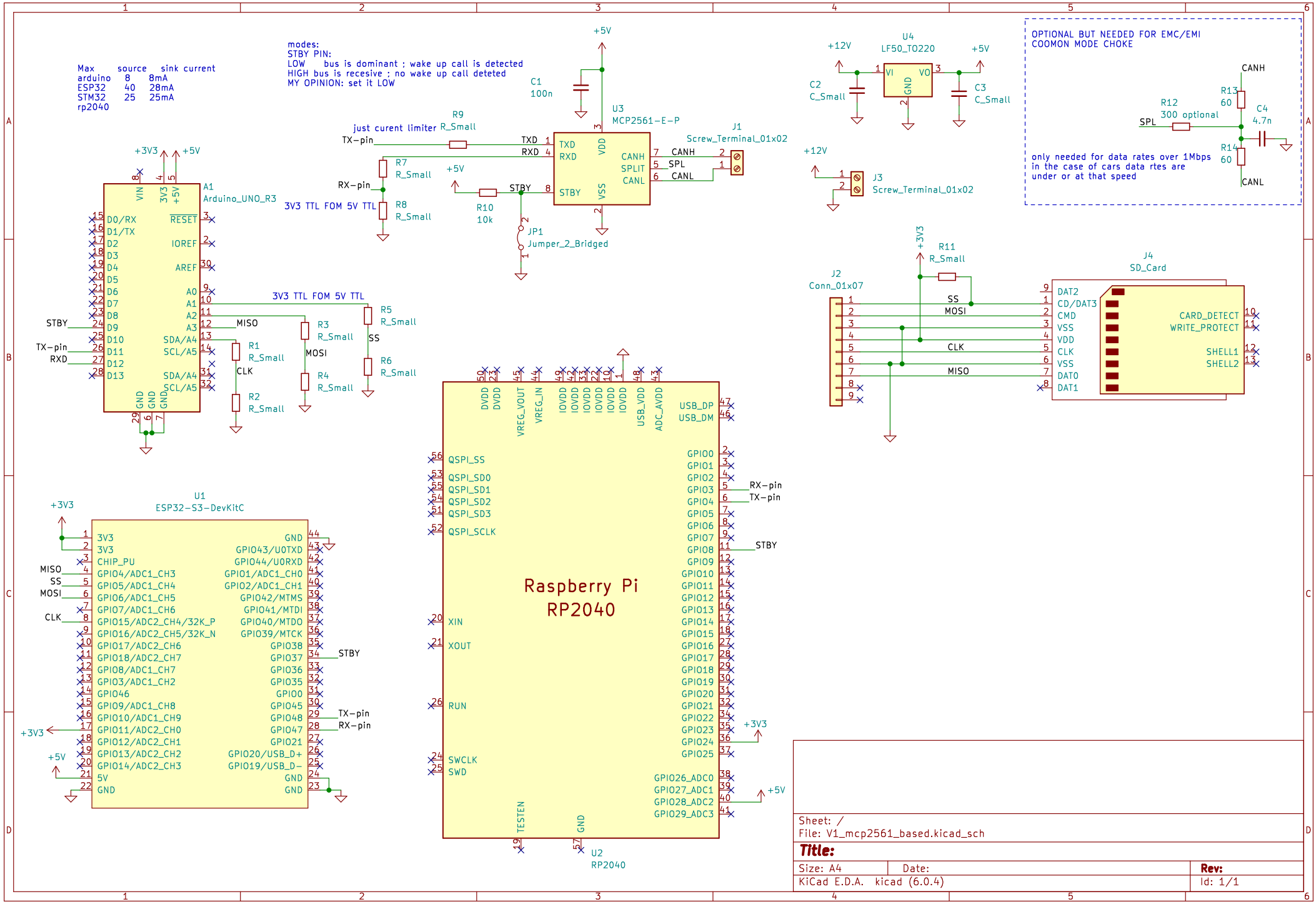
Max source sink current
arduino 8 8mA
ESP32 40 28mA
STM32 25 25mA
rp2040
modes:
STBY PIN:
LOW bus is dominant ; wake up call is detected
HIGH bus is recesive ; no wake up call deteted
MY OPINION: set it LOW
+5V
C1
100n
U3
MCP2561-E-P
TXD
RXD
VDD
CANH
SPLIT
CANL
STBY
VSS
J1
Screw_Terminal_01x02
CANH
SPL
CANL
TX-pin
R9
R_Small
just curent limiter
R7
R_Small
RX-pin
R8
R_Small
3V3 TTL FOM 5V TTL
R10
10k
JP1
Jumper_2_Bridged
+12V
U4
LF50_TO220
VI
VO
GND
C2
C_Small
C3
C_Small
J3
Screw_Terminal_01x02
OPTIONAL BUT NEEDED FOR EMC/EMI
COOMON MODE CHOKE
R12
300 optional
R13
60
R14
60
C4
4.7n
only needed for data rates over 1Mbps
in the case of cars data rtes are
under or at that speed
+3V3
+5V
A1
Arduino_UNO_R3
VIN
3V3
RESET
IOREF
AREF
D0/RX
D1/TX
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
A0
A1
A2
A3
SDA/A4
SCL/A5
GND
STBY
TX-pin
RXD
MISO
MOSI
CLK
SS
R1
R_Small
R2
R_Small
R3
R_Small
R4
R_Small
R5
R_Small
R6
R_Small
R11
R_Small
J2
Conn_01x07
J4
SD_Card
DAT2
CD/DAT3
CMD
VSS
VDD
CLK
VSS
DAT0
DAT1
CARD_DETECT
WRITE_PROTECT
SHELL1
SHELL2
U1
ESP32-S3-DevKitC
3V3
CHIP_PU
GPIO4/ADC1_CH3
GPIO5/ADC1_CH4
GPIO6/ADC1_CH5
GPIO7/ADC1_CH6
GPIO15/ADC2_CH4/32K_P
GPIO16/ADC2_CH5/32K_N
GPIO17/ADC2_CH6
GPIO18/ADC2_CH7
GPIO8/ADC1_CH7
GPIO3/ADC1_CH2
GPIO46
GPIO9/ADC1_CH8
GPIO10/ADC1_CH9
GPIO11/ADC2_CH0
GPIO12/ADC2_CH1
GPIO13/ADC2_CH2
GPIO14/ADC2_CH3
5V
GND
GPIO43/U0TXD
GPIO44/U0RXD
GPIO1/ADC1_CH0
GPIO2/ADC1_CH1
GPIO42/MTMS
GPIO41/MTDI
GPIO40/MTDO
GPIO39/MTCK
GPIO38
GPIO37
GPIO36
GPIO35
GPIO0
GPIO45
GPIO48
GPIO47
GPIO21
GPIO20/USB_D+
GPIO19/USB_D-
Raspberry Pi
RP2040
DVDD
VREG_VOUT
VREG_IN
IOVDD
USB_VDD
ADC_AVDD
USB_DP
USB_DM
QSPI_SS
QSPI_SD0
QSPI_SD1
QSPI_SD2
QSPI_SD3
QSPI_SCLK
XIN
XOUT
RUN
SWCLK
SWD
TESTEN
GPIO26_ADC0
GPIO27_ADC1
GPIO28_ADC2
GPIO29_ADC3
U2
RP2040
Sheet: /
File: V1_mcp2561_based.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad (6.0.4)
Id: 1/1