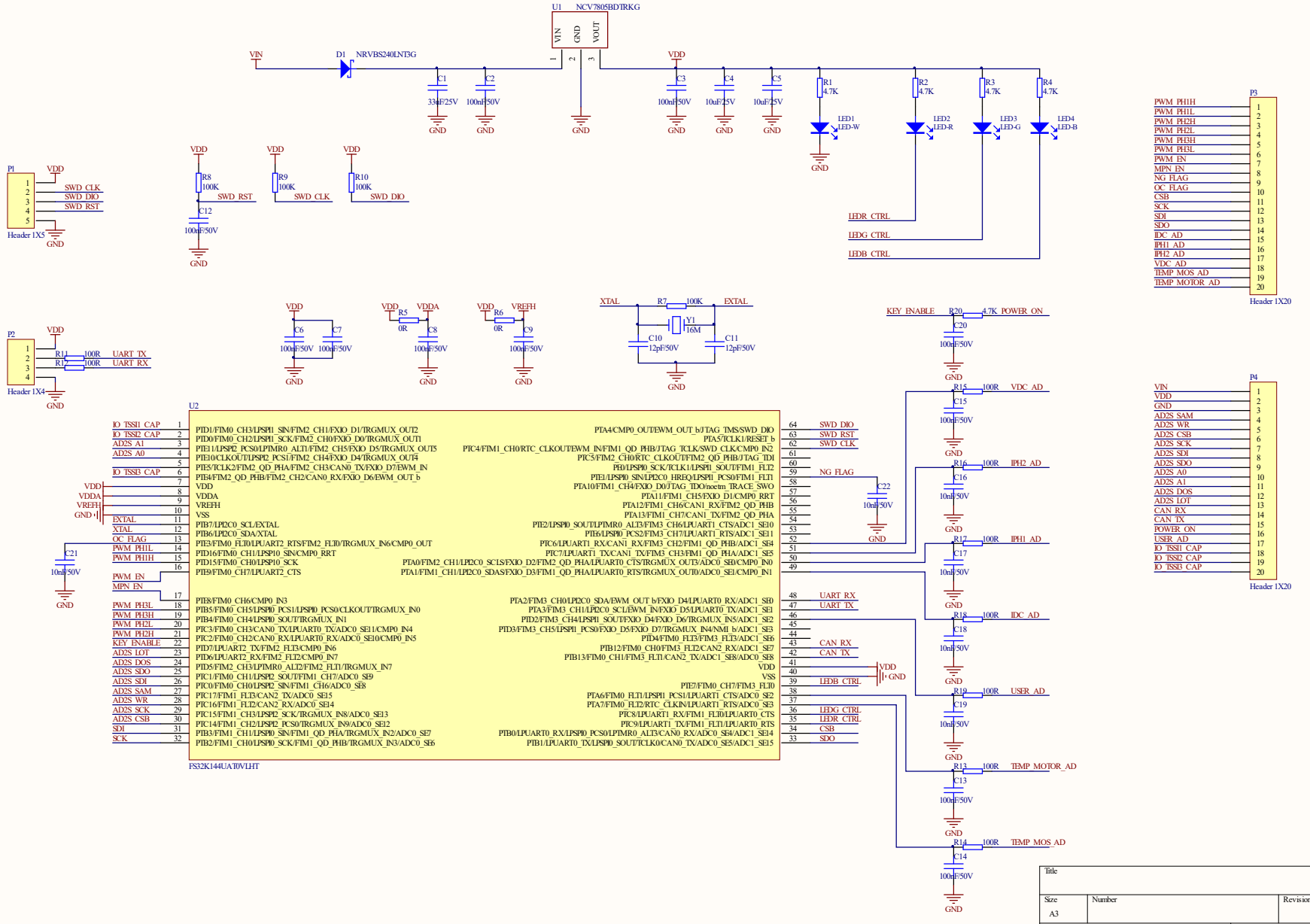
U1 NCV7805BDTRKG
VIN GND VOUT
D1 NRVBS240LNT3G
C1 33uF/25V
C2 100nF/50V
C3 100nF/50V
C4 10uF/25V
C5 10uF/25V
R1 4.7K
R2 4.7K
R3 4.7K
R4 4.7K
LED1 LED-W
LED2 LED-R
LED3 LED-G
LED4 LED-B
LEDR_CTRL
LEDG_CTRL
LEDB_CTRL
P1 Header 1X5
SWD_CLK
SWD_DIO
SWD_RST
R8 100K
R9 100K
R10 100K
C12 100nF/50V
P3 Header 1X20
PWM_PH1H
PWM_PH1L
PWM_PH2H
PWM_PH2L
PWM_PH3H
PWM_PH3L
PWM_EN
MPN_EN
NG_FLAG
OC_FLAG
CSB
SCK
SDI
SDO
IDC_AD
IPH1_AD
IPH2_AD
VDC_AD
TEMP_MOS_AD
TEMP_MOTOR_AD
P2 Header 1X4
R11 100R UART_TX
R12 100R UART_RX
C6 C7 100nF/50V
R5 0R C8 100nF/50V
R6 0R C9 100nF/50V
XTAL R7 100K EXTAL
Y1 16M
C10 12pF/50V
C11 12pF/50V
KEY_ENABLE R20 4.7K POWER_ON
C20 100nF/50V
P4 Header 1X20
VIN VDD GND AD2S_SAM AD2S_WR AD2S_CSB AD2S_SCK AD2S_SDI AD2S_SDO AD2S_A0 AD2S_A1 AD2S_DOS AD2S_LOT CAN_RX CAN_TX POWER_ON USER_AD IO_TSSI1_CAP IO_TSSI2_CAP IO_TSSI3_CAP
R15 100R VDC_AD
R16 100R IPH2_AD
R17 100R IPH1_AD
R18 100R IDC_AD
R19 100R USER_AD
R13 100R TEMP_MOTOR_AD
R14 100R TEMP_MOS_AD
C15 C16 C17 C18 C19 C13 C14 10nF/50V
C22 10nF/50V
C21 10nF/50V
U2
IO_TSSI1_CAP
IO_TSSI2_CAP
AD2S_A1
AD2S_A0
IO_TSSI3_CAP
VDD
VDDA
VREFH
VSS
EXTAL
XTAL
OC_FLAG
PWM_PH1L
PWM_PH1H
PWM_EN
MPN_EN
PWM_PH3L
PWM_PH3H
PWM_PH2L
PWM_PH2H
KEY_ENABLE
AD2S_LOT
AD2S_DOS
AD2S_SDO
AD2S_SDI
AD2S_SAM
AD2S_WR
AD2S_SCK
AD2S_CSB
SDI
SCK
PTD1/FTM0_CH3/LPSPI1_SIN/FTM2_CH1/FXIO_D1/TRGMUX_OUT2
PTD0/FTM0_CH2/LPSPI1_SCK/FTM2_CH0/FXIO_D0/TRGMUX_OUT1
PTE11/LPSPI2_PCS0/LPTMR0_ALT1/FTM2_CH5/FXIO_D5/TRGMUX_OUT5
PTE10/CLKOUT/LPSPI2_PCS1/FTM2_CH4/FXIO_D4/TRGMUX_OUT4
PTE5/TCLK2/FTM2_QD_PHA/FTM2_CH3/CAN0_TX/FXIO_D7/EWM_IN
PTE4/FTM2_QD_PHB/FTM2_CH2/CAN0_RX/FXIO_D6/EWM_OUT_b
VDD
VDDA
VREFH
VSS
PTB7/LPI2C0_SCL/EXTAL
PTB6/LPI2C0_SDA/XTAL
PTE3/FTM0_FLT0/LPUART2_RTS/FTM2_FLT0/TRGMUX_IN6/CMP0_OUT
PTD16/FTM0_CH1/LPSPI0_SIN/CMP0_RRT
PTD15/FTM0_CH0/LPSPI0_SCK
PTE9/FTM0_CH7/LPUART2_CTS
PTE8/FTM0_CH6/CMP0_IN3
PTB5/FTM0_CH5/LPSPI0_PCS1/LPSPI0_PCS0/CLKOUT/TRGMUX_IN0
PTB4/FTM0_CH4/LPSPI0_SOUT/TRGMUX_IN1
PTC3/FTM0_CH3/CAN0_TX/LPUART0_TX/ADC0_SE11/CMP0_IN4
PTC2/FTM0_CH2/CAN0_RX/LPUART0_RX/ADC0_SE10/CMP0_IN5
PTD7/LPUART2_TX/FTM2_FLT3/CMP0_IN6
PTD6/LPUART2_RX/FTM2_FLT2/CMP0_IN7
PTD5/FTM2_CH3/LPTMR0_ALT2/FTM2_FLT1/TRGMUX_IN7
PTC1/FTM0_CH1/LPSPI2_SOUT/FTM1_CH7/ADC0_SE9
PTC0/FTM0_CH0/LPSPI2_SIN/FTM1_CH6/ADC0_SE8
PTC17/FTM1_FLT3/CAN2_TX/ADC0_SE15
PTC16/FTM1_FLT2/CAN2_RX/ADC0_SE14
PTC15/FTM1_CH3/LPSPI2_SCK/TRGMUX_IN8/ADC0_SE13
PTC14/FTM1_CH2/LPSPI2_PCS0/TRGMUX_IN9/ADC0_SE12
PTB3/FTM1_CH1/LPSPI0_SIN/FTM1_QD_PHA/TRGMUX_IN2/ADC0_SE7
PTB2/FTM1_CH0/LPSPI0_SCK/FTM1_QD_PHB/TRGMUX_IN3/ADC0_SE6
PTA4/CMP0_OUT/EWM_OUT_b/JTAG_TMS/SWD_DIO
PTA5/TCLK1/RESET_b
PTC4/FTM1_CH0/RTC_CLKOUT/EWM_IN/FTM1_QD_PHB/JTAG_TCLK/SWD_CLK/CMP0_IN2
PTC5/FTM2_CH0/RTC_CLKOUT/FTM2_QD_PHB/JTAG_TDI
PB0/LPSPI0_SCK/TCLK1/LPSPI1_SOUT/FTM1_FLT2
PTE1/LPSPI0_SIN/LPI2C0_HREQ/LPSPI1_PCS0/FTM1_FLT1
PTA10/FTM1_CH4/FXIO_D0/JTAG_TDO/noctrn_TRACE_SWO
PTA11/FTM1_CH5/FXIO_D1/CMP0_RRT
PTA12/FTM1_CH6/CAN1_RX/FTM2_QD_PHB
PTA13/FTM1_CH7/CAN1_TX/FTM2_QD_PHA
PTE2/LPSPI0_SOUT/LPTMR0_ALT3/FTM3_CH6/LPUART1_CTS/ADC1_SE10
PTB6/LPSPI0_PCS2/FTM3_CH7/LPUART1_RTS/ADC1_SE11
PTC6/LPUART1_RX/CAN1_RX/FTM3_CH2/FTM1_QD_PHB/ADC1_SE4
PTC7/LPUART1_TX/CAN1_TX/FTM3_CH3/FTM1_QD_PHA/ADC1_SE5
PTA0/FTM2_CH1/LPI2C0_SCLS/FXIO_D2/FTM2_QD_PHA/LPUART0_CTS/TRGMUX_OUT3/ADC0_SE0/CMP0_IN0
PTA1/FTM1_CH1/LPI2C0_SDAS/FXIO_D3/FTM1_QD_PHA/LPUART0_RTS/TRGMUX_OUT0/ADC0_SE1/CMP0_IN1
PTA2/FTM3_CH0/LPI2C0_SDA/EWM_OUT_b/FXIO_D4/LPUART0_RX/ADC1_SE0
PTA3/FTM3_CH1/LPI2C0_SCL/EWM_IN/FXIO_D5/LPUART0_TX/ADC1_SE1
PTD2/FTM3_CH4/LPSPI1_SOUT/FXIO_D4/FXIO_D6/TRGMUX_IN5/ADC1_SE2
PTD3/FTM3_CH5/LPSPI1_PCS0/FXIO_D5/FXIO_D7/TRGMUX_IN4/NMI_b/ADC1_SE3
PTD4/FTM0_FLT3/FTM3_FLT3/ADC1_SE6
PTB12/FTM0_CH0/FTM3_FLT2/CAN2_RX/ADC1_SE7
PTB13/FTM0_CH1/FTM3_FLT1/CAN2_TX/ADC1_SE8/ADC0_SE8
VDD
VSS
PTE7/FTM0_CH7/FTM3_FLT0
PTA6/FTM0_FLT1/LPSPI1_PCS1/LPUART1_CTS/ADC0_SE2
PTA7/FTM0_FLT2/RTC_CLKIN/LPUART1_RTS/ADC0_SE3
PTC8/LPUART1_RX/FTM1_FLT0/LPUART0_CTS
PTC9/LPUART1_TX/FTM1_FLT1/LPUART0_RTS
PTB0/LPUART0_RX/LPSPI0_PCS0/LPTMR0_ALT3/CAN0_RX/ADC0_SE4/ADC1_SE14
PTB1/LPUART0_TX/LPSPI0_SOUT/TCLK0/CAN0_TX/ADC0_SE5/ADC1_SE15
SWD_DIO
SWD_RST
SWD_CLK
NG_FLAG
UART_RX
UART_TX
CAN_RX
CAN_TX
LEDB_CTRL
LEDG_CTRL
LEDR_CTRL
CSB
SDO
FS32K144UAT0VLHT
Title
Size A3
Number
Revision
Date: 2022/3/8
File: C:\Users\..\MCU.SchDoc
Sheet of
Drawn By: