

EX1200_7000_Driver_Firmware_Release_Note

EX1200, EX7000 Driver/Firmware Revision History

Date of the Release: May 22, 2018

Version Number: v3.13.19

Model Number: EX12xx/EX12xxA/Switch/NonSwitch/NonSwitch-2 - All series card & chassis FW

Operating System: Windows

Fix:

- Fixed an issue with switch cards scan hangs when both thermistor and thermocouple measured in same step.
- Fixed an issue in the hardware booting up issue with different FW version combination (particularly with ex120x/ex120xA chassis).

New Feature:

- N/A

System level dependency:

- N/A

Known Issue:

Compatibility Details:

Firmware version: 3.13.18

Driver version: 3.x.xx

Hardware Version:

Digital_FPGA_Firmware_version	Digital_FPGA_Version	Analog_FPGA_version
New_Hardware_Revision_Number	DMM Version:	

	27		46
	9	39	
2.0.18			

Date of the Release: November 27, 2017

Version Number: v3.13.18 - Beta

Model Number: EX12xx series chassis FW

Operating System: Windows

Fix:

- Fixed an issue in the FW code where plugin card timestamps not programmed unless chassis is 1588 slave.

New Feature:

- N/A

System level dependency:

- N/A

Known Issue:

Compatibility Details:

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Firmware version: 3.13.18

Driver version: 3.x.xx

Hardware Version:

Digital_FPGA_Firmware_version | Digital_FPGA_Version | Analog_FPGA_version |
New_Hardware_Revision_Number | DMM Version:

27 | 46
9 | 39
| 2.0.18

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Date of the Release: November 2, 2017

Version Number: v3.13.18

Model Number: EX1200 3608 (FGen card) Upgrade FW

Operating System: Windows

Fix:

- Fixed an issue with 3608 card where offset voltage is consistently high by about 25mv after bootup and before initial parameters are configured in SFP.

New Feature:

- N/A

System level dependency:

- N/A

Known Issue:

Compatibility Details:

Firmware version: 3.13.18

Driver version: 3.x.xx

Hardware Version:

Digital_FPGA_Firmware_version | Digital_FPGA_Version | Analog_FPGA_version |
New_Hardware_Revision_Number | DMM Version:

27 | 46
9 | 39
| 2.0.18

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Date of the Release: September 12, 2017

Version Number: v3.13.17

EX1200_7000_Driver_Firmware_Release_Note

Model Number: EX1200 Switch Upgrade FW

Operating System: Windows

Fix:

- Fixed an issue where EX1200-7000s upgrades would fail.

New Feature:

- N/A

System level dependency:

- N/A

Known Issue:

Compatibility Details:

Firmware version: 3.13.17

Driver version: 4.x.x

Hardware Version:

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Digital_FPGA_Firmware_version | Digital_FPGA_Version | Analog_FPGA_version |
New_Hardware_Revision_Number | DMM Version:
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|          27          |          |          46
|          9          |          |          39
| 2.0.18             |          |
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Date of the Release: May 25, 2017

Version Number: v3.13.16

Model Number: EX7000 FW/Switch SFP/EX7000 Configurator

Operating System: Windows

Fix:

- N/A

New Feature:

- Add new flag to DCF to allow control of channel sorting when pathfinding

System level dependency:

- N/A

Known Issue:

Compatibility Details:

Firmware version: 3.13.16

Driver version: 4.x.x

Hardware Version:

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Digital_FPGA_Firmware_version | Digital_FPGA_Version | Analog_FPGA_version |
New_Hardware_Revision_Number | DMM Version:
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46

27			
9			39
	2.0.18		

Date of the Release: Mar 16, 2017

Version Number: v3.13.15

Model Number: EX1200 FW

Operating System: Windows

Fix:

- N/A

New Feature:

- Fix precision display in SFP for EX1200-7008 RTD measured current

System level dependency:

- N/A

Known Issue:

Compatibility Details:

Firmware version: 3.13.13

Driver version: 4.x.x

Hardware Version:

Digital_FPGA_Firmware_version	Digital_FPGA_Version	Analog_FPGA_version
New_Hardware_Revision_Number	DMM Version:	

46

27			
9			39
	2.0.18		

Date of the Release: Dec 5, 2016

Version Number: v3.13.14

Model Number: EX7000 FW

Operating System: Windows

Fix:

- N/A

New Feature:

- Load DCF through the web interface with the correct password

System level dependency:

- N/A

Known Issue:

Compatibility Details:

Firmware version: 3.13.13

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Driver version: 4.x.x

Hardware Version:

Digital_FPGA_Firmware_version | Digital_FPGA_Version | Analog_FPGA_version |
New_Hardware_Revision_Number | DMM Version:

27 | 46
9 | 39
| 2.0.18
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Date of the Release: Nov 28, 2016

Version Number: v3.13.13

Model Number: EX7000 FW, FGen 64 bit IVI Drivers

Operating System: Windows

Fix:

- N/A

New Feature:

- EX7000 improved upload security via DCF password protection
- 64 bit IVI driver for FGen

System level dependency:

- Common & System driver libraries are dependencies components need to be installed in the system

Known Issue:

Compatibility Details:

Firmware version: 3.13.12

Driver version: 4.x.x

Hardware Version:

Digital_FPGA_Firmware_version | Digital_FPGA_Version | Analog_FPGA_version |
New_Hardware_Revision_Number | DMM Version:

27 | 46
9 | 39
| 2.0.18
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Date of the Release: Oct 21, 2016

Version Number: v3.13.12

Model Number: EX1200 Series Drivers

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Operating System: Linux

Fix:

N/A

New Feature:

- 64 bit Linux driver support for RTDSimulator, Breadboard, Scanner, Comparator, DIO, DMM, FGen, Multifunction & Varres cards

System level dependency:

- Common & System driver libraries are dependencies components need to be installed in the system

Known Issue:

Compatibility Details:

Firmware version: 3.13.11

Driver version: 4.x.x

Hardware Version:

Digital_FPGA_Firmware_version | Digital_FPGA_Version | Analog_FPGA_version |
New_Hardware_Revision_Number | DMM Version:

27 | 46
9 | 39
| 2.0.18
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Date of the Release: Sep 5, 2016

Version Number: v3.13.11

Model Number: EX1200 Series FW

Operating System: Windows

Fix:

N/A

New Feature:

- Added support for RTD simulator IVI driver 64 bit version
- Added support for serial & model entry for SMP carrier plug-in cards

System level dependency:

N/A

Known Issue:

Compatibility Details:

Firmware version: 3.13.11

Driver version: 4.x.x

Hardware Version:

Digital_FPGA_Firmware_version | Digital_FPGA_Version | Analog_FPGA_version |
New_Hardware_Revision_Number | DMM Version:

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                27          |
                9           |
| 2.0.18         |          39          |
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Date of the Release: Jun 17, 2016

Version Number: v3.13.10

Model Number: EX1200 Series FW

Operating System: Windows

Fix:

N/A

New Feature:

- Added DMM version display in SFP.
- Added 'Chassis' suffix to Scanner list in SFP
- Showing scan list in SFP is added for EX1200-SMP

System level dependency:

N/A

Known Issue:

Compatibility Details:

Firmware version: 3.13.10

Driver version: 4.x.x

Hardware Version:

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Digital_FPGA_Firmware_version | Digital_FPGA_Version | Analog_FPGA_version |
New_Hardware_Revision_Number | DMM Version:
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                27          |
                9           |
| 2.0.18         |          39          |
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Date of the Release: May 24, 2016

Version Number: v3.13.9

Model Number: EX1200 Series FW (EX1200-SMP New Model Support)

Operating System: Windows

Fix:

N/A

New Feature:

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- Added support for additional Keysight (Agilent) relays.
- Added new SMP hardware support

System level dependency:

N/A

Known Issue:

- Scan list doesn't show in SFP for some switch cards.
- Scanner feature is not supported in SMP
- The above issues will be corrected in subsequent release

Compatibility Details:

Firmware version: 3.13.9

Driver version: 4.x.x

Hardware Version:

Digital_FPGA_Firmware_version | Digital_FPGA_Version | Analog_FPGA_version |
New_Hardware_Revision_Number | DMM Version:

27 | 46
9 | 39
| 2.0.18

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Date of the Release: February 2, 2016

Version Number: v3.13.8

Model Number: EX7000 FW

Release Note Item:

New Feature:

- FPGA reverted to an older version to resolve SFP loading issue of some cards.

Compatibility Details:

Firmware version: NA

Driver version: NA
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Date of the Release: February 1, 2016

Version Number: v3.13.7 - Beta

Model Number: EX7000 FW

Release Note Item:

Fix:

- FPGA updated for switch card 5002 detection issue.

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- Added support for EX1200-7316b card

Compatibility Details:

Firmware version: NA

Driver version: NA

Date of the Release: November 17, 2015

Version Number: v3.13.7

Model Number: EX7000 FW

Release Note Item:

New Feature:

- Added support for additional Radiall relays.

Compatibility Details:

Firmware version: NA

Driver version: NA

Date of the Release: October 20, 2015

Version Number: v3.13.5

Model Number: EX1200-7000 Breadboard

Release Note Item:

Fix:

- Fixed issue with bank 7 which is not able to function properly with newer PCB revision.

Date of the Release: September 29, 2015

Version Number: v3.13.4

Model Number: EX1200, EX7000 FW / Switch SFP

Release Note Item:

Fix:

- Fixed SFP issue to load appropriate java run time version i.e. 1.6 to 1.8.

Date of the Release: September 2, 2015

Version Number: v3.13.3

Model Number: EX7000 FW / Switch SFP

Release Note Item:

Fix:

- Fixed an issue where manually entering an attenuation value could result in an unexpected value being applied.

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Date of the Release: August 25, 2015

Version Number: v3.13.2

Model Number: EX7000 FW / Switch SFP

Release Note Item:

Fix:

- Fixed an issue where some attenuators could not be set to the full range of valid values.

Date of the Release:

Version Number: v3.13.1

Model Number: EX1200 FW

Release Note Item:

Fix:

- Fixed memory usage issues in comparator reset and self test

Date of the Release:

Version Number: v3.13.0

Model Number: EX1200 Scanner and DMM IVI drivers

Release Note Item:

System level dependency:

- Initial release of 64 bit drivers

Date of the Release:

Version Number: v3.12.53

Model Number: EX1200, EX7000 FW

Release Note Item:

System level dependency:

- (PTPv2) Updated current UTC offset to 36

Date of the Release: June 19, 2015

Version Number: v3.12.52

Model Number: EX7000 FW

Release Note Item:

Fix:

- Fixed an issue with systems containing 3 RDBs

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Date of the Release: June 17, 2015

Version Number: v3.12.51

Model Number: EX7000 Configurator

Release Note Item:

Fix:

- Fixed an issue where non-linear attenuators were not assigned enough control bits.

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Date of the Release: June 01, 2015

Version Number: v3.12.50

Model Number: EX7000 FW

Release Note Item:

New Feature:

- Add scanner support in the Software with limited trigger support (as of now supporting only Immediate and Software triggers).

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Date of the Release: May 29, 2015

Version Number: v3.12.49

Model Number: EX7000 FW

Release Note Item:

New Feature:

- Add images for AMC pin diode and Kratos phase shifter

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Date of the Release: May 21, 2015

Version Number: v3.12.48

Model Number: VTEXScanner Driver
EX1200 FW
All SFPs

Release Note Item:

System level dependency:

- (VTEXScanner) Updated to include new DMM error codes.
- (DMM SFP) If nominal calibration data is loaded, initiating a measurement will return an error unless calibration is in progress.
- All SFPs are now built with Java 8

New Feature:

- (DMM SFP) Added protection to prevent calibration data from being mistakenly overwritten

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Date of the Release: May 15, 2015

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Version Number: v3.12.47

Model Number: VTEXDmm Driver

Release Note Item:

New Feature:

Date of the Release:

Version Number: v3.12.46

Model Number: EX7000 FW Image

Release Note Item:

Fix:

- Fixed an issue where setting the RDB serial number corrupts relay drive mode settings

Date of the Release:

Version Number: v3.12.45

Model Number: EX1200 Chassis FW Images

Release Note Item:

Fix:

- Fixed an issue where setting the serial of a DMM would replace cal constants with nominal values

Date of the Release:

Version Number: 3.12.44

Model Number: VTEXSwitch LV Driver

Release Note Item:

Fix: EX1200 Switch card upgrade image

- Added both ex1200-6112-s and ex1200-6216-s switch card in the EX1200 family

Date of the Release:

Version Number: v4.1.2

Model Number: VTEXSwitch LV Driver

Release Note Item:

Fix:

- Update all labVIEW vi's to call function names as "VtexSwitch" instead of "VTEXSwitch" with the updated IVI driver.

Date of the Release:

EX1200_7000_Driver_Firmware_Release_Note

Version Number: v3.12.43

Model Number: DMM SFP - EX1200 FW Images

Release Note Item:

Fix:

- Fixed an issue where the SFP did not properly dump all of the calibration coefficients

System level dependency:

- Altered the calibration routine to better handle DMM drift in certain functions and ranges.

New Feature:

- Added logging of ADC counts when running calibration or verification

Date of the Release:

Version Number: v3.12.42

Model Number: EX7000 FW

Release Note Item:

Fix:

- Fixed a FPGA issue where the unit did not properly power up.

Date of the Release:

Version Number: v3.12.41

Model Number: EX1200 FW

Release Note Item:

Fix: DMM SFP - EX1200 FW Images

- Updated the ACV test points during verification of DMM in SFP jar file

Date of the Release:

Version Number: v3.12.40

Model Number: DMM SFP - EX1200 FW Images

Release Note Item:

Fix:

- Fixed the issue with saving both calibrated date and due calibration date in DMM SFP jar file

Date of the Release:

Version Number: v3.12.39

Model Number: System IVI/LabVIEW Driver

EX1200_7000_Driver_Firmware_Release_Note

Release Note Item:

New Feature:

- Add support for 64-bit and releasing both 32-bit and 64-bit versions of VTEXSystem IVI driver as 3.12.39
- Add support for calling 64-bit/32-bit VTEXSystem dll (based on the OS) in VTEXSystem LabVIEW wrapper

Model Number: EX1200, EX7000 Firmware

Release Note Item:

New Feature:

- Add support for PTPv2 (IEEE 1588-2008) and releasing as non-beta version

Date of the Release:

Version Number: v3.12.38-Beta

Model Number: EX1200, EX7000 Firmware

Release Note Item:

New Feature:

- Add support for PTPv2 (IEEE 1588-2008)

Date of the Release:

Version Number: v3.12.37

Model Number: EX1200 Switch card upgrade image

Release Note Item:

Fix:

- Fixed the issue with pin number mismatch in fpga for 3824

Date of the Release:

Version Number: v3.12.36-Beta

Model Number: EX1200 Switch card upgrade image

Release Note Item:

New Feature:

- Added 3824 switch card in the EX1200 family

Date of the Release:

Version Number: v3.12.35

Model Number: VTEXSystem IVI Driver/EX1200 FW images

Release Note Item:

System level dependency:

- Updated FIFO_POLL_MSEC to 10 instead of 250 for dmm measurements in firmware

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Fix:

- Fixed the issue of loading saved configuration with Reset method of VTEXSystem IVI driver

Date of the Release:

Version Number: v3.12.34

Model Number: Fgen IVI Driver

Release Note Item:

Fix:

- Fixed the issue with returning the status of self test call

Date of the Release:

Version Number: v3.12.33

Model Number: Comparator IVI Driver

Release Note Item:

Fix:

- Fixed the issue with Initialize method in simulation mode

Date of the Release:

Version Number: v3.12.31 and v3.12.32

Model Number: VT series FW Images

Release Note Item:

Date of the Release:

Version Number: v3.12.30

Model Number: EX1200/EX7000 FW Images

Release Note Item:

New Feature:

Date of the Release:

Version Number: v3.12.29

Model Number: EX1200 Switch card upgrade image

Release Note Item:

New Feature:

- Added both 7000s and 7316 switch cards in the EX1200 family

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Date of the Release:

Version Number: v3.12.28

Model Number: EX1200 Firmware, IVI, LV and Linux images

Release Note Item:

New Feature:

- Added 7000 Breadboard in the EX1200 family
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Date of the Release:

Version Number: v3.12.27

Model Number: EX1200 non-switch Upgrade image

Release Note Item:

System level dependency:

- Rebuild the ex1200-3608 FPGA by including the changes in 4bb (fix for not detecting 3608 in some of the slots of EX1268A chassis)
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Date of the Release:

Version Number: v3.12.26

Model Number: Switch IVI (both 32-bit and 64-bit versions) and Linux drivers

Release Note Item:

New Feature:

- Added new property to get the list of relays and releasing both 32-bit and 64-bit VTEXSwitch IVI Drivers as 3.12.26 version
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Date of the Release:

Version Number: v3.12.25

Model Number: EX1200 Upgrade images

Release Note Item:

Fix:

- Fixed the DmmSfp to correctly wait until the Fluke calibrator has settled before taking measurements when being calibrated.
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Date of the Release:

Version Number: v3.12.24

Model Number: EX1200 Firmware card upgrade image/IVI driver/Linux driver - Multifunction

Release Note Item:

System level dependency:

- Modified the FPGA to give an error signal upon receiving trigger when NO new data available and SFP/Lib layers will treat the measurement as zero

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based on the error signal

Date of the Release:

Version Number: v3.12.23

Model Number: EX1200 Upgrade images, VTEXSystem IVI/LV drivers

Release Note Item:

Fix:

- Fixed the issue with ACV measurement in DMM SFP

New Feature:

- Added the feature to support saving the configuration and loading it back from non-volatile memory and removed the earlier way ("Default=") of storing source/invertedsource list.

Date of the Release:

Version Number: v3.12.22

Model Number: Non-Switch Card upgrade image, VTEXMultifunction IVI/Linux driver

Release Note Item:

Fix:

- Fixed the issue with readings when there is no input in FPGA and IVI driver

New Feature:

- Added a missing case to calculate time interval measurement and corrected dutycycle calculation

Date of the Release:

Version Number: v3.12.21

Model Number: Non-Switch Card upgrade image

Release Note Item:

Fix:

- Fixed the issue with ReadLatest by not allowing the write during the read in progress to the block memory

Date of the Release:

Version Number: v3.12.20

Model Number: Switch Card upgrade image

Release Note Item:

System level dependency:

- Modified common code between scanner and switch SFP's.

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Date of the Release:

Version Number: v3.12.19

Model Number: EX1200 Firmware/IVI driver/Linux driver/LV wrapper

Release Note Item:

System level dependency:

- Releasing the firmware, Comparator IVI/Linux driver and
Comparator LabVIEW wrapper as 3.12.19 version

Fix:

- Fixed the backplane trigger level option - active low or active
high

New Feature:

- Added ex1200-7416m1 model to support 50.0V range instead of
100.0V in ex1200-7416

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Date of the Release:

Version Number: v3.12.18

Model Number: Switch IVI Driver

Release Note Item:

System level dependency:

- Releasing both 32-bit and 64-bit VTEXSwitch IVI Drivers as
3.12.18 (non-beta) version

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Date of the Release:

Version Number: v3.12.17 Beta

Model Number: EX7000 Firmware

Release Note Item:

New Feature:

- Added support for new relays

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Date of the Release:

Version Number: v3.12.16 Beta

Model Number: Switch IVI Driver

Release Note Item:

System level dependency:

- Releasing VTEXSwitch IVI Driver as 64-bit version

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Date of the Release:

Version Number: v4.0.0 Beta

Model Number: VTEXSwitch LV Driver

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Release Note Item:

System level dependency:

- Updated all the vi's to work with 64-bit machine.

Date of the Release:

Version Number: v3.12.15

Model Number: Scanner IVI Driver

Release Note Item:

Fix:

- Fixed the problem with driver going into indefinite loop while ethernet cable is removed.

Date of the Release:

Version Number: v3.12.14

Model Number: Switch LV Driver

Release Note Item:

Fix:

- Fixed the problem with VTEXSwitch LabVIEW wrapper opening with older version of LabVIEW.

Date of the Release:

Version Number: v3.12.13

Model Number: Switch Firmware

Release Note Item:

Fix:

- Fixed power on saved state for EX1200-3164 switch card.

Model Number: RTDSimulator Firmware

Release Note Item:

System level dependency:

- Updated the Pulsed current lower threshold in FPGA.

Date of the Release:

Version Number: v3.12.11

Model Number: EX7000 Firmware

Release Note Item:

Fix:

- Fixed a problem saving odometer values beyond 4 RDBs

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Date of the Release:

Version Number: v3.12.10

Model Number: Switch Driver/Firmware

Release Note Item:

New Feature:

- Added the support for EX1200-4265 card.
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Date of the Release:

Version Number: v3.12.9

Model Number: EX1200 Firmware

Release Note Item:

New Feature:

- Added support for storing the BPL_INSFAIL configuration in NV
RAM.

System level dependency:

- Releasing Fgen card upgrade image - fix in SFP calibration
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Date of the Release:

Version Number: v3.12.8

Model Number: NonSwitch Card Upgrade Image - Multifunction

Release Note Item:

Fix:

- Fixed the problem with setting the output direction for dio
channels in SFP.
 - Fixed the problem while writing the direction in FPGA by
increasing the latch enable time.
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Date of the Release:

Version Number: v3.12.7

Model Number: RTDSimulator Card Upgrade Image

Release Note Item:

System level dependency:

- Updated the Pulsed current settling time with 1.6 milli-seconds
in FPGA.
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Date of the Release:

Version Number: v3.12.6

Model Number: RTDSimulator Driver/ Firmware

Release Note Item:

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New Feature:

- Added the Pulsed Current Excitation Feature.

Model Number: Switch Driver/Firmware

Release Note Item:

New Feature:

- Added the support for EX1200-6111 card.

Date of the Release:

Version Number: v3.12.5

Model Number: EX7000 Firmware

Release Note Item:

New Feature:

- Added Support for RelComm RMT-12S6DB (SP12T) relay.

Model Number: Switch Firmware

Release Note Item:

Fix:

- Fixed occasional self-test failure with EX1200-2087A switch card.

Date of the Release:

Version Number: v3.12.4

Model Number: Switch Driver/Firmware

Release Note Item:

New Feature:

- Support for EX1200-2087A switch card relay built in self test feature.

Model Number: Switch Card upgrade image

Release Note Item:

New Feature:

- Added Support for relay built in self test feature in the EX1200-2087A FPGA.

Date of the Release:

Version Number: v3.12.3

Model Number: EX1200 Firmware, IVI, LV and Linux images

Release Note Item:

New feature:

- Added 7008 RTDSimulator in the EX1200 family.

System level dependency:

- Releasing all the EX1200 related images as 3.12.3 version.

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Date of the Release:
Version Number: v3.12.2
Model Number: Fgen Card upgrade image
Release Note Item:
 Fix:
 - Fix for Calibration COnstants for 20mA range in SFP

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Date of the Release:
Version Number: v3.11.4
Model Number: EX7000 Firmware
Release Note Item:
 System level dependency:
 - Updated with matching SFP.

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Date of the Release:
Version Number: v3.11.3
Model Number: EX7000 Firmware
Release Note Item:
 New Feature:
 - Added library and image support for amplifier modules.

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Date of the Release:
Version Number: v3.10.6
Model Number: Comparator Card upgrade Image
Release Note Item:
 Fix:
 - Fix for FPGA bit file for RJR cards

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Date of the Release:
Version Number: v3.10.5
Model Number: Switch Driver
Release Note Item:
 fix:
 - Fix for verify relay state on latching relays

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Date of the Release:

Version Number: v3.10.3

Model Number: EX1200 Firmware

Release Note Item:

System level dependency:

- Resolved an issue with the ex1200-6301 and -6301T cards.

Date of the Release:

Version Number: v3.10.2

Model Number: EX1200 Firmware

Release Note Item:

System level dependency:

- Resistance tolerances updated for revision B boards.

Date of the Release:

Version Number: v3.10.1

Model Number: VarRes Driver/Firmware

Release Note Item:

System level dependency:

- Previously this driver had a dependence on VISA to be installed. Since VISA is not used in this driver, it was removed.

Model Number: DIO Driver/Firmware

Release Note Item:

System level dependency:

- The maximum pattern output rate has been permanently reduced to 2MHz. This is a specification change for the card.
- The card can now generate many more clock frequencies, including many between 1.25MHz and 2MHz.
- Pattern output now works reliably at all supported frequencies.

Model Number: Fgen Driver/Firmware

Release Note Item:

System level dependency:

- The Marker output is now correctly synchronized to the start of sample. (It was previously generated at the end of sample.)
- Standard waveforms (Square, Triangle, RampUp, RampDown) were incorrectly shaped and/or had the wrong frequency for low frequencies.

Model Number: EX7000 Firmware

Release Note Item:

EX1200_7000_Driver_Firmware_Release_Note

System level dependency:

- Now more robustly handles incorrect and invalid scpi commands.

Model Number: System Driver

Release Note Item:

System level dependency:

- Updated supported models.

Model Number: Multifunction Driver/Firmware

Release Note Item:

System level dependency:

- Max average count corrected from 255 to 256 in FPGA
- DMM connectivity of Comparator (DAC) changed according to

Hardware changes

Fix:

- Fixed the RPM measurement issue in missing tooth mode.
- Fixed the Frequency and pulse width measurement issue when in moving average mode (Average Repeat off)
- Fixed the DAC Channel reset issue by Reset command.

Date of the Release:

Version Number: v3.9.8

Model Number: EX1200 Firmware

Release Note Item:

New Feature:

- Added support for user-replaceable DMM.
- Added support for EX1268A chassis.

Date of the Release:

Version Number: v3.9.5

Model Number: Switch Driver

Release Note Item:

fix:

- Fix for linear (new-style) attenuator definitions.

Date of the Release:

Version Number: v3.9.3

Model Number: Switch Driver

Release Note Item:

System level dependency:

Rebuild to include a change intended to be in v3.9.2

Fix:

EX1200_7000_Driver_Firmware_Release_Note
- Fix fractional attenuator dB settings

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Date of the Release:
Version Number: v3.9.2
Model Number: Switch Driver/Firmware
Release Note Item:
 Fix:
 - Fix support for YIG filters
 - Fix odometers display in the SFP
 - Fix fractional attenuator dB settings

Model Number: Fgen Driver/Firmware
Release Note Item:
 System level dependency:
 - The Arbitrary.Configure() and Sequence.Configure() methods
 are now working properly on channels 2,3,4 on the 3604.

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Date of the Release:
Version Number: v3.9.1
Model Number: Switch Driver/Firmware
Release Note Item:
 Fix:
 - Fix support for matrix relays in SetPath()
 New Feature:
 - Add support for YIG filters

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Date of the Release:
Version Number: v3.9.0
Model Number: All Drivers
Release Note Item:
 System level dependency:
 - Driver Sessions are now closed properly when simulating.

Model Number: Dio Driver/Firmware
Release Note Item:
 System level dependency:
 - Simulating mode no longer requires a model number.
 - EndState now works properly.
 - Pattern Acquisition Fifo can now be cleared properly.

Model Number: Fgen Driver/Firmware
Release Note Item:

EX1200_7000_Driver_Firmware_Release_Note

System level dependency:

- The 3608 (and 3604) is now recognized in EX12x7, EX12x8, and EX12x9 devices.
- Autorange now works properly for Arbitrary and Sequence OutputModes. Previously, the 20V range was always selected.
- Initial values of arbitrary waveform generation were incorrect. Fixed.
- Sometimes Arbitrary waveforms would generate before the first trigger in a triggered OperationMode. Fixed.
- Two triggers were needed to advance in Sequenced OperationMode. Fixed.
- Initial generation of Square waves had extra samples. Fixed.
- Arbitrary.Configure() and Sequence.Configure() would not select the initial range correctly when in autorange mode. Fixed.

Model Number: Scanner Driver/Firmware

Release Note Item:

System level dependency:

- When calling Scanner::Read, timeouts over 60 seconds now work properly.
- Several new APIs were added to give customers more flexibility when debugging Scanlists. This breaks backwards compatibility.
- The DMM::Trigger::Multipoint API was not useful in Scanner and was removed.
- Driver help file updated to have proper EBNF grammar for scanlists.
- Drastically improved maximum possible scan speed.

Model Number: Switch Driver/Firmware

Release Note Item:

System level dependency:

- Corrected ex1200-4120, 4148, and 4164 configuration files

Model Number: VarRes Firmware

Release Note Item:

System level dependency:

- A change was made to the firmware to correct submitted resistances for the presence of a 1G0hm parallel resistance. This will result in higher accuracy.

Model Number: EX7000 Firmware

Release Note Item:

EX1200_7000_Driver_Firmware_Release_Note

System level dependency:

- Closing a vx111 connection without calling destroy_link() no longer prevents a scpi connection from being opened.

Release Note Item:

Known issues:

- The mark output is currently generated one sample late, and not generated at all at the last sample of a waveform. (Fgen)
- Scanner driver breaks backward compatibility.

Date of the Release:

Version Number: v3.8.2

Model Number: Switch Driver

Release Note Item:

System level dependency:

- Change the value returned from CanConnect() when both channels are the same

Date of the Release:

Version Number: v3.8.1

Model Number: Switch Driver

Release Note Item:

Fix:

- Fixed latching relay reset when multiple Connect() or Disconnect() calls are made without debouncing between

Date of the Release:

Version Number: v3.8.0

Model Number: Newly Supported Models

Release Note Item:

System level dependency:

- ex1200-4260
- ex1200-4264

Model Number: VarRes Driver

Release Note Item:

System level dependency:

- The VarRes driver now includes example programs

Model Number: DIO Driver

Release Note Item:

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Fix:

- Fixes an issue where DIO interfered with Scanner and the two could not be active at the same time.

Model Number: Scanner SFP

Release Note Item:

New Feature:

- Added the Scan Delay property to the SFP.

Model Number: Fgen Driver/Firmware

Release Note Item:

System level dependency:

- The Range is now set to Autorange by default.

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Date of the Release:

Version Number: v3.7.0

Model Number: Newly Supported Models

Release Note Item:

System level dependency:

- ex1200-7600

Model Number: FGen Driver/Firmware

Release Note Item:

System level dependency:

- Sequenced OperationMode now supports the AsyncAdvance mode.
- Events are fully supported.
- Marker output is fully supported.

Model Number: VarRes Driver/Firmware

Release Note Item:

System level dependency:

- Initial official release.

Model Number: Scanner Driver

Release Note Item:

New Feature:

- Added new property, "Delay" - Delay acts as a holdoff to enforce a minimum delay between scan steps. Also, we now allow the use of commas in sweep steps. A comma indicates that the driver should disconnect the previous sweep channel and connect the next sweep channel at the same time.

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Date of the Release:

Version Number: v3.6.2

Model Number: EX7000 Firmware

Release Note Item:

New Feature:

- Add an SFP graphic for another type of SP4T relay
- =====

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Date of the Release:

Version Number: v3.6.1

Model Number: Switch Driver

Release Note Item:

System level dependency:

- Solved issue with NI Switch Executive and the Config Store
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Date of the Release:

Version Number: v3.6.0

Model Number: Newly Supported Models

Release Note Item:

System level dependency:

- ex1200-2007a
- ex1200-2008h
- ex1200-5004
- ex1200-5006
- ex1200-6216hv

Model Number: Dio Dirver

Release Note Item:

System level dependency:

- VTEXDio functionality is now complete. All interfaces are implemented, and Pattern and Async modes are now available.

Model Number: FGen Driver/Firmware

Release Note Item:

System level dependency:

- Standard, Arbitrary, and Arbitrary Sequence OutputModes are supported.
- Sine, Square, Triangle, RampUp and RampDown standard waveforms add to the already existing DC standard waveform.
- StartPhase is supported on all cyclic waveforms.
- DutyCycle is supported for Square waveform.
- Continuous and Burst OperationModes are supported as well as the

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VTI

Extensions Sequenced and SingleStep.

- AutoRange is now supported.
- Frontpanel, Backplane (and so any LXI trigger source), Internal

and

Software triggers are supported.

- VTEXResult get_Name(int32_t index, VTEXString *ChannelName) is

now changed to

VTEXString get_Name(int32_t index)

Release Note Item:

Known Issues:

- The AsyncAdvanced capability of Sequenced OperationMode is not supported at this time. (FGen)
- Events outputs are not supported at this time. (FGen)
- Marker output is not supported at this time. (FGen)

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Date of the Release:

Version Number: v3.5.0

Model Number: System Driver

Release Note Item:

System level dependency:

- Solved multi-threading issues with C interface

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Date of the Release:

Version Number: v3.4.0

Model Number: Switch Driver

Release Note Item:

System level dependency:

- Solved multi-threading issues with C interface

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Date of the Release:

Version Number: v3.3.0

Model Number: EX1200 Switch Firmware

Release Note Item:

System level dependency:

- Minor change to signalling on data backplane

Model Number: EX1200 Non Switch Firmware

Release Note Item:

System level dependency:

- Resolved memory leak on reset of DIO plugin modules

EX1200_7000_Driver_Firmware_Release_Note
- Resolved transfer errors on data backplane

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Date of the Release:
Version Number: v3.2.0
Model Number: Switch Driver
Release Note Item:
 Fix:
 - fixed environment variable needed for simulation
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Date of the Release:
Version Number: v3.1.0
Model Number: Switch Driver/firmware
Release Note Item:
 System level dependency:
 - Cleaned up self-test error message
 New Feature:
 - Added support for scanning current in ex1200-3001
 Fix:
 - Fixed example code

Model Number: Scanner Driver
Release Note Item:
 Fix:
 - Fixed the Close() API.
 - Fixed example code
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Date of the Release:
Version Number: v3.0.0
Model Number:
Release Note Item:
 Comparator Driver/Firmware
 - The way calibrations are applied to thresholds has changed since the
previous release. If you are upgrading from a previous release a new calibration
will be necessary.

 Dio Driver/Firmware
 - The version of the VTEXDio driver and firmware released under Version
3.0.0 is incomplete.
 - Normal mode operation is supported.
 - The Ports interface is supported.

EX1200_7000_Driver_Firmware_Release_Note

FGen Driver

- In this version of the VTEXFgen driver, only static DC operation is supported.
- This is the DC waveform in StandardWaveform mode.
- The ex1200-3604 is now supported.
- Autorange is not available at this time. Only fixed ranges are supported.

Scanner Driver

- Currently the LibScanner driver supports all varieties of Switch card as well as the integrated DMM in the EX1200 chassis. Future support is planned for other card models.

Known Issues

- There is not currently a calibration application built into the Soft Front Panel for Comparator cards. This is planned in a future release. (Comparator)
 - None of the calls that work in Async mode (InitAsync, etc) are supported. (DIO)
 - There is nothing preventing users from accessing unsupported functionality in this release.
- Users must ensure they are only using supported functionality as listed in this release note or proper operation is not guaranteed. (DIO)

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Prior to v3.0.0 Supported Models

- ex1200-2001
- ex1200-2002
- ex1200-3001
- ex1200-3048
- ex1200-3048s
- ex1200-3072
- ex1200-3096
- ex1200-3164
- ex1200-3604
- ex1200-3608
- ex1200-4003
- ex1200-4120
- ex1200-4128
- ex1200-4148
- ex1200-4164
- ex1200-5001

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- ex1200-5002
- ex1200-6101
- ex1200-6102
- ex1200-6216
- ex1200-7416
- ex1200-7500

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