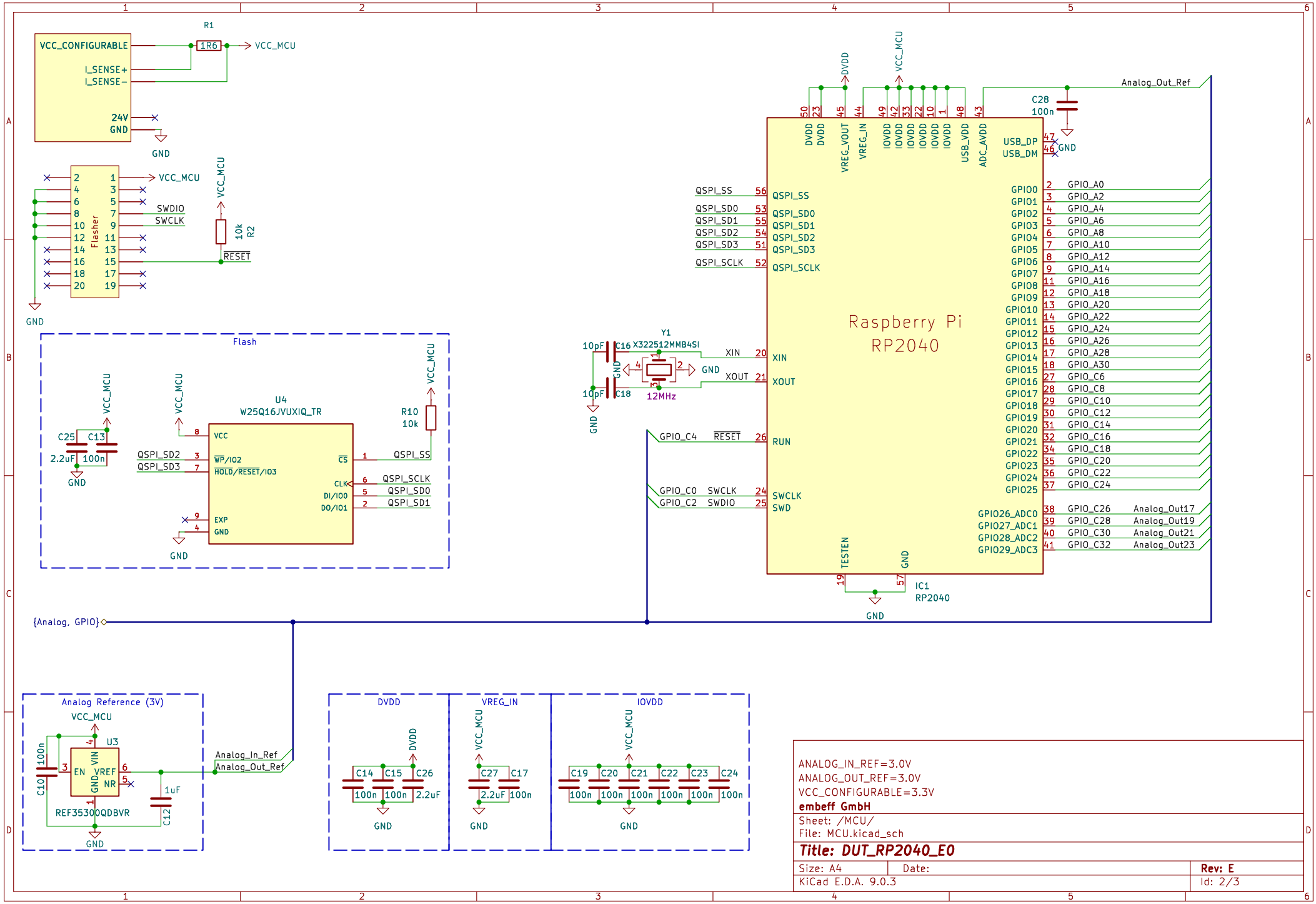
VCC_CONFIGURABLE
I_SENSE+
I_SENSE−
24V
GND
R1
1R6
VCC_MCU
Flasher
SWDIO
SWCLK
RESET
R2
10k
Flash
U4
W25Q16JVUXIQ_TR
VCC
WP/IO2
HOLD/RESET/IO3
CS
CLK
DI/IO0
DO/IO1
EXP
C25
C13
2.2uF
100n
QSPI_SD2
QSPI_SD3
QSPI_SS
QSPI_SCLK
QSPI_SD0
QSPI_SD1
R10
10k
Raspberry Pi
RP2040
DVDD
VREG_VOUT
VREG_IN
IOVDD
USB_VDD
ADC_AVDD
USB_DP
USB_DM
C28
Analog_Out_Ref
QSPI_SS
QSPI_SD0
QSPI_SD1
QSPI_SD2
QSPI_SD3
QSPI_SCLK
XIN
XOUT
RUN
SWCLK
SWD
TESTEN
GPIO00
GPIO01
GPIO02
GPIO03
GPIO04
GPIO05
GPIO06
GPIO07
GPIO08
GPIO09
GPIO10
GPIO11
GPIO12
GPIO13
GPIO14
GPIO15
GPIO16
GPIO17
GPIO18
GPIO19
GPIO20
GPIO21
GPIO22
GPIO23
GPIO24
GPIO25
GPIO26_ADC0
GPIO27_ADC1
GPIO28_ADC2
GPIO29_ADC3
GPIO_A0
GPIO_A2
GPIO_A4
GPIO_A6
GPIO_A8
GPIO_A10
GPIO_A12
GPIO_A14
GPIO_A16
GPIO_A18
GPIO_A20
GPIO_A22
GPIO_A24
GPIO_A26
GPIO_A28
GPIO_A30
GPIO_C6
GPIO_C8
GPIO_C10
GPIO_C12
GPIO_C14
GPIO_C16
GPIO_C18
GPIO_C20
GPIO_C22
GPIO_C24
GPIO_C26
GPIO_C28
GPIO_C30
GPIO_C32
Analog_Out17
Analog_Out19
Analog_Out21
Analog_Out23
GPIO_C4
GPIO_C0
GPIO_C2
Y1
X322512MMB4SI
12MHz
C16
C18
10pF
IC1
RP2040
{Analog, GPIO}
Analog Reference (3V)
U3
REF35300QDBVR
EN
VIN
VREF
NR
C10
100n
1uF
C12
Analog_In_Ref
Analog_Out_Ref
DVDD
C14
C15
C26
2.2uF
VREG_IN
C27
C17
IOVDD
C19
C20
C21
C22
C23
C24
ANALOG_IN_REF=3.0V
ANALOG_OUT_REF=3.0V
VCC_CONFIGURABLE=3.3V
embeff GmbH
Sheet: /MCU/
File: MCU.kicad_sch
Title: DUT_RP2040_E0
Size: A4
Date:
Rev: E
KiCad E.D.A. 9.0.3
Id: 2/3