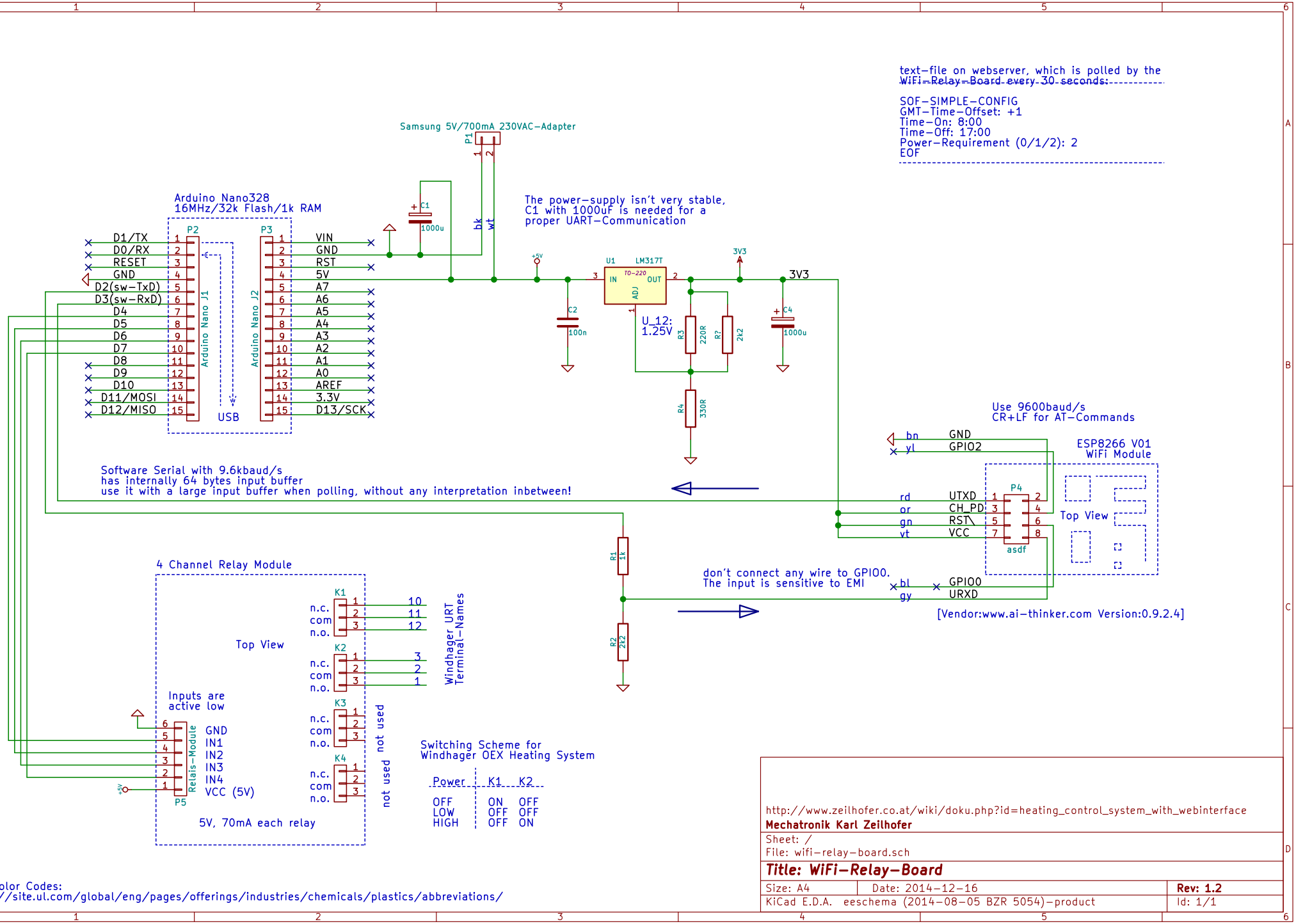
text-file on webserver, which is polled by the WiFi-Relay-Board every 30 seconds:
SOF-SIMPLE-CONFIG
GMT-Time-Offset: +1
Time-On: 8:00
Time-Off: 17:00
Power-Requirement (0/1/2): 2
EOF
Samsung 5V/700mA 230VAC-Adapter
P1
Arduino Nano328
16MHz/32k Flash/1k RAM
P2
P3
D1/TX
D0/RX
RESET
GND
D2(sw-TxD)
D3(sw-RxD)
D4
D5
D6
D7
D8
D9
D10
D11/MOSI
D12/MISO
Arduino Nano J1
Arduino Nano J2
VIN
GND
RST
5V
A7
A6
A5
A4
A3
A2
A1
A0
AREF
3.3V
D13/SCK
USB
C1
1000u
bk
wt
The power-supply isn't very stable,
C1 with 1000uF is needed for a
proper UART-Communication
+5V
U1
LM317T
TO-220
IN
OUT
ADJ
3V3
C2
100n
U_12:
1.25V
R3
220R
R2
2k2
C4
1000u
R4
330R
Use 9600baud/s
CR+LF for AT-Commands
ESP8266 V01
WiFi Module
bn
yl
GND
GPIO2
rd
or
gn
vt
UTXD
CH_PD
RST
VCC
P4
Top View
asdf
Software Serial with 9.6kbaud/s
has internally 64 bytes input buffer
use it with a large input buffer when polling, without any interpretation inbetween!
R1
1k
R2
2k2
don't connect any wire to GPIO0.
The input is sensitive to EMI
bl
gy
GPIO0
URXD
[Vendor:www.ai-thinker.com Version:0.9.2.4]
4 Channel Relay Module
K1
K2
K3
K4
n.c.
com
n.o.
Top View
10
11
12
3
2
1
Windhager URT
Terminal-Names
not used
not used
Inputs are
active low
Relais-Module
GND
IN1
IN2
IN3
IN4
VCC (5V)
P5
5V, 70mA each relay
Switching Scheme for
Windhager OEX Heating System
Power
K1
K2
OFF
LOW
HIGH
ON
OFF
OFF
OFF
OFF
ON
UL Color Codes:
http://site.ul.com/global/eng/pages/offerings/industries/chemicals/plastics/abbreviations/
http://www.zeilhofer.co.at/wiki/doku.php?id=heating_control_system_with_webinterface
Mechatronik Karl Zeilhofer
Sheet: /
File: wifi-relay-board.sch
Title: WiFi-Relay-Board
Size: A4
Date: 2014-12-16
Rev: 1.2
KiCad E.D.A. eeschema (2014-08-05 BZR 5054)-product
Id: 1/1