



Release Title:	6.1.10
Release Date:	17-April-2017
Version:	6.1.10

1. Remarks

This is the release of the OMI, OKI, OEI-2 and KP-series which supports OCA. In addition to all the functionality that is available in V5.2.12, this release supports additional features listed below (starting from 6.1.0). Section 2 of this document lists the Software Compatibility of firmware versions. Please refer to the Application note "OCP-OCA Migration" for upgrading from existing OCP based firmware to OCA based firmware.

Issues fixed in V6.1.10

OMI, OKI, OEI-2 and KP-Series

- 1) Continuous reset of devices when using unmanaged switches has been resolved
- 2) Hot swap of KP's has been resolved

Issues fixed in V6.1.8

- 3) Fiber Ports on OMI/OKI/OEI-2 now work in both RSTP and no RSTP mode. In previous release fiber port did not work in RSTP mode.
- 4) Junk characters were displayed on the KP-series when operating in Katakana mode. This has been resolved.
- 5) KP-12 operating in Katakana mode requesting "KP Power-up" data continuously has been resolved.
- 6) New version of OMI-FPGA released to address the issue of intermittent audio distortion observed on some of the channels in OMI, caused by a TDM bus timing issue.
- 7) OMI continuously resets when the OMI back card is not connected. This has been fixed.
- 8) In event of OMI resetting continuously (caused by ports not being allocated or failure to communicate with MCIIe), the OMI channel configuration was erased in some instances. This has been addressed in this release.

New Feature in V6.1.8

- 1) IPedit now displays connection information if the OMI/OKI/OEI-2/KP-series audio routes are set-up by Dante Controller. When 3rd party Dante devices are connected, the Device Type is shown as "Others" in the channel configuration grid and connection status is shown as updated. The channel bitmap indicates the connection status.
- 2) This release is based on OMNEO Platform version V5.0.0.

Issues fixed in V6.1.4

- 1) Fixing the Phantom Cross-points
- 2) Fixing the issue of removal of the 256th entry in Listen Audio Mixer Map.
- 3) Putting valid range checks when the audio mixer maps were being updated
- 4) Provided Diagnostics to clear and read the ASIC maps

Issues fixed in V6.1.3

1. OMI is not able to transmit audio in the Port range of 400 to 500. The OMI was internally using a limit of 500 timeslots. This resulted in the Audio not driven from the backplane by the OMI card. Now it is changed to maximum supported timeslots (880 ports).
2. Intercom Alpha names were not displayed correctly for OKI and OEI-2 connected devices.

New Features V6.1.2

1. Telnet is disabled by default for all the OMNEO devices. Telnet can be enabled from IPedit using special keyboard and mouse combination. Right click on the device with Ctrl+Shift down.
2. Intercom Port numbers along with the Matrix name and Alpha are shown on the OMI card in IPedit under channel configuration as shown in the picture below



	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8
Channel Configuration							
Intercom Alpha	FRM2 : BRAC12 (N178)	FRM2 : BRA234 (N179)	FRM2 : N180	FRM2 : N181	FRM2 : N182	FRM2 : N183	FRM2 : N184

3. The OKI , OEI-2 and KP Series keypanel will display the Intercom port, matrix name and Alpha to which they are connected as shown in the picture below

	Channel 1
Channel Configuration	
Intercom Alpha	FRM2 : N196
Channel Description	
Destination Type	<input type="checkbox"/> OMI-64
Destination Device Name	SLOT11.local
Destination IP Address	192.168.2.238

4. In AZEdit, the version string for the OMI card will display “Firmware Download in Progress” when the OMI firmware is downloaded using the FWUT. This string will alternate with the regular version string during the Firmware Upgrade process.
5. Tear down channel Command has been implemented for OMI, OKI and OEI-2 devices. From IPedit select a channel and it will show a Teardown channel menu item. Clicking this will temporarily teardown the channel and the connection is re-established automatically.

Issues Fixed

Following issues have been fixed in this release

1. The SetupOMNEOXXXXFirmware.msi file for NIOS, OEI-2 and OKP did not update the latest files for the firmware upgrade. This has been fixed. The set-up files in this release will remove the old files and install the new files.

Features in V6.1.0:

1. New version of the OMNEO (OCA) integrated for OMI/OKI/OEI-2. The new version is 4.40.4085
2. Support for switching from RSTP to noRSTP and vice versa is now provided via IPedit. There is no need to upgrade the firmware. If RSTP needs to be disabled then “Disable RSTP” should be checked. If RSTP needs to be enabled then “Disable RSTP” should be unchecked. The option is shown in picture below



Device Information

Configuration

Device Name: SLOT11

Description: SLOT 11 OMI-64 KPS

Version: ADAM OMI-64 Card, Version [FPGA-0.50][C-6.0.26][A-6.0.2]

Controller IP: 192.168.2.237 MAC: 00:0b:7c:80:32:31

Audio IP: 192.168.2.238 MAC: 00:1c:44:00:84:31

Netmask: 255.255.0.0 ☒ Use Static IP Settings

Gateway: ☐ Disable RSTP

DNS Server:

Domain Name:

3. In earlier version 5.x.x Receiver Latency was always fixed at 1ms, but with 6.x.x onwards the receiver latency can be configured per channel from the OMI. The OKI, OEI-2 and KP-Series will display the set latency value from the OMI when the Audio Routes are established. The Receiver latency values cannot be changed from the OKI, OEI-2 and KP-Series, they are read-only. The default value is still 1 ms. The following Receiver Latency values can be set on per channel basis 1,2,5,10,15 and 20 ms. Refer the picture below for options in IPedit.

OMI Screen in IPedit

Destination Channel Description	I am F1K12	I am KeyPanel			
Channel Input Gain	0 dB	0 dB	0 dB	0 dB	0 dB
Channel Output Gain	0 dB	0 dB	0 dB	0 dB	0 dB
Receiver Latency	1 ms	1 ms	1 ms	1 ms	1 ms

Receiver Latency: 1 ms

Channel Status

Connection State

Connection Duration

1 ms

2 ms

5 ms

10 ms

15 ms

20 ms

OKI/OEI-2/KP-Series Screen in IPedit



Destination Description	SLOT 11 OMI-64 KPS
Destination Channel	Channel 7
Destination Channel Description	183
Channel Input Gain	3 dB
Channel Output Gain	0 dB
Invert Audio Direction	<input type="checkbox"/>
Receiver Latency	20 ms

4. FWUT /DNS-SD Version 4.40 is released
5. ARNI Configuration Tool and Firmware V4.40

2. Software Compatibility Matrix

The Version 6.x.x firmware requires following version of the software/firmware. Please refer to release notes of the individual products. All the below firmware is available in the OMNEOSuiteV6.1.10.

Nr	Device	Latest Released Version	Earlier versions (compatible)
1	OMI OMI-FPGA	6.1.10 0.75	6.1.0/6.1.2/6.1.3/6.1.4/6.1.8 0.48/0.50
2.	OKI	6.1.10	6.1.0/6.1.2/6.1.3/6.1.8
3.	OEI2	2.1.10	2.1.0/2.1.3/2.1.4/2.1.7
4.	KP-Series Boot loader FPGA	2.1.0 1.3.0 5.0.0	2.0.2/2.0.3/2.04 1.2.0/1.2.3 4.3.5
5.	RVON-KP Series Boot loader FPGA	1.3.0R 1.3.0 5.0.0	1.2.2R/1.2.4R 1.2.0/1.2.3 4.3.5
6.	IPEdit	3.4.0	3.3.0 and above releases
7.	AZEdit	5.2.2	5.2.1 and above releases
8.	MCIle	3.4.3	3.0.4 or above releases
9.	FWUT	4.40	Please check the Application note migration guide for details
10.	Bosch DNS-SD	4.40	
11.	KP32-CLD	1.7.9	V1.6.0 onwards Omneo Support Added
12.	KP12-CLD	1.4.8	V1.3.0 onwards Omneo Support Added
13.	KP32-Classic	2.5.2	V2.4.0 onwards Omneo Support Added. Requires update to boot loader
14	RP-1000	2.1.3	

Please note:

Version 5.x.x is not compatible with Version 6.x.x or vice versa. For eg: OMI V5.x.x will not connect to OKI version 6.x.x or OEI-2 version 2.x.x or KP-Series version 2.x.x. The OMI needs to be updated to V6.x.x. Similarly OMI version 6.x.x will not connect to OKI version 5.x.x or OEI-2 version 1.4.x or KP-series version 1.2.x. These need to be updated to V6.x.x or 2.x.x



3 Firmware Versions

The precondition for upgrading the OMI-firmware to 6.x.x is that the existing OMI-Firmware version must be at V5.2.12. If the OMI firmware is at version lower than V5.2.12, upgrade the firmware to version 5.2.12 and then proceed with upgrading to V6.x.x. If the OMI firmware is already at 6.x.x then the firmware can be updated to this released version.

Please refer to the Application note "OCP-OCA Migration" for upgrading the firmware from V5.x.x to 6.x.x for further information

Component	Version	Comment
The following firmware file contains images for the both the OMI controller and Audio Device and should be used for upgrading OMI card with Versions 4.02 and above.		
OMI-Firmware_RSTP_V6.x.x.capfw OMI-Firmware_noRSTP_V6.x.x.capfw	6.1.10	This file has to be used for upgrading OMI cards with version 4.02 and above. Please read the FWUT instructions
OMI-FPGA_Firmware_V0.75.capfw	0.75	This updates only the NIOS FPGA
Component	Version	Comment
The following firmware file contains images for the both the OMI controller and Audio Device and should be used for upgrading OMI card with Versions 4.0.0 and above		
OMI-Firmware_Controller_V6.x.x.capfw	6.1.10	This file is used for upgrading the OMI board set with the above versions using FWUT. This only updates the NIOS
OMI-Firmware_AudioDevice_RSTP_V6.x.x.capfw OMIFirmware_AudioDevice_noRSTP_V6.x.x.capfw	6.1.10	This file is used for upgrading the OMI board set with the above versions using FWUT

3 LED Diagnostic Information

Following are description of the LED's on OMI Front card that can be used for diagnostic purposes. This section mentions the changes and additions with respect to the LED's.

Red LED	#	Green Led
	23	
ON- Config from MCIIe OFF- Config form card Indicates Dip Switch 4 status	22	
ON - Static Mode OFF- DHCP Mode	21	
ON- NO RSTP Mode OFF- RSTP Mode	20	
ON- Device Name Mismatch OFF- Device Name in Sync	19	
	18	ON - IP Address in Sync OFF - IP address not in Sync
	17	
	16	
	15	
	14	
	13	
	12	
	11	
OMI Firmware States.	10	
	9	



		8	
		7	
		6	
		5	
		4	
		3	
		2	
		1	
	Blinking – Indicating the OMI is Good	0	

During the Firmware download of the OMI, the LED's 1 to 9 turn on and off in sequence, indicating the OMI controller download is in progress.

Following is the OMI state when booting up.

Red Led #	Status	Remarks
1	ON	OMI validating the configuration information
2	ON	Identifying the OMI-Audio Device
3	ON	Verifying the Network Configuration
4	ON	Verifying the Audio Device Name
5	ON	Establish Connection with Audio Device