

G-API Version History

Version 2.2.10827_Release - 10/29/2024

Features

G-API Service

- delete files in Temp folder on service start

g_api_ethernet:

- added flag:
"G_ETHERNET__TP__INIT__ISO13400__CMD_FLAG__DISABLE_ROUTING_ACTIVATION"

g_api_io:

- added commands:
x"G_Io_I2C_Master_Init"
x"G_Io_I2C_Master_Reset"
x"G_Io_I2C_Master_GetNumberOfChannels"
x"G_Io_I2C_Master_GetSupportedChannels"
x"G_Io_I2C_Master_DebounceTime_Get"
x"G_Io_I2C_Master_DebounceTime_Set"
x"G_Io_I2C_Master_BusSpeed_Get"
x"G_Io_I2C_Master_BusSpeed_Set"
"G_Io_I2C_Master_WriteRead"
"G_Io_I2C_Master_Write"
"G_Io_I2C_Master_Read"
"G_Io_I2C_Master_ChUsage_Get"

g_api_lvds:

- added commands:
"G_Lvds_Common_Data_Register_Read32"
"G_Lvds_Common_Data_Register_Write32"
"G_Lvds_Common_Data_Register_ReadModWrite32"
- added properties:
"G_LVDS__SER_DES__PROPERTY_ID__APIX_STATUS"
"G_LVDS__COMMON__DATA__PROPERTY_ID__I2C_MASTER_ACCESS"

Changes

Hardware Explorer

- message box for success or error on feature control dialog

Bugfix

G-API Service

- error while using different GCAR62xx device types

Hardware Explorer

- USB version 2.10 is now correct

g_api_ethernet:

- RxFifo response flags "CONTAINS_IP_ENDPOINT" overwrites "CONTAINS_TIMESTAMP"

Features

g_api:

- added "G_HOST_INTERFACE_TYPE__ETH4050"

g_api_io:

- added commands:
 - "G_Io_I2C_Slave_NotifyHost_WriteEnd_Enable"
 - "G_Io_I2C_Slave_NotifyHost_WriteEnd_Disable"
 - "G_Io_I2C_Slave_DebounceTime_Get"
 - "G_Io_I2C_Slave_DebounceTime_Set"
- added trigger source:
 - "G_IO__TRIGGER__SOURCE_TYPE__SYNC_EXT_IN"

g_api_net2run:

- added commands:
 - "G_Net2Run_PduMux3_ContainerTxPdu_Config"
 - "G_Net2Run_PduMux3_ContainedTxPdu_Config"
 - "G_Net2Run_PduMux3_ContainerRxPdu_Config"
 - "G_Net2Run_PduMux3_ContainedRxPdu_Config"

g_api_trace:

- added flag:
 - "G_TRACE__ADD_CHANNEL__CMD_FLAG__SET_INTERNAL_TIMEOUT"

Changes

Bugfix

Features

g_api_lvds:

- added properties:
 - "G_LVDS__SER_DES__PROPERTY_ID__ERRB_SER_DES_GPIO_INDEX"
 - "G_LVDS__SER_DES__PROPERTY_ID__ERRB_STATUS"
 - "G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__FRAME_TIME_IN_PS"
 - "G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__LINE_TIME_IN_PS"
- added media interface:
 - "G_LVDS__COMMON__SER_DES__ML86112"

g_api_trace:

- added commands:
 - "G_Trace_Pause"
 - "G_Trace_Resume"

Changes

g_api:

- added Header file "g_pcie_dma.h" for direct usage of PCIe DMA (please handle with care!)

g_api_lvds:

- increase maximum of io triggers in config xml

Bugfix

Hardware Explorer:

- use now the correct settings.xml file

g_api_lvds:

- RxTxLoop configuration if autostart is disabled
- G_HOST_INTERFACE_TYPE__USB4120 is now interpreted as a Grabber
- rename description of configuration error
- compare functionality is now available for DMA
- wrong multi function pin configuration is now correct again

g_api_trace:

- export to Pcap now involves the page file information

Version 2.2.10643_Release - 5/7/2024

Features

g_api_common:

- added transceiver type:
"G_COMMON__TRANSCEIVER_TYPE__ETHERNET__AETH_88Q2220_B0"

g_api_lvds:

- added media interfaces:
"LVDS_PARAM__SER_DES__MAX96878"
"LVDS_PARAM__SER_DES__MAX96880"
"LVDS_PARAM__SER_DES__MAX96737"
"LVDS_PARAM__SER_DES__MAX96760"
"LVDS_PARAM__SER_DES__VA7044"

Changes

Hardware Explorer:

- changed context menu and properties for devices without a firmware

G-API Service:

- optimized communication over USB for Serie 62

Bugfix

g_api_lvds:

-

Version 2.2.10612_Release - 3/22/2024

Features

g_api_io:

- added I2C analyzer commands:
"G_Io_I2C_A_Reset"
"G_Io_I2C_A_Init"
"G_Io_I2C_A_GetNumberOfChannels"
"G_Io_I2C_A_Monitor_Reset"
"G_Io_I2C_A_Monitor_Init"
"G_Io_I2C_A_Monitor_Start"
"G_Io_I2C_A_Monitor_Stop"
"G_Io_I2C_A_Monitor_Read"
- added UART TAR commands:
"G_Io_Uart_Tar_Reset"
"G_Io_Uart_Tar_Init"
"G_Io_Uart_Tar_TriggerFrame_Add"
"G_Io_Uart_Tar_TriggerFrame_Delete"
"G_Io_Uart_Tar_TriggerSkip_Add"
"G_Io_Uart_Tar_TriggerSkip_Delete"

"G_Io_Uart_Tar_Enable"
"G_Io_Uart_Tar_Disable"

- added I2C analyzer to trigger output type:
"G_IO__TRIGGER__OUTPUT_TYPE__I2C_A_SCL"
"G_IO__TRIGGER__OUTPUT_TYPE__I2C_A_SDA"

g_api_lvds:

- added I2C analyzer commands:
"G_Lvds_Mi_I2C_Uart_Switch_Set"
"G_Lvds_Mi_I2C_Uart_Switch_Get"
- added attribute to lvds config xml:
"i2cUartSwitch" to "MiMfpPinConfig"

g_api_trace:

- added flag:
"G_TRACE__ADD_CHANNEL__CMD_FLAG__SET_BUFFER_SIZE"

Changes

g_api_net2run:

- restricted length removed:
"G_Net2Run_Com_TxPdu_Signal_Write"
"G_Net2Run_Com_TxPdu_Write"

Hardware Explorer:

- remember expand status of devices for restarting or refreshing
- refresh interface availability after flashing firmware or bootloader

Bugfix

g_api_lvds:

- discarded first frame by grabbing over PCIe DMA

Version 2.2.10552_Release - 2/16/2024

Features

g_api:

- added commands:
"G_Resource_Monitor_Init"
"G_Resource_Monitor_GetText"
"G_Resource_Monitor_Reset"

g_api_ethernet:

- added commands:
"G_Ethernet_Phy_Property_SetById"
"G_Ethernet_Phy_Property_GetById"

g_api_lvds:

- added media interface:
"Maxim MAX96792A"

- samples:

- added samples:
"Ethernet_10BaseT1S_PhyLink"
"Ethernet_Monitor"
"Ethernet_Trace_Self"
"Trace_ASC"

Hardware Explorer:

- added status of G-API service in status bar

Changes

g_api:

- each monitor instance gets its own lock

g_api_trace:

- added process id to standard file name

Version 2.2.10478_Release - 12/18/2023

Features

g_api_traces:

- added flag:
"G_TRACE__EXPORT_TO_PCAP__CMD_FLAG__USE_MONITORED_FILE"

Bugfix

- several minor bugfixes

Hardware Explorer:

- now correct device index

Version 2.2.10391_Release - 10/16/2023

Features

g_api_ethernet:

- added commands:
"G_Ethernet_Dlt_SendBytes"
"G_Ethernet_Dlt_SendMessage"
- added properties:
"G_ETHERNET__DLT__PROPERTY_ID__INTERPRET_AS_GDCN"
"G_ETHERNET__DLT__PROPERTY_ID__USE_GDCN_MARKER"

g_api_io:

- added commands:
"G_Io_I2C_Slave_NotifyHost_ReadEnd_Enable"
"G_Io_I2C_Slave_NotifyHost_ReadEnd_Disable"

Version 2.2.10337_Release - 8/31/2023

Features

g_api_ethernet:

- added commands:
"G_Ethernet_RxFifo_GetConfig"
"G_Ethernet_RxFifo_GetAll"
"G_Ethernet_TxFifo_GetAll"

g_api_trace:

- added monitoring on IO:
 - SPI
 - Uart

Bugfix

Hardware Explorer:

- wrong ethernet feature Info for 6242

Features

g_api_common:

- added transceiver types:
 - "G_COMMON__TRANSCEIVER_TYPE__ETHERNET__AETH_88Q2220_A0"
 - "G_COMMON__TRANSCEIVER_TYPE__ETHERNET__AETH_88Q2220_B1"
 - "G_COMMON__TRANSCEIVER_TYPE__ETHERNET__AETH_88Q2221_A0"
 - "G_COMMON__TRANSCEIVER_TYPE__ETHERNET__AETH_88Q2221_B1"
 - "G_COMMON__TRANSCEIVER_TYPE__ETHERNET__10BASE_T1S_LAN8670"

g_api_flexray:

- added command:
 - "G_FlexRay_FrameTrigger_HeaderCrcTxMode_Set"

g_api_net2run:

- added check sum:
 - "G_NET2RUN__CHECKSUM_MODE__AUTOSAR_E2E_P02"

Changes

g_api_ethernet:

- added "VEthDevId" to "G_Ethernet_Ping_Start_Cmd_t"

Hardware Explorer:

- added FeatureInfo TLS under software
- added FeatureInfo for application

Bugfix

g_api_ethernet:

- missing response flag G_ETHERNET__TLS__CONFIG__GET__RSP__FLAG__USE_CLIENT_AUTHENTICATION

g_api_lvds:

- wrong FPGA version for "G_LVDS__FRAME_GENERATOR__PROPERTY_ID__FPGA_VERSION" in the forth place

G-API Service:

- crashed service while resetting GCAR6222

Features

g_api:

- added commands:
 - "G_SetServerProperty"
 - "G_GetServerProperty"

g_api_ethernet:

- added flag:
 - "G_ETHERNET__TX_FIFO__GET_STATE__CMD_FLAG__GET_NUM_OF_FREE_ENTRIES"
- added TLS commands:
 - "G_Ethernet_Tls_CryptoKey_Create"
 - "G_Ethernet_Tls_CryptoKey_Delete"
 - "G_Ethernet_Tls_CryptoKey_Get"
 - "G_Ethernet_Tls_CryptoKey_GetAll"
 - "G_Ethernet_Tls_CryptoCert_Create"
 - "G_Ethernet_Tls_CryptoCert_Delete"
 - "G_Ethernet_Tls_CryptoCert_Get"
 - "G_Ethernet_Tls_CryptoCert_GetAll"
 - "G_Ethernet_Tls_CryptoCertTrustStore_Create"
 - "G_Ethernet_Tls_CryptoCertTrustStore_Delete"
 - "G_Ethernet_Tls_CryptoCertTrustStore_GetAll"
 - "G_Ethernet_Tls_CryptoCertTrustStore_AddCert"
 - "G_Ethernet_Tls_CryptoCertTrustStore_RemoveCert"

"G_Ethernet_Tls_CryptoCertTrustStore_GetAllCerts"
"G_Ethernet_Tls_Config_Create"
"G_Ethernet_Tls_Config_Delete"
"G_Ethernet_Tls_Config_Get"
"G_Ethernet_Tls_Config_GetAll"

g_api_flexray:

- added command:
"G_FlexRay_Node_GetState2"

g_api_lvds:

- added command:
"G_Lvds_FrameGenerator_FrameRate_Set"

-added properties:

"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__PCIE_DMA__DMA_CHANNEL"
"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__PCIE_DMA__BUFFER_SIZE"

Changes

- improved thread safety in client and server

Bugfix

g_api_ethernet:

- monitor using API buffer is further monitoring in the event of a buffer overflow

g_api_io:

- trigger output type is now correct

Hardware Explorer:

- show MII available for LVDS is now correct

Version 2.2.9872_Release - 2/3/2023

Features

g_api_common.dll:

- added commands:
"G_Lin_FrameResponses_Checksum_Define_Xor"
"G_Lin_FrameResponses_Checksum_Define_GeneralCrcWithUserBytes"
"G_Lin_FrameResponses_Checksum_Define_Custom12"
"G_Lin_FrameResponses_Checksum_Delete"

g_api_io.dll:

- added commands:
"G_Io_I2C_Slave_Init"
"G_Io_I2C_Slave_Reset"
"G_Io_I2C_Slave_MemoryRead"
"G_Io_I2C_Slave_MemoryWrite"
"G_Io_I2C_Slave_Mapping_Get"
"G_Io_I2C_Slave_Mapping_Set"
"G_Io_I2C_Slave_GetNumberOfChannels"
"G_Io_I2C_Slave_GetSupportedChannels"
"G_Io_Trigger_Mappings_Get"

- added trigger output type:
"G_IO__TRIGGER__OUTPUT_TYPE__I2C_S_SCL"
"G_IO__TRIGGER__OUTPUT_TYPE__I2C_S_SDA"

- added trigger source type:
"G_IO__TRIGGER__SOURCE_TYPE__I2C_S_SDA"

g_api_lvds.dll:

- added flag:
"G_LVDS__FRAME_GENERATOR__RX_TX_LOOP__CONFIG__CMD_FLAG__NO_AUTO_START"

Changes

Hardware Explorer:

- resize column of properties
- show geographical address for PXI(e) devices connected via ethernet

g_api_io.dll:

- added reserved bytes to "G_Io_Spi_A_Monitor_Item_t" for alignment

g_api_lvds.dll:

- added RxTxLoop to config file
- added attribute "autoStart" to config file
- added possibility to include mask byte to I2C file

Bugfix

Hardware Explorer:

- do not show temperature timestamp for devices which does not support temperature
- get correct ethernet parameters for GPXIe6222 and GPXIe6281

Version 2.2.9799_Release - 1/19/2023

Features

Hardware Explorer:

-

g_api_common.dll:

- added commands:
 - "G_Lin_FrameResponses_Checksum_Define_Xor"
 - "G_Lin_FrameResponses_Checksum_Define_GeneralCrcWithUserBytes"
 - "G_Lin_FrameResponses_Checksum_Define_Custom12"
 - "G_Lin_FrameResponses_Checksum_Delete"

g_api_lvds.dll:

- added commands:

- added properties:

Changes

Hardware Explorer:

- resize column of properties
- show geographical address for PXI(e) devices connected via ethernet

Bugfix

Hardware Explorer:

- do not show temperature timestamp for devices which does not support temperature
- get correct ethernet parameters for GPXIe6222 and GPXIe6281

Version 2.2.9740_Release - 12/16/2022

Features

Hardware Explorer:

- added "geographical address" to properties of PXI(e) devices

g_api_common.dll:

- added commands:
 - "G_Common_EA_DetachActionFromEvent"
 - "G_Common_EA_NotifyHost_AddCallback"
 - "G_Common_EA_NotifyHost_RemoveCallback"
 - "G_Common_GetPxiGeographicalAddress"

g_api_lvds.dll:

- added commands:
 - "G_Lvds_FrameGrabber_OpenLdi_Property_SetById"
 - "G_Lvds_FrameGrabber_OpenLdi_Property_GetById"
 - "G_Lvds_Generator_OpenLdi_Property_SetById"
 - "G_Lvds_Generator_OpenLdi_Property_GetById"
 - "G_Lvds_FrameGenerator_RxTxLoop_Config"
- added properties:
 - "G_LVDS__FRAME_GRABBER__CAPTURE_PROPERTY_ID__DEVICE_FB_FILL_ALL"

 - "G_LVDS__FRAME_GENERATOR__PROPERTY_ID__TRANSFER_MODE"
 - "G_LVDS__FRAME_GENERATOR__PROPERTY_ID__RX_TX_LOOP__RX_LVDS_INSTANCE_ID"
 - "G_LVDS__FRAME_GENERATOR__PROPERTY_ID__RX_TX_LOOP__RX_LVDS_CHANNEL_ID"
 - "G_LVDS__FRAME_GENERATOR__PROPERTY_ID__DEVICE_FB_COUNT"

 - "G_LVDS__FRAME_GRABBER__OPEN_LDI__PROPERTY_ID__MAP_SEL"
 - "G_LVDS__FRAME_GRABBER__OPEN_LDI__PROPERTY_ID__DE_POL"
 - "G_LVDS__FRAME_GRABBER__OPEN_LDI__PROPERTY_ID__HSYNC_POL"
 - "G_LVDS__FRAME_GRABBER__OPEN_LDI__PROPERTY_ID__VSYNC_POL"
 - "G_LVDS__FRAME_GRABBER__OPEN_LDI__PROPERTY_ID__LOCK"
 - "G_LVDS__FRAME_GRABBER__OPEN_LDI__PROPERTY_ID__GE_DT"
 - "G_LVDS__FRAME_GRABBER__OPEN_LDI__PROPERTY_ID__MODE"
 - "G_LVDS__FRAME_GRABBER__OPEN_LDI__PROPERTY_ID__PLL_EN"

 - "G_LVDS__GENERATOR__OPEN_LDI__PROPERTY_ID__MAP_SEL"
 - "G_LVDS__GENERATOR__OPEN_LDI__PROPERTY_ID__DE_POL"
 - "G_LVDS__GENERATOR__OPEN_LDI__PROPERTY_ID__HSYNC_POL"
 - "G_LVDS__GENERATOR__OPEN_LDI__PROPERTY_ID__VSYNC_POL"
 - "G_LVDS__GENERATOR__OPEN_LDI__PROPERTY_ID__LOOP"
 - "G_LVDS__GENERATOR__OPEN_LDI__PROPERTY_ID__GE_DT"
 - "G_LVDS__GENERATOR__OPEN_LDI__PROPERTY_ID__MODE"

Changes

g_api.dll

- increased MAX_NUMBER_OF_CONTROL_DATA_BYTES from 8 to 16

Bugfix

g_api_trace.dll:

- removed differentiation between CAN and CAN FD frames in ASC Export

Version 2.2.9681_Release - 10/28/2022

- removed old Hardware Explorer:

Features

- added device ETH3218

Hardware Explorer:

- added interface transceiver type
- properties and property groups are now copyable

g_api_common.dll:

- added commands
 - "G_Common_GetTransceiverTypeDescription"
- added flags:
 - "G_COMMON__XCP__CMD__DOWNLOAD__CMD_FLAG__NONE"
 - "G_COMMON__XCP__CMD__DOWNLOAD__CMD_FLAG__SKIP_PROGRAM_PREPARE"

"G_COMMON__XCP__CMD__PROGRAM__CMD_FLAG__SKIP_PROGRAM_PREPARE"

g_api_lvds.dll:

- added properties
"G_LVDS__GENERATOR__MIPI_CSI2__PROPERTY_ID__LINE_CMD_EN"
"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__FPGA_VERSION"

g_api_net2run.dll:

- added flag
"G_NET2RUN__ETH_TIME_SYNC__SOCKET__FLAG__USE_HW_TIMESTAMP"

Changes

- set INVALID_PORT_HANDLE from 0xff to 0xffffffff
- set maximum number of port handles for one client from 255 to 1023
- removed "FpgaVersionExt" from "G_Lvds_FrameGenerator_GetHardwareInfo2_Rsp_t" for backward compatibility

Bugfix

- using DMA when different device types are connected

Hardware Explorer:

- error invalid interface if CAN STM interface is involved

g_api_lvds.dll:

- "G_Lvds_Common_Config_Get" could not set default pixel mode to older firmware

Documentation

- added maximum number of port handles for one client
- added maximum number of port handles for one device
- added maximum number of devices

Version 2.2.9580_Release - 8/30/2022

Features

Hardware Explorer:

- change default usage of DMA channels

g_api.dll:

- added commands
"G_GetHostInterfaceType"
"G_GetInterfaceType"

g_api_lvds.dll:

- added commands
"G_Lvds_Generator_MipiDsi_Property_SetById"
"G_Lvds_Generator_MipiDsi_Property_GetById"
"G_Lvds_Generator_MipiCsi2_Property_SetById"
"G_Lvds_Generator_MipiCsi2_Property_GetById"
"G_Lvds_FrameGrabber_MipiDsi_Property_SetById"
"G_Lvds_FrameGrabber_MipiDsi_Property_GetById"

g_api_trace.dll:

- added flag
"G_TRACE__ALLOCATE__CMD_FLAG__USE_MULTIPLE_DEVICES"

Changes

- Common:
 - added Net2Run features to 6141, 6241 and 6242

g_api_trace.dll:

- changed internal sorting algorithm

Version 2.2.9519_Release - 7/25/2022

Features

Hardware Explorer:

- Flash Firmware on Linux

- IO:

- added Trigger Source types
 - "G_IO__TRIGGER__SOURCE_TYPE__CLK_10_MHZ"
 - "G_IO__TRIGGER__SOURCE_TYPE__I2C_M_SCL"
 - "G_IO__TRIGGER__SOURCE_TYPE__I2C_M_SDA"

- added Trigger Output types

- "G_IO__TRIGGER__OUTPUT_TYPE__I2C_M_SCL"
- "G_IO__TRIGGER__OUTPUT_TYPE__I2C_M_SDA"

- LVDS:

- added commands:

- "G_Lvds_FrameGenerator_LineTime_Get"
- "G_Lvds_FrameGenerator_LineTime_Set"
- "G_Lvds_FrameGenerator_FrameRate_Get"

- Net2Run:

- added parameter "SoSndBufSize" to "G_Net2Run_SoAd_SoConGroup_Config_Cmd_t"

- Trace:

- added Export to MDF for Linux

Bugfix

Hardware Explorer:

- missing file "g_settings.xml"
- missing support for PXIe devices

Version 2.2.9494_Release - 6/24/2022

- new Hardware Explorer: (change version 2.1 to 2.2)

supported devices

- added ETH4008
- added serializer MAX96793

Features

G-API Service

- Plug and Play for PCIe/PXIe devices

g_api_ethernet.dll:

- added commands

- "G_Ethernet_Node_Vlan_Property_SetById"
- "G_Ethernet_Node_Vlan_Property_GetById"

g_api_lvds.dll:

- added commands

- "G_Lvds_FrameGrabber_MipiCsi2_Property_GetById"
- "G_Lvds_FrameGrabber_MipiCsi2_Property_SetById"

- added property to "G_Lvds_SerDes_PropertyId_t"

- "G_LVDS__SER_DES__PROPERTY_ID__DES_LOCK_POL"

Changes

G-API Service

- changed handling of DMA channels

Hardware Explorer:

- The 'new' Hardware Explorer: is now the standard for installation
- The 'old' Hardware Explorer: could be installed too (until the end of the year)

Documentation

- added missing functions:

```
"G_Common_Ethernet_SubNetMask_Set"  
"G_Common_Ethernet_SubNetMask_Get"  
"G_Common_Ethernet_DefaultGateway_Set"  
"G_Common_Ethernet_DefaultGateway_Get"  
"G_Ethernet_Node_Mtu_Set"  
"G_Ethernet_Node_Mtu_Get"  
"G_Ethernet_Node_Vlan_GetAll"  
"G_Net2Run_InitInterface"  
"G_Net2Run_SignalBlock_Buffer_Reset"
```

Version 2.1.9429_Release - 5/27/2022

Features

- added sample code "Ethernet_Iperf2"

g_api_common.dll:

- added transceiver types

```
"G_COMMON__TRANSCEIVER_TYPE__ETHERNET__AETH_88Q222x"  
"G_COMMON__TRANSCEIVER_TYPE__ADIO_6282__TYPE_1__5V_DO"  
"G_COMMON__TRANSCEIVER_TYPE__ADIO_6282__TYPE_2__HIGH_V_DO"
```

g_api_flexray.dll:

- added command:

```
"G_FlexRay_Monitor_Config2"
```

- added property:

```
"G_FLEXRAY__PROPERTY_ID__COUNTER__RX_FIFO_OVERRUN"
```

g_api_fs.dll:

- added commands:

```
"G_FS_Directory_Read"  
"G_FS_Directory_Save"
```

- added flag

```
"G_FS__DIRECTORY__DELETE__CMD_FLAG__DELETE_CONTENT"
```

g_api_ethernet.dll:

- added flags

```
"G_ETHERNET__TP__INIT__DO_SO_AD__CMD_FLAG__LOCAL_ADDR__PHYS__RX_SIDE"  
"G_ETHERNET__TP__INIT__DO_SO_AD__CMD_FLAG__REMOTE_ADDR__PHYS__RX_SIDE"  
"G_ETHERNET__TP__INIT__DO_SO_AD__CMD_FLAG__LOCAL_ADDR__FUNCT__RX_SIDE"  
"G_ETHERNET__TP__INIT__DO_SO_AD__CMD_FLAG__REMOTE_ADDR__FUNCT__RX_SIDE"
```

g_api_io.dll:

- added types

```
"G_IO__TRIGGER__TIMESTAMP_CLOCK_SOURCE__EXTERNAL_10_MHZ"  
"G_IO__TRIGGER__TIMESTAMP_CLOCK_SOURCE__EXTERNAL_100_MHZ"
```

g_api_lvds.dll:

- added flag "G_LVDS__FRAME_GRABBER__PCIE_DMA__CONFIG__CMD_FLAG__USE_NUM_OF_BUF"

- added pixel mode "G_LVDS__FRAME_GENERATOR__PIXEL_MODE__RAW8"

- added pixel buffer type to "G_Lvds_PattGen_Init_Cmd_t"

- added properties:
 - "G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__H_SIZE"
 - "G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__H_SIZE_MIN"
 - "G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__H_SIZE_MAX"
 - "G_LVDS__PATT_GEN__PROPERTY_ID__PIX_BUF_OUTPUT"
 - "G_LVDS__PATT_GEN__PROPERTY_ID__PIX_BUF_COUNT"

Changes

G-API Service

- changed handling of USB devices for speeding up

Hardware Explorer:

- Beta:
 - added dialog "supported devices"
 - added dialog "About"
 - added menu entry "Remove disconnected devices"
 - added version number to splash screen and main window title
 - remember last flash file path
 - suppress console window in the background

g_api_net2run.dll:

- changed selector bit size possibility from 8 to 16 in commands:
 - "G_Net2Run_PduMux_MuxedTxPdu_Config"
 - "G_Net2Run_PduMux_DemuxedTxPdu_Config"
 - "G_Net2Run_PduMux_DemuxedRxPdu_Config"

g_api_lvds.dll:

- G_Lvds_FrameGenerator_GetHardwareInfo2:
 - added extended FPGA version
 - if Generator is not configured, it will still return serdes type and FPGA version

Bugfix

Hardware Explorer:

- missing LVDS interface icon if device is connected but interface is not available

g_api_lvds.dll:

- "G_Lvds_FrameGrabber_PcieDma_Config" didn't work correct with user defined number of buffers

Documentation

- added missing commands:
 - "G_ReleaseAllLocks"
 - "G_SetResponseTimeout"
 - "G_GetResponseTimeout"
 - "G_CheckPortHandle"
 - "G_GetHostCommTypeDescription"
 - "G_GetInterfaceTypeDescription"
 - "G_Lvds_FrameGrabber_PcieDma_Reset"
 - "G_Lvds_FrameGrabber_PcieDma_Config"
 - "G_Lvds_FrameGrabber_PcieDma_WriteLimit_Set"
 - "G_Lvds_FrameGrabber_PcieDma_WritePosition_Get"

Version 2.1.9349_Release - 5/4/2022

Features

g_api_common.dll

- added transceiver type:
 - "G_COMMON__TRANSCEIVER_TYPE__CAN__TJA1463AT"

g_api_ethernet.dll

- added commands:
 - "G_Ethernet_MiiMux_IsSourceAvailable"
 - "G_Ethernet_MiiMux_IsTargetAvailable"

"G_Ethernet_Monitor_Config2"
"G_Ethernet_Node_ArpEntry_Add"
"G_Ethernet_Node_ArpEntry_Delete"
"G_Ethernet_Node_ArpEntry_GetAll"
"G_Ethernet_Node_NdpEntry_Add"
"G_Ethernet_Node_NdpEntry_Delete"
"G_Ethernet_Node_NdpEntry_GetAll"
"G_Ethernet_Node_TcpOption_GetById"
"G_Ethernet_Node_TcpOption_SetById"
"G_Ethernet_TxFifo_GetConfig"

g_api_lvds.dll:

- Compare frames with "G_Lvds_FrameGrabber_Compare" for 6222
- added commands:
 - "G_Lvds_FrameGrabber_GetCompareArea"
 - "G_Lvds_Mi_Property_GetById"
 - "G_Lvds_Mi_Property_SetById"
- added properties to "G_Lvds_SerDes_PropertyId_t":
 - "G_LVDS__SER_DES__PROPERTY_ID__DES_LOCK_DISABLE"
 - "G_LVDS__SER_DES__PROPERTY_ID__APIX_BW_BST_CFG"
 - "G_LVDS__SER_DES__PROPERTY_ID__APIX_BW_BST_ACTIVE"
- added properties to "G_Lvds_FrameGrabber_CapturePropertyId_t":
 - "G_LVDS__FRAME_GRABBER__CAPTURE_PROPERTY_ID__DISCARDED_FRAMES_COUNTER"
 - "G_LVDS__FRAME_GRABBER__CAPTURE_PROPERTY_ID__IS_INITIALIZED"
 - "G_LVDS__FRAME_GRABBER__CAPTURE_PROPERTY_ID__IS_BUFFERING"
- added flag "G_LVDS__FRAME_GRABBER__CAPT_2_BUF_2_CMD_FLAG__DMA_GET_NEWEST_FRAME"

g_api_net2run.dll:

- added flag:
 - "G_NET2RUN__PDU_ROUTER__ROUTING_PATH__CONFIG__FLAG__USE_FIFO"

Changes

g_api_lvds.dll:

- several commands are modified for series 62 compare operations:
 - "G_Lvds_SerDes_Reset" use APIX bandwidth bootstrap pin if necessary
 - "G_Lvds_FrameGrabber_CaptureToBuffer2" with DMA returns now the oldest frame in the buffer
 - "G_Lvds_Common_Config_Get" and "G_Lvds_Common_Config_Set" return now 0x02060019 if some error occurred

Bugfix

g_api_lvds.dll:

- config:
 - get pattern generator properties (wrong number of frames and data type)
 - frame generator: missing channel information

Installer:

- Linux: fixed issue with root rights

Version 2.1.9290_Release - 3/29/2022

Features

Hardware Explorer:

- new Hardware Explorer: in Beta variant for first testing

g_api_io.dll:

- added flags:
 - "G_IO__SENT__TRANSMITTER__INIT__CMD_FLAG__DN4_AND_DN5_AS_COUNTER"
 - "G_IO__SENT__TRANSMITTER__INIT__CMD_FLAG__DN6_AS_INV_COPY_OF_DN1"

g_api_lvds.dll:

- virtual DMA channels

Changes

Installer:

- 3rd party:
 - update Microsoft VC Redistributable to version 14.31.31103

Bugfix

g_api_net2run.dll:

- missing status interpretation in "G_Net2Run_TimeSyncMgr_GetStatus", added:
 - "G_NET2RUN__TIME_SYNC_MGR__STATUS__TIMEOUT"
 - "G_NET2RUN__TIME_SYNC_MGR__STATUS__SYNC_TO_GATEWAY"
 - "G_NET2RUN__TIME_SYNC_MGR__STATUS__GLOBAL_TIME_BASE"
 - "G_NET2RUN__TIME_SYNC_MGR__STATUS__TIMELEAP_FUTURE"
 - "G_NET2RUN__TIME_SYNC_MGR__STATUS__TIMELEAP_PAST"

Installer:

- fixed issue with virtual storing of g_devices.xml

Version 2.1.9208_Release - 2/18/2022

Features

g_api_can.dll:

- added types:
 - "G_Can_EventType_t"
 - "G_Can_ActionType_t"

g_api_common.dll:

- "G_Common_EA_InitEvent" supports
 - "G_Can_EventType_t"
 - "G_Lin_EventType_t"
- "G_Common_EA_InitAction" supports
 - "G_Can_ActionType_t"
 - "G_Lin_ActionType_t"

g_api_can.dll:

- added command:
 - "G_Diag_GetAsyncResponse"

g_api_ethernet.dll:

- added commands:
 - "G_Ethernet_Tp_ResetChannel"
 - "G_Ethernet_TxFifo_GetRemoteAddress"
 - "G_Ethernet_TxFifo_SetRemoteAddress"
 - "G_Ethernet_TxTrace_Allocate"
 - "G_Ethernet_TxTrace_Free"
 - "G_Ethernet_TxTrace_Download"
 - "G_Ethernet_TxTrace_Play"
 - "G_Ethernet_TxTrace_Property_GetById"
 - "G_Ethernet_TxTrace_Property_SetById"
- added flags to command "G_Ethernet_TxFifo_GetState"
 - "G_ETHERNET__TX_FIFO__GET_STATE__CMD_FLAG__GET_LAST_ERROR_CODE"
 - "G_ETHERNET__TX_FIFO__GET_STATE__CMD_FLAG__RESET_LAST_ERROR_CODE"
- added flag to command "G_Ethernet_RxFifo_Config"
 - "G_ETHERNET__RX_FIFO__CONFIG__CMD_FLAG__INCLUDE_IP_ENDPOINT"

g_api_lin.dll:

- added types:
 - "G_Lin_EventType_t"
 - "G_Lin_ActionType_t"

- new sample:
 - "FeatureCode" to get/set lock code to enable features

Bugfix

g_api_can.dll

- "G_Can_CyclicMsgs_ChangeMsgDataAndMsgCount" for CAN FD

g_api_trace.dll

- missing differentiation between CAN and CAN FD entries in ASC Export

Version 2.1.9174_Release - 1/27/2022

Features

- added sample "Diagnostics_UDS_basedOn_ISO15765"

g_api_ethernet.dll

- added flags:
 - "G_ETHERNET__MONITOR__ITEM__FRAME__FLAG__MAC_TX_ERROR"
 - "G_ETHERNET__MONITOR__ITEM__FRAME__FLAG__MAC_TX_ERROR"

g_api_lvds.dll

- config file
 - frame generator channel config

Changes

- trace binaries are now located in "C:\ProgramData\GOEPEL electronic\G-API\Temp" for windows

Bugfix

g_api_lvds.dll

- config file
 - reading comments in APIX3 registers

g_api_trace.dll

- Export to PCAPNG: wrong 'block total length' in 'interface description block'

Documentation

- adding missing commands:
 - "G_Sequence_Replay_AddDelay2"
 - "G_Sequence_Replay_DeleteFile"
 - "G_Sequence_Replay_AutoPlayByInput_Config_Set"
 - "G_Sequence_Replay_AutoPlayByInput_Config_Get"
 - "G_Sequence_Replay_AutoPlayByInput_FileName_Set"
 - "G_Sequence_Replay_AutoPlayByInput_FileName_Get"

Version 2.1.9140_Release - 12/16/2021

Features

g_api_lvds.dll

- added serdes
 - "LVDS_PARAM__SER_DES__DS90UB971"
 - "LVDS_PARAM__SER_DES__DS90UB981"
 - "LVDS_PARAM__SER_DES__DS90UB9702"
 - "G_LVDS__COMMON__SER_DES__NONE__MIPI_CS12_RX"
 - "G_LVDS__COMMON__SER_DES__NONE__MIPI_CS12_TX"

- "G_LVDS__COMMON__SER_DES__NONE__MIPI_DSI_RX"
- "G_LVDS__COMMON__SER_DES__NONE__MIPI_DSI_TX"
- "G_LVDS__COMMON__SER_DES__NONE__OPEN_LDI_RX"
- "G_LVDS__COMMON__SER_DES__NONE__OPEN_LDI_TX"

- added functions
 - "G_Lvds_FrameGenerator_PropertyGetById"
 - "G_Lvds_FrameGenerator_PropertySetById"

- added property to "G_Lvds_FrameGrabber_PropertyId_t"
 - "G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__MODE"

- added properties to "G_Lvds_Generator_PropertyId_t"
 - "G_LVDS__GENERATOR__PROPERTY_ID__MIPI_CSI2_DT"
 - "G_LVDS__GENERATOR__PROPERTY_ID__MIPI_DSI_DT"
 - "G_LVDS__GENERATOR__PROPERTY_ID__OPEN_LDI__MODE"

- config file
 - added Open LDI Mode to Grabber and Generator

- added "PixelMode" to "G_Lvds_FrameGenerator_Config_Cmd_t"

Changes

g_api_diag.dll

- increasing polling interval for "G_Diag_GetResponse" to save resources

Bugfix

- missing files "g_xml.h" and "g_xml.lib" in installation path are now available again

g_api_lvds.dll

- config file
 - set frame generator now disables the channel request before configuring

Version 2.1.9105_Release - 11/15/2021

Features

g_api_can.dll

- added functions:
 - "G_Can_Node_Property_SetById"
 - "G_Can_Node_Property_GetById"

g_api_common.dll

- added events:
 - "G_COMMON__EA__EVENT_TYPE__BUS__ACTIVITY"
 - "G_COMMON__EA__EVENT_TYPE__BUS__NO_ACTIVITY"
 - "G_COMMON__EA__EVENT_TYPE__ETHERNET__TX_TRACE__LOW_MARK"
 - "G_COMMON__EA__EVENT_TYPE__SO_AD__SO_CON_STATE__CHGD"

- added action:
 - "G_COMMON__EA__ACTION_TYPE__NOTIFY_HOST"

g_api_ethernet.dll

- added functions:
 - "G_Ethernet_Node_Property_SetById"
 - "G_Ethernet_Node_Property_GetById"
 - "G_Ethernet_Tools_Iperf2_Config"
 - "G_Ethernet_Tools_Iperf2_Reset"
 - "G_Ethernet_Tools_Iperf2_GetState"
 - "G_Ethernet_Tools_Iperf2_GetResult"

- added flags to "G_Ethernet_RxFifo_Config"
 - "G_ETHERNET__RX_FIFO__CONFIG__CMD_FLAG__PROMISCUOUS_MODE"
 - "G_ETHERNET__RX_FIFO__CONFIG__CMD_FLAG__USE_TIMESTAMP"

g_api_io.dll

- added functions:
 - "G_Io_Inputs_Analog_Range_Get"
 - "G_Io_Inputs_Analog_Range_Set"
 - "G_Io_Outputs_Analog_Range_Get"
 - "G_Io_Outputs_Analog_Range_Set"

g_api_lvds.dll

- added functions to get more details about the configuration errors
 - "G_Lvds_Common_Config_GetNumberOfErrors"
 - "G_Lvds_Common_Config_GetErrors"

g_api_net2run.dll

- added function:
 - "G_Net2Run_SoAd_Pdu_Config"

- samples

- new sample "Ethernet_PTP_timeSync"

Changes

g_api_lvds.dll

- behaviour of the configuration in
 - "G_Lvds_Common_Config_Set"
 - "G_Lvds_Common_Config_Get"
- commands try to do all configuration steps
- errors could be extract by the new function "G_Lvds_Common_Config_GetErrors"

g_api_net2run.dll

- added parameter "PduDataMaxLength" and its flag to the functions
 - "G_Net2Run_SecOc_RxPduProcessing"
 - "G_Net2Run_SecOc_TxPduProcessing"
- added the following parameters and their flags to the function:
 - "G_Net2Run_SoAd_SoConGroup_Config"
 - "TcpMss"
 - "SoRcvBufSize"

Hardware Explorer:

- temperature update of the device could be triggered by a button in the toolbar
- the update every 5 seconds could be controlled only in the general settings

- VersionHistory.pdf in startmenu

- relocate the file "g_device.xml" to the ProgramData Folder

Bugfix

Hardware Explorer:

- detection of GCAR devices 6281 and 6223 over USB
- several missing feature infos

g_api_trace.dll

- multiple interfaces in one trace in a long run resulted in a delay

Version 2.1.9044_Release - 10/7/2021

Features

g_api_lvds.dll

- added properties to "Lvds_Param_Gen_PropertyId_t":
 - "G_LVDS__GENERATOR__PROPERTY_ID__OPEN_LDI__GE_DT"
 - "G_LVDS__GENERATOR__PROPERTY_ID__MIPI_CSI2__CFG_NUM_LANES"
 - "G_LVDS__GENERATOR__PROPERTY_ID__MIPI_CSI2__CFG_CONTINUOUS_HS_CLK"
 - "G_LVDS__GENERATOR__PROPERTY_ID__MIPI_CSI2__CFG_T_PRE"
 - "G_LVDS__GENERATOR__PROPERTY_ID__MIPI_CSI2__CFG_T_POST"
 - "G_LVDS__GENERATOR__PROPERTY_ID__MIPI_CSI2__CFG_TX_GAP"
 - "G_LVDS__GENERATOR__PROPERTY_ID__MIPI_CSI2__CFG_TWAKEUP"

- "G_LVDS_GENERATOR_PROPERTY_ID_IF_AUTO_RE_SYNC_EN"
- "G_LVDS_GENERATOR_PROPERTY_ID_CH_GEN_EN_REQ"
- "G_LVDS_GENERATOR_PROPERTY_ID_CH_GEN_EN_STATE"
- "G_LVDS_GENERATOR_PROPERTY_ID_CH_FRAME_COUNT"
- "G_LVDS_GENERATOR_PROPERTY_ID_CH_FRAME_COUNTER"
- "G_LVDS_GENERATOR_PROPERTY_ID_CH_FRAME_COUNTER_2"
- added Mipi Dsi Loop functions
 - "G_Lvds_Generator_MipiDsi_Loop_ConfigSet"
 - "G_Lvds_Generator_MipiDsi_Loop_ConfigGet"
 - "G_Lvds_Generator_MipiDsi_Loop_Reset"
 - "G_Lvds_Generator_MipiDsi_Loop_Start"
 - "G_Lvds_Generator_MipiDsi_Loop_Stop"
 - "G_Lvds_Generator_MipiDsi_Loop_ScanDataGet"
 - "G_Lvds_Generator_MipiDsi_Loop_ScanDataReset"
- added frame generator functions for device 6222:
 - "G_Lvds_FrameGenerator_Reset"
 - "G_Lvds_FrameGenerator_Config"
 - "G_Lvds_FrameGenerator_Init"
 - "G_Lvds_FrameGenerator_DeInit"
 - "G_Lvds_FrameGenerator_Start"
 - "G_Lvds_FrameGenerator_Stop"

g_api_net2run.dll

- added time sync over ethernet functions
 - G_Net2Run_EthIf_Init
 - G_Net2Run_EthIf_DeInit
 - G_Net2Run_EthTimeSync_Config_Socket
 - G_Net2Run_EthTimeSync_Config_Master
 - G_Net2Run_EthTimeSync_Config_Slave
- added function
 - G_Net2Run_EthIf_MacAddr_Set

Hardware Explorer:

- added feature code for
 - Net2Run time sync

Changes

- linux
 - one installation file for all distros (without drivers)
 - an additional file for driver installation (version 1.8)

g_api_lvds.dll

- "G_Lvds_Common_Data_SpiTransfer": increased maximum of Tx and Rx bytes for Video Dragon 2 (from 8 to 16)
- "G_Lvds_Common_Config_Set": frame generator for device 6222

Bugfix

G-API Service

- crashed, when an USB device is connected, which isn't a Göpel electronics device

Documentation

g_api_net2run.dll

- add description about net2run

Version 2.1.8994_Release - 9/10/2021

Changes

g_api_lvds.dll

- clear separation between common generator and frame generator functions
 - "G_Lvds_FrameGenerator_Property_SetById" is deprecated, use "G_Lvds_Generator_Property_SetById" instead
 - "G_Lvds_FrameGenerator_Property_GetById" is deprecated, use "G_Lvds_Generator_Property_GetById" instead
 - "G_Lvds_FrameGenerator_MuxSource_Set" is deprecated, use "G_Lvds_Generator_MuxSource_Set" instead

- "G_Lvds_FrameGenerator_MuxSource_Get" is deprecated, use "G_Lvds_Generator_MuxSource_Get" instead
- increased buffer size from 4096 x 2160 with 24 Bit to 4096 x 2160 with 32 Bit

Version 2.1.8977_Release - 8/26/2021

Features

g_api_flexray.dll

- added property to "G_FlexRay_PropertyId_t":
 - "G_FLEXRAY__PROPERTY_ID__NUMBER_OF_MINI_SLOTS"
 - "G_FLEXRAY__PROPERTY_ID__NUMBER_OF_SLOTS"
 - "G_FLEXRAY__PROPERTY_ID__P_KEY_SLOT_ID"
 - "G_FLEXRAY__PROPERTY_ID__G_PAYLOAD_LENGTH_STATIC"
 - "G_FLEXRAY__PROPERTY_ID__P_PAYLOAD_LENGTH_DYN_MAX"
 - "G_FLEXRAY__PROPERTY_ID__G_MACRO_PER_CYCLE"
 - "G_FLEXRAY__PROPERTY_ID__SYNC_STATE"
 - "G_FLEXRAY__PROPERTY_ID__COUNTER_NO_TX_MSG_BUFFER_STATIC"
 - "G_FLEXRAY__PROPERTY_ID__COUNTER_NO_TX_MSG_BUFFER_DYNAMIC"
 - "G_FLEXRAY__PROPERTY_ID__NUMBER_OF_MSG_BUFFERS_RX_FIFO"

g_api_lvds.dll

- add flag "G_LVDS__APIX__ASHELL_MSG__READ_WRITE__CMD_FLAGS__56_BIT"

Bugfix

g_api_lvds.dll

- "G_Lvds_Common_Config_Set" now handles the Apix Mode correct again

g_api_lvds.so:

- Write_I2C_Registers_From_File for linux : handle empty lines

Version 2.1.8929_Release - 7/9/2021

Features

Hardware Explorer:

- show USB connection version for GCAR

g_api_lvds.dll

- added commands
 - "G_Lvds_PattGen_MipiCsi2_Property_SetById"
 - "G_Lvds_PattGen_MipiCsi2_Property_GetById"
- added node "LineCmdEnable" to the Pattern Generator in the Config File
- added property to "G_Lvds_Common_Data_PropertyId_t"
 - "G_LVDS__COMMON__DATA__PROPERTY_ID__I2C_MASTER_DELAY_TIME"
- added node "I2cMasterDelayTimeInNs" to the Data Properties in the Config File

Changes

G-API Service

- Debug mode
 - added debug options for filtering information - interface type
- USB 62 Driver
 - added error codes

Bugfix

- Linux
 - GetApiVersion returned wrong values

g_api_net2run.dll

- "G_Net2Run_Signal_Read" does not accept valueSize

Version 2.1.8910_Release - 6/29/2021

Features

supported devices

- "GPCIE6242"
- "GPXIE6242"

g_api.dll

- added command
"G_ReleaseAllLocks"
- added flag to "G_OpenInterface2_CmdFlags_t"
"G_OPEN_INTERFACE_2_CMD_FLAG_NO_LOCK"

g_api_common.dll

- added flag to "G_Common_OpenInterface2_CmdFlags_t"
"G_COMMON_OPEN_INTERFACE_2_CMD_FLAG_NO_LOCK"

g_api_can.dll

- added flag to "G_Can_InitInterface_CmdFlags_t"
"G_CAN_INIT_INTERFACE_CMD_FLAG_IGNORE_LOCK"

g_api_io.dll

- added flag to "G_Io_InitInterface_CmdFlags_t"
"G_IO_INIT_INTERFACE_CMD_FLAG_IGNORE_LOCK"

g_api_lin.dll

- added flag to "G_Lin_InitInterface_CmdFlags_t"
"G_LIN_INIT_INTERFACE_CMD_FLAG_IGNORE_LOCK"

g_api_lvds.dll

- added pixel modes to "G_Lvds_FrameGrabber_PixelMode_t"
"G_LVDS_FRAME_GRABBER_PIXEL_MODE_BGR888_24"
"G_LVDS_FRAME_GRABBER_PIXEL_MODE_RGB888_24"

Changes

G-API Service

- Debug mode
 - time of day in milliseconds instead time in milliseconds since server start
- added debug options for filtering information
- commands listed with a meaningful name instead of a pure number ("speaking server")

Hardware Explorer:

- 'Reset Device' restarts the firmware completely

Bugfix

G-API Service

- GCAR6222: Reset Device and Flash Firmware

g_api_lvds.dll

- LVDS Config file:
 - set pattern generator properties
 - problems with channel number > 2
 - close file handle, if an error occurs
 - read/write apix registers for page 8
 - set/get frame grabber polarities for Open Ldi

Documentation

- added missing commands:
 - "G_OpenInterface2"
 - "G_Common_OpenInterface2"
 - "G_GetLockStatus"
 - "G_GetLock"
 - "G_ReleaseLock"

Version 2.1.8844_Release - 4/28/2021

Features

g_api_can.dll

- added commands
 - "G_Can_Diag_Config_Uds"

g_api_lvds.dll

- added commands
 - "G_Lvds_FrameGrabber_Fpga_ChannelUsage_Get"
 - "G_Lvds_FrameGrabber_ChAssignmentStrategy_Set"
- add property to "G_Lvds_FrameGrabber_PropertyId_t"
 - "G_LVDS__FRAME_GRABBER__PROPERTY_ID__CH_ASSIGNMENT_STRATEGY"
- add pixel mode to "G_Lvds_FrameGrabber_PixelMode_t"
 - "G_LVDS__FRAME_GRABBER__PIXEL_MODE__YUV422_8_Y1U1Y2V1"
- add property to "G_Lvds_FrameGrabber_CapturePropertyId_t"
 - "G_LVDS__FRAME_GRABBER__CAPTURE_PROPERTY_ID__SUPPORTED_PIXEL_MODES"

Changes

g_api_lvds.dll

- the property "G_LVDS__FRAME_GRABBER__PROPERTY_ID__NUMBER_OF_CHANNELS" can be set

Bugfix

g_api_lvds.dll

- set timings for Open Ldi (in LVDS Config File)
- no Open LDI polarity for 4121
- read serdes device config for frame generator
- multifunction pins and serdes gpio in lvds config file for input type

Version 2.1.8785_Release - 3/29/2021

Features

g_api.dll

- added command
 - "G_GetHostCommunicationType"

g_api_lvds.dll

- added commands
 - "G_Lvds_Apix3_ConfigRegister_Read"
 - "G_Lvds_Apix3_ConfigRegister_Write"
 - "G_Lvds_PattGen_Property_GetFrameRate"
 - "G_Lvds_PattGen_Property_SetFrameRate"
- add values to config file
 - VideoSettings Properties -> Data Rate Select
 - Grabber Configuration -> Channel Data Type Open LDI
 - Pattern Generator -> Data Types Open LDI
- add property to "G_Lvds_FrameGrabber_PropertyId_t"
 - "G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__GE_DT"
- added pixel modes to "G_Lvds_FrameGrabber_PixelMode_t"
 - "G_LVDS__FRAME_GRABBER__PIXEL_MODE__RGB101010_30"

"G_LVDS__FRAME_GRABBER__PIXEL_MODE__YUV422_8_MIPI_CS12"

- config file:
 - loop-through for Open LDI

Changes

g_api_lvds.dll

- deprecated functions:
 - "G_Lvds_FrameGrabber_VideoSettings_Property_SetById"
use "G_Lvds_Common_VideoSettings_Property_SetById" instead
 - "G_Lvds_FrameGrabber_VideoSettings_Property_GetById"
use "G_Lvds_Common_VideoSettings_Property_GetById" instead

Hardware Explorer:

- set ethernet via right click on device "Change IP Address,..."

Bugfix

g_api_lvds.dll

- read multifunction pins from 'old' config file
- sync polarities for Open Ldi in LVDS Config File

Hardware Explorer:

- error while starting at GetFirmwareVersion (rc = 0x02010006)

Version 2.1.8771_Release - 3/24/2021

Features

g_api.dll

- added command
"G_GetHostCommunicationType"

g_api_lvds.dll

- added commands
"G_Lvds_Apix3_ConfigRegister_Read"
"G_Lvds_Apix3_ConfigRegister_Write"
"G_Lvds_PattGen_Property_GetFrameRate"
"G_Lvds_PattGen_Property_SetFrameRate"
- add values to config file
 - VideoSettings Properties -> Data Rate Select
 - Grabber Configuration -> Channel Data Type Open LDI
 - Pattern Generator -> Data Types Open LDI
- add property to "G_Lvds_FrameGrabber_PropertyId_t"
"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__GE_DT"
- added pixel modes to "G_Lvds_FrameGrabber_PixelMode_t"
"G_LVDS__FRAME_GRABBER__PIXEL_MODE__RGB101010_30"
"G_LVDS__FRAME_GRABBER__PIXEL_MODE__YUV422_8_MIPI_CS12"

Changes

g_api_lvds.dll

- deprecated functions:
 - "G_Lvds_FrameGrabber_VideoSettings_Property_SetById"
use "G_Lvds_Common_VideoSettings_Property_SetById" instead
 - "G_Lvds_FrameGrabber_VideoSettings_Property_GetById"
use "G_Lvds_Common_VideoSettings_Property_GetById" instead

Hardware Explorer:

- set ethernet via right click on device "Change IP Address,..."

Bugfix

g_api_lvds.dll

- read multifunction pins from 'old' config file
- sync polarities for Open Ldi in LVDS Config File

Version 2.1.8687_Release - 2/26/2021

- improvements in Performance of the Linux G-API (change version 2.0 to 2.1)

Features

g_api_common.dll

- added commands:
"G_Common_GetHardwareVersion"

g_api_lvds.dll

- added commands:
"G_Lvds_Mi_GetHardwareInfo"
"G_Lvds_FrameGrabber_GetCaptureState"
"G_Lvds_FrameGrabber_SyncInfo_PermanentScan_GetState"
- added property to "G_Lvds_Common_VideoSettings_PropertyId_t":
"G_LVDS__COMMON__VIDEO_SETTINGS__PROPERTY_ID__DATA_RATE_SELECT"

Hardware Explorer:

- added device property
"Hardware Version"
- added interface properties
"Interface Version"
"Interface Instance Id"
- added LVDS interface properties:
"MediaInterface Version"
"Connector Type"
"MII"

Bugfix

g_api_lvds.dll

- correct VideoRouting for frameGenerator

Hardware Explorer:

- feature infos (e.g. "ETHERNET DIAG/TP" was not correct checked)
- feature APIX MII now correct

Version 2.0.8619_Release - 2/8/2021

Features

g_api_lvds.dll

- config file:
 - schema_version of config file is set to 1.30
 - pattern generator
- read config files generated by Dragon Suite

Bugfix

g_api.dll

- wrong TCP port

g_api_lvds.dll

- capturing failures after G_Lvds_Config_Set
- Mux not available for 4121

Features

G-API Service and Hardware Explorer:

supports USB for Serie 62 (GCAR6222 and GCAR6282)

G-API in general

version type (Release/Beta) in *.dll product version

version type (Release/Beta) in Hardware Explorer: product version

version type (Release/Beta) in G-API service product version an name

version type (Release/Beta) in Installer name

g_api.dll

- added command

"G_Interface_GetInterfaceList_Usb62xx"

g_api_lvds.dll

- added support for OpenLDI

added "G_LVDS__IF_TYPE__OPEN_LDI" to "G_Lvds_IfType_t"

- added data types for OpenLDI "G_Lvds_OpenLdiGeDt_t"

"G_LVDS__OPEN_LDI_GE_DT__RGB666_18"

"G_LVDS__OPEN_LDI_GE_DT__RGB888_24"

"G_LVDS__OPEN_LDI_GE_DT__RGB101010_30"

- added properties to "G_Lvds_FrameGenerator_PropertyId_t"

"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__OPEN_LDI__MAP_SEL"

"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__OPEN_LDI__DE_POL"

"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__OPEN_LDI__HSYNC_POL"

"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__OPEN_LDI__VSYNC_POL"

"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__OPEN_LDI__LOOP"

- added properties to "G_Lvds_FrameGrabber_PropertyId_t"

"G_LVDS__FRAME_GRABBER__PROPERTY_ID__NUMBER_OF_CHANNELS"

"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__MAP_SEL"

"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__DE_POL"

"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__HSYNC_POL"

"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__VSYNC_POL"

"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__LOCK"

- added properties to "G_Lvds_FrameGrabber_SyncInfo_Id_t"

"G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__PIXEL_CLOCK"

"G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__PIXEL_CLOCK_MIN"

"G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__PIXEL_CLOCK_MAX"

- added property to "G_Lvds_PattGen_PropertyId_t"

"G_LVDS__PATT_GEN__PROPERTY_ID__IS_INITIALIZED"

- added property to "G_Lvds_PattGen_PicFormat_t"

"G_LVDS__PATT_GEN__PIC_FORMAT__NULL"

Changes

g_api_lvds.dll

- commands

"G_Lvds_Common_Config_Get"

"G_Lvds_Common_Config_Set"

"G_Lvds_FrameGrabber_SetCaptureArea" was sending to much data

- config file:

- schema_version of config file is set to 1.20

- capture area for each channel

Bugfix

Hardware Explorer:

- renaming interface

Features

supported devices

"GCAR6281"
"GCAR6223"
"GPCIE6241"
"GPXIE6241"

g_api_lvds.dll

- added commands

"G_Lvds_Apix_AShellMsg_SetBaseAddress"
"G_Lvds_Apix_AShellMsg_GetBaseAddress"

- added flags to "G_Lvds_Apix_AShellMsg_ReadWrite_CmdFlags_t"

"G_LVDS__APIX__ASHELL_MSG__READ_WRITE__CMD_FLAGS__NONE"
"G_LVDS__APIX__ASHELL_MSG__READ_WRITE__CMD_FLAGS__AUTO_OFFSET_ADDRESS"
"G_LVDS__APIX__ASHELL_MSG__READ_WRITE__CMD_FLAGS__RESTORE_BASE_ADDRESS"

g_api_io.dll

- added commands

"G_Io_Uart_A_Reset"
"G_Io_Uart_A_Init"
"G_Io_Uart_A_Monitor_Reset"
"G_Io_Uart_A_Monitor_Init"
"G_Io_Uart_A_Monitor_Start"
"G_Io_Uart_A_Monitor_Stop"
"G_Io_Uart_A_Monitor_Read"

-bugfixes

g_api_lvds.dll

- SerDes reset when loading config file with no change in APIX mode
- sync check error when loading config file
- changed data sequence and offset address of AShell Messages

g_api_trace.dll:

- command "G_Trace_ExportToMDF" for Linux

Hardware Explorer:

- accelerated refreshing, if new devices are detected

Documentation

- added missing commands

"G_Flasher_ResetController"
"G_Flasher_FlashDevice"

"G_Io_Sent_Receiver_Reset"

"G_Io_Sent_Receiver_Init"

"G_Io_Sent_Receiver_Enable"

"G_Io_Sent_Receiver_Disable"

"G_Io_Sent_Receiver_Property_GetById"

"G_Io_Sent_Receiver_Property_SetById"

"G_Io_Sent_Receiver_Monitor_Init"

"G_Io_Sent_Receiver_Monitor_Start"

"G_Io_Sent_Receiver_Monitor_Stop"

"G_Io_Sent_Receiver_Monitor_Read"

"G_Io_Sent_Receiver_Monitor_Property_GetById"

"G_Io_Sent_Receiver_Monitor_Property_SetById"

"G_Io_Spi_A_Monitor_Read"

"G_Lin_Relays_GetState"

G_UserCode_File_StopAll

- G-API for LINUX available now:
 - Debian RT
 - OpenSuse
 - Ubuntu

Features

g_api_lvds.dll:

- added commands
 - "G_Lvds_Apex_AShellMsg_Read"
 - "G_Lvds_Apex_AShellMsg_Write"
 - "G_Lvds_PattGen_Pattern1_VideoTimings_Set"
 - "G_Lvds_PattGen_Pattern1_VideoTimings_Get"
- added property ids to enum "G_Lvds_FrameGenerator_PropertyId_t"
 - G_LVDS__FRAME_GENERATOR__PROPERTY_ID__MIPI_CSI2_CONT_CLK
 - G_LVDS__FRAME_GENERATOR__PROPERTY_ID__MIPI_DSI_CONT_CLK
 - G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_EN
 - G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_REMOVE_BLANKING
 - G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_REMOVE_NULL
 - G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_HS_BURST_EN
 - G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_SYNC_EN
 - G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_SYNC_REQ
- added property ids to enum "G_Lvds_PattGen_PropertyId_t"
 - G_LVDS__PATT_GEN__PROPERTY_ID__IS_ENABLED
 - G_LVDS__PATT_GEN__PROPERTY_ID__HOR_PIX_SIZE_IN_BITS

g_api_net2run.dll:

- "G_Net2Run_Fvm_Custom5_AuthBroadcast":
 - added flag "SESSION_COUNTER"
 - added flag "SENDER"
 - added flag "IGNORE_REPLAY"
 - added parameter "SessionBasedCounterLength"
- "G_Net2Run_Fvm_Custom5_PartEcuChallenge":
 - added flag "SESSION_COUNTER"
 - added parameter "SessionBasedCounterLength"
- "G_Net2Run_Fvm_Custom5_TimeServerEcuResponse":
 - added flag "SESSION_COUNTER"
 - added parameter "SessionBasedCounterLength"

g_api_trace.dll:

- added commands
 - "G_Trace_ClearChannelList"
 - "G_Trace_ExportToMDF"
- add flag to command "G_Trace_Start"
 - G_TRACE__START__CMD_FLAG__LOG_TO_MDF
- added property ids to enum "G_Trace_PropertyId_t"
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__NAME
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__MAX_SIZE
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__AUTHOR
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__DEPARTMENT
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__PROJECT
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__SUBJECT

Bugfix

G-API Service

- version in executable

Hardware Explorer:

- "Send Message" in Device Context Menu removed
- temperature bugs

- "G_Lvds_I2C_Write_Register_From_File" now allows any number of lines

Changes

- Sample modified
- Ethernet Trace PCAP

Documentation

- added missing commands
 - "G_Lvds_Apix_Read"
 - "G_Lvds_Apix_Write"
 - "G_Lvds_Apix_Command"
 - "G_Lvds_Apix_CommandWithResponse"
 - "G_Lvds_Apix_ConfigByFile"
 - "G_Lvds_I2C_Write_Register_From_File"

Version 1.4.8297 - 9/17/2020

Features

g_api_lvds.dll:

- added commands
 - "G_Lvds_FrameGrabber_SyncInfo_IfScan_Start"
 - "G_Lvds_FrameGrabber_SyncInfo_IfScan_Stop"
 - "G_Lvds_FrameGrabber_SyncInfo_IfScan_GetVcs"
 - "G_Lvds_FrameGrabber_SyncInfo_IfScan_GetDts"
 - "G_Lvds_GetDataTypeName_ByIfType"
- added data types enum "G_Lvds_MipiDsi2Dt_t"
- added mux source types "G_Lvds_Gen_MuxSourceType_t"
- added data types to enum "G_Lvds_MipiCsi2Dt_t"
 - G_LVDS__MIPI_CSI2_DT__NULL
 - G_LVDS__MIPI_CSI2_DT__BLANKING
 - G_LVDS__MIPI_CSI2_DT__YUV420_8_BIT
 - G_LVDS__MIPI_CSI2_DT__YUV420_10_BIT
 - G_LVDS__MIPI_CSI2_DT__YUV420_8_BIT_LEGACY
 - G_LVDS__MIPI_CSI2_DT__YUV420_8_BIT_CHROMA_SHIFTED
 - G_LVDS__MIPI_CSI2_DT__YUV420_10_BIT_CHROMA_SHIFTED
 - G_LVDS__MIPI_CSI2_DT__YUV422_8_BIT
 - G_LVDS__MIPI_CSI2_DT__YUV422_10_BIT
 - G_LVDS__MIPI_CSI2_DT__RGB444
 - G_LVDS__MIPI_CSI2_DT__RGB555
 - G_LVDS__MIPI_CSI2_DT__RGB565
 - G_LVDS__MIPI_CSI2_DT__RGB666
 - G_LVDS__MIPI_CSI2_DT__RAW6
 - G_LVDS__MIPI_CSI2_DT__RAW7
 - G_LVDS__MIPI_CSI2_DT__RAW14
 - G_LVDS__MIPI_CSI2_DT__RAW20
 - G_LVDS__MIPI_CSI2_DT__USER_DEFINED_8_BIT_DATA_TYPE_1 to 8
- added ids to enum "G_Lvds_FrameGrabber_SyncInfo_Id_t"
 - G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__MIPI_DSI_DT
 - G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__H_RES_MIN
 - G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__H_RES_MAX
 - G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__V_RES_MIN
 - G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__V_RES_MAX

Bugfix

Hardware Explorer:

- non-feature-controlable devices can be flashable
- corrected feature info for GPC1e6281/GPX1e6181 cards
- corrected feature info for GPC1e6222/GPX1e6222 and GCAR6222 cards
- temperature

- Enable BaudRate Detection in LIN Interfaces
- missing SerDes detection if temperature is not available

=====

Version 1.2.3_Beta - 2/11/2021

Bugfix

g_api_lvds.dll

- correct VideoRouting for frameGenerator

Hardware Explorer:

- feature infos (e.g. "ETHERNET DIAG/TP" was not correct checked)

Version 2.0.8619_Release - 2/8/2021

Features

g_api_lvds.dll

- config file:
 - schema_version of config file is set to 1.30
 - pattern generator
 - read config files generated by Dragon Suite

Bugfix

g_api.dll

- wrong TCP port

g_api_lvds.dll

- capturing failures after G_Lvds_Config_Set
- Mux not available for 4121

Version 2.0.8567_Release - 1/11/2021

Features

G-API in general

- version type (Release/Beta) in *.dll product version
- version type (Release/Beta) in Hardware Explorer: product version
- version type (Release/Beta) in G-API service product version an name
- version type (Release/Beta) in Installer name

supported devices

- USB for Serie 62 (GCAR6222 and GCAR6282)

g_api.dll

- added command
"G_Interface_GetInterfaceList_Usb62xx"

g_api_lvds.dll

- added support for OpenLDI
added "G_LVDS__IF_TYPE__OPEN_LDI" to "G_Lvds_IfType_t"
- added data types for OpenLDI "G_Lvds_OpenLdiGeDt_t"
"G_LVDS__OPEN_LDI_GE_DT__RGB666_18"
"G_LVDS__OPEN_LDI_GE_DT__RGB888_24"
"G_LVDS__OPEN_LDI_GE_DT__RGB101010_30"
- added properties to "G_Lvds_FrameGenerator_PropertyId_t"
"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__OPEN_LDI__MAP_SEL"
"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__OPEN_LDI__DE_POL"
"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__OPEN_LDI__HSYNC_POL"
"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__OPEN_LDI__VSYNC_POL"
"G_LVDS__FRAME_GENERATOR__PROPERTY_ID__OPEN_LDI__LOOP"
- added properties to "G_Lvds_FrameGrabber_PropertyId_t"

"G_LVDS__FRAME_GRABBER__PROPERTY_ID__NUMBER_OF_CHANNELS"
"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__MAP_SEL"
"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__DE_POL"
"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__HSYNC_POL"
"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__VSYNC_POL"
"G_LVDS__FRAME_GRABBER__PROPERTY_ID__OPEN_LDI__LOCK"

- added properties to "G_Lvds_FrameGrabber_SyncInfo_Id_t"
 - "G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__PIXEL_CLOCK"
 - "G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__PIXEL_CLOCK_MIN"
 - "G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__PIXEL_CLOCK_MAX"
- added property to "G_Lvds_PattGen_PropertyId_t"
 - "G_LVDS__PATT_GEN__PROPERTY_ID__IS_INITIALIZED"
- added property to "G_Lvds_PattGen_PicFormat_t"
 - "G_LVDS__PATT_GEN__PIC_FORMAT__NULL"

Changes

g_api_lvds.dll

- commands
 - "G_Lvds_Common_Config_Get"
 - "G_Lvds_Common_Config_Set"
 - "G_Lvds_FrameGrabber_SetCaptureArea" was sending to much data
- config file:
 - schema_version of config file is set to 1.20
 - capture area for each channel

Bugfix

Hardware Explorer:

- renaming interface

Version 2.0.8457 - 11/16/2020

Features

supported devices

- added GCAR6281
- added GCAR6223
- added GPCIE6241
- added GPXIE6241

g_api_io.dll

- added commands
 - "G_Io_Uart_A_Reset"
 - "G_Io_Uart_A_Init"
 - "G_Io_Uart_A_Monitor_Reset"
 - "G_Io_Uart_A_Monitor_Init"
 - "G_Io_Uart_A_Monitor_Start"
 - "G_Io_Uart_A_Monitor_Stop"
 - "G_Io_Uart_A_Monitor_Read"

g_api_lvds.dll

- added commands
 - "G_Lvds_Apix_AShellMsg_SetBaseAddress"
 - "G_Lvds_Apix_AShellMsg_GetBaseAddress"
- added flags to "G_Lvds_Apix_AShellMsg_ReadWrite_CmdFlags_t"
 - "G_LVDS__APIX__ASHELL_MSG__READ_WRITE__CMD_FLAGS__NONE"
 - "G_LVDS__APIX__ASHELL_MSG__READ_WRITE__CMD_FLAGS__AUTO_OFFSET_ADDRESS"
 - "G_LVDS__APIX__ASHELL_MSG__READ_WRITE__CMD_FLAGS__RESTORE_BASE_ADDRESS"

Bugfix

g_api_lvds.dll

- SerDes reset when loading config file with no change in APIX mode
- sync check error when loading config file
- changed data sequence and offset address of AShell Messages

g_api_trace.dll:

- command "G_Trace_ExportToMDF" for Linux

Hardware Explorer:

- accelerated refreshing, if new devices are detected

Documentation

- added missing commands

"G_Flasher_ResetController"
"G_Flasher_FlashDevice"

"G_Io_Sent_Receiver_Reset"
"G_Io_Sent_Receiver_Init"
"G_Io_Sent_Receiver_Enable"
"G_Io_Sent_Receiver_Disable"
"G_Io_Sent_Receiver_Property_GetById"
"G_Io_Sent_Receiver_Property_SetById"
"G_Io_Sent_Receiver_Monitor_Init"
"G_Io_Sent_Receiver_Monitor_Start"
"G_Io_Sent_Receiver_Monitor_Stop"
"G_Io_Sent_Receiver_Monitor_Read"
"G_Io_Sent_Receiver_Monitor_Property_GetById"
"G_Io_Sent_Receiver_Monitor_Property_SetById"
"G_Io_Spi_A_Monitor_Read"

"G_Lin_Relays_GetState"

"G_UserCode_File_StopAll"

Version 2.0.8416 - 10/20/2020

Features

G-API in general

- G-API for LINUX available now:
 - Debian RT
 - OpenSuse
 - Ubuntu

g_api_lvds.dll:

- added commands

"G_Lvds_Apix_AShellMsg_Read"
"G_Lvds_Apix_AShellMsg_Write"
"G_Lvds_PattGen_Pattern1_VideoTimings_Set"
"G_Lvds_PattGen_Pattern1_VideoTimings_Get"

- added property ids to enum "G_Lvds_FrameGenerator_PropertyId_t"
G_LVDS__FRAME_GENERATOR__PROPERTY_ID__MIPI_CSI2_CONT_CLK
G_LVDS__FRAME_GENERATOR__PROPERTY_ID__MIPI_DSI_CONT_CLK
G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_EN
G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_REMOVE_BLANKING
G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_REMOVE_NULL
G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_HS_BURST_EN
G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_SYNC_EN
G_LVDS__FRAME_GENERATOR__PROPERTY_ID__IF_SYNC_REQ

- added property ids to enum "G_Lvds_PattGen_PropertyId_t"
G_LVDS__PATT_GEN__PROPERTY_ID__IS_ENABLED
G_LVDS__PATT_GEN__PROPERTY_ID__HOR_PIX_SIZE_IN_BITS

g_api_net2run.dll:

- "G_Net2Run_Fvm_Custom5_AuthBroadcast":
 - added flag "SESSION_COUNTER"
 - added flag "SENDER"
 - added flag "IGNORE_REPLAY"
 - added parameter "SessionBasedCounterLength"
- "G_Net2Run_Fvm_Custom5_PartEcuChallenge":
 - added flag "SESSION_COUNTER"
 - added parameter "SessionBasedCounterLength"
- "G_Net2Run_Fvm_Custom5_TimeServerEcuResponse":
 - added flag "SESSION_COUNTER"
 - added parameter "SessionBasedCounterLength"

g_api_trace.dll:

- added commands
 - "G_Trace_ClearChannelList"
 - "G_Trace_ExportToMDF"
- add flag to command "G_Trace_Start"
 - G_TRACE__START__CMD_FLAG__LOG_TO_MDF
- added property ids to enum "G_Trace_PropertyId_t"
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__NAME
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__MAX_SIZE
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__AUTHOR
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__DEPARTMENT
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__PROJECT
 - G_TRACE__PROPERTY_ID__MDF_LOG_FILE__SUBJECT

Changes

- Sample modified
 - Ethernet Trace PCAP

Bugfix

g_api_lvds.dll:

- "G_Lvds_I2C_Write_Register_From_File" now allows any number of lines

G-API Service

- version in executable

Hardware Explorer:

- "Send Message" in Device Context Menu removed
- temperature bugs

Documentation

- added missing commands
 - "G_Lvds_Apix_Read"
 - "G_Lvds_Apix_Write"
 - "G_Lvds_Apix_Command"
 - "G_Lvds_Apix_CommandWithResponse"
 - "G_Lvds_Apix_ConfigByFile"
 - "G_Lvds_I2C_Write_Register_From_File"

Version 1.4.8297 - 9/17/2020

Features

g_api_lvds.dll:

- added commands
 - "G_Lvds_FrameGrabber_SyncInfo_IfScan_Start"
 - "G_Lvds_FrameGrabber_SyncInfo_IfScan_Stop"
 - "G_Lvds_FrameGrabber_SyncInfo_IfScan_GetVcs"
 - "G_Lvds_FrameGrabber_SyncInfo_IfScan_GetDts"

"G_Lvds_GetDataTypeName_ByIfType"

- added data types enum "G_Lvds_MipiDsi2Dt_t"
- added mux source types "G_Lvds_Gen_MuxSourceType_t"

- added data types to enum "G_Lvds_MipiCsi2Dt_t"
 - G_LVDS__MIPI_CSI2_DT__NULL
 - G_LVDS__MIPI_CSI2_DT__BLANKING
 - G_LVDS__MIPI_CSI2_DT__YUV420_8_BIT
 - G_LVDS__MIPI_CSI2_DT__YUV420_10_BIT
 - G_LVDS__MIPI_CSI2_DT__YUV420_8_BIT_LEGACY
 - G_LVDS__MIPI_CSI2_DT__YUV420_8_BIT_CHROMA_SHIFTED
 - G_LVDS__MIPI_CSI2_DT__YUV420_10_BIT_CHROMA_SHIFTED
 - G_LVDS__MIPI_CSI2_DT__YUV422_8_BIT
 - G_LVDS__MIPI_CSI2_DT__YUV422_10_BIT
 - G_LVDS__MIPI_CSI2_DT__RGB444
 - G_LVDS__MIPI_CSI2_DT__RGB555
 - G_LVDS__MIPI_CSI2_DT__RGB565
 - G_LVDS__MIPI_CSI2_DT__RGB666
 - G_LVDS__MIPI_CSI2_DT__RAW6
 - G_LVDS__MIPI_CSI2_DT__RAW7
 - G_LVDS__MIPI_CSI2_DT__RAW14
 - G_LVDS__MIPI_CSI2_DT__RAW20
 - G_LVDS__MIPI_CSI2_DT__USER_DEFINED_8_BIT_DATA_TYPE_1 to 8

- added ids to enum "G_Lvds_FrameGrabber_SyncInfo_Id_t"
 - G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__MIPI_DSI_DT
 - G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__H_RES_MIN
 - G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__H_RES_MAX
 - G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__V_RES_MIN
 - G_LVDS__FRAME_GRABBER_SYNC__PROPERTY_ID__V_RES_MAX

Bugfix

Hardware Explorer:

- non- feature-controlable devices can be flashable
- corrected feature info for GPC1e6281/GPX1e6181 cards
- corrected feature info for GPC1e6222/GPX1e6222 and GCAR6222 cards
- temperature
- Enable BaudRate Detection in LIN Interfaces
- missing SerDes detection if temperature is not available

>>>>>>> .r8688

Version 1.4.8236 - 8/27/2020

Features

g_api.dll:

- added commands
 - "G_FeatureControl_LockCode_Get"
 - "G_FeatureControl_LockCode_Set"
 - "G_GetHostInterfaceTypeDescription"

g_api_common.dll:

- added commands
 - "G_Common_GetTemperature"
 - "G_Interface_GetSerialNumber"

g_api_ethernet.dll:

- added command
 - "G_Ethernet_Tp_Init_DoSoAd"

g_api_flexray.dll:

- added commands
 - "G_FlexRay_Node_GetTransceiverMode"
 - "G_FlexRay_Node_SetTransceiverMode"

g_api_net2run.dll:

- added commands
 - "G_Net2Run_Fvm_Custom5_TimeServerEcu"
 - "G_Net2Run_Fvm_Custom5_PartEcu"
 - "G_Net2Run_Fvm_Custom5_AuthBroadcast"
 - "G_Net2Run_Fvm_Custom5_PartEcuChallenge"
 - "G_Net2Run_Fvm_Custom5_TimeServerEcuResponse"

g_api_sequence.dll:

- added commands
 - "G_Sequence_Replay_GetNumberOfFiles"
 - "G_Sequence_Replay_GetFileName"

Hardware Explorer:

- added "Core Temperature" and "Board Temperature" to device info
- added Tool Button to enable/disable temperature updating (every 5 seconds)
- added information which devices are supported (Menu: "Help"->"Supported Devices")
- added feature info dialog to 'decrypt' the feature code of a device (Right click on a device: "Feature Code"->"Info")
- added "LVDS Type" to LVDS Interface info (Generator or Grabber)

- change starting and refreshing behaviour (throw error message earlier, if G-API service is not running)
- change LVDS Interface Icons to Grabber or Generator (add an arrow)

Changes

g_api_trace.dll:

- reduced asc export format for lin, to speed up import process

Documentation

- added chapter "Trace Functions"

Version 1.4.8150 - 7/10/2020

Features

g_api_lvds.dll:

- added pixel mode to enum "G_Lvds_FrameGrabber_PixelMode_t"
 - G_LVDS__FRAME_GRABBER__PIXEL_MODE__RAW10_MIPI_CS12
 - G_LVDS__FRAME_GRABBER__PIXEL_MODE__YUV422_10_MIPI_CS12

- added data type "MipiDsiDt" to "G_Lvds_Common_Config_Grabber_ChannelConfig_Channel_t"

- added MipiDsi to ConfigFile

Changes

G-API Service

- Debug mode
 - time in milliseconds since server start instead of seconds since 01/01/1970

- added thread ids output

- SAddr/TAddr to CONT (controller number)

- SPort/TPort to INTF (interface number)

- App to Port (portHandle)

- Mod deleted

- more structured Connecting and Disconnecting Output

Features

g_api_lvds.dll:

- added interface type to enum "G_Lvds_IfType_t"
"G_LVDS__IF_TYPE__MIPI_DSI"
- added data types for Mipi DSI "G_Lvds_MipiDsiDt_t"
G_LVDS__MIPI_DSI_DT__SYNC_EVENT__V_SYNC_START
G_LVDS__MIPI_DSI_DT__COLOR_MODE_OFF
G_LVDS__MIPI_DSI_DT__GENERIC_SHORT_WRITE_0
G_LVDS__MIPI_DSI_DT__GENERIC_READ_0
G_LVDS__MIPI_DSI_DT__DCS_SHORT_WRITE_0
G_LVDS__MIPI_DSI_DT__DCS_READ_0
G_LVDS__MIPI_DSI_DT__COMPRESSION_MODE
G_LVDS__MIPI_DSI_DT__EOTP
G_LVDS__MIPI_DSI_DT__NULL
G_LVDS__MIPI_DSI_DT__PPS
G_LVDS__MIPI_DSI_DT__COMPRESSED_PIXEL_STREAM
G_LVDS__MIPI_DSI_DT__LOOSLY_PACKED_PIXEL_STREAM__YCBCR422_20_24
G_LVDS__MIPI_DSI_DT__PACKED_PIXEL_STREAM__RGB101010_30
G_LVDS__MIPI_DSI_DT__PACKED_PIXEL_STREAM__RGB565_16
G_LVDS__MIPI_DSI_DT__SYNC_EVENT__V_SYNC_END
G_LVDS__MIPI_DSI_DT__COLOR_MODE_ON
G_LVDS__MIPI_DSI_DT__GENERIC_SHORT_WRITE_1
G_LVDS__MIPI_DSI_DT__GENERIC_READ_1
G_LVDS__MIPI_DSI_DT__DCS_SHORT_WRITE_1
G_LVDS__MIPI_DSI_DT__EXECUTE_QUEUE
G_LVDS__MIPI_DSI_DT__BLANKING
G_LVDS__MIPI_DSI_DT__PACKED_PIXEL_STREAM__YCBCR422_24
G_LVDS__MIPI_DSI_DT__PACKED_PIXEL_STREAM__RGB121212_36
G_LVDS__MIPI_DSI_DT__PACKED_PIXEL_STREAM__RGB666_18
G_LVDS__MIPI_DSI_DT__SYNC_EVENT__H_SYNC_START
G_LVDS__MIPI_DSI_DT__SHUTDOWN_PERIPHERAL
G_LVDS__MIPI_DSI_DT__GENERIC_SHORT_WRITE_2
G_LVDS__MIPI_DSI_DT__GENERIC_READ_2
G_LVDS__MIPI_DSI_DT__GENERIC_LONG_WRITE
G_LVDS__MIPI_DSI_DT__PACKED_PIXEL_STREAM__YCBCR422_16
G_LVDS__MIPI_DSI_DT__LOOSLY_PACKED_PIXEL_STREAM__RGB666_18_24
G_LVDS__MIPI_DSI_DT__SYNC_EVENT__H_SYNC_END
G_LVDS__MIPI_DSI_DT__TURN_ON_PERIPHERAL
G_LVDS__MIPI_DSI_DT__SET_MAXIMUM_RETURN_PACKET_SIZE
G_LVDS__MIPI_DSI_DT__DCS_LONG_WRITE
G_LVDS__MIPI_DSI_DT__PACKED_PIXEL_STREAM__YCBCR420_12
G_LVDS__MIPI_DSI_DT__PACKED_PIXEL_STREAM__RGB888_24
- added property id to enum "G_Lvds_FrameGrabber_PropertyId_t"
G_LVDS__FRAME_GRABBER__PROPERTY_ID__MIPI_DSI_DT

g_api_net2run.dll:

- added commands for "Sync over CAN"
"G_Net2Run_CanTimeSync_Config_Master"
"G_Net2Run_CanTimeSync_Config_Slave"
"G_Net2Run_TimeSyncMgr_TimeBase_Config"
"G_Net2Run_TimeSyncMgr_TimeCorrection_Config"
"G_Net2Run_TimeSyncMgr_GetCurrentTime"
"G_Net2Run_TimeSyncMgr_SetGlobalTime"
"G_Net2Run_TimeSyncMgr_UpdateGlobalTime"
"G_Net2Run_TimeSyncMgr_SetOffset"
"G_Net2Run_TimeSyncMgr_GetOffset"
"G_Net2Run_TimeSyncMgr_GetRateDeviation"
"G_Net2Run_TimeSyncMgr_SetRateCorrection"
"G_Net2Run_TimeSyncMgr_GetTimeLeap"
"G_Net2Run_TimeSyncMgr_GetStatus"
"G_Net2Run_TimeSyncMgr_TrigTimeTransmission"
"G_Net2Run_TimeSyncMgr_GetUpdateCounter"
"G_Net2Run_TimeSyncMgr_SetUserData"
"G_Net2Run_TimeSyncMgr_SetInitValue"
"G_Net2Run_TimeSyncMgr_GetInitValue"

Hardware Explorer:

- added "UserComment" for interfaces

g_device.xml:

- added "deviceTypeName" to device nodes

Bugfix

g_api_lvds.dll:

- enabled GCAR6222 for command "G_Lvds_FrameGrabber_Init2"

Hardware Explorer:

- added icons for PXIe cards
- changed icons for PCIe cards

Version 1.4.7905 - 5/19/2020

Features

g_api_can.dll:

- added commands
 - "G_Can_TxTrace_Allocate"
 - "G_Can_TxTrace_Free"
 - "G_Can_TxTrace_Download"
 - "G_Can_TxTrace_Play"
 - "G_Can_TxTrace_GetState"
 - "G_Can_TxTrace_Property_SetById"
 - "G_Can_TxTrace_Property_GetById"

Version 1.4.7838 - 4/29/2020

Features

g_api.dll:

- added functions:
 - "G_Interface_UpdateAllInterfaces"

examples

- added projects in example folder:
 - "AsyncCommunication_Tp_Direct_GetResponse"
 - "Ethernet_Trace_PCAP"
 - "LVDS_CANoverUART"

Bugfix

g_api_lvds.dll:

- enabled command "G_Lvds_Common_Config_Set" for new LVDS host devices

g_api_trace.dll:

- increased internal monitoring buffer size to 64k

Hardware Explorer:

- added support for GPXie6281

Version 1.4.7787 - 3/30/2020

Features

g_api_io.dll:

- added functions:
 - "G_Io_Uart_Fifo_Reset"
 - "G_Io_Uart_Fifo_Init"
 - "G_Io_Uart_Fifo_TxFifo_Write"
 - "G_Io_Uart_Fifo_RxFifo_Read"

Changes

- renamed functions "G_Lvds_Gen_..." to "G_Lvds_FrameGenerator_..." (for consistency reasons)

Version 1.4.7771 - 3/23/2020

Bugfix

- removed dependencies on "g_platform.h"

Version 1.4.7760 - 3/17/2020

Bugfix

- added "g_platform.h" to installer

Version 1.4.7756 - 3/16/2020

Bugfix

- removed Plug&Play for GPXle 62er cards

Version 1.4.7752 - 3/11/2020

Features

g_api_ethernet.dll:

- added flags:
 - "G_ETHERNET__PKT_FLT__FLT__SET__CMD__FLAG__USE_FILTER_ID"
 - "G_ETHERNET__PKT_FLT__FLT__RESET__CMD__FLAG__USE_FILTER_ID"
- added parameter "FilterID" to
 - command "G_Ethernet_PktFilter_Filter_Set_Cmd_t"
 - command "G_Ethernet_PktFilter_Filter_Reset_Cmd_t"
- added SourceType
 - "G_ETHERNET__MII_MUX__SOURCE_TYPE__SWITCH_OUT"
- added TargetType
 - "G_ETHERNET__MII_MUX__TARGET_TYPE__SWITCH_IN_0"
 - "G_ETHERNET__MII_MUX__TARGET_TYPE__SWITCH_IN_1"
 - "G_ETHERNET__MII_MUX__TARGET_TYPE__SWITCH_IN_2"

g_api_lvds.dll:

- added commands:
 - "G_Lvds_Gen_Property_SetById"
 - "G_Lvds_Gen_Property_GetById"

Version 1.4.7680 - 2/18/2020

Features

g_api.dll:

- added functions:
 - "G_Interface_GetPortHandleByInterfaceType"
 - "G_Interface_GetPortHandleByInterfaceTypeAndInstance"

g_api_lvds.dll:

- added functions
 - "G_Lvds_Mi_Mfp_PinConfig_Get"
 - "G_Lvds_Mi_Mfp_PinConfig_Set"
- added LVDS interface type "G_LVDS__IF_TYPE__MIPI_DSI2"

g_api_net2run.dll:

- "G_Net2Run_Pdu_PduList_Get": added parameter "BusType"
- added function
"G_Net2Run_Pdu_NumberOfIncludedSignals_Get2"

Bugfix

g_api_common.dll:

- "G_Common_Xcp_Daq_ReadRxSignals" and "G_Common_Xcp_Daq_ReadRxSignalsTs":
set alignment to 4 bytes on 64 bit version

g_api_lvds.dll:

- "G_Lvds_Common_Config_Get" could fail on FrameGrabber devices
- "G_Lvds_Common_Data_UartTransfer": changed value of
"G_LVDS__COMMON__DATA__UART__TRANSFER__MAX__NUMBER__OF__RX__DATA" to 2295

Hardware Explorer:

- PCIe6222 interfaces could appear twice
- SerDes type info on GCAR6222 devices was not available
- When flashing firmware the user is not allowed to click into main window.

Version 1.4.7601 - 1/23/2020

Features

g_api_ethernet.dll:

- "G_Ethernet_Tp_Init_Iso13400": added parameter "VehIdentReqRepetitions"

g_api_io.dll:

- added trigger source type "G_IO__TRIGGER__SOURCE__TYPE__LVDS_MI_O_MFP"
- added trigger output type "G_IO__TRIGGER__OUTPUT__TYPE__LVDS_MI_O_MFP"

g_api_lvds.dll:

- added I2C slave baud rate enum values:
"G_LVDS__I2C__SLAVE__BAUD__RATE__1000__KHZ"
"G_LVDS__I2C__SLAVE__BAUD__RATE__3400__KHZ"
"G_LVDS__I2C__SLAVE__BAUD__RATE__5000__KHZ"
- added I2C master baud rate enum values:
"G_LVDS__I2C__MASTER__BAUD__RATE__1000__KHZ"
"G_LVDS__I2C__MASTER__BAUD__RATE__3400__KHZ"
"G_LVDS__I2C__MASTER__BAUD__RATE__5000__KHZ"
- added SerDes types:
"G_LVDS__COMMON__SER__DES__INAP562R"
"G_LVDS__COMMON__SER__DES__INAP562T"

Bugfix

g_api_can.dll:

- "G_Can_CyclicMsgs_Checksum_Define_AddBytes": input signal size may be 0
- "G_Can_CyclicMsgs_Checksum_Define...": fixes "invalid value" error because of
internal reserved byte

g_api_lvds.dll:

- property "G_LVDS__COMMON__PROPERTY_ID__CAN_GENERATE" could return wrong value
under some circumstances

g_api_trace.dll:

- ASC file entries compatible to newer Vector software

Features

supported devices

- added GCAR6222

g_api_can.dll:

- added flag "G_CAN__NM__CONFIG__AUTOSAR__NODE__CMD_FLAG__SET_IMMED_TRANS"
to command "G_Can_Nm_Config_Autosar_Node"
- added command "G_Can_CyclicMsgs_Checksum_Define_AddBytes"
- added support for CAN FD frames to checksum commands
G_Can_CyclicMsgs_MultiplexBytes_Define
G_Can_CyclicMsgs_Checksum_Define
G_Can_CyclicMsgs_Checksum_Define_XorWithUserBytes
G_Can_CyclicMsgs_Checksum_Define_GeneralCrcWithUserBytes
G_Can_CyclicMsgs_Checksum_Define_Custom12
G_Can_CyclicMsgs_Checksum_Define_AddBytes

g_api_ethernet.dll:

- added functions:
G_Ethernet_Node_Vlan_GetAll
G_Ethernet_Phy_Temperature_Get
G_Ethernet_Phy_LegacyMode_Set
G_Ethernet_Phy_HwRevision_Get
- added MiiMux source type "G_ETHERNET__MII_MUX__SOURCE_TYPE__PKT_FILTER"
- added MiiMux target type "G_ETHERNET__MII_MUX__TARGET_TYPE__PKT_FILTER"
- added Phy transceiver type
"G_ETHERNET__PHY__TRANSCEIVER_TYPE__AETH_88Q2112_A2" with corresponding
enum "G_Ethernet_Phy_LegacyMode_Aeth88q2112A2_t"

g_api_io.dll:

- added commands
G_Io_Relays_GetStateDirect (now for real)
G_Io_Spi_A_Reset
G_Io_Spi_A_Init
G_Io_Spi_A_Monitor_Reset
G_Io_Spi_A_Monitor_Init
G_Io_Spi_A_Monitor_Start
G_Io_Spi_A_Monitor_Stop
G_Io_Spi_A_Monitor_Read
- added trigger source types
G_IO__TRIGGER__SOURCE_TYPE__SPI_M_MOSI
G_IO__TRIGGER__SOURCE_TYPE__SPI_M_SCLK
G_IO__TRIGGER__SOURCE_TYPE__SPI_M_SSO
G_IO__TRIGGER__SOURCE_TYPE__SPI_M_SS1
G_IO__TRIGGER__SOURCE_TYPE__SPI_M_SS2
G_IO__TRIGGER__SOURCE_TYPE__SPI_S_MISO
G_IO__TRIGGER__SOURCE_TYPE__LVDS_2_SER_DES_GPIO
G_IO__TRIGGER__SOURCE_TYPE__LVDS_3_SER_DES_GPIO
G_IO__TRIGGER__SOURCE_TYPE__LVDS_2_TRIGGER_OUT
G_IO__TRIGGER__SOURCE_TYPE__LVDS_3_TRIGGER_OUT
- added trigger output types
G_IO__TRIGGER__OUTPUT_TYPE__SPI_M_MISO
G_IO__TRIGGER__OUTPUT_TYPE__SPI_S_MOSI
G_IO__TRIGGER__OUTPUT_TYPE__SPI_S_SCLK
G_IO__TRIGGER__OUTPUT_TYPE__SPI_S_SS
G_IO__TRIGGER__OUTPUT_TYPE__SPI_A_MISO
G_IO__TRIGGER__OUTPUT_TYPE__SPI_A_MOSI
G_IO__TRIGGER__OUTPUT_TYPE__SPI_A_SCLK
G_IO__TRIGGER__OUTPUT_TYPE__SPI_A_SSO
G_IO__TRIGGER__OUTPUT_TYPE__SPI_A_SS1
G_IO__TRIGGER__OUTPUT_TYPE__SPI_A_SS2
G_IO__TRIGGER__OUTPUT_TYPE__LVDS_2_SER_DES_GPIO
G_IO__TRIGGER__OUTPUT_TYPE__LVDS_3_SER_DES_GPIO
G_IO__TRIGGER__OUTPUT_TYPE__LVDS_2_TRIGGER_IN

G_IO__TRIGGER__OUTPUT_TYPE__LVDS_3_TRIGGER_IN

g_api_lvds.dll:

- added pattern generator property
"G_LVDS__PATT_GEN__PROPERTY_ID__IS_ACTIVE"

g_api_net2run.dll:

- added commands
G_Net2Run_EthIf_Controller_Config
G_Net2Run_UdpNm_Autosar_Ecu_Config
G_Net2Run_UdpNm_Autosar_RxPdu
G_Net2Run_UdpNm_Autosar_TxPdu

Bugfix

G-API in general

- Monitoring:
 - If a monitor instance was closed, other instances on the same interface could have been closed, too.

g_api_ethernet.dll:

- "G_Ethernet_Monitor_GetData" could return too much data ("ghost pakets")

Version 1.4.7457 - 11/18/2019

Features

G-API in general

- Monitoring:
 - multiple monitor instances can be used on the same interface by switching instance IDs with commands:
"G_Monitor_InstanceId_Set"
"G_Monitor_InstanceId_Get"

g_api_can.dll:

- added support for CAN FD signal offset (up to 511 bits) when defining ramps or checksums
- added support for CAN FD data in command "G_Can_CyclicMsgs_DefinedDisturbance"
- added commands "G_Can_Tar_AddTxItems_Simple2" and "G_Can_Tar_AddTxItems_Standard2" for supporting CAN FD frames in TAR

g_api_io.dll:

- added command "G_Io_Relays_GetStateDirect"

g_api_tp.dll:

- added asynchronous functionality for "G_Tp_Direct_GetResponse" with commands:
"G_Tp_Direct_GetResponse_Async_AddCallback"
"G_Tp_Direct_GetResponse_Async_RemoveCallback"
"G_Tp_Direct_GetResponse_Async_Enable"
"G_Tp_Direct_GetResponse_Async_Disable"

Hardware Explorer:

- added "Feature Control" option in context menu for devices

Bugfix

g_api_diag.dll:

- "G_Diag_Start" did not update parameter "responseLength" correctly in some cases

g_api_ethernet.dll (x64):

- correctly exports ethernet functions

g_api_lvds.dll:

- "G_Lvds_Common_Config_Set" UART Baudrate is only set when value is not "0"
- "G_Lvds_Common_Data_UartTransfer" returned wrong number of data bytes when timestamp is activated

Hardware Explorer:

- PCIe devices connected via Thunderbolt extension box are detected correctly
- DefaultGateway parameter for ethernet devices can be reset to "0" even if current value is "0" (= not available)

Version 1.4.7271 - 9/19/2019

Features

g_api_lvds.dll:

- added commands:
 - "G_Lvds_PattGen_Pattern1Data_Set"
 - "G_Lvds_PattGen_Pattern1Data_Get"
 - "G_Lvds_PattGen_Pattern1Def_Set"
 - "G_Lvds_PattGen_Pattern1Def_Get"
 - "G_Lvds_PattGen_Timing_Set"
 - "G_Lvds_PattGen_Property_SetById"
 - "G_Lvds_PattGen_Property_GetById"

Version 1.4.7246 - 9/5/2019

Features

g_api_can.dll:

- added commands:
 - "G_Can_CyclicMsgs_Property_SetById"
 - "G_Can_CyclicMsgs_Property_GetById"

g_api_common.dll:

- added support for ETHERNET transceiver type AETH_88Q2112_A2

g_api_diag.dll:

- added commands:
 - "G_Diag_Flag_SetById"
 - "G_Diag_Flag_GetById"
 - "G_Diag_GetLastError"
 - "G_Diag_Property_SetById"
 - "G_Diag_Property_GetById"
 - "G_Diag_Session_Reset"
 - "G_Diag_Reset"

g_api_lvds.dll:

- added commands:
 - "G_Lvds_PattGen_Reset"
 - "G_Lvds_PattGen_Init"
 - "G_Lvds_PattGen_Default_Create"
 - "G_Lvds_PattGen_Enable"
 - "G_Lvds_PattGen_Disable"
 - "G_Lvds_PattGen_Start"
 - "G_Lvds_PattGen_Stop"
- added SerDes type "G_LVDS__COMMON__SER_DES__DS90UB940"

Bugfix

g_api_common.dll:

- "G_Common_Xcp_Cmd_ProgramClear" ProjectSpecific data is updated correctly

g_api_diag.dll:

- "G_Diag_Start" did not return response data in some cases

g_api_ethernet.dll:

- "G_Ethernet_Tar_AddItems" could raise firmware error "invalid command length"

g_api_trace.dll:

- Trace monitor listens only to monitor instance 0 (only for CAN, Ethernet and FlexRay traces)

Version 1.4.7155 - 7/25/2019

Features

g_api_lvds.dll:

- "G_Lvds_FrameGrabber_CaptureToBuffer2" uses DMA mode only when configured via "G_Lvds_FrameGrabber_PcieDma_Config"

g_api_net2run.dll:

- added support for "Signal Length Type" in signal configuration with commands "G_Net2Run_Signal_Config" and "G_Net2Run_Signal_Config2" for supporting dynamically sized data types

Version 1.4.7097 - 7/4/2019

Features

g_api_can_stm.dll:

- added enum members
 - "G_CAN_STM_TRIGGER_TRIGGER_IN_MODE_AS_HW_TRIGGER"
 - "G_CAN_STM_PARAM_TRIGGER_TRIGGER_OUT_SOURCE_ESI"
 - "G_CAN_STM_TRIGGER_TRIGGER_OUT_SOURCE_STUFF_BIT_COUNTER"
 - "G_CAN_STM_TRIGGER_TRIGGER_OUT_SOURCE_ERROR_FRAME"
 - "G_CAN_STM_TRIGGER_TRIGGER_OUT_SOURCE_START_OF_FRAME"

g_api_ethernet.dll:

- added functions:
 - "G_Ethernet_Diag_Config_Off"

g_api_net2run.dll:

- added functions:
 - "G_Net2Run_Com_TxPdu_Signal_Filter_Config"
 - "G_Net2Run_SecOc_TxPduProcessing_Error"
- "G_Net2Run_Com_Checksum_Config":
 - added checksum mode "G_NET2RUN_CHECKSUM_MODE_ADD_NIBBLES"

Hardware Explorer:

- show PCIe Bus data info for PCIe62xx devices

Bugfix

G-API Service:

- service start type is set to "automatic" when service is installed via command line option

Version 1.4.7045 - 6/12/2019

Features

g_api_ethernet.dll:

- optionally monitor items are buffered in API layer (and not on the device itself) by using flag "G_ETHERNET_MONITOR_CONFIG_FLAG_USE_API_BUFFER"
- added transceiver type "G_ETHERNET_PHY_TRANSCEIVER_TYPE_AETH_88Q2112"
- added commands:
 - "G_Ethernet_Node_DataRate_Set"

"G_Ethernet_Node_DataRate_Get"

Bugfix

g_api_lvs.dll:

- "G_Lvds_Common_Config_Get": LVDS channel configuration is written correctly to config file

Installer:

- added VCRedist package for 64 bit installs

Version 1.4.6968 - 5/27/2019

Features

g_api_can.dll:

- added transport protocol configuration function
"G_Can_Tp_Config_Iso15765"

Bugfix

g_api_flexray.dll:

- "G_FlexRay_Message_Tx_Define" could cause access violation error in
64 bit builds

G-API Service:

- PXIe/PCIe62xx: when trying to open a port to a disconnected device, an
already established connection to a connected device could have been closed

Version 1.4.6869 - 4/25/2019

Features

g_api_can.dll:

- added flag "G_CAN__UART_GATEWAY__INIT__CMD_FLAG__LENGTH_INCLUSIVE_LENGTH_BYTE"
to function "G_Can_UartGateway_Init"

g_api_io.dll:

Historically many functions in the IO Trigger section provide input- output- and channel-numbers that are starting with offset 1.

To provide a more convenient numbering scheme, especially in cross-interface-applications, the following features have been added:

- added functions
 - "G_Io_Trigger_Source_Set2"
 - "G_Io_Trigger_Source_Get2"
 - "G_Io_Trigger_TriggerBusDirection_Set2"
 - "G_Io_Trigger_TriggerBusDirection_Get2"
 - "G_Io_Trigger_SoftwareOut_Write2"
 - "G_Io_Trigger_SoftwareOut_Read2"
 - "G_Io_Trigger_SoftwareIn_Read2"
- "G_Io_Trigger_TimestampConfig_Set":
 - added flag "G_IO__TRIGGER__TIMESTAMP_CONFIG__SET__CMD_FLAG__NO_OFFSET"
- "G_Io_Trigger_TimestampConfig_Get":
 - added flag "G_IO__TRIGGER__TIMESTAMP_CONFIG__GET__RSP_FLAG__NO_OFFSET"
- "G_Io_Trigger_SoftwareIn_TsFifo_Reset":
 - added flag "G_IO__TRIGGER__SOFTWARE_IN__TS_FIFO__RESET__CMD_FLAG__NO_OFFSET"
- "G_Io_Trigger_SoftwareIn_TsFifo_Init":
 - added flag "G_IO__TRIGGER__SOFTWARE_IN__TS_FIFO__INIT__CMD_FLAG__NO_OFFSET"
- "G_Io_Trigger_SoftwareIn_TsFifo_Read":
 - added flag "G_IO__TRIGGER__SOFTWARE_IN__TS_FIFO__READ__CMD_FLAG__NO_OFFSET"

g_api_lvds.dll:

- added functions
 - "G_Lvds_FrameGrabber_CaptureProperty_SetById"
 - "G_Lvds_FrameGrabber_CaptureProperty_GetById"
 - added functions
 - "G_Lvds_Common_Config_Get"
 - "G_Lvds_Common_Config_Set"
- as replacement for the following functions that are deprecated:
- "G_Lvds_Common_Config_Get_StructFromFile"
 - "G_Lvds_Common_Config_WriteToFile"
 - "G_Lvds_Common_Config_GetFromDevice"
 - "G_Lvds_Common_Config_Set_ByFile"
 - "G_Lvds_Common_Config_Set_ByStruct"

g_api_net2run.dll:

- added transfer property values
 - "G_NET2RUN__COM__TRANSFER_PROPERTY__TRIGGERED_ON_CHANGE"
 - "G_NET2RUN__COM__TRANSFER_PROPERTY__TRIGGERED_ON_CHANGE_WITHOUT_REP"
 - "G_NET2RUN__COM__TRANSFER_PROPERTY__TRIGGERED_WITHOUT_REP"

Bugfix

examples

- "G_GetInterfaceList": interfaces for GPXI62xx devices were reported twice

Version 1.4.6793 - 4/1/2019

Features

supported devices

- added GPCIE6281

g_api_common.dll:

- added command "G_Common_GetFeatureCode"
- added support for ETHERNET transceiver type AETH_88Q2112

g_api_io.dll:

- added output type "G_IO__TRIGGER__OUTPUT_TYPE__UART_RX"
- added trigger source type "G_IO__TRIGGER__SOURCE_TYPE__UART_TX"

g_api_lvds.dll:

- added property "G_LVDS__COMMON__DATA__PROPERTY_ID__PASSTHROUGH_SWITCH"
- added SerDes types
 - "G_LVDS__COMMON__SER_DES__APIX_INAP375T_MII"
 - "G_LVDS__COMMON__SER_DES__APIX_INAP375R_MII"

g_api_net2run.dll:

- added commands
 - "G_Net2Run_Fvm_Custom2_TimeServerEcu"
 - "G_Net2Run_Fvm_Custom2_PartEcu"
 - "G_Net2Run_Fvm_Custom2_AuthBroadcast"
 - "G_Net2Run_Fvm_Custom2_PartEcuChallenge"
 - "G_Net2Run_Fvm_Custom2_TimeServerEcuResponse"

examples

- add "LVDS_TriggerIn"
- add "LVDS_TriggerOut"

Changes

g_api_lvds.dll:

- the following functions are deprecated:
 - G_Lvds_Common_Config_Get_StructFromFile
 - G_Lvds_Common_Config_WriteToFile
 - G_Lvds_Common_Config_GetFromDevice
 - G_Lvds_Common_Config_Set_ByFile
 - G_Lvds_Common_Config_Set_ByStruct

Bugfix

g_api_lin.dll:

- "G_Lin_Node_Config": fixed crash when "baudRate" was 0

G-API Service:

- when using monitoring on PXI3051 or PXI3052 devices, not all handles were closed

Version 1.4.6635 - 1/31/2019

Features

g_api_ethernet.dll:

- added commands

"G_Ethernet_Node_MacAddress_Get"
"G_Ethernet_PktFilter_Set"
"G_Ethernet_Phy_LinkState_Get"
"G_Ethernet_Phy_LinkQuality_Get"

- "G_Ethernet_Monitor_GetData":

added flag "G_ETHERNET__MONITOR__ITEM__FRAME__FLAG__FCS_ERROR"

- "G_Ethernet_TxFifo_Config_Udp6"

- added flags

"G_ETHERNET__TX_FIFO__CONFIG__UDP6__CMD_FLAG__SET_REMOTE_ADDR_FROM_RX"
"G_ETHERNET__TX_FIFO__CONFIG__UDP6__CMD_FLAG__SET_MCAST_HOPS"
"G_ETHERNET__TX_FIFO__CONFIG__UDP6__CMD_FLAG__USE_MCAST_ADDR_FLT"

- added parameters

"MulticastHops"
"MulticastPortFilter"
"MulticastAddressFilter"

- "G_Ethernet_TxFifo_Config_Tcp4"

- added flag

"G_ETHERNET__TX_FIFO__CONFIG__TCP4__CMD_FLAG__ACT_AS_SERVER"

- "G_Ethernet_TxFifo_Config_Tcp6"

- added flag

"G_ETHERNET__TX_FIFO__CONFIG__TCP6__CMD_FLAG__ACT_AS_SERVER"

- "G_Ethernet_TxFifo_Config_Udp4"

- added flags

"G_ETHERNET__TX_FIFO__CONFIG__UDP4__CMD_FLAG__SET_REMOTE_ADDR_FROM_RX"
"G_ETHERNET__TX_FIFO__CONFIG__UDP4__CMD_FLAG__MCAST_LOOP_DISABLE"
"G_ETHERNET__TX_FIFO__CONFIG__UDP4__CMD_FLAG__SET_MCAST_HOPS"

- added parameter

"MulticastHops"

g_api_lvds.dll:

- added commands

"G_Lvds_FrameGrabber_Property_SetById"
"G_Lvds_FrameGrabber_Property_GetById"

Bugfix

g_api_can.dll:

- corrected typo in

- G_CAN__TRIGGER__INPUT_STATE__GET__LEVEL__UNKNOWN
- G_CAN__TRIGGER__OUTPUT_STATE__GET__LEVEL__UNKNOWN

g_api_common.dll:

"G_Common_Xcp_Init_Ethernet_Udp6" returned "invalid command length" error

g_api_ethernet.dll:

- "G_Ethernet_RxFifo_Read" returned wrong entry length on big endian machines (Onboard API)
- "G_Ethernet_MiiMux_ResetAllSelections" - only own selection was reset

Version 1.4.6582 - 12/20/2018

Bugfix

g_api_lvds.dll:

- capture functionality was broken due to feature implementation

Version 1.4.6579 - 12/19/2018

Features

g_api_io.dll:

- added values
 - "G_IO_TRIGGER_SOURCE_TYPE_LVDS_0_SER_DES_GPIO"
 - "G_IO_TRIGGER_SOURCE_TYPE_LVDS_1_SER_DES_GPIO"
 - "G_IO_TRIGGER_SOURCE_TYPE_LVDS_0_TRIGGER_OUT"
 - "G_IO_TRIGGER_SOURCE_TYPE_LVDS_1_TRIGGER_OUT"to type "G_Io_Trigger_SourceType_t"
- added values
 - "G_IO_TRIGGER_OUTPUT_TYPE_LVDS_0_SER_DES_GPIO"
 - "G_IO_TRIGGER_OUTPUT_TYPE_LVDS_1_SER_DES_GPIO"
 - "G_IO_TRIGGER_OUTPUT_TYPE_LVDS_0_TRIGGER_IN"
 - "G_IO_TRIGGER_OUTPUT_TYPE_LVDS_1_TRIGGER_IN"to type "G_Io_Trigger_OutputType_t"

g_api_lvds.dll:

- added commands
 - "G_Lvds_SerDesGpio_IocPinConfig_Get"
 - "G_Lvds_SerDesGpio_IocPinConfig_Set"
 - "G_Lvds_TriggerIn_SourceConfig_Get"
 - "G_Lvds_TriggerIn_SourceConfig_Set"
 - "G_Lvds_TriggerIn_TargetConfig_Get"
 - "G_Lvds_TriggerIn_TargetConfig_Set"
 - "G_Lvds_TriggerOut_Config_Get"
 - "G_Lvds_TriggerOut_Config_Set"

Bugfix

g_api_net2run.dll:

- added reserved bytes for restoring correct alignment to the following commands:
 - "G_Net2Run_Com_SignalMonitor_Config"
 - "G_Net2Run_Com_SignalMonitor_Start"
 - "G_Net2Run_Com_SignalMonitor_Stop"
 - "G_Net2Run_Com_SignalMonitor_GetSignalInfo"
 - "G_Net2Run_Com_SignalMonitor_GetSignalData"
- G_Net2Run_Com_SignalMonitor_GetSignalData:
 - when reading physical signal values, monitor data was corrupted
- G_API Service:
 - Pxi61xx devices are sorted by geographic address per device type

Version 1.4.6533 - 11/12/2018

Features

g_api_lvds.dll:

- added SerDes type "G_LVDS__COMMON__SER_DES__DS90C386"

Bugfix

- G_API Service:
 - could crash when PXI62xx is disconnected

Version 1.4.6514 - 10/25/2018

Features

g_api_can.dll:

- G_Can_Tp_Config_IsoTp:
 - added flags
 - "G_CAN__TP__ISOTP__FLAG__USE_PADDING_BYTE"
 - "G_CAN__TP__ISOTP__FLAG__IGNORE_CF_WITH_WRONG_SN"
 - "G_CAN__TP__ISOTP__FLAG__USE_PHYSICAL_TX_DL"
 - "G_CAN__TP__ISOTP__FLAG__USE_FUNCTIONAL_TX_DL"
 - added parameters
 - "PaddingByte"
 - "PhysicalTxDI"
 - "FunctionalTxDI"

g_api_io.dll:

- added command
 - "G_Io_Trigger_Timestamp_Get"

Version 1.4.6487 - 10/4/2018

Features

g_api_lvds.dll:

- added SerDes types
 - G_LVDS__COMMON__SER_DES__DS90UB954
 - G_LVDS__COMMON__SER_DES__DS90UB953
- added pixel modes
 - G_LVDS__FRAME_GRABBER__PIXEL_MODE__RAW12_16_SHIFTED_LE
 - G_LVDS__FRAME_GRABBER__PIXEL_MODE__RAW16_LE

g_api_net2run.dll:

- added commands
 - G_Net2Run_Com_SignalMonitor_Config
 - G_Net2Run_Com_SignalMonitor_Delete
 - G_Net2Run_Com_SignalMonitor_Start
 - G_Net2Run_Com_SignalMonitor_Stop
 - G_Net2Run_Com_SignalMonitor_GetSignalInfo
 - G_Net2Run_Com_SignalMonitor_GetSignalData
 - G_Net2Run_Com_SignalMonitor_SwitchToNextSignal

Version 1.4.6480 - 9/26/2018

Features

g_api_lvds.dll:

- added LVDS SerDes types
 - G_LVDS__COMMON__SER_DES__RGB888R
 - G_LVDS__COMMON__SER_DES__RGB888T
 - G_LVDS__COMMON__SER_DES__MAX9295A_MAX9296A
- added Pixel Modes
 - G_LVDS__FRAME_GRABBER__PIXEL_MODE__RAW8
 - G_LVDS__FRAME_GRABBER__PIXEL_MODE__RAW12_MIPI_CSI2
 - G_LVDS__FRAME_GRABBER__PIXEL_MODE__RAW16_MIPI_CSI2

Features

g_api_flexray.dll:

- "G_FlexRay_Monitor_Config": added command flags
G_FLEXRAY__MONITOR__CONFIG__FLAG__ENABLE_START_EVENT
G_FLEXRAY__MONITOR__CONFIG__FLAG__ENABLE_STOP_EVENT
- "G_FlexRay_Tp_Init_Iso10681": added parameter "TxPduPendingLimit"

Bugfix

Installer

- added FPGA file for PXI4009 to installer

Documentation

- added G_Ethernet_Monitor... section
- added monitor entry types to "G_FlexRay_Monitor_GetData"

Features

g_api_common.dll:

- "G_Common_EA_InitEvent": added event types
G_COMMON__EA__EVENT__TYPE__COM__RX_PDU_SIGNAL__RX_IND
G_COMMON__EA__EVENT__TYPE__COM__TX_PDU_SIGNAL__TX_CON
G_COMMON__EA__EVENT__TYPE__FLEXRAY__PDU__RX_IND
G_COMMON__EA__EVENT__TYPE__FLEXRAY__PDU__TX_CON
G_COMMON__EA__EVENT__TYPE__FLEXRAY__SYNCHRONIZED
G_COMMON__EA__EVENT__TYPE__FLEXRAY__SYNC_LOSS
G_COMMON__EA__EVENT__TYPE__ETHERNET__LINKED
G_COMMON__EA__EVENT__TYPE__ETHERNET__LINK_LOSS
G_COMMON__EA__EVENT__TYPE__ETHERNET__RX_FIFO__NEW_ENTRY

g_api_net2run.dll:

- "G_Net2Run_Com_TxPdu_Checksum_Config": added checksum types
G_NET2RUN__CHECKSUM__MODE__CUSTOM_14
G_NET2RUN__CHECKSUM__MODE__ADD_BYTES__XOR_NIBBLES
- added command "G_Net2Run_Fvm_StopCommunication"
- added signal types
G_NET2RUN__SIGNAL__TYPE__S64
G_NET2RUN__SIGNAL__TYPE__U64

Bugfix

g_api_lvds.dll:

- when calling "G_Lvds_FrameGrabber_SyncInfo_GetById" the permanent scan is no longer interrupted

!!!ATTENTION!!! This requires firmware version >= 1.18.2

g_api_net2run.dll:

- "G_Net2Run_Signal_Config" & "G_Net2Run_Signal_Config2":
check for duplicate ComIds in signal configuration

g_api_trace.dll:

- G_Trace_GetItems: fixed crash when "startIndex" > number of buffer items available

Installer:

- when reverting to an older version, all files are correctly replaced

Version 1.4.6427 - 7/23/2018

Bugfix

Installer:

- when reverting to an older version, all files are correctly replaced

Version 1.4.6426 - 7/23/2018

Features

g_api_lvds.dll:

- increased internal frame buffer size for supporting 4k resolution

g_api_trace.dll:

- added flags
 - G_TRACE__START__CMD_FLAG__LOG_TO_ASC
 - G_TRACE__START__CMD_FLAG__DISABLE_PAGE_FILEto command "G_Trace_Start"
- added property ids
 - G_TRACE__PROPERTY_ID__ASC_LOG_FILE__NAME
 - G_TRACE__PROPERTY_ID__ASC_LOG_FILE__MAX_SIZE

Bugfix

g_api_lvds.dll:

- increased internal frame data reception timeout

Installer

- fixed double entries in Windows uninstall list

Version 1.4.6404 - 6/28/2018

Features

g_api_lvds.dll:

- increased internal frame buffer size for supporting 4k resolution

Bugfix

g_api_lvds.dll:

- increased internal frame data reception timeout

Version 1.4.6384 - 6/25/2018

Features

g_api_net2run.dll:

- added commands
 - "G_Net2Run_SignalBlock_Buffer_Config"
 - "G_Net2Run_SignalBlock_Buffer_Read"

g_api_trace.dll:

- added flag "G_TRACE__EXPORT_TO_ASC__CMD_FLAG__SPLIT_FILE" to command "G_Trace_ExportToASC"

Bugfix

- fixed "Invalid device type" error with certain combinations of USB devices

Features

Installer

- added 64 Bit Version to installer

Bugfix

g_api_can.dll:

- changed flag "G_CAN__TP__ISOTP__FLAG__USE_TIME_BR_BETWEEN_CF_AND_FC" to the correct value

g_api_lin.dll:

- restored alignment for buffer monitor entry types to 4 bytes

g_api_lvds.dll:

- "G_Lvds_FrameGrabber_CaptureToFile" and "G_Lvds_FrameGrabber_CaptureToFile2" could return error when writing files

Features

g_api_ethernet.dll:

- added command "G_Ethernet_Tar_AddItems" that makes the following commands obsolete:

- "G_Ethernet_Tar_AddItems_Udp4"
- "G_Ethernet_Tar_AddItems_Tcp4"
- "G_Ethernet_Tar_AddItems_Udp6"
- "G_Ethernet_Tar_AddItems_Tcp6"

- added "VlanID" parameter to commands

- "G_Ethernet_TxFifo_Config_Icmp6"
- "G_Ethernet_TxFifo_Config_Udp6"
- "G_Ethernet_TxFifo_Config_Tcp6"

- added RX Fifo commands:

- "G_Ethernet_RxFifo_Config"
- "G_Ethernet_RxFifo_Delete"
- "G_Ethernet_RxFifo_Read"

g_api_net2run.dll:

- added commands:

- "G_Net2Run_CanNm_Autosar_Config"
- "G_Net2Run_Fvm_SetFreshness"
- "G_Net2Run_Fvm_GetFreshness"
- "G_Net2Run_Com_TxPdu_Property_SetById"
- "G_Net2Run_Com_TxPdu_Property_GetById"
- "G_Net2Run_Fvm_GetFreshness"
- "G_Net2Run_Fvm_SetFreshness"

- added type "G_NET2RUN__SIGNAL__TYPE__U8_DYN"

- added routing target "G_NET2RUN__PDU_ROUTER__ROUTING_PATH__TARGET__FVM_RX" and routing source "G_NET2RUN__PDU_ROUTER__ROUTING_PATH__TARGET__FVM_TX" to PduRouter

- G_Net2Run_Com_TxPdu_Config:
 - added parameter "ClearUpdateBit"

- G_Net2Run_Com_Signal_TxPduSignal_Mapping:

- added flags:
 - "G_NET2RUN__COM__SIGNAL__TX_PDU_SIGNAL__MAPPING__FLAG__READ_SIGNAL"
 - "G_NET2RUN__COM__SIGNAL__TX_PDU_SIGNAL__MAPPING__FLAG__DISABLE_UPD_NOT"

- G_Net2Run_Com_Signal_RxPduSignal_Mapping:

- added flags:
 - "G_NET2RUN__COM__SIGNAL__RX_PDU_SIGNAL__MAPPING__FLAG__READ_SHADOW_BUFFER"
 - "G_NET2RUN__COM__SIGNAL__RX_PDU_SIGNAL__MAPPING__FLAG__DISABLE_UPD_NOT"

- G_Net2Run_Com_RxPdu_Signal:
 - added flag "G_NET2RUN__COM__RX_PDU__SIGNAL__FLAG__IS_GROUP_SIGNAL"
and parameter "RxPduSignalGroupId"
- G_Net2Run_Fvm_FreshnessValue_Custom1:
 - added flag "G_NET2RUN__FVM__FRESHNESS_VALUE__CUSTOM_1__CMD_FLAG__WAIT_FOR_TX_CONF"
 - replaced parameter "TxPduId_Authenticator" with "BroadcastTpMessagePartDelay"

Bugfix

G-API in general

- restored 4-byte-alignment for critical structures after changing u64_t data type

g_api_can.dll:

- G_Can_TxFifo_QueueMsgs: data was not sent correctly

g_api_lvds.dll:

- increased reset time after configuration of deserializer vector

Hardware Explorer:

- fixed inconsistency when connecting to USB3085 devices that could lead to "device not connected" error

Version 1.3.6245 - 3/20/2018

- maintenance release for Onboard API

Version 1.3.6227 - 3/1/2018

Features

supported devices

- added ETH4009
- added ETH3100

g_api_net2run.dll:

- added command "G_Net2Run_InitInterface"

Changes

- changed definition of host type "u64_t" to real 64 bit type for future compatibility

Bugfix

g_api_resistors.dll:

- when resistor values are reset, "G_Resistors_Values_Get" will return 0xFFFFFFFF instead of 0

Version 1.3.6149 - 1/11/2018

Features

g_api_io.dll:

- added
 - "G_Io_BrrFault_Faults_Set"
 - "G_Io_BrrFault_Faults_Get"
 - "G_Io_BrrFault_Property_SetById"
 - "G_Io_BrrFault_Property_GetById"

Version 1.3.6030 - 12/7/2017

!!! LAST SUPPORTED VERSION FOR WINDOWS XP !!!

Features

- supported devices
- added ETH4045

Bugfix

- fixed USB3060 device access

Version 1.3.5986 - 11/23/2017

Features

supported devices

- added PXI4009

g_api_lvds.dll:

- added SerDes type "G_LVDS__COMMON__SER_DES__RGB888"
- "G_Lvds_Common_DeserializerVector_Config":
 - added command flag "G_LVDS__COMMON__DES_VECTOR__CONFIG__CMD_FLAG__NO_RESET"

g_api_net2run.dll:

- added commands
 - "G_Net2Run_SecOc_GetVerificationStat"
 - "G_Net2Run_Fvm_StartCommunication"

Bugfix

- fixed "unsupported target" error when flashing PXI6141
- corrupted update files handled correctly when flashing devices

Version 1.3.5949 - 10/23/2017

Features

g_api_io.dll:

- added trigger source type
 - "G_IO__TRIGGER__SOURCE_TYPE__CAN_STM_TRIGGER_OUT"
- added commands
 - "G_Io_Trigger_SoftwareIn_TsFifo_Reset"
 - "G_Io_Trigger_SoftwareIn_TsFifo_Init"
 - "G_Io_Trigger_SoftwareIn_TsFifo_Read"

g_api_lvds.dll:

- added commands
 - "G_Lvds_Common_Config_GetSerDesName"
 - "G_Lvds_Common_Config_GetFromDevice"
 - "G_Lvds_Common_Config_Get_StructFromFile"
 - "G_Lvds_Common_Config_Set_ByStruct"
 - "G_Lvds_Common_Config_Set_ByFile"

g_api_net2run.dll:

- added bus type "G_NET2RUN__BUS_TYPE__ETHERNET"
- added commands:
 - "G_Net2Run_SecOc_RxPduProcessing"
 - "G_Net2Run_SecOc_RxSecuredPdu"
 - "G_Net2Run_SecOc_RxSecuredPduCollection"
 - "G_Net2Run_SecOc_RxAuthenticPdu"
 - "G_Net2Run_SecOc_TxPduProcessing"
 - "G_Net2Run_SecOc_TxAuthenticPdu"
 - "G_Net2Run_SecOc_TxSecuredPdu"

"G_Net2Run_SecOc_TxSecuredPduCollection"
"G_Net2Run_Csm_Job"
"G_Net2Run_Csm_Key_128Bit"
"G_Net2Run_Fvm_FreshnessValue_Custom1"

- PduRouter:

- added sources:

"G_NET2RUN__PDU_ROUTER__ROUTING_PATH__SOURCE__SO_AD__RX"
"G_NET2RUN__PDU_ROUTER__ROUTING_PATH__SOURCE__UDP_NM__RX"
"G_NET2RUN__PDU_ROUTER__ROUTING_PATH__SOURCE__SEC_OC__RX"
"G_NET2RUN__PDU_ROUTER__ROUTING_PATH__SOURCE__SEC_OC__TX"
"G_NET2RUN__PDU_ROUTER__ROUTING_PATH__SOURCE__FVM__TX"

- added targets:

"G_NET2RUN__PDU_ROUTER__ROUTING_PATH__TARGET__SO_AD__TX"
"G_NET2RUN__PDU_ROUTER__ROUTING_PATH__TARGET__SEC_OC__RX"
"G_NET2RUN__PDU_ROUTER__ROUTING_PATH__TARGET__SEC_OC__TX"

Bugfix

g_api_common.dll:

- G_Common_Xcp_Cmd_ProgramClear:

- added reserved byte in command structure to ensure proper alignment

Version 1.3.5927 - 9/22/2017

Features

Installer:

- added G_FlashServer to installer

Bugfix

Onboard API:

- eliminated memory leak when closing interface

Version 1.3.5629 - 7/13/2017

Features

- added G_FlashServer
- added interface type "G_INTERFACE_TYPE__CAN_STM"
- added DLL "g_api_can_stm.dll"
- added sample code "Ethernet_TxFifo_Tar"

g_api_lvds.dll:

- added command "G_Lvds_Apix_Write" for writing raw data

Bugfix

- correctly open interfaces when
host interface type = "G_HOST_INTERFACE_TYPE__ETHERNET"
and flag "G_INTERFACE_INFO__FLAG__ETHERNET" is not set
- Series61 PCI devices are correctly detected as PCI devices (not PXI)
- changed connection sequence of Series61 PXI/PCI devices for
preventing deadlock on cards

g_api_ethernet.dll:

"G_Ethernet_TxFifo_Write" could return error
"G_ERROR__DLL__API__RESPONSE_BUFFER_TOO_SMALL"

Features

g_api_common.dll:

- added command
 - "G_Common_Xcp_Init_Ethernet_Udp4"
 - "G_Common_Xcp_Init_Ethernet_Udp6"
 - "G_Common_Xcp_Init_Ethernet_Tcp4"
 - "G_Common_Xcp_Init_Ethernet_Tcp6"

g_api_ethernet.dll:

- added commands
 - "G_Ethernet_Node_LocalIp6Address_Add"
 - "G_Ethernet_Node_LocalIp6Address_Remove"
 - "G_Ethernet_Node_LocalIp6Address_GetAll"
 - "G_Ethernet_Node_Vlan_Config"
 - "G_Ethernet_Node_Vlan_Delete"

 - "G_Ethernet_Phy_LinkState_Get"
 - "G_Ethernet_Phy_TransceiverType_Get"

 - "G_Ethernet_Tar_Config_Udp4"
 - "G_Ethernet_Tar_Config_Tcp4"
 - "G_Ethernet_Tar_Config_Udp6"
 - "G_Ethernet_Tar_Config_Tcp6"
 - "G_Ethernet_Tar_Config_Off"
 - "G_Ethernet_Tar_AddItems_Udp4"
 - "G_Ethernet_Tar_AddItems_Tcp4"
 - "G_Ethernet_Tar_AddItems_Udp6"
 - "G_Ethernet_Tar_AddItems_Tcp6"
 - "G_Ethernet_Tar_Start"
 - "G_Ethernet_Tar_Stop"
 - "G_Ethernet_Tar_GetState"

 - "G_Ethernet_TxFifo_Config_Raw"
 - "G_Ethernet_TxFifo_Config_Icmp6"
 - "G_Ethernet_TxFifo_Config_Udp6"
 - "G_Ethernet_TxFifo_Config_Tcp6"
 - "G_Ethernet_TxFifo_Config_Udp4"
 - "G_Ethernet_TxFifo_Config_Tcp4"
 - "G_Ethernet_TxFifo_Delete"
 - "G_Ethernet_TxFifo_Write"
 - "G_Ethernet_TxFifo_Connect"
 - "G_Ethernet_TxFifo_Disconnect"
 - "G_Ethernet_TxFifo_GetState"
- added flag
 - "G_ETHERNET__TP__INIT__ISO13400__CMD_FLAG__USE_VLAN_ID"

g_api_lvds.dll:

- added command
 - "G_Lvds_Apix_Read"

Bugfix

Hardware Explorer:

- only 128 interfaces could be displayed per host interface (PXI, USB, ...)

Features

g_api_can.dll:

- added UART Gateway functionality with commands
 - G_Can_UartGateway_Reset
 - G_Can_UartGateway_Init

- added documentation for command "G_Lvds_Common_VideoSettings_ResetExtensionBoard"

Bugfix

g_api_common.dll:

- XCP DOWNLOAD and PROGRAM command order could be wrong under some circumstances

g_api_flasher.dll, Hardware Explorer:

- flash operation was not possible on devices without user code interface

Version 1.3.5369 - 2/9/2017

Features

g_api_common.dll:

- added XCP commands
 - "G_Common_Xcp_Cmd_Connect"
 - "G_Common_Xcp_Cmd_Disconnect"
 - "G_Common_Xcp_Cmd_GetStatus"
 - "G_Common_Xcp_Cmd_GetCommModeInfo"
 - "G_Common_Xcp_Cmd_GetSeed"
 - "G_Common_Xcp_Cmd_Unlock"
 - "G_Common_Xcp_Cmd_SetMta"
 - "G_Common_Xcp_Cmd_Download"
 - "G_Common_Xcp_Cmd_Upload"
 - "G_Common_Xcp_Cmd_GetPgmProcessorInfo"
 - "G_Common_Xcp_Cmd_GetSectorInfo"
 - "G_Common_Xcp_Cmd_ProgramClear"
 - "G_Common_Xcp_Cmd_BuildChecksum"
 - "G_Common_Xcp_Cmd_ProgramReset"
 - "G_Common_Xcp_Cmd_Program"

g_api_lvds.dll

- added command "G_Lvds_FrameGrabber_CaptureToBuffer2"

g_api_net2run.dll

- added commands
 - "G_Net2Run_PduMux2_ContainedRxPduPool_Config"
 - "G_Net2Run_PduMux2_ContainerRxPdu_Config"
 - "G_Net2Run_PduMux2_ContainedRxPdu_Config"

Bugfix

g_api.dll

- when using "G_HOST_INTERFACE_TYPE__ETHERNET", internal device parameters are set correctly
- limited max param size for onboard api builds

g_api_common.dll

- increased fifo buffer size for commands
 - "G_Common_Xcp_Cmd_Download" and
 - "G_Common_Xcp_Cmd_Program"

Version 1.3.5347 - 1/25/2017

Bugfix

Hardware Explorer:

- fixed error "port handle not initialized"
- updated internal XML parser to fix alignment bug

Version 1.3.5273 - 11/10/2016

Features

g_api_net2run.dll:

- added functions
 - "G_Net2Run_PduMux2_ContainerTxPdu_Config"
 - "G_Net2Run_PduMux2_ContainedTxPdu_Config"

Version 1.3.5267 - 11/7/2016

Bugfix

Hardware Explorer:

- error "invalid port handle" when flashing firmware on VideoDragon devices

Version 1.3.5252 - 10/27/2016

Features

Hardware Explorer:

- added status box to flash dialog for displaying warnings and errors

g_api_lvds.dll:

- added support for writing register blocks to command
 - "G_Lvds_Common_Data_Register_Write"

g_api_net2run.dll:

- added CAN-FD support to commands
 - "G_Net2Run_CanIf_RxPdu_Config"
 - "G_Net2Run_CanIf_TxPdu_Config"
- added commands
 - "G_Net2Run_CanIf_Controller_Config"
 - "G_Net2Run_CanIf_BaudrateFd_Config"

Version 1.3.5207 - 10/10/2016

Features

Hardware Explorer:

- added status box to flash dialog for displaying warnings and errors

Version 1.3.5200 - 10/6/2016

Features

g_api_common.dll:

- added commands
 - "G_Common_Ethernet_FtpServer_AutoStart_Enable"
 - "G_Common_Ethernet_FtpServer_AutoStart_Disable"
 - "G_Common_Ethernet_FtpServer_AutoStart_GetState"

g_api_lvds.dll:

- added command "G_Lvds_FrameGenerator_DisplayBuffer"

g_api_net2run.dll:

- added flags "G_NET2RUN__PDU_ROUTER__ROUTING_PATH__CONFIG__FLAG__DELETE"
and "G_NET2RUN__PDU_ROUTER__ROUTING_PATH__CONFIG__FLAG__DELETE_ALL"
to command "G_Net2Run_PduRouter_RoutingPath_Config"

Bugfix

g_api_fs.dll:

- "G_FS_File_Read" could return error on large files

Version 1.3.5171 - 9/15/2016

Features

G-API in general

- added interface type to error description for "no response from device"

g_api_can.dll:

- added commands "G_Can_Node_FdState_Get" and "G_Can_Node_FdState_Set"

G-API Service:

- added more detailed error description in case a connection error occurs

Bugfix

g_api_lvds.dll:

- substantiated error code and description for command "G_Lvds_FrameGrabber_SyncInfo_GetById" when permanent scan was not started
- changed parameter name in structure "G_Lvds_FrameGrabber_Init_Parameters_t" from "SyncWidth" to "BackPorch" to reflect correct parameter usage

Hardware Explorer:

- firmware update of VideoDragon devices did end with "no response from device" in some cases

Installer

- added notification when files could not be updated while installing

Version 1.3.5112 - 6/20/2016

Bugfix

g_api_can.dll:

- "G_Can_Monitor_BufferMode_Start": buffer size was set bigger than user value

g_api_io.dll:

- "G_Io_Relays_GetState" could cause error 0x0100000E when called with numberOfRelais > 1

g_api_lvds.dll:

- in command "G_Lvds_Common_VideoSettings_Property_SetById" the extension board reset is performed for properties
G_LVDS__COMMON__VIDEO_SETTINGS__PROPERTY_ID__BUS_WIDTH_SELECT and
G_LVDS__COMMON__VIDEO_SETTINGS__PROPERTY_ID__MODE_SELECT
- increased response size for command "G_Lvds_Common_Data_UartTransfer" for timestamp data

Hardware Explorer:

- Application was not responsive for several seconds when G-API Service was not running

Documentation

- updated documentation for LVDS Common Data commands

Features

g_api_lvds.dll:

- added flags "G_LVDS__COMMON__DATA__UART_TRANSFER__CMD_FLAG__READ_ALL" and "G_LVDS__COMMON__DATA__UART_TRANSFER__CMD_FLAG__WITH_TIMESTAMP" to command "G_Lvds_Common_Data_UartTransfer"
- added property id "G_LVDS__COMMON__DATA__PROPERTY_ID__I2C_SLAVE_BAUDRATE"
- added "G_LVDS__COMMON__DATA__DATA_MODE__I2C_SLAVE_TO_DESERIALIZER" and "G_LVDS__COMMON__DATA__DATA_MODE__I2C_SLAVE_TO_SERIALIZER" to property id "G_LVDS__COMMON__DATA__PROPERTY_ID__DATA_MODE"
- added flags "G_LVDS__COMMON__DATA__UART_TRANSFER__CMD_FLAG__READ_ALL" and "G_LVDS__COMMON__DATA__UART_TRANSFER__CMD_FLAG__WITH_TIMESTAMP" to command "G_Lvds_Common_Data_UartTransfer"
- added commands
"G_Lvds_Common_Data_I2cSlaveDevice_Define"
"G_Lvds_Common_Data_I2cSlaveDevice_Delete"
"G_Lvds_Common_Data_I2cSlaveRegister_Define"
"G_Lvds_Common_Data_I2cSlaveRegister_Delete"

g_api_net2run.dll:

- added flags parameter to type "G_Net2Run_PduInfo_t"

Bugfix

g_api_lvds.dll:

- data transfer was initiated only at second call with the following functions:
"G_Lvds_Common_Data_I2cTransfer"
"G_Lvds_Common_Data_I2cTransferEx"
"G_Lvds_Common_Data_SpiTransfer"
"G_Lvds_Common_Data_UartTransfer"
- commands "G_Lvds_FrameGrabber_CaptureToFile" and "G_Lvds_FrameGrabber_CaptureToFile2" were broken on VideoDragon devices with firmware version prior 1.16.18

Changes

g_api_lvds.dll:

- changed property id names from
"G_LVDS__FRAME_GRABBER__SYNC_INFO__ID__PIXEL_CLOCK_FREQ_MINIMUM" and
"G_LVDS__FRAME_GRABBER__SYNC_INFO__ID__PIXEL_CLOCK_FREQ_MAXIMUM" to
"G_LVDS__FRAME_GRABBER__SYNC_INFO__ID__PIXEL_CLOCK_FREQ_DIV_MINIMUM" and
"G_LVDS__FRAME_GRABBER__SYNC_INFO__ID__PIXEL_CLOCK_FREQ_DIV_MAXIMUM"

Bugfix

- fix for "file not found" error when scanning for available devices

Features

supported devices

- added ETH3116
- added ETH3118
- added ETH3132
- added ETH3164
- added ETH31128

g_api_lvds.dll:

- added command "G_Lvds_FrameGrabber_SetPixelMode"

Hardware Explorer:

- added flashing functionality for ETH3030

Bugfix

g_api_flexray.dll:

- "G_FlexRay_GetConfigData_FromFibex": WakeUp Channel was set wrong in some cases

Version 1.3.5030 - 2/25/2016

Bugfix

- PXI4112 and PXI4113 are detected properly

g_api_fs.dll:

- fixed error handling when file save operation went into timeout

g_api_lvds.dll:

- "G_Lvds_Common_Data_I2cTransferEx": data bytes are read correctly
- "G_Lvds_Apix_ConfigByFile" configuration of APIX RX board works now as expected

Version 1.3.5013 - 2/11/2016

Features

g_api_lvds.dll:

- added commands
 - "G_Lvds_Common_Data_I2cTransferEx"
 - "G_Lvds_Common_Data_SpiTransfer"
 - "G_Lvds_Common_Data_UartTransfer"
- added extended data bytes to commands "G_Lvds_Common_Data_Register_Read" and "G_Lvds_Common_Data_Register_Write"
- added properties "G_LVDS__COMMON__DATA__PROPERTY_ID__UART_BAUDRATE" and "G_LVDS__COMMON__DATA__PROPERTY_ID__UART_PARITY" to "G_Lvds_Common_Data_PropertyId_t"
- added type "G_Lvds_Common_Data_DataMode_t" for property id "G_LVDS__COMMON__DATA__PROPERTY_ID__DATA_MODE"

Version 1.3.4989 - 1/21/2016

Bugfix

- eliminated possible race condition when multiple port handles to the same interface were closed simultaneously

Version 1.3.4964 - 12/10/2015

Features

g_api_lvds.dll:

- added properties "G_LVDS__COMMON__PROPERTY_ID__CAN_GRAB" and "G_LVDS__COMMON__PROPERTY_ID__CAN_GENERATE"

Bugfix

g_api_can.dll:

- "G_Can_Monitor_BufferMode_GetItems_Large" could return invalid monitor data in some circumstances

Hardware Explorer:

- decreased timeout while scanning for ethernet devices

Version 1.3.4912 - 10/29/2015

Features

g_api_lvds.dll:

- "G_Lvds_FrameGrabber_Config_DeserializerVector2" can be used for VideoDragon generator devices

Bugfix

Hardware Explorer:

- Properties of VideoDragon generator devices are shown in Hardware Explorer:

Version 1.3.4898 - 10/20/2015

Features

g_api_net2run.dll:

- added functions
 - "G_Net2Run_ComManager_User_Config"
 - "G_Net2Run_Com_TxPdu_Checksum_IncludedBytes"
 - "G_Net2Run_Com_TxPdu_Checksum_Wrapper"
 - "G_Net2Run_Com_TxPdu_Ramp_Config"
 - "G_Net2Run_Com_TxPdu_Ramp_Control"

Bugfix

g_api_lvds.dll:

- "G_Lvds_FrameGrabber_CaptureToFile": fixed internal buffer size error for USB4120 devices
- "G_Lvds_FrameGrabber_LoadReferenceFromBuffer": error when loading files > 4MB on USB4115

g_api_net2run.dll:

- "G_Net2Run_Com_TxPdu_Checksum_Config": flags were not handled correctly

Hardware Explorer:

- Hardware Version of 4121 devices was not displayed correctly

Version 1.3.4882 - 9/15/2015

Features

g_api_net2run.dll:

- added functions:
 - G_Net2Run_SignalGroup_TxPdu_Config
 - G_Net2Run_SignalGroup_TxPdu_Mapping
 - G_Net2Run_SignalGroup_RxPdu_Config
 - G_Net2Run_SignalGroup_RxPdu_Mapping
 - G_Net2Run_SignalGroup_TxPdu_Write
 - G_Net2Run_SignalGroup_RxPdu_Read

Bugfix

G-API Service:

- fixed errorhandling when a port handle to a disconnected device was opened (G_ERROR__SERVER__TOO_MANY_DEVICES_TO_MAP)
- fixed error when interfaces of a device with multiple controllers were used

Version 1.3.4874 - 8/5/2015

Features

g_api_lvds.dll:

- added commands
 - "G_Lvds_FrameGrabber_SyncInfoPermanentScan_Start"
 - "G_Lvds_FrameGrabber_SyncInfoPermanentScan_Stop"
 - "G_Lvds_FrameGrabber_SyncInfo_GetById"

Bugfix

Hardware Explorer:

- error message when server could not be found on device scanning

Version 1.3.4870 - 7/23/2015

Bugfix

Hardware Explorer:

- device list could be corrupted when USB devices were disconnected without closing port handles correctly

Version 1.3.4857 - 7/9/2015

Features

g_api_lvds.dll:

- added function "G_Lvds_FrameGenerator_SetDisplayProperties2"
- added function "G_Lvds_FrameGenerator_GetHardwareInfo2"
- added function "G_Lvds_FrameGenerator_GetImage"

Bugfix

G-API Service:

- fixed rare crash when opening and closing interfaces in multiple threads

Version 1.3.4848 - 6/30/2015

Bugfix

G-API Service:

- fixed possible crash when connecting to USB device that is currently unavailable

Version 1.3.4847 - 6/29/2015

Features

g_api_can.dll:

- added support for CAN FD to command "G_Can_CyclicMsgs_ChangeMsgDataAndMsgCount"

Bugfix

g_api_can.dll:

- fixed error in command "G_Can_CyclicMsgs_ChangeMsgDataAndMsgCount" when mode "G_CAN__CYCLIC_MSGS__CHANGE_MSG_DATA__CHANGE_MODE__WITH_MINIMUM_DELAY" was selected

g_api_net2run.dll:

- fixed inconsistency in G_Net2Run_SignalBlock functions when reading or writing with signal length information

G-API Service:

- fixed rare locks when port was closed

Version 1.3.4836 - 6/11/2015

Features

- VideoDragon: capture operation is temporarily stopped when configuring deserializer vector to prevent capture errors

g_api_net2run.dll:

- added signal block functionality:
 - G_Net2Run_SignalBlock_Config
 - G_Net2Run_SignalBlock_Delete
 - G_Net2Run_SignalBlock_Write
 - G_Net2Run_SignalBlock_Read

Bugfix

g_api_net2run.dll:

- fixed memory leak in "G_Net2Run_Signal_Config"
- fixed crash when RBS file contained non-subsequent signal ids

Version 1.3.4825 - 5/20/2015

Bugfix

G-API Service:

- possible stack overflow

g_api_common.dll:

- XCP DAQ could cause access violation on de-initialization

Version 1.3.4783 - 4/15/2015

Features

g_api_lvds.dll:

- added functions
 - G_Lvds_FrameGrabber_Data_Property_SetById
 - G_Lvds_FrameGrabber_Data_Property_GetById
 - G_Lvds_FrameGrabber_Data_Register_Write
 - G_Lvds_FrameGrabber_Data_Register_Read
 - G_Lvds_FrameGrabber_Data_I2cTransfer
 - G_Lvds_FrameGrabber_VideoSettings_Property_SetById
 - G_Lvds_FrameGrabber_VideoSettings_Property_GetById

g_api_net2run.dll:

- added function G_Net2Run_Signal_Config2 for configuration of RBS signals without RBS file

Bugfix

- VideoDragon: improved stability

Version 1.3.4765 - 3/17/2015

Features

- added command "G_FlexRay_Diag_Config_Off" for deactivating FlexRay diagnostics

Bugfix

- VideoDragon: fixed interface assignments for file system functions
- DLL version info is written correctly into DLL files

Version 1.3.4739 - 3/11/2015

Features

- added possibility to set and query baud rate for CAN FD with commands "G_Can_Node_BaudrateFd_Set" and "G_Can_Node_BaudrateFd_Get"

Hardware Explorer:

- improved speed when scanning for ETH3030 devices

Bugfix

Installer:

- the user gets notified if binaries could not be updated when installing

Hardware Explorer:

- updating device list could lead to exception

G-API Service

- could crash in rare occasions with Series61 PXI/PCI devices

Version 1.3.4705 - 2/9/2015

Features

- added CAN FD functionality to
 - "G_Can_TxFifo_QueueMsg"
 - "G_Can_InitInterface"
 - "G_Can_CyclicMsgs_DefineMsg"
 - "G_Can_CyclicMsgs_ChangeMsg"
 - "G_Can_CyclicMsgs_ChangeMsgData"
- added SENT receiver functionality to IO interface

- added commands:

- "G_Can_TxFifo_QueueMsgs2"
- "G_Can_Monitor_BufferMode_Start2"
- "G_Can_Monitor_BufferMode_GetItems_Large"
- "G_Io_Sent_Receiver_Reset"
- "G_Io_Sent_Receiver_Init"
- "G_Io_Sent_Receiver_Enable"
- "G_Io_Sent_Receiver_Disable"
- "G_Io_Sent_Receiver_Property_GetById"
- "G_Io_Sent_Receiver_Property_SetById"
- "G_Io_Sent_Receiver_Monitor_Init"
- "G_Io_Sent_Receiver_Monitor_Start"
- "G_Io_Sent_Receiver_Monitor_Stop"
- "G_Io_Sent_Receiver_Monitor_Read"
- "G_Io_Sent_Receiver_Monitor_Property_GetById"
- "G_Io_Sent_Receiver_Monitor_Property_SetById"
- "G_Io_Tle4998Prog_Reset"
- "G_Io_Tle4998Prog_Init"
- "G_Io_Tle4998Prog_Property_GetById"
- "G_Io_Tle4998Prog_Property_SetById"
- "G_Io_Tle4998Prog_WriteCmd"
- "G_Io_Tle4998Prog_ReadState"
- "G_Io_Tle4998Prog_ReadData"
- "G_Io_Tle4998Prog_VddControl"

Version 1.3.4671 - 12/17/2014

Features

- command "G_Lvds_FrameGrabber_LoadReferenceFromFile" now accepts top-down- AND bottom-up-bitmaps

Bugfix

- XCP DAQ could cause access violation

Version 1.3.4656 - 11/25/2014

Bugfix

- stability improvements

Version 1.3.4635 - 11/12/2014

Features

- added SENT Transmitter commands to IO interface DLL

Bugfix

- fixed possible crash when opening a port handle quickly after the same handle was closed

Version 1.3.4622 - 11/4/2014

Features

- added support for Ethernet interface on Series61
- added transport protocol ISO13400 and diagnostic protocol UDS on Ethernet interface

Bugfix

- fixed crash when configuring Net2Run restbus simulation under certain circumstances

Version 1.3.4585 - 10/16/2014

Features

supported devices

- added PXI4112 (LVDS Multiplexer)
- added PXI4113 (LVDS Splitter)

Hardware Explorer:

- PXI devices are sorted by geographic address

Bugfix

- when working with multiple processes simultaneously, the error "Pipe not found" could occur
- G_Common_Events were not reset automatically

Hardware Explorer: under Windows 7 64 Bit:

interface assignments were mixed up when working with multiple PXI3051, PXI3052, PXI3072 or PXI3080 cards
!ATTENTION!: after G-API update you need to check interface names in Hardware Explorer:!

Version 1.3.4576 - 9/30/2014

Features

- improved Net2Run performance when configuring an RBS

Bugfix

- application could freeze when port handles were open and a dll was unloaded from the process
- application could freeze when multiple port handles to an USB4120 were opened

Version 1.3.4552 - 8/21/2014

Features

g_api_common.dll:

- added command "G_Common_Xcp_Daq_Start2" for XCP DAQ with extended parameters

Version 1.3.4549 - 8/8/2014

Bugfix

g_api_can.dll: fixed wrong flag of

"G_CAN__CYCLIC_MSGS__CHANGE_MSG__CYCLE_TIME__CMD_FLAG__CANCEL_RESTORE"

- fixed a bug where multithreaded access to different USB devices could lead to unexpected behaviour

Version 1.3.4528 - 7/24/2014

Features

- added file system functions for Series61 and VideoDragon devices (see documentation)

Version 1.3.4513 - 7/3/2014

Features

g_api_common.dll:

- added timestamp information to XCP DAQ (see G_Common_Xcp_Daq_ReadRxSignalsTs)

Version 1.3.4508 - 6/5/2014

Features

- improved LVDS VideoDragon performance
- added command "G_Lvds_FrameGrabber_SetCaptureArea" to g_api_lvds.dll

Bugfix

Hardware Explorer:

- flashing firmware on devices without interface #1 failed
- warning dialog for ethernet scan properties could open behind main window

g_api_common.dll:

- adapted XCP DAQ status mask to regard only specified bits (XCP v.1.1)
- when an application did not close a port handle properly, the error "no lock" could have been raised

Version 1.3.4476 - 5/6/2014

Features

- added LVDS features

Version 1.3.4441 - 3/20/2014

Features

- added command "G_Lvds_FrameGrabber_CaptureToFile2" (see documentation for details)

Version 1.3.4439 - 3/13/2014

Features

- added support for VideoDragon USB communication

Bugfix

- closing an interface did not free all resources
- fixed access violation error in monitor

Version 1.3.4430 - 2/19/2014

Bugfix

G-API Service:

- closing all handles on Series61 PCI/PXI devices
- Server could cause deadlock when multiple port handles were closed concurrently

Version 1.3.4429 - 2/18/2014

Bugfix

g_api_lvds.dll:

- fixed bug in "G_Lvds_FrameGenerator_Data_Write" where error "response buffer undersized" could be returned

Hardware Explorer:

- VideoDragon devices now show up with the correct firmware and deserializer info

G-API Service:

- not all handles were closed when application was disconnected

Version 1.3.4422 - 2/4/2014

Features

g_api_common.dll:

- added support for XCP DAQ

Bugfix

Hardware Explorer:

- fixed problems with resetting G-API server

- fixed bug when multithreaded applications opened ports concurrently

- silent mode installer now runs really silent (no errors are indicated), therefore it is recommended to perform a restart after a silent mode install

Version 1.3.4398 - 12/19/2013

Features

g_api_flexray.dll:

- added command "G_FlexRay_Pdu_Search"

Bugfix

Hardware Explorer:

- when scanning network adapter list deselected entries were scanned

Version 1.3.4392 - 12/13/2013

Features

- compatibility improvements for G_API LabVIEW wrapper

Version 1.3.4391 - 12/13/2013

Features

g_api_lvds.dll:

- added support for APiX Rx boards in command "G_Lvds_Apix_ConfigByFile"

g_api_user_code.dll

- added functions "G_UserCode_File_GetNumberOfDirectories" and "G_UserCode_File_GetDirectoryNameByNumber"

Documentation

- added description for "G_GetErrorDescription2" to manual

Bugfix

Hardware Explorer:

- Ethernet Scan Warning Dialog was opened behind main window

Version 1.3.4319 - 10/30/2013

Bugfix

Hardware Explorer:

- fixed possible crash on startup when no COM ports were detected
- corrupted device configuration file will be deleted on startup

Version 1.3.4279 - 10/14/2013

Bugfix

g_api_tp.dll

- fixed command length bug when starting and stopping tp direct

g_api_common.dll

- "G_Common_Xcp_ReadDtoRxFifo" and "G_Common_Xcp_ReadCtoRxFifo" returned wrong data length

- magicCAR3 was not accessible under some circumstances

Hardware Explorer:

- formerly disconnected devices were scanned when "Do not scan for new devices" was activated

Version 1.3.4263 - 10/2/2013

Features

- basicCON4121 (VideoDragon) support enhanced

Version 1.3.4259 - 9/30/2013

Features

- basicCON4121 (VideoDragon) support enhanced
- added XCP support (g_api_common.dll)
- added support for FlexRay Tx Fifo (g_api_flexray.dll)

Bugfix

g_api_net2run.dll:

- configuring pdus without signals could lead to crash

- flashing new VHDL design on USB4120 could fail

Version 1.3.4165 - 8/21/2013

Features

supported devices

- added basicCON4121 (VideoDragon)

Version 1.3.4156 - 8/15/2013

Features

supported devices

- added APIX2 ADK boards

g_api_lvds.dll:

- added serializer type DS90UR925Q

- added deserializer types:
 - APIX_INAP375R
 - ADV7611
 - DS90UB914
 - DS90UB925
 - DS90UB913
 - MAX9259

- added commands:
 - G_Lvds_FrameGrabber_SetColourTolerance
 - G_Lvds_FrameGrabber_Config_DeserializerVector2

Bugfix

g_api_lvds.dll

- fixed output selection in
 - "G_Lvds_Splitter_Outputs_Enable"
 - "G_Lvds_Splitter_Outputs_Disable"

Version 1.3.4057 - 7/11/2013

Features

- added support for APIX2 ADK boards

Version 1.3.4036 - 7/1/2013

Features

g_api_common.dll

- added parameter "InstanceId" to "G_Common_GetInterfaceInfo"
- added commands "G_Common_GetTransceiverInfoForCurrentInterface" "G_Common_GetInterfaceNumber"

g_api_lvds.dll

- added deserializer type "G_LVDS__FRAME_GRABBER__DESERIALIZER__DS90UB926"
- added commands "G_Lvds_FrameGenerator_Data_Write" "G_Lvds_FrameGenerator_Data_Read"

g_api_can.dll

- added checksum "Custom12"

g_api_flexray_dll

- added parameter "UpdateBit" in function "G_FlexRay_NPduPool_Rx_AddNPdu"
- added commands "G_FlexRay_Property_SetById" "G_FlexRay_Property_GetById" "G_FlexRay_Monitor_Property_SetById" "G_FlexRay_Monitor_Property_GetById"

Hardware Explorer: Windows are resizable

Version 1.3.3967 - 3/19/2013

Features

g_api_lvds.dll

- added deserializer type "G_LVDS__FRAME_GRABBER__DESERIALIZER__DS90UB926"

Version 1.3.3956 - 3/7/2013

Bugfix

- flashing firmware on Series61 devices returned with an error when no user code interface was present

Version 1.3.3945 - 2/27/2013

Features

- "G_Can_Monitor_MonitorTime_Get" returns real 64 bit timestamps on Series61 devices

Bugfix

- flashing firmware on Series61 devices returned with an error when no user code interface was present

Version 1.3.3942 - 2/21/2013

Features

- On Series61 devices all running user code programs are stopped when flashing firmware
- magicCAR3: improved slave device detection

Bugfix

- fixed crash in "G_FlexRay_ConfigFromFibex" and "G_FlexRay_GetConfigData_FromFibex" when providing an invalid filename

Version 1.3.3896 - 1/28/2013

Features

- added serializers "APIX_INAP375T" and "DS90UR905Q" to LVDS frame generator

Bugfix

- dump files were not created under some circumstances
- G-API-Server crashed when multiple magiCAR3 slave devices were accessed
- "G_Lvds_FrameGenerator_GetMemoryInfo" returned wrong file system state flag

Version 1.3.3866 - 12/5/2012

Bugfix

- magicCAR3: slave devices were not recognized correctly under some circumstances

Version 1.3.3861 - 11/30/2012

Features

- improved Net2Run performance when configuring signals
- added FlexRay PDU functionality:
 - "G_FlexRay_Pdu_Config"
 - "G_FlexRay_Pdu_Delete"
 - "G_FlexRay_LPdu_Config"
 - "G_FlexRay_LPdu_Delete"
 - "G_FlexRay_PduInLPdu_Config"
 - "G_FlexRay_PduInLPdu_Delete"
 - "G_FlexRay_FrameTrigger_Config"
 - "G_FlexRay_FrameTrigger_Delete"
 - "G_FlexRay_NPduPool_Tx_AddPdu"
 - "G_FlexRay_NPduPool_Tx_DeletePool"
 - "G_FlexRay_NPduPool_Rx_AddPdu"
 - "G_FlexRay_NPduPool_Rx_DeletePool"
- added FlexRay monitor filter command "G_FlexRay_Monitor_DefineFilter"

Hardware Explorer:

- under "Tools->Preferences->Ethernet" a checkbox for enabling/disabling has been added to each ip address in the ip list
- added flash functionality to USB4120 LVDS FrameGrabber devices

G-API Service: when service crashes, a dump file is generated

Bugfix

- 3051 and 3052 devices where not all expansion boards are assembled were not detected in hardwareExplorer
- flashing firmware on 6191 device was not possible

Version 1.3.3835 - 10/24/2012

Features

- added support for using dedicated firmware for devices via firmware packages (see quickstart manual for details)
- added command "G_UpdateToDedicatedFirmware"
- added samples "IO_GetAnalogInputValues" and "IO_SetAnalogOutput"

Bugfix

- flashing firmware on 6191 device was not possible
- Series61 devices with interface numbers starting > 1 were not recognized correctly
- LIN monitor: data byte timestamps of normal and advanced items were not ordered correctly

Version 1.3.3812 - 9/5/2012

Bugfix

- increased internal buffer size to handle more interfaces (increased from 128 to 1024)

Version 1.3.3785 - 7/20/2012

Features

- added command "G_FlexRay_Node_SendWakeUp"

Version 1.3.3767 - 6/7/2012

Features

- added parameter "UpdateBitPosition" to command "G_FlexRay_NPduPool_Tx_AddNPdu"
- added command "G_Can_CyclicMsgs_ChangeCycleTime"

Bugfix

- magicCAR3: increased timeout for FPGA download to slave devices (could cause G_Api_Server.exe to crash)

Version 1.3.3754 - 5/30/2012

Features

- added function "G_FlexRay_Tp_Init_Autosar"
- added function "G_FlexRay_Diag_Config_Uds"

Bugfix

G-API Service:

- could lock under Windows 7

Version 1.3.3728 - 5/7/2012

Features

- added functions:
 - G_FlexRay_GetConfigData_FromXmlFile
 - G_FlexRay_GetConfigData_FromFibex

Bugfix

- "G_InterfaceConfig_GetApiVersion" returns overall revision number (not file specific revision)

Hardware Explorer:

- fixed false detection of ethernet device when option "Do not scan for new devices" was enabled

G-API Service:

- eliminated sporadic crashes when handling multiple usb devices

Version 1.3.3671 - 3/7/2012

Features

- added Net2Run CAN Interface and PDU Router functions
- added possibility to query G-API version via command "G_GetApiVersion"

Bugfix

- improved detection of Series61 devices

Version 1.3.3611 - 2/8/2012

Features

- parallel KLINE monitoring on different interfaces

Version 1.3.3582 - 12/20/2011

Features

- added command line options to installer (see quickstart guide for details)
- added trigger functionality to IO interface, CAN interface and LIN interface

Bugfix

Hardware Explorer:

- when the host connection type (PXI, Ethernet, ...) of a Series61 device was changed, interface configuration was lost

Changes

- changed typedef of "G_HostInterfaceType_t" from "enum" to "u32_t" to avoid future compatibility issues
- G_Io_Trigger_Source_Set
 - renamed output type "G_IO__TRIGGER__OUTPUT_TYPE__PXI_OUT" to "G_IO__TRIGGER__OUTPUT_TYPE__TRIGGER_BUS_OUT"
- input and output numbers start with "1" (as in the whole IO interface)

Version 1.3.3568 - 12/2/2011

Features

supported devices

- added USB4112
- added USB4113

Bugfix

- USB61xx was not detected correctly in some cases

Hardware Explorer:

- Series61 DefaultGateway display was not updated when "Do not scan for new devices" was activated

Version 1.3.3564 - 11/25/2011

Features

- added support for USB4115 LVDS FrameGenerator
- added function "G_Interface_Name_Set" for setting interface names from within applications
- USB3116, USB3132, USB4009 and USB4120 can be reset from within Hardware Explorer: or by command "G_Common_SoftwareReset"
- "G_Interface_GetInterfaceList" performs scan for ethernet devices only on network addresses that are selected in Preferences Menu of Hardware Explorer:
- added support for USB6161, PXI6161, basicMOST6161 devices
- MOST:
 - added functions
 - "G_Most_Pdts_Mep_GetTxState"
 - "G_Most_Pdts_Mep_QueueMessage"
 - "G_Most_Pdts_Mep_SendMessage"
 - added monitor ids
 - "G_MOST__MONITOR__ID__SPY__CONTROL_MESSAGE"
 - "G_MOST__MONITOR__ID__SPY__MOST_PACKET"
 - "G_MOST__MONITOR__ID__SPY__NETWORK_STATUS_INFORMATION"

Bugfix

- Software Feature Code was not enabled properly on some PXI/PCI3051 and PXI/PCI3052 devices

Version 1.3.3379 - 10/19/2011

Bugfix

- fixed stability issues with magicCAR3 and basicCAN61
- fixed resistor reset of 2nd decade on USB4009

Version 1.3.3306 - 09/30/2011

Features

- added functions:
 - "G_Can_CyclicMsgs_SetMsgBreakCount"
 - "G_Can_CyclicMsgs_SetMsgBreakTime"
 - "G_Can_CyclicMsgs_SetCalculationBreakCount"
- added support for PXI6161 devices

Bugfix

- magicCAR3 with slave devices crashes G-API Server under Windows 7 64 Bit
- USB4009 switches more exactly on very low resistor values (< 1 ohm)

Version 1.3.3270 - 09/12/2011

Features

- added functions
 - "G_Can_Monitor_MonitorTime_Get"
 - "G_Can_Monitor_WriteUserEvent"
 - "G_Io_Outputs_Analog_GetNumberOfOutputs"
- G_Can_Monitor_BufferMode_GetItems" returns true 64 Bit timestamps for Series61 devices
- added support for the following devices:
 - PXI3078
 - USB3116
 - USB3132
- added support for slave devices of magicCAR3

Bugfix

Hardware Explorer:

- Flashing Firmware of Ethernet devices could lead to a timeout.

Version 1.3.3180 - 07/05/2011

Features

- added functions for generating signal curves in g_api_io.dll

Bugfix

- G_Can_Nm_Config_Autosar - changed size of type G_Can_Nm_Config_Autosar_Type_t for correct alignment

Version 1.3.3158 - 06/21/2011

Features

- added "G_Net2Run_Signal_GetSignalTransmissionMode"

Hardware Explorer:

- added switch for disabling scan for new devices

Version 1.3.3143 - 05/24/2011

Bugfix

- G_Interface_GetInterfaceList could return duplicate interfaces on some PCI/PXI devices
- G_Interface_GetInterfaceList could return with error 0x02000205 (no response) when another port was already connected to a device
- LVDS Tools Software did not find "g_devices.xml" at startup

Version 1.3.3132 - 05/11/2011

Bugfix

- magicCAR3 was not scanned correctly

Version 1.3.3119 - 05/05/2011

Features

Hardware Explorer:

- added option to change configuration file path
- added option for scanning particular IP addresses

g_api_lvds.dll:

- added deserializer type MAX9260

Bugfix

- "G_Interface_Name_Get" did not return name for user code interfaces

Version 1.3.3075 - 04/13/2011

Features

- added function:
 - "G_KLine_Node_Property_SetById"
 - "G_KLine_Node_Property_GetById"

Bugfix

Hardware Explorer:

- "Reset G-API Service" did not close all port handles

Version 1.3.3050 - 04/08/2011

Features

- added function:
 - "G_UserCode_File_GetNumberOfFiles"
 - "G_UserCode_File_GetFileInfoByNumber"
 - "G_UserCode_File_Save"

Version 1.3.3039 - 04/05/2011

Features

Hardware Explorer:

- added editable sub net mask property to ethernet devices
!this feature is available with firmware versions newer than 02/2011
- added common transport protocol functions in "g_api_tp.dll"
- added "G_FlexRay_Tp_Init_Iso10681"

Version 1.3.3022 - 03/24/2011

Features

Hardware Explorer:

- reset G-API Service from Tools-Menue
- supported devices
- added USB4009
- Ethernet device discovery improved under Windows 7

Version 1.3.2930 - 01/28/2011

Bugfix

Hardware Explorer:

- Ethernet Device Discovery could hang on some systems
- Revision number was not displayed correctly in main window title bar
- USB4120 LVDS FrameGrabber: Parallel accesses to the same device could deliver false data

Version 1.3.2908 - 01/20/2011

Features

- added functions
 - "G_UserCode_File_Save"
 - "G_UserCode_File_Delete"
 - "G_UserCode_File_Start"
 - "G_UserCode_File_Stop"
 - "G_UserCode_File_AutoPlay_Enable"
 - "G_UserCode_File_AutoPlay_Disable"

Version 1.3.2900 - 01/11/2011

Features

Hardware Explorer:

- newly detected interfaces of a device are ordered by interface type
- Automatic configuration of USB4120 - LVDS FrameGrabber includes configuration of Deserializer Vector
- added function
 - "G_Lin_MasterTask_SendHeader"
- added property
 - "G_LIN__NODE__PROPERTY_ID__FULL_ID_MODE" to "G_Lin_Node_PropertyId_t"

Bugfix

- multiple accesses to "g_devices.xml" now possible
- Threadsafety is assured when opening multiple ports to the same interface within one process.

Version 1.3.2860 - 12/03/2010

Features

- added CAN CCP functionality
- added K-Line functionality
- added function "G_FlexRay_ConfigFromFibex"
- added command flag "G_FLEXRAY__STARTUP__CONFIG__FLAG__ALLOW_AUTO_RESTART" to function "G_FlexRay_Startup_Config"

Version 1.3.2819 - 11/10/2010

Features

Hardware Explorer:

- Firmware Flasher supports basicCAN6153, basicLIN6173, basicCAR6181, basicFLEX6191 and magicCAR3
- added functions:
 - "G_Can_Nm_Config_Autosar"
 - "G_Can_Nm_Config_Autosar_Global"
 - "G_Can_Nm_Config_Autosar_Node"
 - "G_Can_Nm_Autosar_Node_GetState"
 - "G_Can_Nm_Autosar_RepeatMessageRequest"

"G_Can_Nm_Autosar_RequestBusSynchronization"
"G_FlexRay_ConfigFromFibex"

Bugfix

- "G_Lin_AdvLib_DominantLevel_Set": wrong timing calculation
- "G_Lin_AdvLib_RecessiveLevel_Set": wrong timing calculation

Version 1.3.2797 - 10/28/2010

Features

- added functions:
 - "G_Sequence_Replay_AutoPlayByInput_Config_Set"
 - "G_Sequence_Replay_AutoPlayByInput_Config_Get"
 - "G_Sequence_Replay_AutoPlayByInput_FileName_Set"
 - "G_Sequence_Replay_AutoPlayByInput_FileName_Get"

Hardware Explorer:

- interface names are displayed in device list
- serial numbers are displayed in device list
- added Sequence interface

Bugfix

- fixed division by zero when "baudrate" was set to 0
- "G_Lin_AdvLib_DominantLevel_Set", "G_Lin_AdvLib_RecessiveLevel_Set":
corrected scaling of timing values

Version 1.3.2759 - 10/13/2010

- added this Version History