
- Add DDS / IDL changes to support SDP object creation by GVC
- Add audio type override on the IP receiver
- Add UCP50-MV
- IQIPEP-362, Add support for AIMS RFC4175 profiles in sender
- IQIPEP-1480, Cisco PSM4 QSFPs qualified for IQUCP50
- IQIPEP-1481, Cisco AOC qualified for IQUCP25

### Fixed

- IQIPEP-1347, Input loss to TPG does not work
- IQIPEP-1290, intermittent vertical jump with 2022-6
- IQIPEP-1452, Repeat frame issue
- IQIPEP-1529, Gigalight SR QSFP settings are incorrect
- IQIPEP-1518, Intermittent black SDI output
- IQIPEP-1574, Spigots show the incorrect format
- IQIPEP-551, PTP Status selection not working correctly
- IQIPEP-1533, Logging - INPUT\_N\_STANDARD not reporting correctly for TPG
- IQIPEP-1535, Logging - INPUT\_N\_SDI\_ERRCNT flickering between values when TPG enabled
- IQIPEP-1602, PsF format not detected for HD 25/29/30 frame rates

- IQIPEP-1469, IGMP process failure if 42 or more unique flows are routed to an IP sender
- IQIPEP-1487, Switching between EP and MV on the IQUCP can lead to settings being corrupted

### Known Issues

- IQIPEP-1585, Unpredictable audio channel behaviour when receiver does not match the number contained in the stream

*Work around is to set to 'Auto' unless you know exactly what the audio channel count is*

- IQIPEP-1446, 12G FGPA receiver TPG doesn't work until a flow has been received
- IQIPEP-1679, 1080i VPID is being set incorrectly
- IQIPEP-1642, ST2022+ST2110-30 or ST2110-2+ST2110-30 without extended headers leads to a fixed A/V delay

*The following audio delay should be applied on the destination timing page.*

625i25	19ms
1080i25	19ms
720p50	9ms
1080p50	9ms
525i29	15ms
1080i29	15ms
720p59	8ms
1080p59	8ms

### IQUCP50 Specification Change

This release sees a change to existing product functionality in the IQUCP50-EP. The IP sender has been split TR-03 and TR-04. Therefore when upgrading a product, if one of the configurations is selected its IP sender functionality will change and needs to be accounted for by the end user.

	V15.0 and earlier	V15.5 and on
<b>Modified</b>	<b>0000</b> 8xl/8xO ST2022-6, ST2110-20/30/40 <b>0002</b> 16xl/0xO ST2022-6, ST2110-20/30/40 <b>0011</b> 12xl/4xO ST2022-6, ST2110-20/30/40 <b>0012</b> 4xl/12xO ST2022-6, ST2110-20/30/40 <b>0022</b> 0xl/16xO ST2022-6, ST2110-20/30/40	<b>0000</b> 8xl/8xO ST2110-20/30/40 <b>0002</b> 16xl/0xO ST2110-20/30/40 <b>0011</b> 12xl/4xO ST2110-20/30/40 <b>0012</b> 4xl/12xO ST2110-20/30/40 <b>0022</b> 0xl/16xO ST2110-20/30/40
<b>New</b>		<b>0047</b> 8xl/8xO ST2022-6, ST2110-30/40 <b>0048</b> 16xl/0xO ST2022-6, ST2110-30/40 <b>0049</b> 0xl/16xO ST2022-6, ST2110-30/40 <b>0050</b> 12xl/4xO ST2022-6, ST2110-30/40 <b>0051</b> 4xl/12xO ST2022-6, ST2110-30/40

## V15.0 (11th October 19)

### Summary

This release brings the previously deprecated V11.73.x back on line, with the exception of the removal of audio rate adaption. It also introduces 12G-SDI support for:

- FGAN IQUCP5000-2B3

### Products(s) Built

V15.0 .95 b0.22.174	IQMIX00	V15.0 .95 b0.22.174	IQEDGE25_6	V15.0 .95 b0.22.174	IQMIX40	V15.0 .95 b0.22.174	MV-820-IP-REAR
V15.0 .95 b0.22.174	IQMIX10	V15.0 .95 b0.22.174	IQMIX25	V15.0 .95 b0.22.174	KAHUNA IPI40	V15.0 .95 b0.22.174	IQUCP50-EP
V15.0 .95 b0.22.174	IQMIX10_KP	V15.0 .95 b0.22.174	IQUCP25-EP	V15.0 .95 b0.22.174	KAHUNA IPO40	V15.0 .95 b0.22.174	KAHUNA IPI50
V15.0 .95 b0.22.174	IQMIX4010	V15.0 .93 b0.23.007	IQUCP25-MV	V15.0 .95 b0.22.174	KAHUNA IPI40T	V15.0 .95 b0.22.174	KAHUNA IPO50
V15.0 .95 b0.22.174	KAHUNA IPI10			V15.0 .95 b0.22.174	KAHUNA IPO40T	V15.0 .95 b0.22.174	KAHUNA IPI40T
V15.0 .95 b0.22.174	KAHUNA IPO10			N/A	S800 5960	V15.0 .95 b0.22.174	KAHUNA IPO40T
V15.0 .95 b0.22.174	KAHUNA IPI10T			N/A	S800 5970	V15.0 .95 b0.22.174	KULA IP50
V15.0 .95 b0.22.174	KAHUNA IPO10T			V15.0 .95 b0.22.174	IQEDGE40_6	N/A	IQUCP50-MV

### New

- Add auto detection when no extended headers are present
- Add 12G-SDI support to the IQUCP50-EP
- IQMIT-1546, Random delay override added for all products as factory control
- IQMIT-1454, Add a control to allow PTP to switch between active clocks based on priority
- IQMIT-1462, Show PTP clock status without having to show the detailed status
- IQMIT-1446, Counter added to time sync status page to indicate when we see an excessive correction value

### Fixed

- IQMIT-1332, Switching to a missing source causes audio distortion
- IQMIT-1334, Auto-detect video standards with no extended headers added
- IQMIT-1287, Clean audio switching can be broken switching between audio flows with different packet time
- IQMIT-1038, Auto-detect the number of audio channels with no extended header
- IQMIT-1335, ST2110-40 clause 5.5 added
- IQMIT-1295, Add support ST2110-40 for SDI ANC payloads with non-specific H-offset values
- IQMIT-1567, Embedded Audio in SDI OP is 1ms early
- IQMIT-1505, MV-820-IP PTP port fail over not working
- IQMIT-1534, SDI outputs black
- IQMIT-1314, The ST2110-20 ext.seq. count increments in the wrong packet

*The Tek Prism does not correctly process 2110 compliant extended headers, and will report sequence number errors for video if extended headers are enabled.*

- IQMIT-1455, 2110-40 broken CC608

## **Known Issues**

- IQMIT-1681, Packet drops when RS-FEC is enabled on IQUCP25 with Cisco C93180YC-FX
- IQMIT-1551, 12G FGPA receiver TPG doesn't work until a flow has been received
- IQMIT-1188, Audio rate adaption on the IP receiver not supported
- IQMIT-1283, Add audio tracking delay to frame synchronising inputs
- IQMIT-1379, intermittent vertical jump with 2022-6
- IQMIT-1560, Repeat frame issue with 2022-6
- IQMIT-1498, SD card corruption on power cycling
- IQMIT-1512, Intermittent picture stability issue with VC2 on IQUCP50
- IQMIT-1615, Cannot auto detect between 59 and 60 frame rates
- IQMIT-1643, Gigalight SR settings are incorrect

*Work around is to set the SFP setting to the Custom {0x12, 0x0, 0x12, 0x1}.*

## **V14.57 .85 b0.22.43** (17 May 19)

### **Summary**

This release saw audio rate adaption deprecated from the IQUCP25-MV

### **Products(s) Built**

	IQMIX00		IQEDGE25		IQMIX40		MV-820-IP-REAR
	IQMIX10		IQMIX25		KAHUNA IPI40		IQUCP50-EP
	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
	IQMIX4010	<b>X</b>	IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

### **Deprecated Issues**

- IQMIT-1332, Switching to a missing source causes audio distortion
- IQMIT-1287, Clean audio switching can be broken by small to large packet switches
- IQMIT-1038, Auto-detect the number of audio channels with no extended header
- IQMIT-1335, ST2110-40 clause 5.5 added
- IQMIT-1295, Add support ST2110-40 for SDI ANC payloads with non-specific H-offset values
- IQMIT-1283, Add audio tracking delay to frame synchronising inputs
- IQMIT-1188, Audio rate adaption on the IP receiver not supported
- IQMIT-1040, 1334, Auto-detect the video standard with no extended headers

### **Known Issues**

- IQMIT-1379, intermittent vertical jump with 2022-6
- IQMIT-1560, Repeat frame issue with 2022-6
- IQMIT-1498, SD card corruption on power cycling

## V14.55 .86 b0.21.108 (11 Apr 19)

### Summary

This release saw audio rate adaption deprecated for the MV-820-IP

### Products(s) Built

	IQMIX00		IQEDGE25		IQMIX40	X	MV-820-IP-REAR
	IQMIX10		IQMIX25		KAHUNA IPI40		IQUCP50-EP
	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		KAHUNA IPI50
	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPO50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPI40T
	KAHUNA IPO10				S800 5960		KAHUNA IPO40T
	KAHUNA IPI10T				S800 5970		KULA IP50
	KAHUNA IPO10T				IQEDGE40_6		

### Deprecated

- IQMIT-1332, Switching to a missing source causes audio distortion
- IQMIT-1287, Clean audio switching can be broken by small to large packet switches
- IQMIT-1038, Auto-detect the number of audio channels with no extended header
- IQMIT-1335, ST2110-40 clause 5.5 added
- IQMIT-1295, Add support ST2110-40 for SDI ANC payloads with non-specific H-offset values
- IQMIT-1283, Add audio tracking delay to frame synchronising inputs
- IQMIT-1188, Audio rate adaption on the IP receiver not supported
- IQMIT-1040, 1334, Auto-detect the video standard with no extended headers

### Known Issues

- IQMIT-1379, intermittent vertical jump with 2022-6
- IQMIT-1560, Repeat frame issue with 2022-6
- IQMIT-1498, SD card corruption on power cycling



## V14.54 .86 b0.21.105 (08 Apr 19)

### Summary

V14 introduces licensing to the UCP25/50, based upon V11.73D.76. Specifically this release saw the removal of audio rate adaption.

### Products(s) Built

	IQMIX00		IQEDGE25		IQMIX40		MV-820-IP-REAR
	IQMIX10		IQMIX25		KAHUNA IPI40		IQUCP50-EP
	IQMIX10_KP	<b>X</b>	IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

### New

- V14 / Licensed version of the V11.73D.76 b0.20.88 release for the IQUCP

### Known Issues

- IQMIT-1332, Switching to a missing source causes audio distortion
- IQMIT-1040, 1334, Auto-detect the video standard with no extended headers
- IQMIT-1287, Clean audio switching can be broken by small to large packet switches
- IQMIT-1038, Auto-detect the number of audio channels with no extended header
- IQMIT-1335, ST2110-40 clause 5.5 added
- IQMIT-1295, Add support ST2110-40 for SDI ANC payloads with non-specific H-offset values
- IQMIT-1283, Add audio tracking delay to frame synchronising inputs
- IQMIT-1188, Audio rate adaption on the IP receiver not supported
- IQMIT-1379, intermittent vertical jump with 2022-6
- IQMIT-1560, Repeat frame issue with 2022-6
- IQMIT-1498, SD card corruption on power cycling

## **V14.47 .85 b0.22.35** (07 Feb 19)

### **Summary**

This specific version introduces is the licensed IQUCP25-MV (Multiviewer) Software Defined Core to the IQUCP25.

### **Products(s) Affected**

	IQMIX00		IQEDGE25_6		IQMIX40		MV-820-IP-REAR
	IQMIX10		IQMIX25		KAHUNA IPI40		IQUCP50-EP
	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
	IQMIX4010	<b>X</b>	IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

### **New**

- Initial release of the UCP25-MV core

### **Fixed**

- IQMIT-1368, Removed high power FPGA build strategy
- IQMIT-1498, SD card corruption on power cycling

## **V14.34B .86 b0.21.105** (07 Feb 19)

### **Summary**

V14 introduces licensing to the UCP25/50.

This specific version introduces the licensing to the IQUCP25-EP (Essence Processing / IP Gateway) Software Defined Core to the IQUCP25/50. Previously Essence Processing (V11 and earlier) did not require a license to work.

### **Products(s) Built**

	IQMIX00		IQEDGE25		IQMIX40		MV-820-IP-REAR
	IQMIX10		IQMIX25		KAHUNA IPI40		IQUCP50-EP
	IQMIX10_KP	<b>X</b>	IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

### **New**

- V14 / Licensed version of the V11.73D.76 b0.20.88 release for the IQUCP

### **Known Issues**

## **V11.73D.76 b0.20.21** (20 Mar 19)

### **Summary**

This release was an immediate response to audio mute and distortion issues seen at a several customer sites post the introduction of V11.73 .76. The FPGAs were rolled back to a previous stable release (V11.58), however, the software was kept at the V11.73, specifically to keep improvements made to the non-volatile file system.

### **Products(s) Built**

X	IQMIX00	X	IQEDGE25_6	X	IQMIX40	X	MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40	X	IQUCP50-EP
X	IQMIX10_KP	X	IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
X	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T			X	IQEDGE40_6		KULA IP50

### **New**

- 2110 compliant extended header control was introduced. The card no has 3 modes: Off, Legacy and Compliant

### **Fixed**

- IQMIT-1368, FPGAs may run hot depending on build strategy used
- IQMIT-1379, Intermittent vertical jump with 2022-6

### **Deprecated**

- IQMIT-1332, Switching to a missing source causes audio distortion
- IQMIT-1334, Auto-detect video standards with no extended headers added
- IQMIT-1287, Clean audio switching can be broken by small to large packet switches
- IQMIT-1038, Auto-detect the number of audio channels with no extended header
- IQMIT-1335, ST2110-40 clause 5.5 added
- IQMIT-1295, Add support ST2110-40 for SDI ANC payloads with non-specific H-offset values
- IQMIT-1283, Add audio tracking delay to frame synchronising inputs
- IQMIT-1188, Add audio drop/repeat to IQMIX SDI outputs
- IQMIT-1040, Auto-detect the video standard with no extended headers

## Known

- IQMIT-1379, intermittent vertical jump with 2022-6
- IQMIT-1560, Repeat frame issue with 2022-6
- IQMIT-1498, SD card corruption on power cycling
- IQMIT-1560, Repeat frame issue

## **V11.73 .76 b0.20.88** (07 Sep 18)

### **Summary**

Major update to include auto standards detection without the need for extended headers, as well as improvements made to the robustness of the non-volatile file system.

### **Products(s) Built**

X	IQMIX00	X	IQEDGE25_6	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40	X	IQUCP50-EP
X	IQMIX10_KP	X	IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
X	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10			X	S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T			X	S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T			X	IQEDGE40_6		KULA IP50

### **New**

- IQMIT-1335, ST2110-40 clause 5.5 added
- IQMIT-1295, Add support ST2110-40 for SDI ANC payloads with non-specific H-offset values
- IQMIT-1337, Add Receiver TPG Control to the MIX
- IQMIT-1330, Add Audio rate adaption control to the template
- IQMIT-1329, Addition of receiver TPG Control on loss mode
- IQMIT-1283, Add audio tracking delay to frame synchronising inputs
- IQMIT-1188, Audio rate adaption added
- IQMIT-1040, Auto-detect the video standard with no extended headers
- IQMIT-1309, Add Kahuna 50 T variants to the code base
- Migrate Kahuna to unified code base

### **Fixed**

- IQMIT-1332, Switching to a missing source causes audio distortion
- IQMIT-1334, Auto detection with no extended headers added
- IQMIT-1290, SD Card robustness improvements. FAT32 partition made read only
- IQMIT-1287, Clean audio switching can be broken by small to large packet switches
- IQMIT-1038, Auto-detect the number of audio channels with no extended header

## Known Issues

- IQMIT-1368, FPGAs may run hot depending on build strategy used
- IQMIT-1498, SD card corruption on power cycling
- IQMIT-1379, intermittent vertical jump with 2022-6
- IQMIT-1560, Repeat frame issue with 2022-6

## **V11.58 .71 b0.20.74** (21 Jun 18)

### **Summary**

The main focus of this release was an Engineering one so as to unify the Kahuna and MV-820-IP product software to use the same code as the MIX products.

Audio V-Fade was also added.

### **Products(s) Built**

X	IQMIX00	X	IQEDGE25_6	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40	X	IQUCP50-EP
X	IQMIX10_KP	X	IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
X	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T			X	IQEDGE25_6		KULA IP50

### **New**

- Kahuna added to unified code base
- MV-820-IP added to unified code base
- Audio V fade added
- Added Media port RollCall Logging for MIX10, MIX10\_KP

### **Fixed**

- IQMIT-1299, Video tear fixes
- IQMIT-1290, SD Card robustness improvements. Removed chkdosfs from QNX-IFS boot, changed PMIC to write to into /tmp/ folder rather than FAT32 partition.
- IQMIT-1273, Unclean MBB switching fixes
- Ethernet stack robustness improvements
- QNX robustness improvements

### **Known Issues**

- IQMIT-1368, Post release it was found that for the MIX25/UCP25 they would run some 10C higher. Product performance and functionality is unaffected. This has no impact if the card is used within a 4U frame. For a 3U cards located towards the higher slot positions within a 3U is affected
- IQMIT-1498, SD card corruption on power cycling
- IQMIT-1560, Repeat frame issue



**V11.43 .67 b0.20.55** (01 May 18)

**Summary**

This focus for this release was the introduction of the IQUCP50 Essence Processing product (not licensed).

**Products(s) Built**

X	IQMIX00	X	IQEDGE25_6	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40	X	IQUCP50-EP
X	IQMIX10_KP	X	IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
X	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T			X	IQEDGE40_6		KULA IP50

**New**

- UCP50 Released
- Added output spigot on input loss feature

**Fixed**

- Various minor fixes / enhancements

**Known**

- IQMIT-1560, Repeat frame issue

## **V11.40 .64 b0.20.52** (25 Apr 18)

### **Summary**

See details below

### **Products(s) Built**

X	IQMIX00	X	IQEDGE25_6	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40	X	IQUCP50-EP
X	IQMIX10_KP	X	IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
X	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T			X	IQEDGE40_6		KULA IP50

### **New**

- IQMIT-1247, Add frames dropped/repeated reports
- Bandwidth management added

### **Fixed**

- IQMIT-1253, SD Card FAT32 robustness improvements
- IQMIT-430, Improve audio switching to avoid pops and bangs
- IQMIT-1240, VC2 problem fix (INC-52230)

### **Known**

- IQMIT-1560, Repeat frame issue

**V11.34 .64 b0.20.45** (06 Apr 18)

**Summary**

The focus for this release was the introduction of the IQUCP25

**Products(s) Built**

X	IQMIX00	X	IQEDGE25_6	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40	X	IQUCP50-EP
X	IQMIX10_KP	X	IQUCP25-EP		KAHUNA IPO40	X	IQUCP50-MV
X	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

**New**

- IQUCP25 product introduction

**Fixed**

- IQMIT-1236, Add Gigalight LR option into the SFP configuration
- IQMIT-1228, Add Frame Sync controls

**Known**

- IQMIT-1560, Repeat frame issue

## **V11.30 .62 b0.20.41** (13 Mar 18)

### **Summary**

See details below

### **Products(s) Built**

X	IQMIX00		IQEDGE25_6	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40	X	IQUCP50-EP
X	IQMIX10_KP	X	IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

### **New**

- IQMIT-1196, Add Direct Copper entry in the SFP Database
- IQMIT-1108, Adding LLDP support
- Fast upgrade implemented

### **Fixed**

- IQMIT-1209, 4K switching fixes
- Major Ethernet component update to latest QNX driver

### **Known**

- IQMIT-1560, Repeat frame issue

## **V10.67 .53 b0.12.92** (17 Nov 17)

### **Summary**

See details below

### **Products(s) Built**

X	IQMIX00		IQEDGE25_6	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40		IQUCP50-EP
X	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
X	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

### **New**

- Added support for configuration of RTP payload types

### **Fixed**

- IQMIT-1128, Invalid RTP timestamp on audio flows with switched SDI
- IQMIT-1120, Upgrade process broken when CRC check detects file CRC error
- IQMIT-1072, Rapid series of crosspoints can result in incorrect final tally state
- Added support for configuration of RTP payload types
- Various logging enhancements
- Various minor fixes

### **Known**

- IQMIT-1560, Repeat frame issue

**V10.53 .52 b0.12.69** (10 Oct 17)

**Summary**

This release saw the introduction of the IQEDGE25 and IQEDGE40 products

**Products(s) Built**

X	IQMIX00	X	IQEDGE25_6	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40		IQUCP50-EP
X	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
X	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T			X	IQEDGE40_6		KULA IP50

**New**

- IQEDGE-40 - 3U/4U Frame, 2x PSU + IQEDGE 40GE Rear Assembly

**Fixed**

- IQMIT-1075, SMPT2022-6 IP has incorrect SDI line numbers
- Various high availability manager improvements
- Various IGMP improvements
- Various FPGA programming improvement
- Various minor fixes / enhancements

## **V10.40 .52 b0.12.55** (09 Sep 17)

### **Summary**

See detail below

### **Products(s) Built**

X	IQMIX00	X	IQEDGE25	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40		IQUCP50-EP
X	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
X	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T			X	IQEDGE40		KULA IP50

### **Fixed**

- IQMIT-1066, Update QNX to incorporate latest ARM Errata fixes
- IQMIT-1054, Modified code to be able to support 12x3G-SDI on MIX40
- IQMIT-1050, Corrupted Ethernet packets causing network flooding
- IQMIT-1036, TPG caption improvements
- Various logging enhancements
- Various minor fixes

## **V10.24 .50 b0.12.36** (25 Jul 17)

### **Summary**

See detail below

### **Products(s) Built**

<b>X</b>	IQMIX00		IQEDGE25	<b>X</b>	IQMIX40		MV-820-IP-REAR
	IQMIX10	<b>X</b>	IQMIX25		KAHUNA IPI40		IQUCP50-EP
	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

### **New**

- Added power safe file system
- Quad link support incorporated

### **Fixed**

- IQMIT-976, Added destination timing page
- IQMIT-905, Enabled 25G FEC by default
- IQMIT-980, Upgraded improvements - to address no free space
- IQMIT-971, Fix for SDI flickering
- Various logging enhancements
- Add support for additional SFPs
- Various FPGA programming improvements
- Various minor fixes



**V8.98 .39 b0.4.386** (16 May 17)

**Summary**

Various minor bug fixes for the MIX40

**Products(s) Built**

	IQMIX00		IQEDGE25	<b>X</b>	IQMIX40		MV-820-IP-REAR
	IQMIX10		IQMIX25		KAHUNA IPI40		IQUCP50-EP
	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

**Fixed**

- Various minor fixes

## **V8.95 .39 b0.4.378/3780** (17 May 17)

### **Summary**

See below

### **Products(s) Built**

X	IQMIX00		IQEDGE25	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40		IQUCP50-EP
X	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
X	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

### **New**

- MIX10\_KP released
- MIX10 released with b0.4.3780
- Added support for the IQH4B chassis

### **Fixed**

- IQMIT-933, SMPTE2022+AES 67 with 125uS packet time causes SDI CRC errors
- IQMIT-913, IQMIT-917 added SMPTE 352 option
- Various quad link improvements
- Various logging fixes
- Various minor fixes

**V8.84 .38 b0.4.367** (07 Apr 17)

**Summary**

See below

**Products(s) Built**

X	IQMIX00		IQEDGE25	X	IQMIX40		MV-820-IP-REAR
X	IQMIX10	X	IQMIX25		KAHUNA IPI40		IQUCP50-EP
X	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

**Fixed**

- Various genlock enhancements
- IQMIX-850, added support for per flow RTP discontinuity measurement
- Various logging fixes
- Various minor fixes

## **V8.72 .34 b0.4.354** (15 Mar 17)

### **Summary**

See below.

### **Products(s) Built**

<b>X</b>	IQMIX00		IQEDGE25	<b>X</b>	IQMIX40		MV-820-IP-REAR
<b>X</b>	IQMIX10		IQMIX25		KAHUNA IPI40		IQUCP50-EP
	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

### **New**

- IQEDGE-25 - 3U/4U Frame, 2x PSU + IQEDGE 25GE Rear Assembly
- Add SFP configuration page and support for 25GbE

### **Fixed**

- Add high availability manager
- Various SFP enhancements
- Various upgrader improvements / logging / instrumentation
- Various logging enhancements / fixes
- Various PTP enhancements
- Various minor fixes / enhancements

## **V8.12 .16 b0.4.204** (16 Nov 16)

### **Summary**

The release introduced the IQMIX4010 and IQMIX4000 products.

### **Products(s) Built**

	IQMIX00		IQEDGE25	<b>X</b>	IQMIX40		MV-820-IP-REAR
	IQMIX10		IQMIX25		KAHUNA IPI40		IQUCP50-EP
	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
<b>X</b>	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

### **New**

- IQMIX4000 4K/3G/HD/SD-SDI Multi Ch 40GE IP Transceiver
- IQMIX4010 4K/3G/HD/SD-SDI Multi Ch 10GE IP Transceiver
- MBB / BBM controls added

### **Fixed**

- IQMIT-586, Broken RFC4175
- Various SFP fixes
- Various IGMPv3 fixes
- Various logging fixes

**V7.0 .5 b0.40.41** (04 Oct 16)

**Summary**

This release introduces the IQMIX2500 product

**Products(s) Built**

	IQMIX00		IQEDGE25_6		IQMIX40		MV-820-IP-REAR
	IQMIX10	<b>X</b>	IQMIX25		KAHUNA IPI40		IQUCP50-EP
	IQMIX10_KP		IQUCP25-EP		KAHUNA IPO40		IQUCP50-MV
	IQMIX4010		IQUCP25-MV		KAHUNA IPI40T		KAHUNA IPI50
	KAHUNA IPI10				KAHUNA IPO40T		KAHUNA IPO50
	KAHUNA IPO10				S800 5960		KAHUNA IPI40T
	KAHUNA IPI10T				S800 5970		KAHUNA IPO40T
	KAHUNA IPO10T				IQEDGE40_6		KULA IP50

**New**

- MIX25 candidate release to the field