Interface S88 Gleisbox Raspberry Pi Manual

Guido de Hek

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1 Introduction

System for controlling a marklin track using a rpi

2 Setup of CAN-interface

t.b.d.

2.1 Connection Scheme

The CAN-bus shall be connected to the Gleisbox as depicted in figure 1. The pin 1 (power supply) does not have to be connected.

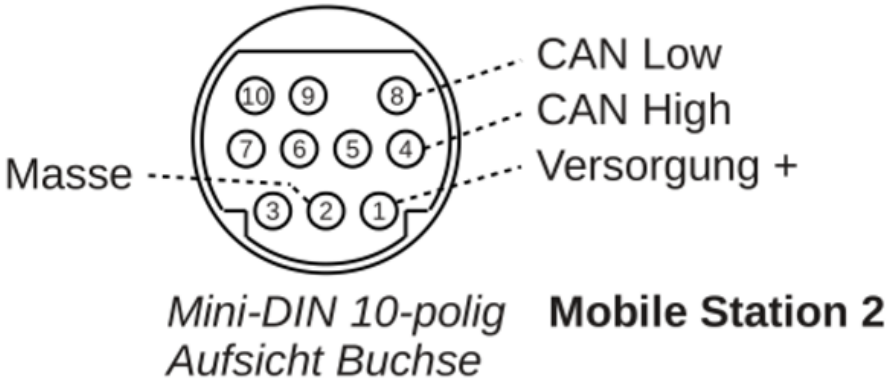

Figure 1: Pinout canbus.

2.2 Oscillator Settings

sudo ip link set can0 up type can bitrate 250000

2.3 Rocrail Server Settings

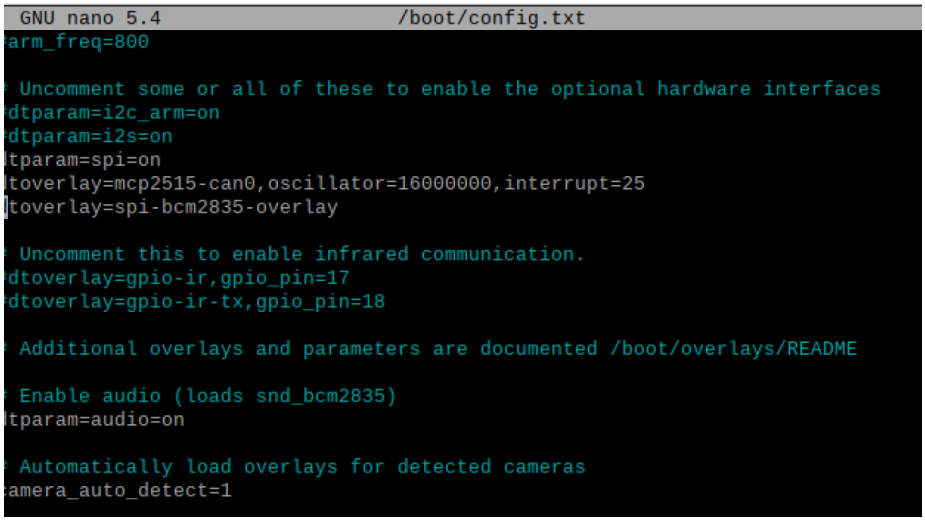

Figure 2: Pi Oscillator settings.

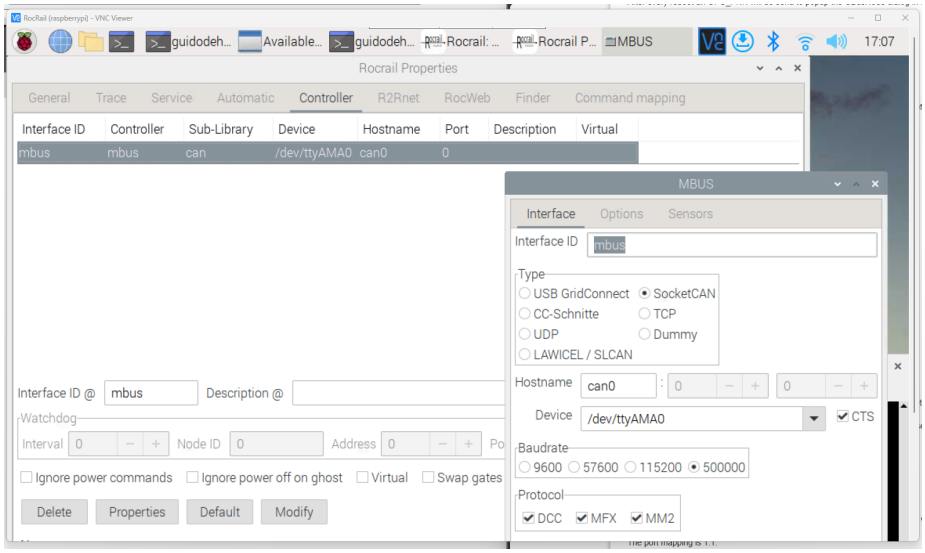

Figure 3: rocrailServerSettings.

3 Setup of S88n-interface

t.b.d.

3.1 Connection Scheme

Table 1: S88N pinout and description.

RJ45 pin	Colour in UTP cable	S88N Description
1	Orange-white	+5V (+12V not in this board)
2	Orange	Data
3	Green-white	GND
4	Blue	Clock
5	Blue-white	GND
6	Green	Load
7	Brown-white	Reset
8	Brown	Rail signal (not used in this design)

4 PCB Description

todo:

- swap S88N port wiring! - standard 9v input for S88

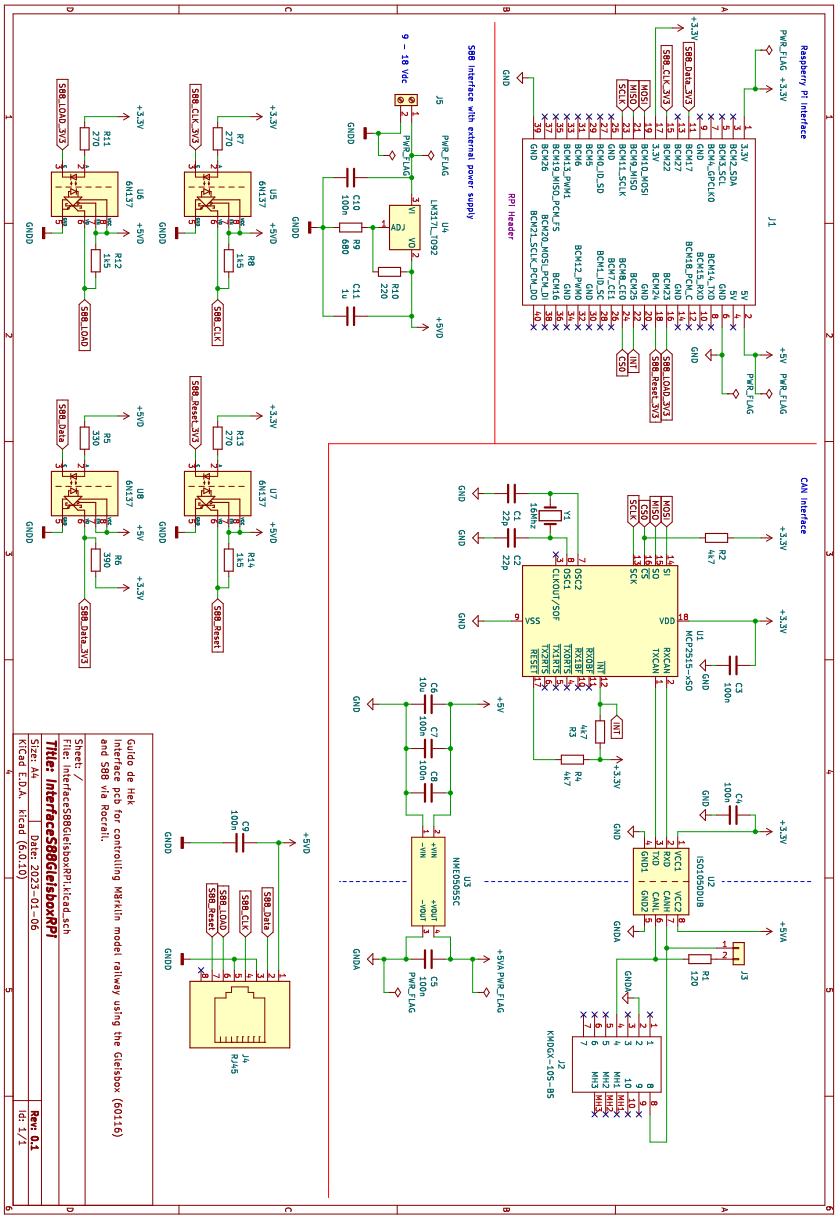

Figure 4: Schematic of the system.