

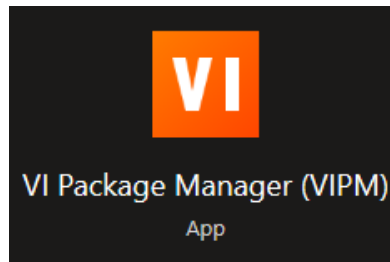
GPower IO-Link for LabVIEW

GETTING STARTED

<https://gpower.io/en/products/io-link-labview-teststand/>

Installation

Install the GPower IO-Link toolkit VIPC package using “VI Package manager”. The VIPC package installs the GPower IO-Link package and its dependency packages.



License

Product Name

Client ID

IO-Link LabVIEW Toolkit v1.7.1 (Development)

Manage License

License ID Password

Activation Key Have Key ☐

License State: New (0 days remaining)

Client ID

Copy to clipboard

When running the GPower IO-Link toolkit LabVIEW functions for the first time, the user will be prompted with a license dialog.

A **trial** license can be activated once per client and activates the product for 30 days.

If a **trial** has already been activated, this option is no longer available.

Supported Masters - Interfaces

ModbusTCP

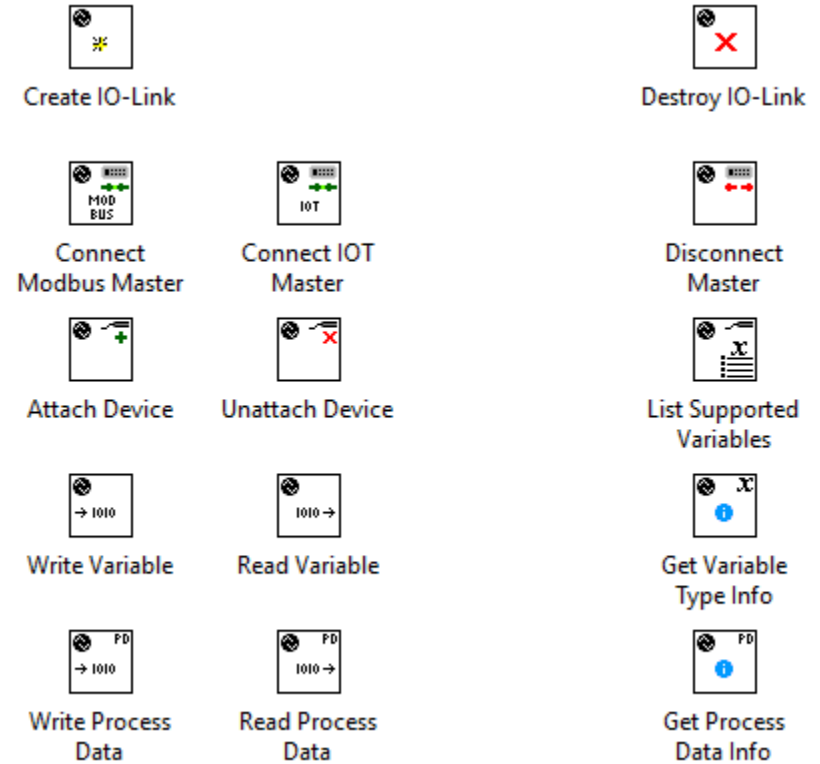
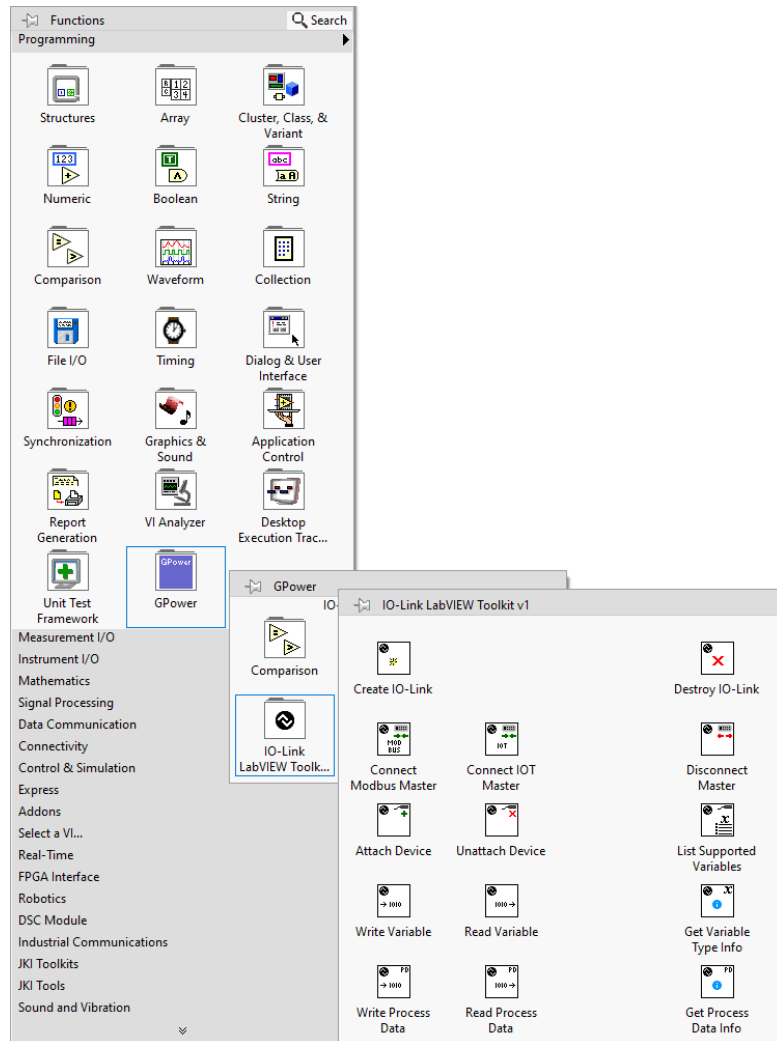
- **Pepperl+Fuchs SE**
 - ICE2-8IOL-G65L-V1D
 - ICE2-8IOL-K45P-RJ45
 - ICE2-8IOL-K45S-RJ45
 - ICE3-8IOL-G65L-V1D
 - ICE3-8IOL-K45P-RJ45
 - ICE3-8IOL-K45S-RJ45
- **CONTROL**
 - IOLM 4-EIP
 - IOLM 8-EIP
 - IOLM 8-EIP-L
- **Baumer**
 - IO-Link Master PROFINET (11215447)
 - IO-Link Master PROFINET (11215445)
- **PHOENIX CONTACT**
 - I/O module – IOL MA8 EIP D18
- **Carlo Gavazzi**
 - YL212CEI8M1IO
 - YL212CPN8M1IO
 - YN115CEI8RPIO
 - YN115CPN8RPIO
- **Datalogic**
 - CBX-8IOL Master

IOT

- **ifm**
 - AL13xx Series
 - AL14xx Series
 - AL19xx Series

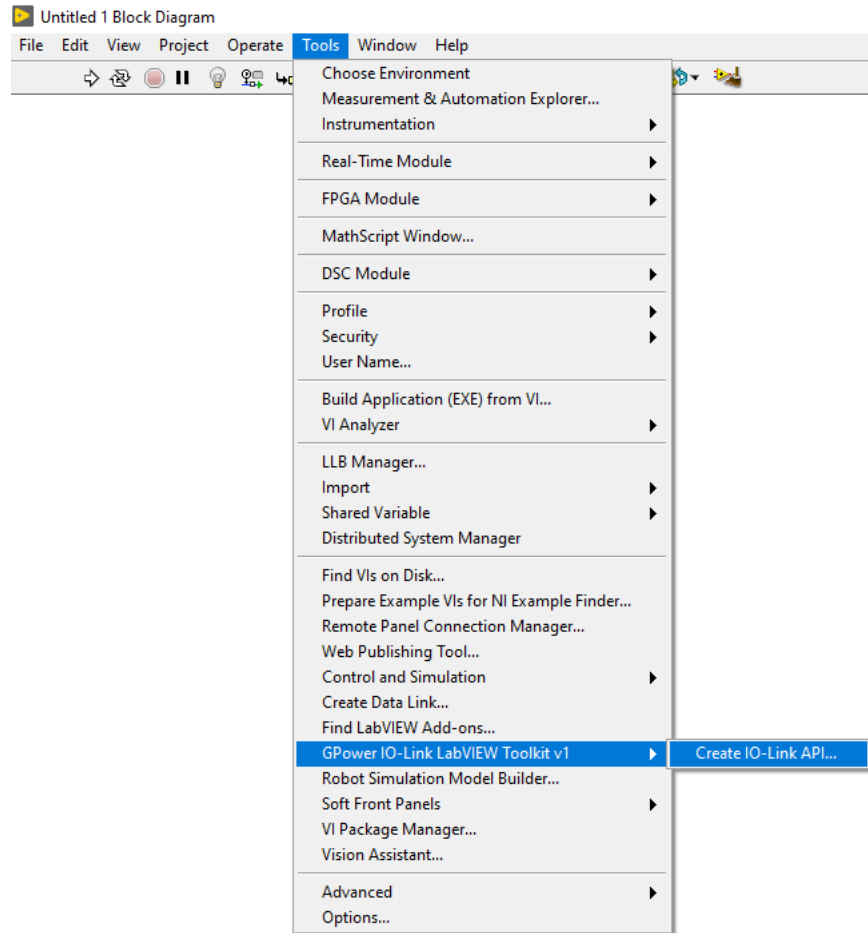
N.b. Enable MODBUS TCP on the Master, using the website of the Master.

GPower IO-Link LabVIEW Palette



Create IO-Link API tool

Use the tool “Create IO-Link API” to create an API for your IO-Link device based on an IODD file



Create IO-Link API tool

IODD file

Parameters

Access direction

API destination

Place in library

Library Name

Parameter info

Create IO-Link API

IODD File
C:\Users\GPower\Desktop\IODD Files\ifm DV2131\IFM-000498-20200325-IODD1.1.xml

Parameters of IODD File

- Application Specific Tag
- Bit Coded Active Events
- Buzzer Intensity
- Buzzer Style
- Demo Mode
- Detailed Device Status
- Device Access Locks
- Device Status
- Direct Parameters 1
- Direct Parameters 2
- Firmware Version
- Function Tag
- Hardware Version
- Location Tag
- OU1
- OnOffIn
- OnOffOut
- Operating mode
- BaseConfig FaultCollection

Parameter info

Parameter Name: **Buzzer Style**
Parameter ID: **V_BuzzerStyle**

Buzzer Style, Bit length: 8, UIntegerT

- 0:No sound
- 1:Rapid intermittent beep
- 2:Rapid Hi-Lo
- 3:Sweep sound
- 4:Continuous beep with Cycle ON/OFF
- 5:Rapid intermittent beep with Cycle ON/OFF
- 6:Rapid Hi-Lo with Cycle ON/OFF
- 7:Sweep sound with Cycle ON/OFF

Access
Read and Write

Destination Folder
C:\Users\GPower\Desktop\IO-Link APIs

Add to Library ☒

Library Name
IFM DV2131

Progress

Create

IFM DV2131.lvlib on Main Application...

File Edit View Project Operate Tools Window Help

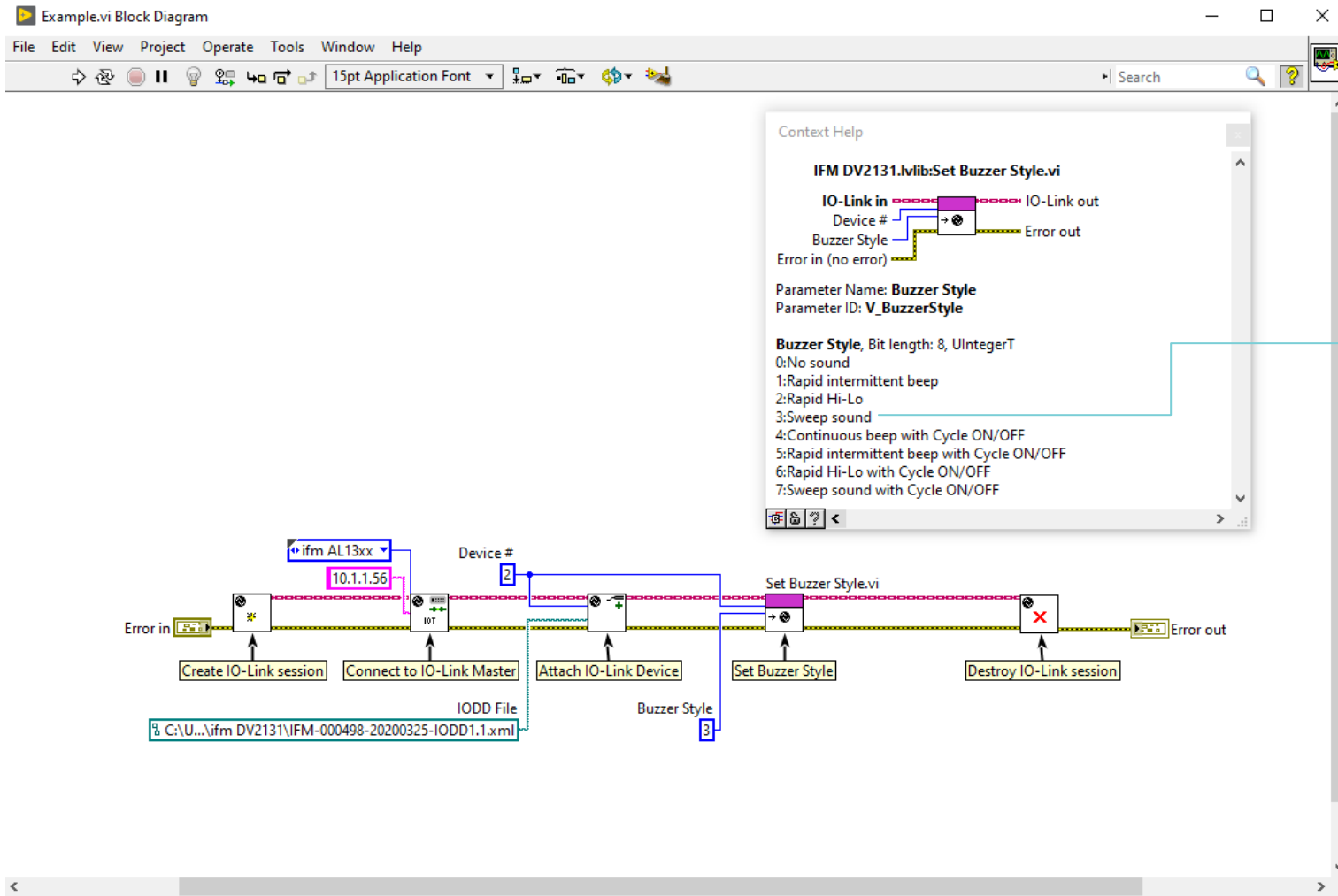
Items Files

- IFM DV2131.lvlib
 - Get
 - Get Buzzer Style.vi
 - Get Demo Mode.vi
 - Get Firmware Version.vi
 - Get Hardware Version.vi
 - Get OnOffIn.vi
 - Get OnOffOut.vi
 - Get Operating mode.vi
 - Get OU1.vi
 - Set
 - Set Buzzer Style.vi
 - Set Demo Mode.vi
 - Set OnOffOut.vi
 - Set Operating mode.vi
 - Set OU1.vi
 - Type Defs

n.b. set/get accessors is only created if the parameter supports read/write.

E.g. there is no "Set Hardware Version", as this is not a supported operation.

Example

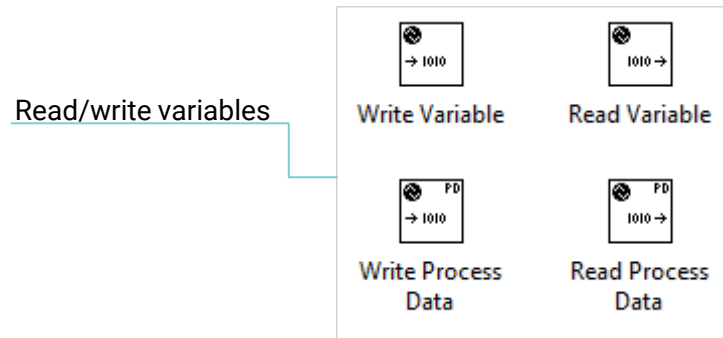
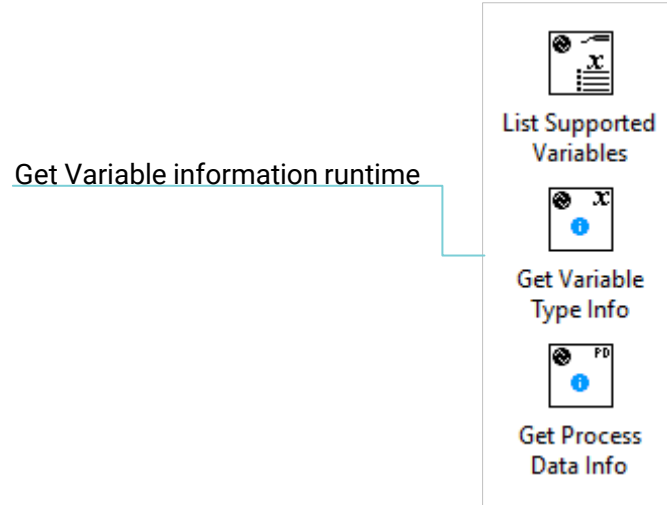


In the example shown the “Set Buzzer style.VI” is created using the “Create IO-Link API” tool shown previously in this guide.

Show context help on the API function to show the Parameter information.

- In the example shown the Buzzer Style set to the value 3 is the “Sweep sound”.

Using the IO-Link tool dynamically



It is also possible to use IODD files dynamically (not created by the “create IO-Link API” tool). In this case the Generic IO-Link API functions can be used.

Get the Parameter ID and Datatype from the “List Supported Variables” and “Get Variable Type Info” functions. Use the Read or Write functions to access the data.

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