

MYC - Communication

Author: DK1RI

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This paper is published in <https://github.com/dk1ri> as well

Introduction

The MYC protocol is a semantic protocol without header and end. For transmission of data some additional data are necessary,

There are some rules, which should be observed for the additional protocols.

Definitions and formats

see <https://dk1ri.de/myc/Definitions.txt> or <https://dk1ri.de/myc/Definitions.pdf>

I2C

The MYC data can be directly transmitted over I2C. Error correction, handshake, encryption usually is not necessary.

A transmission should not exceed 254 Byte. The Rxbuffer of (small) FU cannot hold more bytes. If necessary for announcements, use multiline. The CR and SK will support this.

Because the slave needs time for commandhandling, the master must be able to wait. Either the master send the read request not directly after a write or it waits during the read process. Slave is isolated from the bus at that time. The CR will support this

RS232 / USB

As I2C the MYC data can be directly transmitted over I2C. Error correction, handshake, encryption usually is not necessary.

Ethernet

Up to now telnet is used only, which may have a security problem, when sent via internet.

Telnet requires a defined packet length. The devices can calculate this, so pure MYC data could be sent to the devices. The device will send answers as hex numbers (2 byte per byte) and end the transmission with chr(10). So the telnet client find the end of a transmission.

This is used for the communication between CR and SK and the communication between devices and CR.

LORA and other wireless protocols

There is a FU for wireless connection of the CR to FU. Not all existing FUs may be connected to the this FU. This may be updated later.

LD

The LD is integrated to the CR; so data transfer is via variables

SK

If the SK and CR are on the same server, data transfer is done via file as long as there is no way to do this via pipes.

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Reference

- [1] <https://dk1ri.de/myc/MYC.pdf> (german)
- [2] <https://dk1ri.de/myc/MYC.en.pdf>
- [3] <https://dk1ri.de/myc/Description.txt> or <https://dk1ri.de/myc/Description.pdf>
- [4] <https://dk1ri.de/myc/commands.txt> or <https://dk1ri.de/myc/commands.pdf>
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