DENSITE-CPU-ETH2 Release Notes

FIRMWARE COMPATIBILITY MATRIX

Current Version	Desired Version			
	1xx	200,201,202	204,210,212	220, 221
1xx	Use the file UPGRADE.zip	Use the file UPGRADE.zip	IMPOSSIBLE (1) Upgrade to version 200,201 or 202 first	IMPOSSIBLE (1) Upgrade to version 200,201 or 202 first
200,201,202		Use the file UPGRADE.zip	Use the file 7659-0102-204.img or 7659-0102-21x.bbbb.img	Use the file 7659-0102-220.bbbb.img found in 7659-0102-220.bbbb.tar.gz (2)
204,210,212		Use the file UPGRADE.zip	Use the file 7659-0102-204.img or 7659-0102-21x.bbbb.img	Use the file 7659-0102-220.bbbb.img found in 7659-0102-220.bbbb.tar.gz (2)
220, 221, 222, 223		Use the file 7659-0102-2xx.img	Use the file 7659-0102-204.img or 7659-0102-21x.bbbb.img	Use the file 7659-0102-220.bbbb.tar.gz

(1) Starting from version 204 the folder "Self Upgrade Through Ethernet" which was used to do the upgrade using the "tftpd32.exe" tool, is not supported. A user who wants to go from a version 1xx to version 204 must first upgrade to version 200, 201 or 202.

(2) Starting from version 220, the 7659-0102-xxx.bbbb.img file is contained in a .tar.gz file. To extract the .img file from the .tar.gz you can use an application like 7zip (http://www.7-zip.org/)

Release Notes

WARNINGS

1. LOSS OF DATA when upgrading to v220 (or later) from v212 (or earlier)

During the upgrade of the CPU-ETH2 to version 220 (or later) from a version 212 (or earlier), all the restorable data of the cards saved on the CPU-ETH2 will be deleted. So once the Densite-CPU-ETH2 upgrade is complete all the restorable data of the cards should be re-saved to the CPU-ETH2. Please refer to the section '5.3.5 Topic – Data Restoration' of the CPU-ETH2 user manual.

2. INCOMPATIBILITY with Modular multi-viewers

The CPU-ETH2 needs to be at version 221 or later to be compatible with with Kaleido-MX, Kaleido-Modular-X with Kaleido-X software earlier than 7.20

Make sure to upgrade the Kaleido-X software, on a Kaleido-MX or Kaleido-Modular-X multiviewer, BEFORE upgrading the Densité controller's CPU-ETH2 firmware to version 221 (or later). Earlier versions of the Kaleido-X software for the Kaleido-MX and Kaleido-Modular-X are not compatible with CPU-ETH2 version 220 (and later). Using a Kaleido-MX or Kaleido-Modular-X multiviewer that has a version of the Kaleido-X software earlier than 7.20, with a Densité controller that has version 220 or later of the CPU-ETH2 firmware, may result in an inoperative multiviewer system, in which case you might need assistance from Miranda Technical Support. Refer to Field Bulletin **Field-Bulletin_FB20140116-211** for more details.

3. FIRMWARE UPDATE takes a long time

When upgrading the software from a version less than 220 to a version of 220 or greater, the reboot process of the card may take several minutes. Please be patient (do not reset the card).

VERSION: 223

Release date: 2014-10-17

iControl compatibility: 4.42 and more

iControl Solo compatibility: 4.42 and more

RCP-200 compatibility: Not Compatible

Hardware incompatibility: This firmware applies to all existing hardware assemblies.

See WARNINGS section at the top of this document.
See Firmware Compatibility Matrix for proper upgrade paths.

BUGFIXES

Bug#	Description
ETH2-294	**Shellshock security vulnerability** The product runs the Bash shell and thus has the Shellshock security vulnerability.

KNOWN BUGS & LIMITATIONS

Bug#	Description
ETH2-295	**Handling of RAW data with slow clients** When multiple clients with widely varying bandwidth performance connect to the controller, there could be hick-ups in the handling of RAW data (for all clients).
	All previous restore points saved on the controller will be lost when upgrading from a previous firmware older than 220. A save all restore point must be executed manually by the user.

VERSION: 222

Release date: 2014-09-09

iControl compatibility: 4.42 and more

iControl Solo compatibility: 4.42 and more

RCP-200 compatibility: Not Compatible

Hardware incompatibility: This firmware applies to all existing hardware assemblies.

See WARNINGS section at the top of this document.
See Firmware Compatibility Matrix for proper upgrade paths.

BUGFIXES

Bug#	Description
ETH2-287 ETH2-194	**Densite controller lost sync with NTP server after Ethernet switch is power reset** The CPU-ETH2 NTP daemon would stop working when the switch on which it is connected was power reset.

KNOWN BUGS & LIMITATIONS

Bug#	Description
	All previous restore points saved on the controller will be lost when upgrading from a previous firmware older than 220. A save all restore point must be executed manually by the user.

VERSION: 221

Release date: 2014-06-03

iControl compatibility: 4.42 and more

iControl Solo compatibility: 4.42 and more

RCP-200 compatibility: Not Compatible

Hardware incompatibility: This firmware applies to all existing hardware assemblies.

See WARNINGS section at the top of this document.
See Firmware Compatibility Matrix for proper upgrade paths.

BUGFIXES

Bug#	Description
ETH2-283	**Cannot activate option** The 'Ethernet Link Redundancy Option' could not be activated if the activation key was starting with 00 (double zeros)
ETH2-290	**MAC Address and MII Status are not correctly reported in the web page** The MAC address and the MII status of eth1 are displayed for the eth2 interface.

KNOWN BUGS & LIMITATIONS

Bug#	Description
	All previous restore points saved on the controller will be lost when upgrading from a previous firmware older than 220. A save all restore point must be executed manually by the user.

Release Notes

VERSION: 220

Release date: 2013-10-28

iControl compatibility: 4.42 and more

iControl Solo compatibility: 4.42 and more

RCP-200 compatibility: Not Compatible

Hardware incompatibility: This firmware applies to all existing hardware assemblies.

See WARNINGS section at the top of this document.
See Firmware Compatibility Matrix for proper upgrade paths.

ENHANCEMENTS & NEW FEATURES

Ref#	Description
ETH2-105	**Improved upgrade** Upgrade is now more robust. Better feedback during upgrade.
ETH-124	**Improve logging** Debug log web page was improved to allow user to view logs directly in the web page.
ETH2-117	**Performance enhancement**

BUGFIXES

Bug#	Description
29876 (ETH2-84)	**Changing DENSITE-CPU-ETH2 time cause the web server to crash** When the time is changed on the controller, the web server start using 99% of the cpu and after a couple of minute it crashes.
ETH2-76	**Bonding: good link/bad link not always correctly detected**

	In active backup mode the link up/link down are not always correctly detected which prevents switch from one interface to the other.
ETH2-83	**Densité MIB not available for download** When attempting to follow the download link on the Web page, you get this message: > 404 Not Found > The requested URL '/densite.mib' was not found on this server.
ETH2-194	**Densite controller booted without Ethernet connection doesn't sync with NTP server once connection is back** When a Densite controller, set to sync with a NTP server, is powered up with no Ethernet connection it doesn't sync with the NTP server once the Ethernet connection is reestablish.
ETH2-131	**Speed up controller boot time** The controller is slow to boot because of NTP initial synchronization.

KNOWN BUGS & LIMITATIONS

Bug#	Description
	All previous restore points saved on the controller will be lost when upgrading from a previous firmware older than 220. A save all restore point must be executed manually by the user.

Release Notes

VERSION: 212

Release date: 2013-06-17

iControl compatibility: 4.42 and more

iControl Solo compatibility: 4.42 and more

RCP-200 compatibility: Not Compatible

Hardware incompatibility: This firmware applies to all existing hardware assemblies.

ENHANCEMENTS & NEW FEATURES

Ref#	Description
17161	**Log activation per card** Debug logging can now be enable card by card.
17162	**Controller now accepts 32 connections** The DENSITE-CPU-ETH2 now accepts up to 32 connections on its Ethernet port.
17163	**Thumbnail streamed to all connections** The DENSITE-CPU-ETH2 now can stream thumbnails to all its Ethernet connections.
26184	**Ethernet connections listed on web page** There is now a web page in the Status section that displays the list of connected device on the frame.
27479	**Possible to delete restore point using the web page** It's now possible to delete a saved restore point for card using the Restore Points web page in the Tools section.
35643	**Allow possibility for cards to save/load they restore point automatically** It now possible for a card to save/load its own restores point. This feature is only available on specific cards.
37839	**Raw data (thumbnails) and unsolicited message filtering** Device connected on the frame can now filter the raw data and unsolicited message then

	want to receive. In the case of raw data the connected device can filter base on raw data type and slot. In the case of unsolicited message the connected device can filter base on the slot.
23980	**Increased communication speed between the controller and the cards**

BUGFIXES

Bug#	Description
24081	**Error message or incomprehensible message at the end of the upgrade** At the end of the DENSITE-CPU-ETH2 upgrade a web page showing the result of the upgrade should be displayed but instead the user can see an error message because the web page is not accessible or worst a page full of garbage. In the first case this is because the web server was shut down for the reboot before the page could be served and in the second case the web page that should have been displayed was replaced during the upgrade by another file and it's this other file that is displayed. In both case this doesn't affect the upgrade. To know if the upgrade was successful the user can wait about 30 seconds and attempt to reconnect to the DENSITE-CPU-ETH2 web page. Once connected go back to the upgrade page and look at the version of the firmware installed. This error will be gone at the next upgrade from 211 to 2xx.
38005	**Ethernet port does not start 3% of time** After a power up of the frame or after re-slotting the controller in the frame the Ethernet port does not work 3% of the time.
23812	**Extra data in restore point of less than 1024 bytes** Restore point of less than 1024 bytes where filled with zeros.
24283	**Very high memory usage when cards flood controller with messages** The DENSITE-CPU-ETH2 was running out of memory when one or multiple card where sending multiples unsolicited messages per seconds.

	The result was a dead controller. Only way to recuperate was to re-slot the controller.
24983	**Card stuck in initialization** Sometimes a card could be stuck in a state where it was waiting for a specific message from the controller and would not let the controller initialize it.
28470	**Link Redundancy Option: Active-Backup: Ethernet not working at boot-up when only one Ethernet cable is connected** At boot-up the network driver was not checking the state of the network interface.
34485	**High CPU usage and crash when cards flood the controller with messages.** The DENSITE-CPU-ETH2 was running at a very high cpu usage (> 90%) and after a while it was crashing when one or multiple cards where sending multiples unsolicited messages per seconds. The result was a reboot of the controller.
36544	**NTP drift** The time was drifting even if NTP was activated.
38009	**Fixed security vulnerabilities** Security vulnerabilities where fixed. The FTP server was removed. The telnet server was replaced by ssh.

KNOWN BUGS & LIMITATIONS

Bug#	Description
24081	**Error message or incomprehensible message at the end of the upgrade** At the end of the DENSITE-CPU-ETH2 upgrade a web page showing the result of the upgrade should be displayed but instead the user can see an error message because the web page is not accessible or worst a page full of garbage. In the first case this is because the web server was shut down for the reboot before the

	page could be served and in the second case the web page that should have been displayed was replaced during the upgrade by another file and it's this other file that is displayed. In both case this doesn't affect the upgrade. To know if the upgrade was successful the user can wait about 30 seconds and attempt to reconnect to the DENSITE-CPU-ETH2 web page. Once connected go back to the upgrade page and look at the version of the firmware installed. This error will be gone at the next upgrade from 211 to 2xx.
29876	**Changing DENSITE-CPU-ETH2 time cause the web server to crash** When the time is changed on the controller, the web server start using 99% of the cpu and after a couple of minute it crashes. Workaround: After changing the time stop and restart the web server using the controller front panel menu.

Release Notes

VERSION: 211

Release date: 2014-10-17

iControl compatibility: 4.42 and more

iControl Solo compatibility: 4.42 and more

Hardware incompatibility: This firmware applies to all existing hardware assemblies.

ENHANCEMENTS & NEW FEATURES

Ref#	Description

BUGFIXES

Bug#	Description
ETH2-294	**Shellshock security vulnerability** The product runs the Bash shell and thus has the Shellshock security vulnerability.

KNOWN BUGS & LIMITATIONS

Bug#	Description

Release Notes

VERSION: 210

Release date: 2012-09-20

ENHANCEMENTS & NEW FEATURES

Ref#	Description
0001	**Support of the new Densité 3 FR1 frame** This is the first version of the CPU_ETH2 that supports the Densité 3 FR1 frame.

BUGFIXES

Bug#	Description

KNOWN BUGS & LIMITATIONS

Bug#	Description