MDIS device

MDIS device communication protocol

Description

MDIS device protocol is used to control input-output peripherals and hardware of watchdog of devices produced by the MEN company.

Communication line configuration

- Communication line category: API
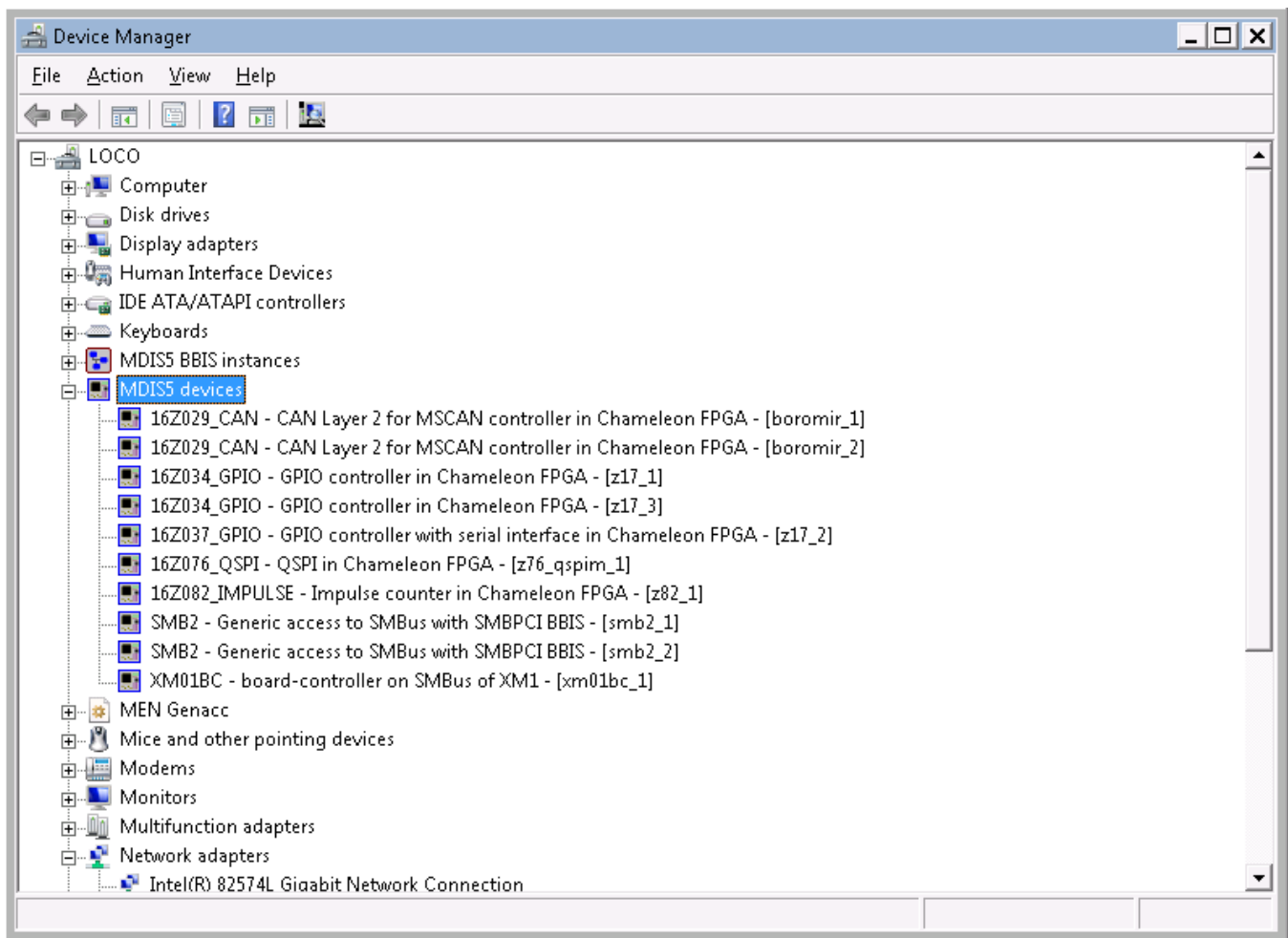
Communication station configuration

Station protocol parameters

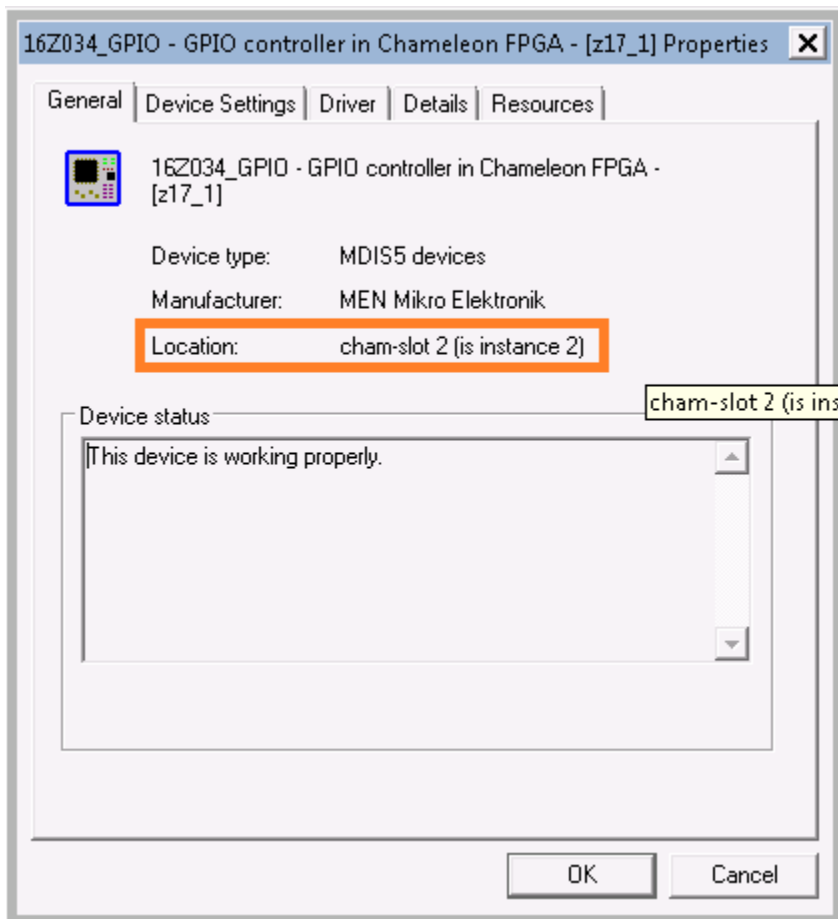| Parameter	Description	Default value
Full Debug	Logging is enhanced with listings that enable fast error detection.	NO
I/O Interface Name	Unique text identifier of interface with binary input-outputs.	z17_9
Watchdog Interface Name	Unique text identifier of the interface of HW watchdog.	xm01bc_1
Control Interface Name	Unique text identifier of the interface that is used to configure other interfaces.	z17_1

Configuration of interfaces

The configuration of MDIS5 interfaces is possible through Device Manager of Windows OD, on the "MDIS5 devices" tab.

Types of interfaces can be identified by their name. **Binary IO** peripheral is a device called **16Z037_GPIO**. The name of the **configuration interface** is **16Z034_GPIO**. In Device Manager, you may find more devices of the same name. Therefore, you should display the properties to identify the particular interface. This interface should be placed in "**cham-slot 2(is instance 2)**" (see figure below). Next interface is **HW watchdog**, its name is **XM01BC**.

Each of these devices can be addressed via its unique identifier. The modification of identifier can be done in "Device Manager -> MDIS device -> Properties -> "Device Settings" tab.

I/O tag configuration

Possible I/O tag types: **Ai, Ao, Ci, Co, Di, Do.**

Addresses of digital inputs 1-8: DIx, e.g. DI1, DI2 .. DI8

Addresses of digital outputs 1-8: DOx, e.g. DO1, DO2 .. DO8

Addresses related to watchdogs:

Address	Description
WD_TIME	Set / query the watchdog time (in milliseconds)
WD_ACTIVE	Set / query the watchdog status (0-inactive, 1-active)
WD_SHUTDOWNSTATE	Set / query the shutdown status (0 - watchdog shot, 1-watchdog didn't shoot)
WD_TRIGGER	Activation (triggering) of the watchdog

Literature

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Changes and modifications

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Document revisions

- Ver. 1.0 – 13.5.2015 - the creation of the document

Related pages:

Communication protocols