ConfigurationDesk

Hardware Resource Properties

For ConfigurationDesk 6.7

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dSPACE

How to Contact dSPACE

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How to Contact dSPACE Support

If you encounter a problem when using dSPACE products, contact your local dSPACE representative:

- Local dSPACE companies and distributors: http://www.dspace.com/go/locations
- For countries not listed, contact dSPACE GmbH in Paderborn, Germany.
  Tel.: +49 5251 1638-941 or e-mail: support@dspace.de

You can also use the support request form: http://www.dspace.com/go/supportrequest. If you are logged on to mydSPACE, you are automatically identified and do not need to add your contact details manually.

If possible, always provide the relevant dSPACE License ID or the serial number of the CmContainer in your support request.

Software Updates and Patches

dSPACE strongly recommends that you download and install the most recent patches for your current dSPACE installation. Visit http://www.dspace.com/go/patches for software updates and patches.

Important Notice

Contents

About This Reference

Contents

This reference provides detailed information on the characteristics of the hardware resources that are supported by ConfigurationDesk. This properties and their values are displayed in the **Properties Browser**.

Symbols

dSPACE user documentation uses the following symbols:

Symbol	Description
DANGER	Indicates a hazardous situation that, if not avoided, will result in death or serious injury.
WARNING	Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
CAUTION	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a hazard that, if not avoided, could result in property damage.
Note	Indicates important information that you should take into account to avoid malfunctions.
Tip	Indicates tips that can make your work easier.
	Indicates a link that refers to a definition in the glossary, which you can find at the end of the document unless stated otherwise.
	Precedes the document title in a link that refers to another document.

Naming conventions

dSPACE user documentation uses the following naming conventions:

%name% Names enclosed in percent signs refer to environment variables for file and path names.

< > Angle brackets contain wildcard characters or placeholders for variable file and path names, etc.

Special folders

Some software products use the following special folders:

Common Program Data folder A standard folder for application-specific configuration data that is used by all users.

`%PROGRAMDATA%\dSPACE\<InstallationGUID>\<ProductName>`

or

`%PROGRAMDATA%\dSPACE\<ProductName>\<VersionNumber>`

Documents folder A standard folder for user-specific documents.

`%USERPROFILE%\Documents\dSPACE\<ProductName>\<VersionNumber>`

Local Program Data folder A standard folder for application-specific configuration data that is used by the current, non-roaming user.

`%USERPROFILE%\AppData\Local\dSPACE\<InstallationGUID>\<ProductName>`

Accessing dSPACE Help and PDF Files

After you install and decrypt dSPACE software, the documentation for the installed products is available in dSPACE Help and as PDF files.

dSPACE Help (local) You can open your local installation of dSPACE Help:

- On its home page via Windows Start Menu
- On specific content using context-sensitive help via **F1**

dSPACE Help (Web) You can access the Web version of dSPACE Help at www.dspace.com/go/help.

To access the Web version, you must have a *mydSPACE* account.

PDF files You can access PDF files via the icon in dSPACE Help. The PDF opens on the first page.

Platform

Platform Properties

Purpose	To display basic properties of the platform.
Type	Displays the type of the platform.

SCALEXIO Rack

SCALEXIO Rack Properties

Purpose

To display and configure basic properties of the rack.

Name

Lets you enter the name of the rack.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Tip

If you clear the rack name, ConfigurationDesk deletes the rack and all units/boxes of the rack are moved to the top node of the hardware topology.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the rack is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser (as a stand-alone element in the assembly view or attached to element names in the network view)
- Platform Manager (as a stand-alone element in the assembly view)

- Information and error messages
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

SCALEXIO AutoBox (8-Slot)

SCALEXIO AutoBox (8-Slot) Properties

Purpose	To configure and display properties of SCALEXIO AutoBox.
Provided properties	▪ SCALEXIO AutoBoxes with installed DS6001 Processor Board provide only a subset of the properties from the list below. The **Uplink** and **Downlink <x>** properties are not available. ▪ SCALEXIO AutoBoxes without installed DS6001 Processor Board provide *all* the properties from the list below.
Name	Lets you enter the name of the unit/box. The name must be unique within a SCALEXIO rack. You can enter the name via the **Platform Manager** or the **Hardware Resource Browser**: ▪ **Platform Manager** Lets you change settings independently of any specific ConfigurationDesk application. ▪ **Hardware Resource Browser** Lets you make settings for the active ConfigurationDesk application. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced. The **Matching platform connected** application state changes to **No matching platform connected** when the name is changed in the **Platform Manager** or the **Hardware Resource Browser**. The name of the unit/box is used and displayed in the following ConfigurationDesk components: ▪ **Hardware Resource Browser** ▪ **Platform Manager** ▪ Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Type

Displays the product name of the selected hardware.

Member of rack

Displays the name of the rack in which the unit/box is inserted and lets you change the name via the Platform Manager or the Hardware Resource Browser. If no name is displayed, the unit/box is not inserted into a rack.

- Platform Manager

  Lets you change the name of the rack in which the unit/box is installed independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Tip

Modifying the hardware topology by changing the rack name in the Hardware Resource Browser:
- If you enter the name of another rack within the hardware topology, ConfigurationDesk moves the unit/box to the other rack node.
- If you enter a new rack name, ConfigurationDesk adds a new rack node with this name to the hardware topology and moves the unit/box to the added rack node.
- If you clear the rack name, ConfigurationDesk moves the unit/box to the top node of the hardware topology. If the rack is empty, ConfigurationDesk deletes it from the topology.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the rack is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser (as a stand-alone element in the assembly view or attached to element names in the network view)
- Platform Manager (as a stand-alone element in the assembly view)
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ .	–	–

Value / Range	Description	Dependencies
▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).		

Uplink

Displays the name of the current uplink and lets you change the uplink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current uplink.

- Hardware Resource Browser

  Displays the name of the current uplink and lets you change the uplink or establish a new one, if there is no established uplink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding downlinks from the opposing elements when you change an existing uplink or establish a new one.

The Matching platform connected application state does *not* change when the uplink/downlink settings are changed in the Hardware Resource Browser.

The uplink/downlink settings in the Hardware Resource Browser are overwritten when the hardware topology is replaced by a topology of registered hardware.

Uplink means data transfer from one unit/box to another unit/box or processing hardware on the next higher level in the IOCNET hierarchy, i.e., directed towards the processing hardware. Due to the hierarchical structure of IOCNET, a unit/box can have exactly one uplink.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Downlink <x>

Displays the name of the current downlink and lets you change the downlink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current downlink.

- Hardware Resource Browser

  Displays the name of the current downlink and lets you change the downlink or establish a new one if there is no downlink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding uplinks from

the opposing elements when you change an existing downlink or establish a new one.

The **Matching platform connected** application state does *not* change when the uplink/downlink settings are changed in the **Hardware Resource Browser**.

The uplink/downlink settings in the **Hardware Resource Browser** are overwritten when the hardware topology is replaced by a topology of registered hardware.

Downlink means data transfer from one unit/box to other units/boxes on the next lower level in the IOCNET hierarchy, i. e., directed away from the processing hardware. Units/boxes or processing hardware can have multiple downlinks.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the unit/box.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the unit/box. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the selected hardware (unit's/box's backplane or unit's/box's IOCNET router).

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Operating system

Displays the operating system of the selected hardware in the **Platform Manager**.

Related topics

Basics

SCALEXIO LabBox (SCALEXIO Hardware Installation and Configuration 🕮)

SCALEXIO LabBox (n-Slot)

SCALEXIO LabBox (n-Slot) Properties

Purpose

To configure and display properties of SCALEXIO LabBox.

Provided properties

- SCALEXIO LabBoxes with installed DS6001 Processor Board provide only a subset of the properties from the list below. The **Uplink** and **Downlink <x>** properties are not available.
- SCALEXIO LabBoxes without installed DS6001 Processor Board provide *all* the properties from the list below.

Name

Lets you enter the name of the unit/box. The name must be unique within a SCALEXIO rack.

You can enter the name via the **Platform Manager** or the **Hardware Resource Browser**:

- **Platform Manager**

  Lets you change settings independently of any specific ConfigurationDesk application.
- **Hardware Resource Browser**

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The **Matching platform connected** application state changes to **No matching platform connected** when the name is changed in the **Platform Manager** or the **Hardware Resource Browser**.

The name of the unit/box is used and displayed in the following ConfigurationDesk components:

- **Hardware Resource Browser**
- **Platform Manager**
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Type

Displays the product name of the selected hardware.

Member of rack

Displays the name of the rack in which the unit/box is inserted and lets you change the name via the Platform Manager or the Hardware Resource Browser. If no name is displayed, the unit/box is not inserted into a rack.

- Platform Manager

  Lets you change the name of the rack in which the unit/box is installed independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Tip

Modifying the hardware topology by changing the rack name in the Hardware Resource Browser:
- If you enter the name of another rack within the hardware topology, ConfigurationDesk moves the unit/box to the other rack node.
- If you enter a new rack name, ConfigurationDesk adds a new rack node with this name to the hardware topology and moves the unit/box to the added rack node.
- If you clear the rack name, ConfigurationDesk moves the unit/box to the top node of the hardware topology. If the rack is empty, ConfigurationDesk deletes it from the topology.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the rack is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser (as a stand-alone element in the assembly view or attached to element names in the network view)
- Platform Manager (as a stand-alone element in the assembly view)
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ .	–	–

Value / Range	Description	Dependencies
▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).		

Uplink

Displays the name of the current uplink and lets you change the uplink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current uplink.

- Hardware Resource Browser

  Displays the name of the current uplink and lets you change the uplink or establish a new one, if there is no established uplink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding downlinks from the opposing elements when you change an existing uplink or establish a new one.

The Matching platform connected application state does *not* change when the uplink/downlink settings are changed in the Hardware Resource Browser.

The uplink/downlink settings in the Hardware Resource Browser are overwritten when the hardware topology is replaced by a topology of registered hardware.

Uplink means data transfer from one unit/box to another unit/box or processing hardware on the next higher level in the IOCNET hierarchy, i.e., directed towards the processing hardware. Due to the hierarchical structure of IOCNET, a unit/box can have exactly one uplink.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Downlink <x>

Displays the name of the current downlink and lets you change the downlink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current downlink.

- Hardware Resource Browser

  Displays the name of the current downlink and lets you change the downlink or establish a new one if there is no downlink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding uplinks from

the opposing elements when you change an existing downlink or establish a new one.

The **Matching platform connected** application state does *not* change when the uplink/downlink settings are changed in the **Hardware Resource Browser**.

The uplink/downlink settings in the **Hardware Resource Browser** are overwritten when the hardware topology is replaced by a topology of registered hardware.

Downlink means data transfer from one unit/box to other units/boxes on the next lower level in the IOCNET hierarchy, i. e., directed away from the processing hardware. Units/boxes or processing hardware can have multiple downlinks.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the unit/box.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the unit/box. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the selected hardware (unit's/box's backplane or unit's/box's IOCNET router).

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Operating system

Displays the operating system of the selected hardware in the **Platform Manager**.

Related topics

Basics

SCALEXIO AutoBox (SCALEXIO Hardware Installation and Configuration 🕮)

SCALEXIO Processing Unit

Where to go from here

Information in this section

SCALEXIO Processing Unit Properties

Purpose

To display properties of the SCALEXIO Processing Unit.

Name

Lets you enter the name of the selected SCALEXIO processing hardware. The name must be unique within a SCALEXIO rack.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the selected SCALEXIO processing hardware is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifier of the selected hardware.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the unit/board.

System name

Lets you enter a system name to identify the system during platform registration.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.

  For more information, refer to How to Change a System Name (ConfigurationDesk Real-Time Implementation Guide 🕮).

- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state does *not* change when the system name is changed in the Platform Manager or the Hardware Resource Browser.

The system name is used and displayed in the following elements:

- Register Platform dialog

  If you scan the local network for processing units, you can filter the results by the system name.
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Member of rack

Displays the name of the rack in which the selected SCALEXIO processing hardware is inserted and lets you change the name via the Platform Manager or the Hardware Resource Browser. If no name is displayed, the SCALEXIO processing hardware is not inserted into a rack.

- Platform Manager

  Lets you change the name of the rack in which the SCALEXIO processing hardware is installed independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Tip

Modifying the hardware topology by changing the rack name in the Hardware Resource Browser:

- If you enter the name of another rack within the hardware topology, ConfigurationDesk moves the SCALEXIO processing hardware to the other rack node.
- If you enter a new rack name, ConfigurationDesk adds a new rack node with this name to the hardware topology and moves the SCALEXIO processing hardware to the added rack node.
- If you clear the rack name, ConfigurationDesk moves the SCALEXIO processing hardware to the top node of the hardware topology. If the rack is empty, ConfigurationDesk deletes it from the topology.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the rack is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser (as a stand-alone element in the assembly view or attached to element names in the network view)
- Platform Manager (as a stand-alone element in the assembly view)
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

IP mode

Displays whether the Ethernet network configuration for the host PC is set by a DHCP server or whether a static network configuration is used.

IP address

Displays the IP address of the Ethernet adapter for connecting the selected SCALEXIO processing hardware to the host PC.

Subnet mask

Displays the subnet mask of the Ethernet adapter for connecting the selected SCALEXIO processing hardware to the host PC.

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter for connecting the selected SCALEXIO processing hardware to the host PC.

Downlink <x>

Displays the name of the current downlink and lets you change the downlink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current downlink.
- Hardware Resource Browser

  Displays the name of the current downlink and lets you change the downlink or establish a new one if there is no downlink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding uplinks and downlinks from the opposing elements when you change an existing downlink or establish a new one.

The **Matching platform connected** application state does *not* change when the uplink/downlink settings are changed in the **Hardware Resource Browser**.

The uplink/downlink settings in the **Hardware Resource Browser** are overwritten when the hardware topology is replaced by a topology of registered hardware.

Downlink means data transfer from one unit/box to other units/boxes on the next lower level in the IOCNET hierarchy, i. e., directed away from the processing hardware. Units/boxes or processing hardware can have multiple downlinks.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

Note

In multi-processing-unit systems, all the processing hardware must be connected via downlinks.
Processing hardware provides multiple downlinks. Although it might be possible to establish more than one downlink between processing hardware (in ConfigurationDesk via the **Hardware Resource Browser** as well as with real hardware), this would not take effect and you are not recommended to proceed this way.

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the SCALEXIO processing hardware. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
CPU	Displays the CPU type of the selected SCALEXIO processing hardware.
Clock frequency	Displays the clock frequency of the CPU on the selected SCALEXIO processing hardware.
RAM size	Displays the total size of the random access memory (RAM) on the selected SCALEXIO processing hardware.
Flash	Displays the total size of the flash memory on the selected SCALEXIO processing hardware.

Number of cores	Displays the number of processor cores of the selected SCALEXIO processing hardware.
Available application cores	Displays the number of the processor cores of the selected SCALEXIO processing hardware that can be used by the real-time application.
Firmware version	Displays the version number of the firmware running on the selected SCALEXIO processing hardware. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Operating system	Displays the operating system of the selected hardware in the Platform Manager.
Related topics	Basics SCALEXIO Processing Unit (SCALEXIO Hardware Installation and Configuration 🕮)

SCALEXIO Processing Unit Angle Unit Properties

Purpose	To display the angle unit properties of the SCALEXIO Processing Unit for virtual engines.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

Using Angular Processing Units (APUs) (ConfigurationDesk I/O Function Implementation Guide 🕮)

SCALEXIO Processing Unit Ethernet Adapter Properties

Purpose

To display the properties of the SCALEXIO Processing Unit's onboard Ethernet adapter for external devices.

Name

Lets you enter the name of the selected Ethernet adapter. The name must be unique within a SCALEXIO Processing Unit, LabBox or AutoBox.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the Ethernet adapter is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 255 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter.

SCALEXIO Processing Unit UART 5 Properties

Purpose	To display properties of the UART channel of the SCALEXIO Processing Unit.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
Baud rate range	Displays the baud rate range that can be applied.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.
UART-xxx	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal.

SCALEXIO SSD 480 GB Properties

Purpose	To display properties of the SCALEXIO SSD 480 GB of the SCALEXIO Processing Unit.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the unit/board.
Memory size	Displays the total memory size of the selected SCALEXIO SSD.

DS2601 Signal Measurement Board

Where to go from here

Information in this section

DS2601 Signal Measurement Board Properties

Purpose	To display properties of the signal measurement board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)	Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the numbers of the slots the board is installed in. ▪ Hardware Resource Browser Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced. If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active. For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Count

Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.

Related topics

Basics

DS2601 Signal Measurement Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS2601 Signal Measurement Board Channel Properties

Purpose

To display and configure properties of a single channel on a signal measurement board.

Channel number

Displays the channel number.

I/O channel set

Displays the channel set this channel belongs to.

Load description

Displays a string-based description of the load that is mounted on the real-time hardware.

The entries do not affect the channel's behavior. This property is used for automatic hardware resource assignment and load compare checks. Note that ConfigurationDesk does not check whether your entries comply with the real hardware. For details, refer to Details on Handling Internal Loads (ConfigurationDesk Real-Time Implementation Guide 🕮)

Load rejection

Displays whether you enforce the rejection of the load during a failure simulation if the application is connected to the hardware. Load rejection protects sensitive loads.

If your load must be protected against damage during a failure simulation, you should enforce load rejection (default setting = not enforced). For details, refer to Basics on Load Rejection (ConfigurationDesk Real-Time Implementation Guide 🕮).

ECU+<channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout, refer to Signal Mapping of the DS2601 Signal Measurement Board (SCALEXIO Hardware Installation and Configuration 🕮).
ECU–<channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout, refer to Signal Mapping of the DS2601 Signal Measurement Board (SCALEXIO Hardware Installation and Configuration 🕮).
LOAD+<channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout, refer to Signal Mapping of the DS2601 Signal Measurement Board (SCALEXIO Hardware Installation and Configuration 🕮).
LOAD–<channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout, refer to Signal Mapping of the DS2601 Signal Measurement Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS2621 Signal Generation Board

Where to go from here

Information in this section

DS2621 Signal Generation Board Properties

Purpose	To display properties of the signal generation board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)	Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the numbers of the slots the board is installed in. ▪ Hardware Resource Browser Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced. If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active. For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Count	Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.

Related topics

Basics

DS2621 Signal Generation Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS2621 Signal Generation Board Channel Properties

Purpose	To display properties of a single channel on a signal generation board.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
ECU+<channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout, refer to Signal Mapping of the DS2621 Signal Generation Board (SCALEXIO Hardware Installation and Configuration 🕮).
ECU–<channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout, refer to Signal Mapping of the DS2621 Signal Generation Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS2642 FIU & Power Switch Board

Where to go from here

Information in this section

DS2642 FIU & Power Switch Board Properties

Purpose	To display properties of the failure insertion unit (FIU) and power switch board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.
- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS2642 FIU & Power Switch Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS2642 FIU & Power Switch Board Channel Properties

Purpose	To display channel properties of the failure insertion unit (FIU) and power switch board.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
VBAT+<channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS2642 FIU & Power Switch Board (SCALEXIO Hardware Installation and Configuration 🕮).
VREF-<channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS2642 FIU & Power Switch Board (SCALEXIO Hardware Installation and Configuration 🕮).

Units for FPGA Base Boards (DS2655 Unit, DS2656 Unit , DS6601 Unit or DS6602 Unit)

DS2655 Unit, DS2656 Unit, DS6601 Unit or DS6602 Unit Properties

Purpose

To configure and display properties of the FPGA units (DS2655 Unit, DS2656 Unit, DS6601 Unit or DS6602 Unit).

Name

Lets you enter the name of the unit/box. The name must be unique within a SCALEXIO rack.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the unit/box is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ .	–	–

Value / Range	Description	Dependencies
▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).		

Type

Displays the product name of the selected hardware.

Member of rack

Displays the name of the rack in which the unit/box is inserted and lets you change the name via the Platform Manager or the Hardware Resource Browser. If no name is displayed, the unit/box is not inserted into a rack.

- Platform Manager

  Lets you change the name of the rack in which the unit/box is installed independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Tip

Modifying the hardware topology by changing the rack name in the Hardware Resource Browser:

- If you enter the name of another rack within the hardware topology, ConfigurationDesk moves the unit/box to the other rack node.
- If you enter a new rack name, ConfigurationDesk adds a new rack node with this name to the hardware topology and moves the unit/box to the added rack node.
- If you clear the rack name, ConfigurationDesk moves the unit/box to the top node of the hardware topology. If the rack is empty, ConfigurationDesk deletes it from the topology.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the rack is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser (as a stand-alone element in the assembly view or attached to element names in the network view)
- Platform Manager (as a stand-alone element in the assembly view)
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ .	–	–

Value / Range	Description	Dependencies
▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).		

DS2655 FPGA Base Board

Where to go from here

Information in this section

Information in other sections

DS2655 FPGA Base Board Properties

Purpose

To display properties of the FPGA base board.

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifier of the selected hardware.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

Member of unit

Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.
- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Note

On a DS2655 FPGA Base Board you can mount up to five I/O modules. Although they are connected directly to the base board and not to the backplane of the unit/box, each I/O module requires the physical space of one slot. In total, a DS2655 FPGA Base Board and its attached I/O modules can occupy 1…6 slots.

When you add or remove I/O modules from the hardware topology, ConfigurationDesk automatically occupies or releases the respective number of slots to the right of the base board and updates the **slot(s)** property. If there are not enough available slots, you must manually assign the DS2655 FPGA Base Board to another set of slots from the drop-down list.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Count	Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.
Device type	Displays the FPGA chip device type provided by the user-programmable FPGA base board.
Block RAM size	Displays the size of the block RAM available on the user-programmable FPGA chip.
UltraRAM size	Displays the size of the UltraRAM available on the user-programmable FPGA chip.
DSP slices	Displays the number of DSP slices available on the user-programmable FPGA chip.
Logic cells	Displays the number of logic cells available on the user-programmable FPGA module.
System logic cells	Displays the number of system logic cells available on the user-programmable FPGA module.

External RAM size	Displays the size of external DDR RAM available on the user-programmable FPGA module.
Default version	Displays the default bitstream version of the user-programmable FPGA. The default bitstream is used internally during the initialization phase. The syntax of the version number as displayed in ConfigurationDesk is <major version>.<minor version>.<maintenance version>. For example, 1.2.3 denotes major version 1, minor version 2, and maintenance version 3.
Module count	Displays the maximum number of FPGA I/O modules that can be mounted on the FPGA base board.
Related topics	Basics DS2655 FPGA Base Board (SCALEXIO Hardware Installation and Configuration 🕮)

Board Connection Module Properties

Purpose	To configure and display properties of the board connection to support inter-FPGA communication.
Type	Displays the connection type.
Slot	Displays which I/O module slot is used for the selected board connection and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the number of the I/O module slot that is used by the selected board connection. ▪ Hardware Resource Browser Displays the I/O module slot of the selected board connection and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific I/O module slot configuration in the rack. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.
Connected board	Displays the FPGA board to which the selected board connection is connected.

Connected module	Displays the I/O module slot of the FPGA board to which the selected board connection is connected.

DS2655M1 Multi-I/O Module

Where to go from here

Information in this section

DS2655M1 Multi-I/O Module Properties

Purpose	To display properties of the DS2655M1 Multi-I/O Module.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Slot count	Displays the number of slots occupied by the board.

Slot

Displays the number of the slot on the FPGA Base Board to which the I/O module is connected. You can also change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the number of the I/O module slot of the FPGA Base Board to which the I/O module is connected.

- Hardware Resource Browser

  Displays the number of the I/O module slot of the FPGA Base Board which is assigned to the I/O module and lets you change the slot assignment. In the tree view of the Hardware Resource Browser, the assigned slot number is attached to the identifier of the I/O module, so you can distinguish modules of the same type. Furthermore, I/O modules are sorted by their assigned slot number. ConfigurationDesk automatically refreshes the display of the I/O modules when you change the slot assignment.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to No matching platform connected. Registered platforms are displayed in the Platform Manager if they are physically connected and active.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the .

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS2655M1 Multi-I/O Module (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS2655M1 Multi-I/O Module Channel Properties

Purpose

To display properties of a single channel of the DS2655M1 Multi-I/O Module.

Channel number

Displays the channel number.

FRU

Displays whether a failure routing unit (FRU) is available.

Channel type

Displays the channel type of the selected channel.

I/O channel set

Displays the channel set this channel belongs to.

Channel type dependent properties

The DS2655M1 Multi-I/O Module provides 20 channels of three different channel types. Properties that are available only for certain channel types are shown in the following table.

Property	Channel	Channel Type
Current range	Channel 1…10	Digital In/Out 2
	Channel 16…20	Analog Out 5
Voltage range	Channel 1…10	Digital In/Out 2
	Channel 16…20	Analog Out 5
High side voltage reference	Channel 1…10	Digital In/Out 2
Low side voltage reference		
Maximum output frequency		
Signal output delay		
Threshold range		
Hysteresis		
Signal voltage range		
Maximum input frequency		
Signal input delay		
Resolution	Channel 11…15	Analog In 3
	Channel 16…20	Analog Out 5
Voltage measurement range	Channel 11…15	Analog In 3
Voltage measurement range precise		
DAC settling time	Channel 16…20	Analog Out 5

Protection voltage	Displays the absolute voltage value up to which the selected channel is protected against overvoltage.
<Channel type> Channel <channel number> — Signal, Reference	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS2655M1 Multi-I/O Module, refer to Pinout of the DS2655M1 Multi-I/O Module (SCALEXIO Hardware Installation and Configuration 🕮).
Related topics	Basics Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS2655M2 Digital I/O Module

Where to go from here

Information in this section

DS2655M2 Digital I/O Module Properties

Purpose	To display properties of the DS2655M2 Digital I/O Module.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Slot count	Displays the number of slots occupied by the board.

Slot

Displays the number of the slot on the FPGA Base Board to which the I/O module is connected. You can also change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the number of the I/O module slot of the FPGA Base Board to which the I/O module is connected.

- Hardware Resource Browser

  Displays the number of the I/O module slot of the FPGA Base Board which is assigned to the I/O module and lets you change the slot assignment. In the tree view of the **Hardware Resource Browser**, the assigned slot number is attached to the identifier of the I/O module, so you can distinguish modules of the same type. Furthermore, I/O modules are sorted by their assigned slot number. ConfigurationDesk automatically refreshes the display of the I/O modules when you change the slot assignment.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the .

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS2655M2 Digital I/O Module (SCALEXIO Hardware Installation and Configuration 🕮)

DS2655M2 Digital I/O Module Channel Properties

Purpose

To display properties of a single channel of the DS2655M2 Digital I/O Module.

Channel number	Displays the channel number.
FRU	Displays whether a failure routing unit (FRU) is available.
Channel type	Displays the channel type of the selected channel.
I/O channel set	Displays the channel set this channel belongs to.
<Channel type> Channel <channel number> Signal	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS2655M2 Digital I/O Module, refer to Pinout of the DS2655M2 Digital I/O Module (SCALEXIO Hardware Installation and Configuration 🕮).
GND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS2655M2 Digital I/O Module, refer to Pinout of the DS2655M2 Digital I/O Module (SCALEXIO Hardware Installation and Configuration 🕮).
Related topics	Basics Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS2671 Bus Board

Where to go from here

Information in this section

DS2671 Bus Board Properties

Purpose	To display properties of the bus board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.

- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS2671 Bus Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS2671 Bus Board Channel Properties

Purpose	To display properties of the bus board channel.
Channel number	Displays the channel number.
PLL IC	Displays the type of the mounted phase-locked loop integrated circuit (PLL IC) of the channel. The PLL IC provides a clock frequency for the FPGA of the selected channel.
I/O channel set	Displays the channel set this channel belongs to.
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Dataphase baud rate range	Displays the baud rate range that can be applied for CAN FD communication during the data phase. This property is available only for high-speed CAN transceivers.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.

CH<channel number>_PINA … PIND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS2671 Bus Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS2672 Bus Module

Where to go from here

Information in this section

DS2672 Bus Module Properties

Purpose	To display properties of the bus module.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.
Slot(s)	Displays the slot numbers the board is installed in.

Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Related topics	Basics DS2672 Bus Module (SCALEXIO Hardware Installation and Configuration 🕮) Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS2672 Bus Module Channel Properties

Purpose	To display channel properties of the DS2672 Bus Module.
Channel number	Displays the channel number.
PLL IC	Displays the type of the mounted phase-locked loop integrated circuit (PLL IC) of the channel. The PLL IC provides a clock frequency for the FPGA of the selected channel.
I/O channel set	Displays the channel set this channel belongs to.
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Baud rate range	Displays the baud rate range that can be applied.
Dataphase baud rate range	Displays the baud rate range that can be applied for CAN FD communication during the data phase. This property is available only for high-speed CAN transceivers.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.
CAN<signal><channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS2672 Bus Module (SCALEXIO Hardware Installation and Configuration 🕮).
FLEXRAY<channel number><signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS2672 Bus Module (SCALEXIO Hardware Installation and Configuration 🕮).
LIN<channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS2672 Bus Module (SCALEXIO Hardware Installation and Configuration 🕮).
<Bustype>VBAT	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS2672 Bus Module (SCALEXIO Hardware Installation and Configuration 🕮).
GND (Bus)	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS2672 Bus Module (SCALEXIO Hardware Installation and Configuration 🕮).

DS2680 I/O Unit

Where to go from here

Information in this section

DS2680 I/O Unit Properties

Purpose

To display properties of the I/O Unit.

Name

Lets you enter the name of the unit/box. The name must be unique within a SCALEXIO rack.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the unit/box is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Type

Displays the product name of the selected hardware.

Member of rack

Displays the name of the rack in which the unit/box is inserted and lets you change the name via the Platform Manager or the Hardware Resource Browser. If no name is displayed, the unit/box is not inserted into a rack.

- Platform Manager

  Lets you change the name of the rack in which the unit/box is installed independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Tip

Modifying the hardware topology by changing the rack name in the Hardware Resource Browser:

- If you enter the name of another rack within the hardware topology, ConfigurationDesk moves the unit/box to the other rack node.
- If you enter a new rack name, ConfigurationDesk adds a new rack node with this name to the hardware topology and moves the unit/box to the added rack node.
- If you clear the rack name, ConfigurationDesk moves the unit/box to the top node of the hardware topology. If the rack is empty, ConfigurationDesk deletes it from the topology.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the rack is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser (as a stand-alone element in the assembly view or attached to element names in the network view)
- Platform Manager (as a stand-alone element in the assembly view)
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Uplink

Displays the name of the current uplink and lets you change the uplink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current uplink.

- Hardware Resource Browser

  Displays the name of the current uplink and lets you change the uplink or establish a new one, if there is no established uplink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding downlinks from the opposing elements when you change an existing uplink or establish a new one.

The Matching platform connected application state does *not* change when the uplink/downlink settings are changed in the Hardware Resource Browser.

The uplink/downlink settings in the Hardware Resource Browser are overwritten when the hardware topology is replaced by a topology of registered hardware.

Uplink means data transfer from one unit/box to another unit/box or processing hardware on the next higher level in the IOCNET hierarchy, i.e., directed towards the processing hardware. Due to the hierarchical structure of IOCNET, a unit/box can have exactly one uplink.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Downlink <x>

Displays the name of the current downlink and lets you change the downlink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current downlink.

- Hardware Resource Browser

  Displays the name of the current downlink and lets you change the downlink or establish a new one if there is no downlink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding uplinks from the opposing elements when you change an existing downlink or establish a new one.

The Matching platform connected application state does *not* change when the uplink/downlink settings are changed in the Hardware Resource Browser.

The uplink/downlink settings in the Hardware Resource Browser are overwritten when the hardware topology is replaced by a topology of registered hardware.

Downlink means data transfer from one unit/box to other units/boxes on the next lower level in the IOCNET hierarchy, i. e., directed away from the processing hardware. Units/boxes or processing hardware can have multiple downlinks.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the unit/box.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the unit/box. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the selected hardware (unit's/box's backplane or unit's/box's IOCNET router).

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics	Basics DS2680 I/O Unit (SCALEXIO Hardware Installation and Configuration 🕮)

DS2680 I/O Module Properties

Purpose	To display properties of the I/O module of the DS2680 I/O Unit.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.
Slot(s)	Displays the slot numbers the board is installed in.
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.

Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Count	Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.
Related topics	Basics Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS2680 I/O Module Channel Properties

Purpose	To display properties of a single channel of the DS2680 I/O module.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
Load description	(Not available for out channel types, such as Analog Out 1, etc.) Lets you enter a string-based description of the load that is mounted on the real-time hardware. The entries do not affect the channel's behavior. This property is used for automatic Hardware resource assignment and load compare checks. Note that ConfigurationDesk does not check whether your entries comply with the real hardware. For details, refer to Details on Handling Internal Loads (ConfigurationDesk Real-Time Implementation Guide 🕮).
Load rejection	(Not available for out channel types, such as Analog Out 1, etc.)

Displays whether you enforce the rejection of the load during a failure simulation if the application is connected to the hardware. Load rejection protects sensitive loads.

If your load must be protected against damage during a failure simulation, you should enforce load rejection (default setting = not enforced). For details, refer to Basics on Load Rejection (ConfigurationDesk Real-Time Implementation Guide 🕮).

<Channel type> Channel <channel number> — Signal, Reference, GND, Load Signal, etc.

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS2680 I/O Module, refer to Pinouts of the DS2680 I/O Unit (SCALEXIO Hardware Installation and Configuration 🕮).

DS2690 Digital I/O Board

Where to go from here

Information in this section

DS2690 Digital I/O Board Properties

Purpose	To display properties of the digital I/O board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.
- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS2690 Digital I/O Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS2690 Digital I/O Board Channel Properties

Purpose

To display properties of a single channel of the DS2690 Digital I/O Board.

Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
Load description	(Not available for the **Digital Out 2** channel type.) Lets you enter a string-based description of the load that is mounted on the real-time hardware. The entries do not affect the channel's behavior. This property is used for automatic Hardware resource assignment and load compare checks. Note that ConfigurationDesk does not check whether your entries comply with the real hardware. For details, refer to Details on Handling Internal Loads (ConfigurationDesk Real-Time Implementation Guide 🕮).
Load rejection	(Not available for the **Digital Out 2** channel type.) Displays whether you enforce the rejection of the load during a failure simulation if the application is connected to the hardware. Load rejection protects sensitive loads. If your load must be protected against damage during a failure simulation, you should enforce load rejection (default setting = not enforced). For details, refer to Basics on Load Rejection (ConfigurationDesk Real-Time Implementation Guide 🕮).
<Channel type> Channel <channel number> — Signal, Reference, Load Signal	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS2690 Digital I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS2702 20-Slot I/O Unit

DS2702 20–Slot I/O Unit Properties

Purpose

To configure and display properties of the 20-slot I/O unit.

Name

Lets you enter the name of the unit/box. The name must be unique within a SCALEXIO rack.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the unit/box is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Type

Displays the product name of the selected hardware.

Member of rack

Displays the name of the rack in which the unit/box is inserted and lets you change the name via the Platform Manager or the Hardware Resource Browser. If no name is displayed, the unit/box is not inserted into a rack.

- Platform Manager

  Lets you change the name of the rack in which the unit/box is installed independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Tip

Modifying the hardware topology by changing the rack name in the Hardware Resource Browser:

- If you enter the name of another rack within the hardware topology, ConfigurationDesk moves the unit/box to the other rack node.
- If you enter a new rack name, ConfigurationDesk adds a new rack node with this name to the hardware topology and moves the unit/box to the added rack node.
- If you clear the rack name, ConfigurationDesk moves the unit/box to the top node of the hardware topology. If the rack is empty, ConfigurationDesk deletes it from the topology.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the rack is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser (as a stand-alone element in the assembly view or attached to element names in the network view)
- Platform Manager (as a stand-alone element in the assembly view)
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Uplink

Displays the name of the current uplink and lets you change the uplink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current uplink.

- Hardware Resource Browser

  Displays the name of the current uplink and lets you change the uplink or establish a new one, if there is no established uplink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding downlinks from the opposing elements when you change an existing uplink or establish a new one.

The Matching platform connected application state does *not* change when the uplink/downlink settings are changed in the Hardware Resource Browser.

The uplink/downlink settings in the Hardware Resource Browser are overwritten when the hardware topology is replaced by a topology of registered hardware.

Uplink means data transfer from one unit/box to another unit/box or processing hardware on the next higher level in the IOCNET hierarchy, i.e., directed towards the processing hardware. Due to the hierarchical structure of IOCNET, a unit/box can have exactly one uplink.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Downlink <x>

Displays the name of the current downlink and lets you change the downlink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current downlink.

- Hardware Resource Browser

  Displays the name of the current downlink and lets you change the downlink or establish a new one if there is no downlink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding uplinks from the opposing elements when you change an existing downlink or establish a new one.

The Matching platform connected application state does *not* change when the uplink/downlink settings are changed in the Hardware Resource Browser.

The uplink/downlink settings in the **Hardware Resource Browser** are overwritten when the hardware topology is replaced by a topology of registered hardware.

Downlink means data transfer from one unit/box to other units/boxes on the next lower level in the IOCNET hierarchy, i. e., directed away from the processing hardware. Units/boxes or processing hardware can have multiple downlinks.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the unit/box.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the unit/box. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the selected hardware (unit's/box's backplane or unit's/box's IOCNET router).

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS2702 20-Slot Unit (SCALEXIO Hardware Installation and Configuration 🕮)

DS2703 6-Slot I/O Unit

DS2703 6–Slot I/O Unit Properties

Purpose

To configure and display properties of the 6-slot I/O unit.

Name

Lets you enter the name of the unit/box. The name must be unique within a SCALEXIO rack.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the unit/box is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Type

Displays the product name of the selected hardware.

Member of rack

Displays the name of the rack in which the unit/box is inserted and lets you change the name via the Platform Manager or the Hardware Resource Browser. If no name is displayed, the unit/box is not inserted into a rack.

- Platform Manager

  Lets you change the name of the rack in which the unit/box is installed independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Tip

Modifying the hardware topology by changing the rack name in the Hardware Resource Browser:

- If you enter the name of another rack within the hardware topology, ConfigurationDesk moves the unit/box to the other rack node.
- If you enter a new rack name, ConfigurationDesk adds a new rack node with this name to the hardware topology and moves the unit/box to the added rack node.
- If you clear the rack name, ConfigurationDesk moves the unit/box to the top node of the hardware topology. If the rack is empty, ConfigurationDesk deletes it from the topology.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the rack is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser (as a stand-alone element in the assembly view or attached to element names in the network view)
- Platform Manager (as a stand-alone element in the assembly view)
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Uplink

Displays the name of the current uplink and lets you change the uplink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current uplink.

- Hardware Resource Browser

  Displays the name of the current uplink and lets you change the uplink or establish a new one, if there is no established uplink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding downlinks from the opposing elements when you change an existing uplink or establish a new one.

The Matching platform connected application state does *not* change when the uplink/downlink settings are changed in the Hardware Resource Browser.

The uplink/downlink settings in the Hardware Resource Browser are overwritten when the hardware topology is replaced by a topology of registered hardware.

Uplink means data transfer from one unit/box to another unit/box or processing hardware on the next higher level in the IOCNET hierarchy, i.e., directed towards the processing hardware. Due to the hierarchical structure of IOCNET, a unit/box can have exactly one uplink.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Downlink <x>

Displays the name of the current downlink and lets you change the downlink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current downlink.

- Hardware Resource Browser

  Displays the name of the current downlink and lets you change the downlink or establish a new one if there is no downlink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding uplinks from the opposing elements when you change an existing downlink or establish a new one.

The Matching platform connected application state does *not* change when the uplink/downlink settings are changed in the Hardware Resource Browser.

The uplink/downlink settings in the **Hardware Resource Browser** are overwritten when the hardware topology is replaced by a topology of registered hardware.

Downlink means data transfer from one unit/box to other units/boxes on the next lower level in the IOCNET hierarchy, i. e., directed away from the processing hardware. Units/boxes or processing hardware can have multiple downlinks.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the unit/box.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the unit/box. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the selected hardware (unit's/box's backplane or unit's/box's IOCNET router).

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS2703 6-Slot Unit (SCALEXIO Hardware Installation and Configuration 🕮)

DS6001 Processor Board

Where to go from here

Information in this section

DS6001 Processor Board Properties

Purpose

To display properties of the DS6001 Processor Board.

Name

Lets you enter the name of the selected SCALEXIO processing hardware. The name must be unique within a SCALEXIO rack.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.

- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the selected SCALEXIO processing hardware is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifier of the selected hardware.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the unit/board.

System name

Lets you enter a system name to identify the system during platform registration.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.

  For more information, refer to How to Change a System Name (ConfigurationDesk Real-Time Implementation Guide 🕮).

- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state does *not* change when the system name is changed in the Platform Manager or the Hardware Resource Browser.

The system name is used and displayed in the following elements:

- Register Platform dialog

  If you scan the local network for processing units, you can filter the results by the system name.
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Member of rack

Displays the name of the rack in which the selected SCALEXIO processing hardware is inserted and lets you change the name via the Platform Manager or the Hardware Resource Browser. If no name is displayed, the SCALEXIO processing hardware is not inserted into a rack.

- Platform Manager

  Lets you change the name of the rack in which the SCALEXIO processing hardware is installed independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Tip

Modifying the hardware topology by changing the rack name in the Hardware Resource Browser:

- If you enter the name of another rack within the hardware topology, ConfigurationDesk moves the SCALEXIO processing hardware to the other rack node.
- If you enter a new rack name, ConfigurationDesk adds a new rack node with this name to the hardware topology and moves the SCALEXIO processing hardware to the added rack node.
- If you clear the rack name, ConfigurationDesk moves the SCALEXIO processing hardware to the top node of the hardware topology. If the rack is empty, ConfigurationDesk deletes it from the topology.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the rack is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser (as a stand-alone element in the assembly view or attached to element names in the network view)
- Platform Manager (as a stand-alone element in the assembly view)
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

IP mode

Displays whether the Ethernet network configuration for the host PC is set by a DHCP server or whether a static network configuration is used.

IP address

Displays the IP address of the Ethernet adapter for connecting the selected SCALEXIO processing hardware to the host PC.

Subnet mask

Displays the subnet mask of the Ethernet adapter for connecting the selected SCALEXIO processing hardware to the host PC.

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter for connecting the selected SCALEXIO processing hardware to the host PC.

Downlink <x>

Displays the name of the current downlink and lets you change the downlink depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the name of the current downlink.
- Hardware Resource Browser

  Displays the name of the current downlink and lets you change the downlink or establish a new one if there is no downlink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding uplinks and downlinks from the opposing elements when you change an existing downlink or establish a new one.

The Matching platform connected application state does *not* change when the uplink/downlink settings are changed in the Hardware Resource Browser.

The uplink/downlink settings in the **Hardware Resource Browser** are overwritten when the hardware topology is replaced by a topology of registered hardware.

Downlink means data transfer from one unit/box to other units/boxes on the next lower level in the IOCNET hierarchy, i. e., directed away from the processing hardware. Units/boxes or processing hardware can have multiple downlinks.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

Note

In multi-processing-unit systems, all the processing hardware must be connected via downlinks.
Processing hardware provides multiple downlinks. Although it might be possible to establish more than one downlink between processing hardware (in ConfigurationDesk via the **Hardware Resource Browser** as well as with real hardware), this would not take effect and you are not recommended to proceed this way.

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the SCALEXIO processing hardware. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

CPU

Displays the CPU type of the selected SCALEXIO processing hardware.

Clock frequency

Displays the clock frequency of the CPU on the selected SCALEXIO processing hardware.

RAM size

Displays the total size of the random access memory (RAM) on the selected SCALEXIO processing hardware.

Flash

Displays the total size of the flash memory on the selected SCALEXIO processing hardware.

Number of cores	Displays the number of processor cores of the selected SCALEXIO processing hardware.
Available application cores	Displays the number of the processor cores of the selected SCALEXIO processing hardware that can be used by the real-time application.
Firmware version	Displays the version number of the firmware running on the selected SCALEXIO processing hardware. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Related topics	Basics DS6001 Processor Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6001 Processor Board Angle Unit Properties

Purpose	To display the angle unit properties of the DS6001 Processor Board for virtual engines.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Related topics	Basics Using Angular Processing Units (APUs) (ConfigurationDesk I/O Function Implementation Guide 🕮)

DS6001 Processor Board Ethernet Adapter Properties

Purpose

To display the properties of the Ethernet adapter of DS6001 Processor Boards.

Name

Lets you enter the name of the selected Ethernet adapter. The name must be unique within a SCALEXIO Processing Unit, LabBox or AutoBox.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the Ethernet adapter is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 255 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter.

DS6001 UART 6 Channel Properties

Purpose

To display properties of the UART channel of the DS6001 Processor Board.

Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
Baud rate range	Displays the baud rate range that can be applied.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.
UART-xxx	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout, refer to Pinout of the Connectors (DS6001) (SCALEXIO Hardware Installation and Configuration 🕮).

DS6101 Multi-I/O Board

Where to go from here

Information in this section

DS6101 Multi-I/O Board Properties

Purpose	To display board properties of the DS6101 Multi-I/O Board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)	Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the numbers of the slots the board is installed in. ▪ Hardware Resource Browser Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced. If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active. For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Count	Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.

Related topics

Basics

DS6101 Multi-I/O Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6101 Multi-I/O Board Channel Properties

Purpose	To display properties of a single channel on the DS6101 Multi-I/O Board.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
<Channel type> Channel <channel number> — Signal, Reference	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6101 Multi-I/O Board, refer to Pinouts of the DS6101 Multi-I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).
VBAT<x>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6101 Multi-I/O Board, refer to Pinouts of the DS6101 Multi-I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).
GND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6101 Multi-I/O Board, refer to Pinouts of the DS6101 Multi-I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS6121 Multi-I/O Board

Where to go from here

Information in this section

DS6121 Multi-I/O Board Properties

Purpose	To display the board properties of the DS6121 Multi-I/O Board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)	Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the numbers of the slots the board is installed in. ▪ Hardware Resource Browser Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced. If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active. For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Count	Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.

Related topics

Basics

DS6121 Multi-I/O Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6121 Multi-I/O Board Channel Properties

Purpose	To display the properties of a single channel on the DS6121 Multi-I/O Board.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
<Channel type> Channel <channel number> — Signal, Reference	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS6121 Multi-I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).
AGND<n>, GND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS6121 Multi-I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).
Resolver<signal>+, Resolver<signal>-	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS6121 Multi-I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.

Protocol version

Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

DS6201 Digital I/O Board

Where to go from here

Information in this section

DS6201 Digital I/O Board Properties

Purpose	To display board properties of the DS6201 Digital I/O Board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.

- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS6201 Digital I/O Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6201 Digital I/O Board Channel Properties

Purpose

To display properties of a single channel on the DS6201 Digital I/O Board.

Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
<Channel type> Channel <channel number> Signal	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6201 Digital I/O Board, refer to Pinouts of the DS6201 Digital I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).
Digital Out Reference <channel bank>A, B	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6201 Digital I/O Board, refer to Pinouts of the DS6201 Digital I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).
GND<channel bank>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6201 Digital I/O Board, refer to Pinouts of the DS6201 Digital I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS6202 Digital I/O Board

Where to go from here

Information in this section

DS6202 Digital I/O Board Properties

Purpose	To display board properties of the DS6202 Digital I/O Board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)	Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the numbers of the slots the board is installed in. ▪ Hardware Resource Browser Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced. If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active. For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Count	Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.

Related topics

Basics

DS6202 Digital I/O Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6202 Digital I/O Board Channel Properties

Purpose	To display properties of a single channel on the DS6202 Digital I/O Board.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
<Channel type> Channel <channel number> Signal	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6202 Digital I/O Board, refer to Data Sheet of the DS6202 Digital I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).
GND1	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6202 Digital I/O Board, refer to Data Sheet of the DS6202 Digital I/O Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS6221 A/D Board

Where to go from here

Information in this section

DS6221 A/D Board Properties

Purpose	To display board properties of the DS6221 A/D Board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)	Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the numbers of the slots the board is installed in. ▪ Hardware Resource Browser Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced. If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active. For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Count	Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.

Related topics

Basics

DS6221 A/D Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6221 A/D Board Channel Properties

Purpose	To display properties of a single channel on the DS6221 A/D Board.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
<Channel type> Channel <channel number> — Signal, Reference	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6221 A/D Board, refer to Pinout of the Connector (DS6221) (SCALEXIO Hardware Installation and Configuration 🕮).
GND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6221 A/D Board, refer to Pinout of the Connector (DS6221) (SCALEXIO Hardware Installation and Configuration 🕮).

DS6241 D/A Board

Where to go from here

Information in this section

DS6241 D/A Board Properties

Purpose	To display board properties of the DS6241 D/A Board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)	Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the numbers of the slots the board is installed in. ▪ Hardware Resource Browser Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced. If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active. For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Count	Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.

Related topics

Basics

DS6241 D/A Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6241 D/A Board Channel Properties

Purpose	To display properties of a single channel on the DS6241 D/A Board.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
<Channel type> Channel <channel number> — Signal, Reference	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6241 D/A Board, refer to Pinout of the Connector (DS6241) (SCALEXIO Hardware Installation and Configuration 🕮) .
GND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the pinout of the DS6241 D/A Board, refer to Pinout of the Connector (DS6241) (SCALEXIO Hardware Installation and Configuration 🕮) .

DS6301 CAN/LIN Board

Where to go from here

Information in this section

DS6301 CAN/LIN Board Properties

Purpose	To display properties of the CAN/LIN board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.
- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS6301 CAN/LIN Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6301 CAN/LIN Board Channel Properties

Purpose	To display channel properties of the CAN/LIN board.
Channel number	Displays the channel number.
PLL IC	Displays the type of the mounted phase-locked loop integrated circuit (PLL IC) of the channel. The PLL IC provides a clock frequency for the FPGA of the selected channel.
I/O channel set	Displays the channel set this channel belongs to.
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Dataphase baud rate range	Displays the baud rate range that can be applied for CAN FD communication during the data phase. This property is available only for high-speed CAN transceivers.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.

<Bustype><signal><channel number>	Indicates which pin is used for the bus signal. For the signal mapping, refer to Signal Mapping of the DS6301 CAN/LIN Board (SCALEXIO Hardware Installation and Configuration 🕮).
<Bustype>VBAT<channel number>	Indicates which pin is used to supply the transceiver of the board with an external voltage if the internal voltage supply is not used. For the signal mapping, refer to Signal Mapping of the DS6301 CAN/LIN Board (SCALEXIO Hardware Installation and Configuration 🕮).
<Bustype>GND<channel number>	Indicates which pin is used for the GND reference signal. For the signal mapping, refer to Signal Mapping of the DS6301 CAN/LIN Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS6311 FlexRay Board

Where to go from here

Information in this section

DS6311 FlexRay Board Properties

Purpose	To display properties of the FlexRay board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.

- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS6311 FlexRay Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6311 FlexRay Board Channel Properties

Purpose	To display channel properties of the FlexRay board.
Channel number	Displays the channel number.
PLL IC	Displays the type of the mounted phase-locked loop integrated circuit (PLL IC) of the channel. The PLL IC provides a clock frequency for the FPGA of the selected channel.
I/O channel set	Displays the channel set this channel belongs to.
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.
FLEXRAY<Flexray channel>GND<channel number>	Indicates which pin is used for the FlexRay GND reference signal of Flexray channel A or B. For the signal mapping, refer to Data Sheet of the DS6311 FlexRay Board (SCALEXIO Hardware Installation and Configuration 🕮).

FLEXRAY<Flexray channel><channel number>+	Indicates which pin is used for the FlexRay BP signal of Flexray channel A or B. For the signal mapping, refer to Data Sheet of the DS6311 FlexRay Board (SCALEXIO Hardware Installation and Configuration 🕮).
FLEXRAY<Flexray channel>FT<channel number>+	Indicates which pin is used for the FlexRay BP Feedthrough signal of Flexray channel A or B. For the signal mapping, refer to Data Sheet of the DS6311 FlexRay Board (SCALEXIO Hardware Installation and Configuration 🕮).
FLEXRAY<Flexray channel><channel number>-	Indicates which pin is used for the FlexRay BM signal of Flexray channel A or B. For the signal mapping, refer to Data Sheet of the DS6311 FlexRay Board (SCALEXIO Hardware Installation and Configuration 🕮).
FLEXRAY<Flexray channel>FT<channel number>-	Indicates which pin is used for the FlexRay BM Feedthrough signal of Flexray channel A or B. For the signal mapping, refer to Data Sheet of the DS6311 FlexRay Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS6321 UART Board

Where to go from here

Information in this section

DS6321 UART Board Properties

Purpose	To display the board properties of the DS6321 UART Board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.
- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS6321 UART Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6321 UART Board Channel Properties

Purpose

To display the properties of a single channel on the DS6321 UART Board.

Channel number	Displays the channel number.
PLL IC	Displays the type of the mounted phase-locked loop integrated circuit (PLL IC) of the channel. The PLL IC provides a clock frequency for the FPGA of the selected channel.
I/O channel set	Displays the channel set this channel belongs to.
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip. The syntax of the version number as displayed in ConfigurationDesk is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.
UART-<Signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Pinout of the Connector (DS6321) (SCALEXIO Hardware Installation and Configuration 🕮).

DS6331-PE Ethernet Board

Where to go from here

Information in this section

DS6331-PE Ethernet Board Properties

Purpose	To display properties of the Ethernet board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

Basics

DS6331-PE Ethernet Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6331-PE Ethernet Board Adapter Properties

Purpose

To display properties of the selected Ethernet adapter of the board.

Name

Lets you enter the name of the selected Ethernet adapter. The name must be unique within a SCALEXIO Processing Unit, LabBox or AutoBox.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the Ethernet adapter is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 255 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter.

DS6333-CS Automotive Ethernet Board

Where to go from here

Information in this section

DS6333-CS Automotive Ethernet Board Properties

Purpose

To display properties of the automotive Ethernet board.

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifiers of the Ethernet board and the onboard Ethernet modules. Furthermore, you can change the type of the onboard Ethernet modules depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the dSPACE identifiers of the Ethernet board and the installed onboard Ethernet modules.

- Hardware Resource Browser

  Displays the dSPACE identifiers of the Ethernet board and of the assigned onboard Ethernet modules. This property also lets you change the type of the assigned onboard Ethernet modules as required:

Ethernet Module	Supported Ethernet Standard
DS6330M1	Automotive Ethernet
DS6330M2	Ethernet

  Changing the type of the assigned onboard Ethernet modules can be useful to prepare the hardware topology for your specific configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the module type for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

Member of unit

Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.

- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Slot

Displays the number of the slot on the DS633x (Automotive) Ethernet Board to which the selected onboard Ethernet module is connected.

Ethernet interface

Displays the Ethernet standard that is supported by the selected onboard Ethernet module.

Related topics

Basics

DS6333-CS Automotive Ethernet Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6333-CS Automotive Ethernet Board Adapter Properties

Purpose

To display properties of the selected Ethernet adapter of the board.

Name

Lets you enter the name of the selected Ethernet adapter. The name must be unique within a SCALEXIO Processing Unit, LabBox or AutoBox.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the Ethernet adapter is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 255 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter.

DS6333-CS Automotive Ethernet Board Switch Properties

Purpose

To display properties of the Ethernet switch of the board.

Name

Lets you enter the name of the Ethernet switch. The name must be unique within a SCALEXIO Processing Unit, LabBox or AutoBox.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Note

The name of the Ethernet switch does not only serve as an identifier. It also determines whether the actual configuration, for example, the data rate, is used and stored only for the Ethernet switch of this particular Ethernet board or additionally for Ethernet switches on other Ethernet boards of the same type in the SCALEXIO Processing Unit, LabBox or AutoBox. This is controlled by either using the default name or by specifying an individual name for the Ethernet switch.

Using the default name has the following effects:

- The configuration of the Ethernet switch is bound to the slot that the Ethernet board is installed in (LabBox/AutoBox) or to the slot that is assigned to the Ethernet board (SCALEXIO Processing Unit).
- Ethernet switches of other Ethernet boards in this slot use the same configuration if the Ethernet boards match the following conditions:
  - The board types match (DS6333-PE matches DS6333-PE, DS6333-CS matches DS6333-CS and DS6335-CS, and vice versa).
  - The boards are equipped with the same Ethernet modules in the same slots on the board.

Specifying an individual name has the following effects:

- The configuration of the Ethernet switch is bound to the particular Ethernet board.
- The configuration of the Ethernet switch remains the same when the Ethernet board is operated in a different slot of the same Processing Unit, LabBox or AutoBox.

Before you change the name of an Ethernet switch, make yourself familiar with naming conventions and the effects of changing the name:

- For Ethernet switches of DS6333-PE Automotive Ethernet Boards, refer to *Ethernet Configuration Page > Slot-specific and board-specific Ethernet switch configuration* in Web Interface of the SCALEXIO Processing Unit (SCALEXIO Hardware Installation and Configuration 🕮).
- For Ethernet switches of DS633x-CS (Automotive) Ethernet Boards, refer to *Ethernet Configuration Page > Slot-specific and board-specific Ethernet switch configuration* in Web Interface of the DS6001 Processor Board (SCALEXIO Hardware Installation and Configuration 🕮).

The **Matching platform connected** application state changes to **No matching platform connected** when the name is changed in the **Platform Manager** or the **Hardware Resource Browser**.

The name of the Ethernet switch is used and displayed in the following ConfigurationDesk components:

- **Hardware Resource Browser**
- **Platform Manager**
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ .	–	–

Value / Range	Description	Dependencies
▪ The number of characters is limited and depends on the characters used (maximum of 63 characters).		

DS6333-PE Automotive Ethernet Board

Where to go from here

Information in this section

DS6333-PE Automotive Ethernet Board Properties

Purpose

To display properties of the automotive Ethernet board.

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifiers of the Ethernet board and the onboard Ethernet modules. Furthermore, you can change the type of the onboard Ethernet modules depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the dSPACE identifiers of the Ethernet board and the installed onboard Ethernet modules.

- Hardware Resource Browser

  Displays the dSPACE identifiers of the Ethernet board and of the assigned onboard Ethernet modules. This property also lets you change the type of the assigned onboard Ethernet modules as required:

Ethernet Module	Supported Ethernet Standard
DS6330M1	Automotive Ethernet
DS6330M2	Ethernet

  Changing the type of the assigned onboard Ethernet modules can be useful to prepare the hardware topology for your specific configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the module type for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Slot

Displays the number of the slot on the DS633x (Automotive) Ethernet Board to which the selected onboard Ethernet module is connected.

Ethernet interface

Displays the Ethernet standard that is supported by the selected onboard Ethernet module.

Related topics

Basics

DS6333-PE Automotive Ethernet Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6333-PE Automotive Ethernet Board Adapter Properties

Purpose

To display properties of the selected Ethernet adapter of the board.

Name

Lets you enter the name of the selected Ethernet adapter. The name must be unique within a SCALEXIO Processing Unit, LabBox or AutoBox.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the Ethernet adapter is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 255 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter.

DS6333-PE Automotive Ethernet Board Switch Properties

Purpose	To display properties of the Ethernet switch of the board.
Name	Lets you enter the name of the Ethernet switch. The name must be unique within a SCALEXIO Processing Unit, LabBox or AutoBox. You can enter the name via the Platform Manager or the Hardware Resource Browser: ▪ Platform Manager Lets you change settings independently of any specific ConfigurationDesk application. ▪ Hardware Resource Browser Lets you make settings for the active ConfigurationDesk application. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Note

The name of the Ethernet switch does not only serve as an identifier. It also determines whether the actual configuration, for example, the data rate, is used and stored only for the Ethernet switch of this particular Ethernet board or additionally for Ethernet switches on other Ethernet boards of the same type in the SCALEXIO Processing Unit, LabBox or AutoBox. This is controlled by either using the default name or by specifying an individual name for the Ethernet switch.

Using the default name has the following effects:

- The configuration of the Ethernet switch is bound to the slot that the Ethernet board is installed in (LabBox/AutoBox) or to the slot that is assigned to the Ethernet board (SCALEXIO Processing Unit).
- Ethernet switches of other Ethernet boards in this slot use the same configuration if the Ethernet boards match the following conditions:
  - The board types match (DS6333-PE matches DS6333-PE, DS6333-CS matches DS6333-CS and DS6335-CS, and vice versa).
  - The boards are equipped with the same Ethernet modules in the same slots on the board.

Specifying an individual name has the following effects:

- The configuration of the Ethernet switch is bound to the particular Ethernet board.
- The configuration of the Ethernet switch remains the same when the Ethernet board is operated in a different slot of the same Processing Unit, LabBox or AutoBox.

Before you change the name of an Ethernet switch, make yourself familiar with naming conventions and the effects of changing the name:

- For Ethernet switches of DS6333-PE Automotive Ethernet Boards, refer to *Ethernet Configuration Page > Slot-specific and board-specific Ethernet switch configuration* in Web Interface of the SCALEXIO Processing Unit (SCALEXIO Hardware Installation and Configuration 🕮).
- For Ethernet switches of DS633x-CS (Automotive) Ethernet Boards, refer to *Ethernet Configuration Page > Slot-specific and board-specific Ethernet switch configuration* in Web Interface of the DS6001 Processor Board (SCALEXIO Hardware Installation and Configuration 🕮).

The **Matching platform connected** application state changes to **No matching platform connected** when the name is changed in the **Platform Manager** or the **Hardware Resource Browser**.

The name of the Ethernet switch is used and displayed in the following ConfigurationDesk components:

- **Hardware Resource Browser**
- **Platform Manager**
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ .	–	–

Value / Range	Description	Dependencies
▪ The number of characters is limited and depends on the characters used (maximum of 63 characters).		

DS6334-PE Ethernet Board

Where to go from here

Information in this section

DS6334-PE Ethernet Board Properties

Purpose	To display properties of the Ethernet board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

Basics

DS6334-PE Ethernet Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6334-PE Ethernet Board Adapter Properties

Purpose

To display properties of the selected Ethernet adapter of the board.

Name

Lets you enter the name of the selected Ethernet adapter. The name must be unique within a SCALEXIO Processing Unit, LabBox or AutoBox.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the Ethernet adapter is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 255 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter.

DS6335-CS Ethernet Board

Where to go from here

Information in this section

DS6335-CS Ethernet Board Properties

Purpose

To display properties of the Ethernet board.

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifiers of the Ethernet board and the onboard Ethernet modules. Furthermore, you can change the type of the onboard Ethernet modules depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the dSPACE identifiers of the Ethernet board and the installed onboard Ethernet modules.

- Hardware Resource Browser

  Displays the dSPACE identifiers of the Ethernet board and of the assigned onboard Ethernet modules. This property also lets you change the type of the assigned onboard Ethernet modules as required:

Ethernet Module	Supported Ethernet Standard
DS6330M1	Automotive Ethernet
DS6330M2	Ethernet

  Changing the type of the assigned onboard Ethernet modules can be useful to prepare the hardware topology for your specific configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the module type for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

Member of unit

Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.

- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Slot

Displays the number of the slot on the DS633x (Automotive) Ethernet Board to which the selected onboard Ethernet module is connected.

Ethernet interface

Displays the Ethernet standard that is supported by the selected onboard Ethernet module.

Related topics

Basics

DS6335-CS Ethernet Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6335-CS Ethernet Board Adapter Properties

Purpose

To display properties of the selected Ethernet adapter of the board.

Name

Lets you enter the name of the selected Ethernet adapter. The name must be unique within a SCALEXIO Processing Unit, LabBox or AutoBox.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the Ethernet adapter is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 255 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter.

DS6335-CS Ethernet Board Switch Properties

Purpose

To display properties of the Ethernet switch of the board.

Name

Lets you enter the name of the Ethernet switch. The name must be unique within a SCALEXIO Processing Unit, LabBox or AutoBox.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

Note

The name of the Ethernet switch does not only serve as an identifier. It also determines whether the actual configuration, for example, the data rate, is used and stored only for the Ethernet switch of this particular Ethernet board or additionally for Ethernet switches on other Ethernet boards of the same type in the SCALEXIO Processing Unit, LabBox or AutoBox. This is controlled by either using the default name or by specifying an individual name for the Ethernet switch.

Using the default name has the following effects:

- The configuration of the Ethernet switch is bound to the slot that the Ethernet board is installed in (LabBox/AutoBox) or to the slot that is assigned to the Ethernet board (SCALEXIO Processing Unit).
- Ethernet switches of other Ethernet boards in this slot use the same configuration if the Ethernet boards match the following conditions:
  - The board types match (DS6333-PE matches DS6333-PE, DS6333-CS matches DS6333-CS and DS6335-CS, and vice versa).
  - The boards are equipped with the same Ethernet modules in the same slots on the board.

Specifying an individual name has the following effects:

- The configuration of the Ethernet switch is bound to the particular Ethernet board.
- The configuration of the Ethernet switch remains the same when the Ethernet board is operated in a different slot of the same Processing Unit, LabBox or AutoBox.

Before you change the name of an Ethernet switch, make yourself familiar with naming conventions and the effects of changing the name:

- For Ethernet switches of DS6333-PE Automotive Ethernet Boards, refer to *Ethernet Configuration Page > Slot-specific and board-specific Ethernet switch configuration* in Web Interface of the SCALEXIO Processing Unit (SCALEXIO Hardware Installation and Configuration 🕮).
- For Ethernet switches of DS633x-CS (Automotive) Ethernet Boards, refer to *Ethernet Configuration Page > Slot-specific and board-specific Ethernet switch configuration* in Web Interface of the DS6001 Processor Board (SCALEXIO Hardware Installation and Configuration 🕮).

The **Matching platform connected** application state changes to **No matching platform connected** when the name is changed in the **Platform Manager** or the **Hardware Resource Browser**.

The name of the Ethernet switch is used and displayed in the following ConfigurationDesk components:

- **Hardware Resource Browser**
- **Platform Manager**
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ .	–	–

Value / Range	Description	Dependencies
▪ The number of characters is limited and depends on the characters used (maximum of 63 characters).		

DS6336-PE Ethernet Board

Where to go from here

Information in this section

DS6336-PE Ethernet Board Properties

Purpose	To display properties of the Ethernet board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

Basics

DS6334-PE Ethernet Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6336-PE Ethernet Board Adapter Properties

Purpose

To display properties of the selected Ethernet adapter of the board.

Name

Lets you enter the name of the

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the .

DS6336-CS Ethernet Board

Where to go from here

Information in this section

DS6336-CS Ethernet Board Properties

Purpose	To display properties of the Ethernet board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

Basics

DS6336-PE Ethernet Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6336-CS Ethernet Board Adapter Properties

Purpose

To display properties of the selected Ethernet adapter of the board.

Name

Lets you enter the name of the

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the .

DS6341 CAN Board

Where to go from here

Information in this section

DS6341 CAN Board Properties

Purpose	To display properties of the CAN board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.
- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS6341 CAN Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6341 CAN Board Channel Properties

Purpose	To display channel properties of the CAN board.
Channel number	Displays the channel number.
PLL IC	Displays the type of the mounted phase-locked loop integrated circuit (PLL IC) of the channel. The PLL IC provides a clock frequency for the FPGA of the selected channel.
I/O channel set	Displays the channel set this channel belongs to.
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Dataphase baud rate range	Displays the baud rate range that can be applied for CAN FD communication during the data phase. This property is available only for high-speed CAN transceivers.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.

CAN<signal><channel number>	Indicates which pin is used for the respective CAN signal. For the signal mapping, refer to Data Sheet of the DS6341 CAN Board (SCALEXIO Hardware Installation and Configuration 🕮).
CANVBAT<channel number>	Indicates which pin is used to supply the transceiver of the board with an external voltage if the internal voltage supply is not used. For the signal mapping, refer to Data Sheet of the DS6341 CAN Board (SCALEXIO Hardware Installation and Configuration 🕮).
CANGND<channel number>	Indicates which pin is used for the CAN GND reference signal. For the signal mapping, refer to Data Sheet of the DS6341 CAN Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS6342 CAN Board

Where to go from here

Information in this section

DS6342 CAN Board Properties

Purpose	To display properties of the DS6342 CAN Board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.
- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS6342 CAN Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6342 CAN Board Channel Properties

Purpose	To display channel properties of the DS6342 CAN Board.
Channel number	Displays the channel number.
PLL IC	Displays the type of the mounted phase-locked loop integrated circuit (PLL IC) of the channel. The PLL IC provides a clock frequency for the FPGA of the selected channel.
I/O channel set	Displays the channel set this channel belongs to.
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Dataphase baud rate range	Displays the baud rate range that can be applied for CAN FD communication during the data phase. This property is available only for high-speed CAN transceivers.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.

CAN<signal><channel number>	Indicates which pin is used for the respective CAN signal. For the signal mapping, refer to Signal Mapping of the DS6342 CAN Board (SCALEXIO Hardware Installation and Configuration 🕮).
CANVBAT<channel number>	Indicates which pin is used to supply the transceiver of the board with an external voltage if the internal voltage supply is not used. For the signal mapping, refer to Signal Mapping of the DS6342 CAN Board (SCALEXIO Hardware Installation and Configuration 🕮).
CANGND<channel number>	Indicates which pin is used for the CAN GND reference signal. For the signal mapping, refer to Signal Mapping of the DS6342 CAN Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS6351 LIN Board

Where to go from here

Information in this section

DS6351 LIN Board Properties

Purpose	To display properties of the LIN board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.
- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the board.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS6351 LIN Board (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6351 LIN Board Channel Properties

Purpose	To display channel properties of the LIN board.
Channel number	Displays the channel number.
PLL IC	Displays the type of the mounted phase-locked loop integrated circuit (PLL IC) of the channel. The PLL IC provides a clock frequency for the FPGA of the selected channel.
I/O channel set	Displays the channel set this channel belongs to.
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.
LIN<channel number>	Indicates which pin is used for the LIN signal. For the signal mapping, refer to Data Sheet of the DS6351 LIN Board (SCALEXIO Hardware Installation and Configuration 🕮).

LINVBAT<channel number>	Indicates which pin is used to supply the transceiver of the board with an external voltage. For the signal mapping, refer to Data Sheet of the DS6351 LIN Board (SCALEXIO Hardware Installation and Configuration 🕮).
LINGND<channel number>	Indicates which pin is used for the LIN GND reference signal. For the signal mapping, refer to Data Sheet of the DS6351 LIN Board (SCALEXIO Hardware Installation and Configuration 🕮).

DS6551 IOCNET Link Board

DS6551 IOCNET Link Board Properties

Purpose	To display properties of the DS6551 IOCNET Link board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Member of unit	Displays the name of the unit/box the board is installed in.
Slot(s)	Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the numbers of the slots the board is installed in. ▪ Hardware Resource Browser Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced. If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application

changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Downlink <x>

Displays the name of the current downlink and lets you change the downlink depending on the ConfigurationDesk component from which you access the property.

- **Platform Manager**

  Displays the name of the current downlink.

- **Hardware Resource Browser**

  Displays the name of the current downlink and lets you change the downlink or establish a new one if there is no downlink yet. A drop-down list provides all the elements from the hardware topology that you can potentially connect. ConfigurationDesk also releases/establishes the corresponding uplinks from the opposing elements when you change an existing downlink or establish a new one.

The **Matching platform connected** application state does *not* change when the uplink/downlink settings are changed in the **Hardware Resource Browser**.

The uplink/downlink settings in the **Hardware Resource Browser** are overwritten when the hardware topology is replaced by a topology of registered hardware.

Downlink means data transfer from one unit/box to other units/boxes on the next lower level in the IOCNET hierarchy, i. e., directed away from the processing hardware. Units/boxes or processing hardware can have multiple downlinks.

For more information, refer to Network Concept (SCALEXIO Hardware Installation and Configuration 🕮) and How to Establish a Network Connection in the Hardware Topology (SCALEXIO) (ConfigurationDesk Real-Time Implementation Guide 🕮).

The uplink/downlink configuration is part of imports and exports of hardware topologies via HTFX-files.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

Basics

DS6551 IOCNET Link Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6601 FPGA Base Board

Where to go from here

Information in this section

Information in other sections

DS6601 FPGA Base Board Properties

Purpose

To display properties of the DS6601 FPGA Base Board.

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifier of the selected hardware.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

Member of unit

Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.
- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Note

On a DS6601 FPGA Base Board, you can install up to five I/O modules plus one multi-gigabit optotransceiver. Although they are connected directly to the base board and not to the backplane of the unit/box, each I/O module or multi-gigabit optotransceiver requires the physical space of one slot. In total, a DS6601 FPGA Base Board and its attached I/O modules or multi-gigabit optotransceiver can occupy 1 … 7 slots.

When you add or remove I/O modules or a multi-gigabit optotransceiver from the hardware topology, ConfigurationDesk automatically occupies or releases the respective number of slots to the right of the base board and updates the **slot(s)** property. If there are not enough available slots, you must manually assign the DS6601 FPGA Base Board to another set of slots from the drop-down list.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision

	number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Count	Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.
Device type	Displays the FPGA chip device type provided by the user-programmable FPGA base board.
Block RAM size	Displays the size of the block RAM available on the user-programmable FPGA chip.
UltraRAM size	Displays the size of the UltraRAM available on the user-programmable FPGA chip.
DSP slices	Displays the number of DSP slices available on the user-programmable FPGA chip.
Logic cells	Displays the number of logic cells available on the user-programmable FPGA module.

System logic cells	Displays the number of system logic cells available on the user-programmable FPGA module.
External RAM size	Displays the size of external DDR RAM available on the user-programmable FPGA module.
Default version	Displays the default bitstream version of the user-programmable FPGA. The default bitstream is used internally during the initialization phase. The syntax of the version number as displayed in ConfigurationDesk is <major version>.<minor version>.<maintenance version>. For example, 1.2.3 denotes major version 1, minor version 2, and maintenance version 3.
Module count	Displays the maximum number of FPGA I/O modules that can be mounted on the FPGA base board.
Port count	Displays the number of multi-gigabit optotransceiver ports supported by the board.
Bandwidth	Displays the maximum bandwidth supported by the multi-gigabit transceivers on the board.
Related topics	Basics DS6601 FPGA Base Board (SCALEXIO Hardware Installation and Configuration 🕮)

Board Connection Module Properties

Purpose	To configure and display properties of the board connection to support inter-FPGA communication.
Type	Displays the connection type.

Slot	Displays which I/O module slot is used for the selected board connection and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the number of the I/O module slot that is used by the selected board connection. ▪ Hardware Resource Browser Displays the I/O module slot of the selected board connection and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific I/O module slot configuration in the rack. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.
Connected board	Displays the FPGA board to which the selected board connection is connected.
Connected module	Displays the I/O module slot of the FPGA board to which the selected board connection is connected.
Related topics	Basics DS6601 FPGA Base Board (SCALEXIO Hardware Installation and Configuration 🕮)

Multi-Gigabit Optotransceiver Properties

Purpose	To display properties of the connected multi-gigabit optotransceiver (MGT) module.
Vendor	Displays the vendor name of the multi-gigabit optotransceiver.
Vendor part number	Displays the vendor-specific part number of the multi-gigabit optotransceiver.
Port count	Displays the number of ports that are provided by the multi-gigabit optotransceiver at the standard MPO connector.

Related topics

Basics

DS6601 FPGA Base Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6602 FPGA Base Board

Where to go from here

Information in this section

Information in other sections

DS6602 FPGA Base Board Properties

Purpose

To display properties of the DS6602 FPGA Base Board.

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifier of the selected hardware.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

Member of unit

Displays the name of the unit/box the board is installed in.

Slot(s)

Displays the numbers of the slots the board is installed in and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the numbers of the slots the board is installed in.
- Hardware Resource Browser

  Displays the slot numbers assigned to the board and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific slot or pin configuration. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

For more information on slot assignment, refer to How to Assign Boards to Specific Slots in an I/O Slot Unit (ConfigurationDesk Real-Time Implementation Guide 🕮).

Note

On a DS6602 FPGA Base Board, you can install up to five I/O modules. Although they are connected directly to the base board and not to the backplane of the unit/box, each I/O module requires the physical space of one slot. In total, a DS6602 FPGA Base Board and its attached I/O modules can occupy 2 … 7 slots.

When you add or remove I/O modules from the hardware topology, ConfigurationDesk automatically occupies or releases the respective number of slots to the right of the base board and updates the **slot(s)** property. If there are not enough available slots, you must manually assign the DS6602 FPGA Base Board to another set of slots from the drop-down list.

The number of slots required by a DS6602 FPGA Base Board does not change when the optional multi-gigabit optotransceiver is added or removed.

Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Count	Displays the number of slave APUs of the board. Slave APUs are executed synchronously to the master APU and provide the angle position for function blocks. Multiple function blocks use the same slave APU if the function blocks are assigned to the same master APU provider.
Device type	Displays the FPGA chip device type provided by the user-programmable FPGA base board.
Block RAM size	Displays the size of the block RAM available on the user-programmable FPGA chip.
UltraRAM size	Displays the size of the UltraRAM available on the user-programmable FPGA chip.
DSP slices	Displays the number of DSP slices available on the user-programmable FPGA chip.

Logic cells	Displays the number of logic cells available on the user-programmable FPGA module.
System logic cells	Displays the number of system logic cells available on the user-programmable FPGA module.
External RAM size	Displays the size of external DDR RAM available on the user-programmable FPGA module.
Default version	Displays the default bitstream version of the user-programmable FPGA. The default bitstream is used internally during the initialization phase. The syntax of the version number as displayed in ConfigurationDesk is <major version>.<minor version>.<maintenance version>. For example, 1.2.3 denotes major version 1, minor version 2, and maintenance version 3.
Module count	Displays the maximum number of FPGA I/O modules that can be mounted on the FPGA base board.
Port count	Displays the number of multi-gigabit optotransceiver ports supported by the board.
Bandwidth	Displays the maximum bandwidth supported by the multi-gigabit transceivers on the board.
Related topics	**Basics** DS6602 FPGA Base Board (SCALEXIO Hardware Installation and Configuration 🕮)

Board Connection Module Properties

Purpose	To configure and display properties of the board connection to support inter-FPGA communication.
Type	Displays the connection type.

Slot	Displays which I/O module slot is used for the selected board connection and lets you change the slot assignment depending on the ConfigurationDesk component from which you access the property. ▪ Platform Manager Displays the number of the I/O module slot that is used by the selected board connection. ▪ Hardware Resource Browser Displays the I/O module slot of the selected board connection and lets you change the slot assignment. This can be useful to prepare the hardware topology for a specific I/O module slot configuration in the rack. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.
Connected board	Displays the FPGA board to which the selected board connection is connected.
Connected module	Displays the I/O module slot of the FPGA board to which the selected board connection is connected.
Related topics	Basics DS6602 FPGA Base Board (SCALEXIO Hardware Installation and Configuration 🕮)

Multi-Gigabit Optotransceiver Properties

Purpose	To display properties of the connected multi-gigabit optotransceiver (MGT) module.
Vendor	Displays the vendor name of the multi-gigabit optotransceiver.
Vendor part number	Displays the vendor-specific part number of the multi-gigabit optotransceiver.
Port count	Displays the number of ports that are provided by the multi-gigabit optotransceiver at the standard MPO connector.

Related topics

Basics

DS6601 FPGA Base Board (SCALEXIO Hardware Installation and Configuration 🕮)

DS6651 Multi-IO Module

Where to go from here

Information in this section

DS6651 Multi-I/O Module Properties

Purpose	To display properties of the DS6651 Multi-I/O Module.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Slot count	Displays the number of slots occupied by the board.

Slot

Displays the number of the slot on the FPGA Base Board to which the I/O module is connected. You can also change the slot assignment depending on the ConfigurationDesk component from which you access the property.

- Platform Manager

  Displays the number of the I/O module slot of the FPGA Base Board to which the I/O module is connected.

- Hardware Resource Browser

  Displays the number of the I/O module slot of the FPGA Base Board which is assigned to the I/O module and lets you change the slot assignment. In the tree view of the **Hardware Resource Browser**, the assigned slot number is attached to the identifier of the I/O module, so you can distinguish modules of the same type. Furthermore, I/O modules are sorted by their assigned slot number. ConfigurationDesk automatically refreshes the display of the I/O modules when you change the slot assignment.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of the application is replaced.

If you change the slot assignment for hardware that is currently connected to a registered platform, the state of the active ConfigurationDesk application changes to **No matching platform connected**. Registered platforms are displayed in the **Platform Manager** if they are physically connected and active.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Firmware version

Displays the version number of the firmware running on the selected module.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

DS6651 Multi-I/O Module (SCALEXIO Hardware Installation and Configuration 🕮)
Overview of SCALEXIO Channel Types (SCALEXIO Hardware Installation and Configuration 🕮)

DS6651 Multi-I/O Module Channel Properties

Purpose

To display properties of a single channel of the DS6651 Multi-I/O Module.

Channel number

Displays the channel number.

FRU

Displays whether a failure routing unit (FRU) is available.

Channel type

Displays the channel type of the selected channel.

I/O channel set

Displays the channel set this channel belongs to.

Channel type dependent properties

The DS6651 Multi-I/O Module provides 28 channels of 5 different channel types. Properties that are available only for certain channel types are shown in the following table.

Property	Channel	Channel Type
—	Channel 1 … 16	Digital In/Out 11
Current range	Channel 17 … 20	Analog Out 15
Voltage range		
Resolution		
DAC settling time		
Current range	Channel 21 … 22	Analog Out 16
Voltage range		
Resolution		
DAC settling time		
Resolution	Channel 23 … 26	Analog In 18
Voltage measurement range 1 ... 4		
Resolution	Channel 27 … 28	Analog In 19
Voltage measurement range 1 ... 4		

Protection voltage

Displays the absolute voltage value up to which the selected channel is protected against overvoltage.

<Channel type> Channel <channel number> Signal	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS6651 Multi-I/O Module (SCALEXIO Hardware Installation and Configuration 🕮) .
GND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to Signal Mapping of the DS6651 Multi-I/O Module (SCALEXIO Hardware Installation and Configuration 🕮).

MicroAutoBox III

MicroAutoBox III Properties

Purpose	To display basic properties of a MicroAutoBox III.
Package name	Displays the name of the selected MicroAutoBox III. The package name is used and displayed in the following ConfigurationDesk components: ▪ Hardware Resource Browser (as a stand-alone element in the assembly view or attached to element names in the network view) ▪ Platform Manager (as a stand-alone element in the assembly view) ▪ Information and error messages ▪ Exported ConfigurationDesk files
Package serial number	Displays the unique identifier of the selected MicroAutoBox III. The serial number is also printed on an adhesive label on the MicroAutoBox III.

DS1403 Processor Board

Where to go from here

Information in this section

DS1403 Processor Board Properties

Purpose

To display properties of the DS1403 Processor Board.

Name

Lets you enter the name of the processor board.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the processor board is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifier of the selected hardware.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

System name

Lets you enter a system name to identify the system during platform registration.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.

For more information, refer to How to Change a System Name (ConfigurationDesk Real-Time Implementation Guide 🕮).

- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state does *not* change when the system name is changed in the Platform Manager or the Hardware Resource Browser.

The system name is used and displayed in the following elements:

- Register Platform dialog

  If you scan the local network for processing units, you can filter the results by the system name.

- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 32 characters).	–	–

IP mode

Displays whether the Ethernet network configuration for the host PC is set by a DHCP server or whether a static network configuration is used.

IP address

Displays the IP address of the Ethernet adapter for connecting the processor board to the host PC.

Subnet mask

Displays the subnet mask of the Ethernet adapter for connecting the processor board to the host PC.

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter for connecting the processor board to the host PC.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

CPU

Displays the CPU type of the processor board.

Clock frequency	Displays the clock frequency of the CPU on the processor board.
RAM size	Displays the total size of the random access memory (RAM) on the processor board.
Flash	Displays the total size of the flash memory on the processor board.
Number of cores	Displays the number of processor cores of the processor board.
Available application cores	Displays the number of the processor cores of the processor board that can be used by the real-time application.
Firmware version	Displays the version number of the firmware running on the processor board. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Related topics	References DS1403 Processor Board Data Sheet (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS1403 Processor Board Angle Unit Properties

Purpose	To display the angle unit properties of the DS1403 Processor Board for virtual engines.
Resolution	Displays the resolution of the angle counter in degrees.
Maximum speed	Displays the maximum angular velocity (°/s) for reverse and forward measurements.
Protocol version	Displays the version number of the APU protocol that is used by the hardware to execute the angle counter of the APU. The versions of APU protocols are compatible with each other.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

Basics

Using Angular Processing Units (APUs) (ConfigurationDesk I/O Function Implementation Guide 🕮)

DS1403 Processor Board Ethernet Adapter Properties

Purpose

To display the properties of the Ethernet adapter of the DS1403 Processor Board.

Name

Lets you enter the name of the selected Ethernet adapter. The name must be unique among the Ethernet adapters within a MicroAutoBox III.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the Ethernet adapter is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 255 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter.

DS1403 Processor Board Ethernet Switch Properties

Purpose

To display the properties of the Ethernet switch of the DS1403 Processor Board.

Name

Lets you enter the name of the Ethernet switch.

You can enter the name via the Platform Manager or the Hardware Resource Browser:

- Platform Manager

  Lets you change settings independently of any specific ConfigurationDesk application.
- Hardware Resource Browser

  Lets you make settings for the active ConfigurationDesk application.

  The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced.

The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the Ethernet switch is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 63 characters).	–	–

DS1403 Processor Board Channel Properties

Purpose

To display the properties of a single channel on a DS1403 Processor Board.

Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.

DS1511/DS1511B1 Multi-I/O Board

Where to go from here

Information in this section

DS1511/DS1511B1 Multi-I/O Board Properties

Purpose	To display board properties of the DS1511/DS1511B1 Multi-I/O Board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.

Layer

Displays the layer number of the selected board.

MicroAutoBox III boards are mounted in layers on top of each other. The layers are numbered from bottom to top starting with 0 (zero). By default, Layer 0 (zero) is occupied by the DS1403 Processor Board.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

References

DS1511 Multi-I/O Board Data Sheet (MicroAutoBox III Hardware Installation and Configuration 🕮)
Overview of MicroAutoBox III Channel Types (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS1511/DS1511B1 Multi-I/O Board Module Properties

Purpose

To display the properties of a DS1511/DS1511B1 Multi-I/O Board onboard module.

Type

Displays the product name of the selected hardware.

Firmware version

Displays the version number of the firmware running on the selected hardware.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

DS1511/DS1511B1 Multi-I/O Board Channel Properties

Purpose

To display the properties of a single channel on a module of the DS1511/DS1511B1 Multi-I/O Board.

Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
<Channel type> Channel <channel number> Signal	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1511 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
GND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1511 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
VDRIVE	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1511 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
SGND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1511 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Dataphase baud rate range	Displays the baud rate range that can be applied for CAN FD communication during the data phase. This property is available only for high-speed CAN transceivers.
Voltage range	Displays the voltage range that can be applied.

Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.
CAN<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1511 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
LIN<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1511 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
Uart<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1511 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).

DS1513 Multi-I/O Board

Where to go from here

Information in this section

DS1513 Multi-I/O Board Properties

Purpose

To display the board properties of the DS1513 Multi-I/O Board.

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifier of the selected hardware.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

Layer

Displays the layer number of the selected board.

MicroAutoBox III boards are mounted in layers on top of each other. The layers are numbered from bottom to top starting with 0 (zero). By default, Layer 0 (zero) is occupied by the DS1403 Processor Board.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

References

DS1513 Multi-I/O Board Data Sheet (MicroAutoBox III Hardware Installation and Configuration 🕮)
Overview of MicroAutoBox III Channel Types (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS1513 Multi-I/O Board Module Properties

Purpose

To display the properties of a DS1513 Multi-I/O Board onboard module.

Type

Displays the product name of the selected hardware.

Firmware version

Displays the version number of the firmware running on the selected hardware.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

DS1513 Multi-I/O Board Channel Properties

Purpose

To display the properties of a single channel on a module of the DS1513 Multi-I/O Board.

Channel number

Displays the channel number.

I/O channel set	Displays the channel set this channel belongs to.
<Channel type> Channel <channel number> Signal	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1513 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
GND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1513 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
VDRIVE	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1513 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
SGND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1513 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Dataphase baud rate range	Displays the baud rate range that can be applied for CAN FD communication during the data phase. This property is available only for high-speed CAN transceivers.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.

Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.
CAN<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1513 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
LIN<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1513 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
Uart<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1513 ZIF I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).

DS1514 FPGA Base Board

Where to go from here

Information in this section

DS1514 FPGA Base Board Properties

Purpose	To display board properties of the DS1514 FPGA Base Board.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Layer	Displays the layer number of the selected board. MicroAutoBox III boards are mounted in layers on top of each other. The layers are numbered from bottom to top starting with 0 (zero). By default, Layer 0 (zero) is occupied by the DS1403 Processor Board.

Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.
Firmware version	Displays the version number of the firmware running on the selected hardware. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Related topics	References DS1514 FPGA Base Board Data Sheet (MicroAutoBox III Hardware Installation and Configuration 🕮) Overview of MicroAutoBox III Channel Types (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS1514 FPGA Base Board Module Properties Properties

Purpose	To display properties of a DS1514 FPGA Base Board onboard module.
Type	Displays the product name of the selected hardware.
Firmware version	Displays the version number of the firmware running on the selected hardware. The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Device type	Displays the FPGA chip device type provided by the user-programmable FPGA base board.
Block RAM size	Displays the size of the block RAM available on the user-programmable FPGA chip.
DSP slices	Displays the number of DSP slices available on the user-programmable FPGA chip.

Logic cells	Displays the number of logic cells available on the user-programmable FPGA module.
Default version	Displays the default bitstream version of the user-programmable FPGA. The default bitstream is used internally during the initialization phase. The syntax of the version number as displayed in ConfigurationDesk is <major version>.<minor version>.<maintenance version>. For example, 1.2.3 denotes major version 1, minor version 2, and maintenance version 3.

DS1521 Bus Board

Where to go from here

Information in this section

DS1521 Bus Board Properties

Purpose

To display the board properties of the DS1521 Bus Board.

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifier of the selected hardware.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

Layer

Displays the layer number of the selected board.

MicroAutoBox III boards are mounted in layers on top of each other. The layers are numbered from bottom to top starting with 0 (zero). By default, Layer 0 (zero) is occupied by the DS1403 Processor Board.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

References

DS1521 Bus Board Data Sheet (MicroAutoBox III Hardware Installation and Configuration 🕮)
Overview of MicroAutoBox III Channel Types (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS1521 Bus Board Module Properties

Purpose

To display the properties of a DS1521 Bus Board onboard module.

Type

Displays the product name of the selected hardware.

Firmware version

Displays the version number of the firmware running on the selected hardware.

The syntax of the version number is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Related topics

References

DS1521 Bus Board Data Sheet (MicroAutoBox III Hardware Installation and Configuration 🕮)
Overview of MicroAutoBox III Channel Types (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS1521 Bus Board Channel Properties

Purpose	To display the properties of a single channel on a module of the DS1521 Bus Board.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Dataphase baud rate range	Displays the baud rate range that can be applied for CAN FD communication during the data phase. This property is available only for high-speed CAN transceivers.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.
<Channel type> Channel <channel number> Signal	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to GPIO Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).

GND	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to GPIO Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
CAN<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to CAN FD Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
LIN<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to GPIO Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
FLEXRAY<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to FlexRay Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
UART<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to GPIO Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).

DS1521 Bus Board Ethernet Adapter Properties

Purpose	To display the properties of the ethernet adapters of the DS1521 Bus Board.
Name	Lets you enter the name of the selected Ethernet adapter. The name must be unique among the Ethernet adapters within a MicroAutoBox III. You can enter the name via the Platform Manager or the Hardware Resource Browser: ▪ Platform Manager Lets you change settings independently of any specific ConfigurationDesk application. ▪ Hardware Resource Browser Lets you make settings for the active ConfigurationDesk application. The settings cannot be transferred to a registered hardware system. They are overwritten when the hardware topology of your application is replaced. The Matching platform connected application state changes to No matching platform connected when the name is changed in the Platform Manager or the Hardware Resource Browser.

The name of the Ethernet adapter is used and displayed in the following ConfigurationDesk components:

- Hardware Resource Browser
- Platform Manager
- Exported ConfigurationDesk files

Value / Range	Description	Dependencies
▪ All characters are allowed, including special characters like * ? | < > : / \ . ▪ The number of characters is limited and depends on the characters used (maximum of 255 characters).	–	–

MAC address

Displays the particular media access control (MAC) address of the Ethernet adapter.

DS1552/DS1552B1 Multi-I/O Module

Where to go from here

Information in this section

DS1552/DS1552B1 Multi-I/O Module Properties

Purpose	To display module properties of the DS1552/DS1552B1 Multi-I/O Module.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision

number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

References

DS1552 Multi-I/O Module Data Sheet (MicroAutoBox III Hardware Installation and Configuration 🕮)
Overview of MicroAutoBox III Channel Types (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS1552/DS1552B1 Multi-I/O Module Channel Properties

Purpose

To display the properties of a single channel of the DS1552/DS15552B1 Multi-I/O Module.

Channel number

Displays the channel number.

I/O channel set

Displays the channel set this channel belongs to.

<Channel type> Channel <channel number> — Signal, Reference

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS1552/DS1552B1) (MicroAutoBox III Hardware Installation and Configuration 🕮).

GND

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS1552/DS1552B1) (MicroAutoBox III Hardware Installation and Configuration 🕮).

VDRIVE

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS1552/DS1552B1) (MicroAutoBox III Hardware Installation and Configuration 🕮).

Serial<signal><channel number>

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS1552/DS1552B1) (MicroAutoBox III Hardware Installation and Configuration 🕮).

DS1553 AC Motor Control Module

Where to go from here

Information in this section

DS1553 AC Motor Control Module Properties

Purpose	To display module properties of the DS1553 AC Motor Control Module.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision

number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

References

Overview of MicroAutoBox III Channel Types (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS1553 AC Motor Control Module Channel Properties

Purpose

To display the properties of a single channel of the DS1553 AC Motor Control Module.

Channel number

Displays the channel number.

I/O channel set

Displays the channel set this channel belongs to.

<Channel type> Channel <channel number> — Signal, Reference

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal.

GND

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal.

Resolver<signal>+, Resolver<signal>-

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal.

DS1554 Engine Control I/O Module

Where to go from here

Information in this section

DS1554 Engine Control I/O Module Properties

Purpose

To display module properties of the DS1554 Engine Control I/O Module.

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifier of the selected hardware.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision

number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

References

DS1554 Engine Control I/O Module Data Sheet (MicroAutoBox III Hardware Installation and Configuration 🕮)
Overview of MicroAutoBox III Channel Types (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS1554 Engine Control I/O Module Channel Properties

Purpose

To display the properties of a single channel of the DS1554 Engine Control I/O Module.

Channel number

Displays the channel number.

I/O channel set

Displays the channel set this channel belongs to.

<Channel type> Channel <channel number> — Signal, Reference

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS1554) (MicroAutoBox III Hardware Installation and Configuration 🕮) and DS1554 Sub-D I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).

CrankCamGND

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS1554) (MicroAutoBox III Hardware Installation and Configuration 🕮) and DS1554 Sub-D I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).

GND

Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS1554) (MicroAutoBox III Hardware Installation and Configuration 🕮) and DS1554 Sub-D I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).

VDRIVE	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS1554) (MicroAutoBox III Hardware Installation and Configuration 🕮) and DS1554 Sub-D I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).
Lambda<signal><channel number>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS1554) (MicroAutoBox III Hardware Installation and Configuration 🕮) and DS1554 Sub-D I/O Connector Pinout (MicroAutoBox III Hardware Installation and Configuration 🕮).

DS4340 FlexRay Interface Module

Where to go from here

Information in this section

DS4340 FlexRay Interface Module Properties

Purpose

To display module properties of the DS4340 FlexRay Interface Module.

Type

Displays the product name of the selected hardware.

DS number

Displays the dSPACE identifier of the selected hardware.

Serial number

Displays the unique identifier of the selected hardware.

The serial number is also printed on an adhesive label on the circuit board.

Product version

Displays the revision number of the selected hardware.

The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision

number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

References

DS4340 FlexRay Interface Module Data Sheet (MicroAutoBox III Hardware Installation and Configuration 🕮)
Overview of MicroAutoBox III Channel Types (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS4340 FlexRay Interface Module Channel Properties

Purpose	To display the properties of a single channel on a module of the DS4340 FlexRay Interface Module.
Channel number	Displays the channel number.
I/O channel set	Displays the channel set this channel belongs to.
Channel FPGA type	Displays the type of the field-programmable gate array (FPGA) of the selected channel.
FPGA version	Displays the version number of the FPGA chip on the channel. The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.
Baud rate range	Displays the baud rate range that can be applied.
Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.

FLEXRAY<signal>	Indicates which connector (ECU, load, ZIF, etc.) and pins are used for the selected signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS4340) (MicroAutoBox III Hardware Installation and Configuration 🕮).

DS4342 CAN FD Interface Module

Where to go from here

Information in this section

DS4342 CAN FD Interface Module Properties

Purpose	To display module properties of the DS4342 CAN FD Interface Module.
Type	Displays the product name of the selected hardware.
DS number	Displays the dSPACE identifier of the selected hardware.
Serial number	Displays the unique identifier of the selected hardware. The serial number is also printed on an adhesive label on the circuit board.
Product version	Displays the revision number of the selected hardware. The syntax of the revision number is <major revision>.<minor revision>. For example, 1.2 denotes major revision 1, minor revision 2. The major revision

number is also printed on the circuit board. It is added to the DS number. Example: DS2601-01, where 01 indicates the major revision.

Related topics

References

DS4342 CAN FD Interface Module Data Sheet (MicroAutoBox III Hardware Installation and Configuration 🕮)
Overview of MicroAutoBox III Channel Types (MicroAutoBox III Hardware Installation and Configuration 🕮)

DS4342 CAN FD Interface Module Channel Properties

Purpose

To display the properties of a single channel of the DS4342 CAN FD Interface Module.

Channel number

Displays the channel number.

PLL IC

Displays the type of the mounted phase-locked loop integrated circuit (PLL IC) of the channel. The PLL IC provides a clock frequency for the FPGA of the selected channel.

I/O channel set

Displays the channel set this channel belongs to.

Channel FPGA type

Displays the type of the field-programmable gate array (FPGA) of the selected channel.

FPGA version

Displays the version number of the FPGA chip on the channel.

The syntax of the version number as displayed is <major version>.<minor version>. For example, 1.2 denotes major version 1, minor version 2.

Baud rate range

Displays the baud rate range that can be applied.

Dataphase baud rate range

Displays the baud rate range that can be applied for CAN FD communication during the data phase.

This property is available only for high-speed CAN transceivers.

Voltage range	Displays the voltage range that can be applied.
Transceiver IC	Displays information on the manufacturer and the chip type of the installed transceiver IC.
Type info	Displays information on the communication type of the transceiver. Transceivers with the same communication type are compatible with each other.
CAN<signal><channel number>	Indicates which pin is used for the respective CAN signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS4342) (MicroAutoBox III Hardware Installation and Configuration 🕮).
CANVBAT	Indicates which pin is used to supply the transceiver of the board with an external voltage if the internal voltage supply is not used. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS4342) (MicroAutoBox III Hardware Installation and Configuration 🕮).
CANGND<channel number>	Indicates which pin is used for the CAN GND reference signal. For the signal mapping, refer to DS1514 ZIF I/O Connector Pinout (DS4342) (MicroAutoBox III Hardware Installation and Configuration 🕮).

Channel Type Properties

Scope of documentation

The following sections only document those channel types which provide properties that might be needed for configuring function blocks.

Where to go from here

Information in this section

Analog Out 2 Channel Type Properties

Galvanic isolation

Displays whether the board provides galvanic isolation for the reference of the Analog Out 2 channel type.

Value / Range	▪ Galvanic isolated ▪ System ground ▪ Switchable
Description	▪ Galvanic isolated The reference of the Analog Out 2 channel type is galvanically isolated from GND of the dSPACE hardware. ▪ System ground The reference of the Analog Out 2 channel type is connected to GND of the dSPACE hardware. ▪ Switchable The reference of the Analog Out 2 channel type can be set to Galvanic isolated or to System ground via configuration

	properties of the assigned function block (**Lambda DCR**, **Lambda NCCR**, or **Waveform Voltage Out**). For details on the configuration features, refer to: ▪ Configuring the Basic Functionality (Lambda NCCR) (ConfigurationDesk I/O Function Implementation Guide 🕮) ▪ Configuring the Basic Functionality (Lambda DCR) (ConfigurationDesk I/O Function Implementation Guide 🕮) ▪ Configuring Standard Features (Waveform Current Sink) (ConfigurationDesk I/O Function Implementation Guide 🕮)
Dependencies	—

Power Control 1 Channel Type Properties

Purpose

If you use a customer-specific power supply for the SCALEXIO system, you have to make the characteristics of this custom hardware known to ConfigurationDesk via channel type properties.

To simulate a vehicle battery, the dSPACE battery simulation controller controls the battery simulation power supply unit according to the values of these properties.

Basics of battery simulation

For details on the SCALEXIO battery simulation concept, refer to Battery Simulation Concept (SCALEXIO Hardware Installation and Configuration 🕮).

Manual settings

Lets you enable the manual settings of a customer-specific power supply.

Value / Range	▪ Disabled ▪ Enabled

Description	▪ Disabled
	  ▪ If you use a standard power supply delivered from dSPACE, the dSPACE battery simulation controller automatically identifies the power supply.
	  ▪ If you use a customer-specific power supply, the dSPACE battery simulation controller might not identify the power supply. In this case, default values are set for the properties that specify the characteristics of the power supply.
	▪ Enabled
	  ▪ Enables the custom power supply channel type properties: **Remote control voltage max**, **Current max**, **Model**, **Voltage max**.

	Note To control the customer-specific power supply, the dSPACE battery simulation controller uses the channel type properties 'custom power supply' to control the battery simulation power supply. Incorrect values lead to incorrect output signals. ▪ If you enable the manual settings, make sure that the values of **Voltage max**, **Current max** and **Remote control voltage max** are correct. ▪ Make sure that you enter the correct values in the **Platform Manager**. Changes in the **Hardware Resource Browser** do not affect the connected platform. ▪ Do not use the channel type properties 'custom power supply' for safety purposes, e.g., to saturate an output signal to protect your external device. For details on saturating signals, refer to Specifying User Saturation (ConfigurationDesk I/O Function Implementation Guide 🕮).
Dependencies	—

Voltage max

Lets you enter the maximum voltage that the customer-specific power supply supports.

Value / Range	0 ... V_{max}
Description	▪ To control the customer-specific power supply, the dSPACE battery simulation controller uses **Voltage max**, **Remote control voltage max** and **Current max** to control the battery simulation power supply: e.g., it scales the remote control voltage linearly according to **Voltage max** and **Remote control voltage max**.

	Note If the manual settings are enabled, make sure that you enter the correct value in the Platform Manager. Changes in the Hardware Resource Browser do not affect the connected platform. ▪ Voltage max limits the voltage range of the assigned function blocks. **Note** Do not use Voltage max for safety purposes, e.g., to saturate an output signal to protect your external device.
Dependencies	Voltage max is configurable only if Manual settings is enabled.

Current max

Lets you enter the maximum current that the customer-specific power supply supports.

Value / Range	0 ... I_{max}
Description	▪ To control the customer-specific power supply, the dSPACE battery simulation controller uses Voltage max, Remote control voltage max and Current max to control the battery simulation power supply. **Note** If the manual settings are enabled, make sure that you enter the correct value in the Platform Manager. Changes in the Hardware Resource Browser do not affect the connected platform. ▪ Current max limits the current range of the assigned function blocks. **Note** Do not use Current max for safety purposes, e.g., to saturate an output signal to protect your external device.
Dependencies	Current max is configurable only if Manual settings is enabled.

Model

Lets you enter the name of the customer-specific power supply.

Value / Range	▪ All characters are allowed.

	▪ Number of characters: 1 … 127
Description	The name is used and displayed in the **Properties Browser** of the hardware.
Dependencies	**Model** is configurable only if **Manual settings** is enabled.

Remote control voltage max

Lets you enter the maximum remote control voltage of the customer-specific power supply.

Value / Range	0 … V_{max}
Description	To control the customer-specific power supply, the dSPACE battery simulation controller uses **Voltage max**, **Remote control voltage max** and **Current max** to control the battery simulation power supply: e.g., it scales the remote control voltage linearly according to **Voltage max** and **Remote control voltage max**. **Note** ▪ If the manual settings are enabled, make sure that you enter the correct value in the **Platform Manager**. Changes in the **Hardware Resource Browser** do not affect the connected platform. ▪ Do not use **Remote control voltage max** for safety purposes, e.g., to saturate an output signal to protect your external device.
Dependencies	**Remote control voltage max** is configurable only if **Manual settings** is enabled.

Related topics

Basics

Battery Simulation Concept (SCALEXIO Hardware Installation and Configuration 🕮)
Specifying User Saturation (ConfigurationDesk I/O Function Implementation Guide 🕮)

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