M2-Dock

Designed for nRF52840 M.2 Module

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Revision History

Rev.	Changes	Date
V1.0	The first public release	10-Mar-2020

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Title: Title Sheet		
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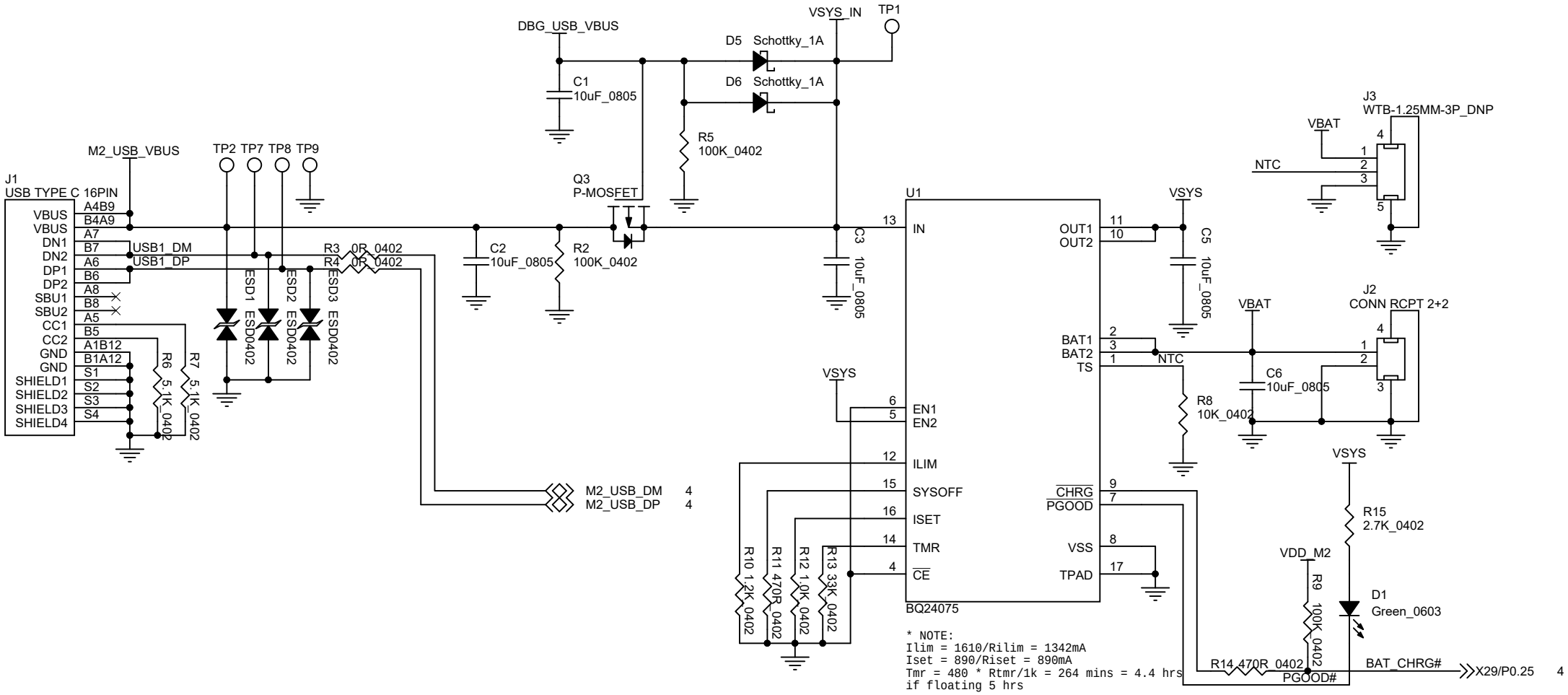

Title	Power Supply	
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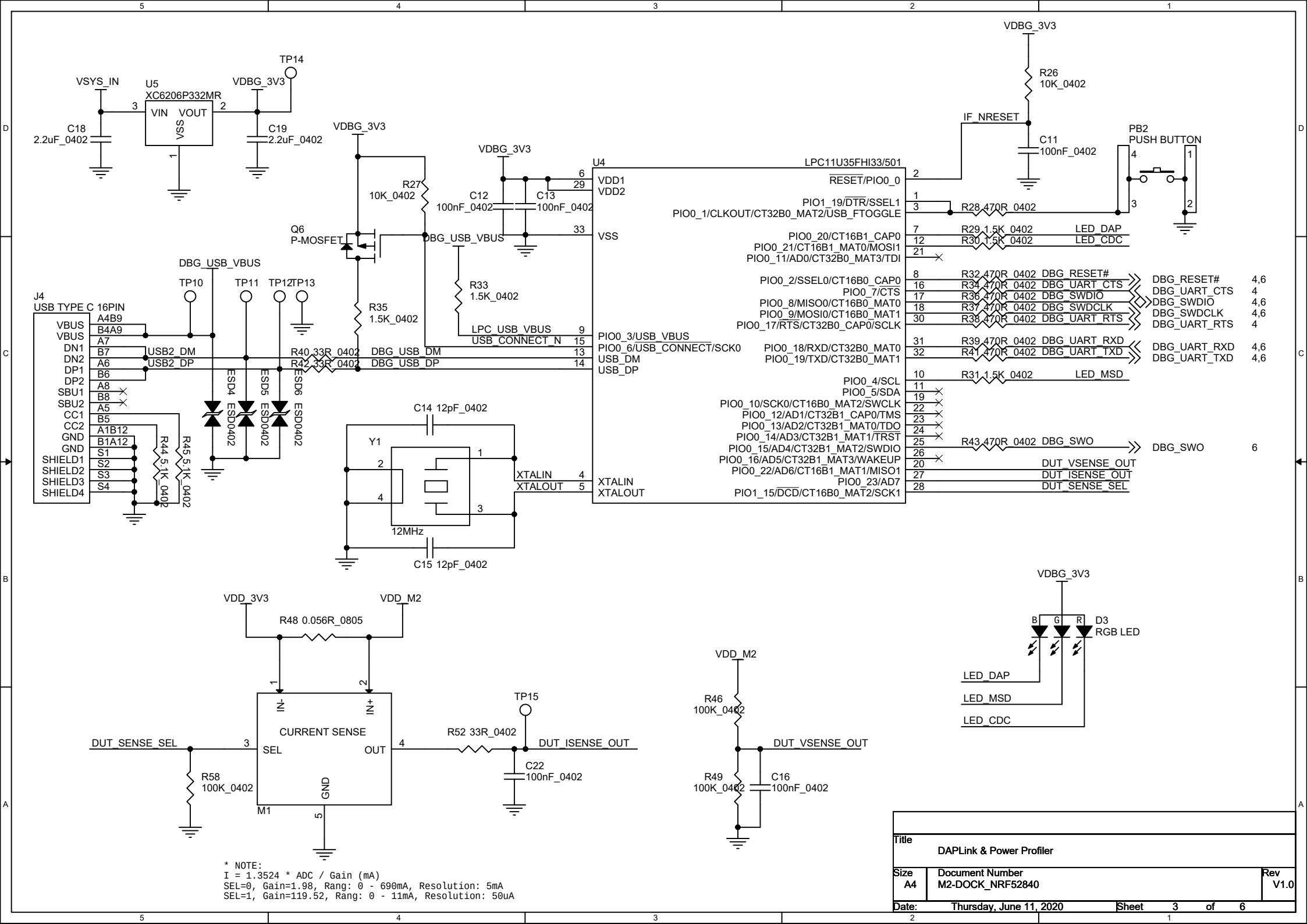
VSYS_IN
U5
XC6206P332MR
VIN
VOUT
SS/A
C18
2.2uF_0402
C19
2.2uF_0402
TP14
VDBG_3V3
R27
10K_0402
C12
100nF_0402
C13
100nF_0402
Q6
P-MOSFET
DBG_USB_VBUS
R33
1.5K_0402
R35
1.5K_0402
U4
LPC11U35FHI33/501
VDD1
VDD2
VSS
RESET/PIO0_0
PIO1_19/DTR/SSEL1
PIO0_1/CLKOUT/CT32B0_MAT2/USB_FTOGGLE
PIO0_20/CT16B1_CAP0
PIO0_21/CT16B1_MAT0/MOSI1
PIO0_11/AD0/CT32B0_MAT3/TDI
PIO0_2/SSEL0/CT16B0_CAP0
PIO0_7/CTS
PIO0_8/MISO0/CT16B0_MAT0
PIO0_9/MOSI0/CT16B0_MAT1
PIO0_17/RTS/CT32B0_CAP0/SCLK
PIO0_3/USB_VBUS
PIO0_6/USB_CONNECT/SCK0
USB_DM
USB_DP
PIO0_18/RXD/CT32B0_MAT0
PIO0_19/TXD/CT32B0_MAT1
PIO0_4/SCL
PIO0_5/SDA
PIO0_10/SCK0/CT16B0_MAT2/SWCLK
PIO0_12/AD1/CT32B1_CAP0/TMS
PIO0_13/AD2/CT32B1_MAT0/TDO
PIO0_14/AD3/CT32B1_MAT1/TRST
PIO0_15/AD4/CT32B1_MAT2/SWDIO
PIO0_16/AD5/CT32B1_MAT3/WAKEUP
PIO0_22/AD6/CT16B1_MAT1/MISO1
PIO0_23/AD7
PIO1_15/DCD/CT16B0_MAT2/SCK1
XTALIN
XTALOUT
LPC_USB_VBUS
USB_CONNECT_N
R26
10K_0402
IF_NRESET
C11
100nF_0402
PB2
PUSH BUTTON
R28 470R_0402
R29 1.5K_0402
R30 1.5K_0402
R31 1.5K_0402
LED_DAP
LED_CDC
LED_MSD
R32 470R_0402 DBG_RESET#
R34 470R_0402 DBG_UART_CTS
R36 470R_0402 DBG_SWDIO
R37 470R_0402 DBG_SWDCLK
R38 470R_0402 DBG_UART_RTS
R39 470R_0402 DBG_UART_RXD
R41 470R_0402 DBG_UART_TXD
R43 470R_0402 DBG_SWO
DUT_VSENSE_OUT
DUT_ISENSE_OUT
DUT_SENSE_SEL
J4
USB TYPE C 16PIN
VBUS
DN1
DN2
DP1
DP2
SBU1
SBU2
CC1
CC2
GND
SHIELD1
SHIELD2
SHIELD3
SHIELD4
USB2_DM
USB2_DP
R40 33R_0402
R42 33R_0402
DBG_USB_DM
DBG_USB_DP
TP10
TP11
TP12
TP13
ESD4
ESD5
ESD6
ESD0402
R44 5.1K_0402
R45 5.1K_0402
C14 12pF_0402
C15 12pF_0402
Y1
12MHz
DBG_RESET#
DBG_UART_CTS
DBG_SWDIO
DBG_SWDCLK
DBG_UART_RTS
DBG_UART_RXD
DBG_UART_TXD
DBG_SWO
VDD_3V3
VDD_M2
R48 0.056R_0805
CURRENT SENSE
SEL
OUT
GND
IN-
IN+
M1
R52 33R_0402
TP15
C22
100nF_0402
R58
100K_0402
R46
100K_0402
R49
100K_0402
C16
100nF_0402
D3
RGB LED
B
G
R
* NOTE:
I = 1.3524 * ADC / Gain (mA)
SEL=0, Gain=1.98, Rang: 0 - 690mA, Resolution: 5mA
SEL=1, Gain=119.52, Rang: 0 - 11mA, Resolution: 50uA
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DAPLink & Power Profiler
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A4
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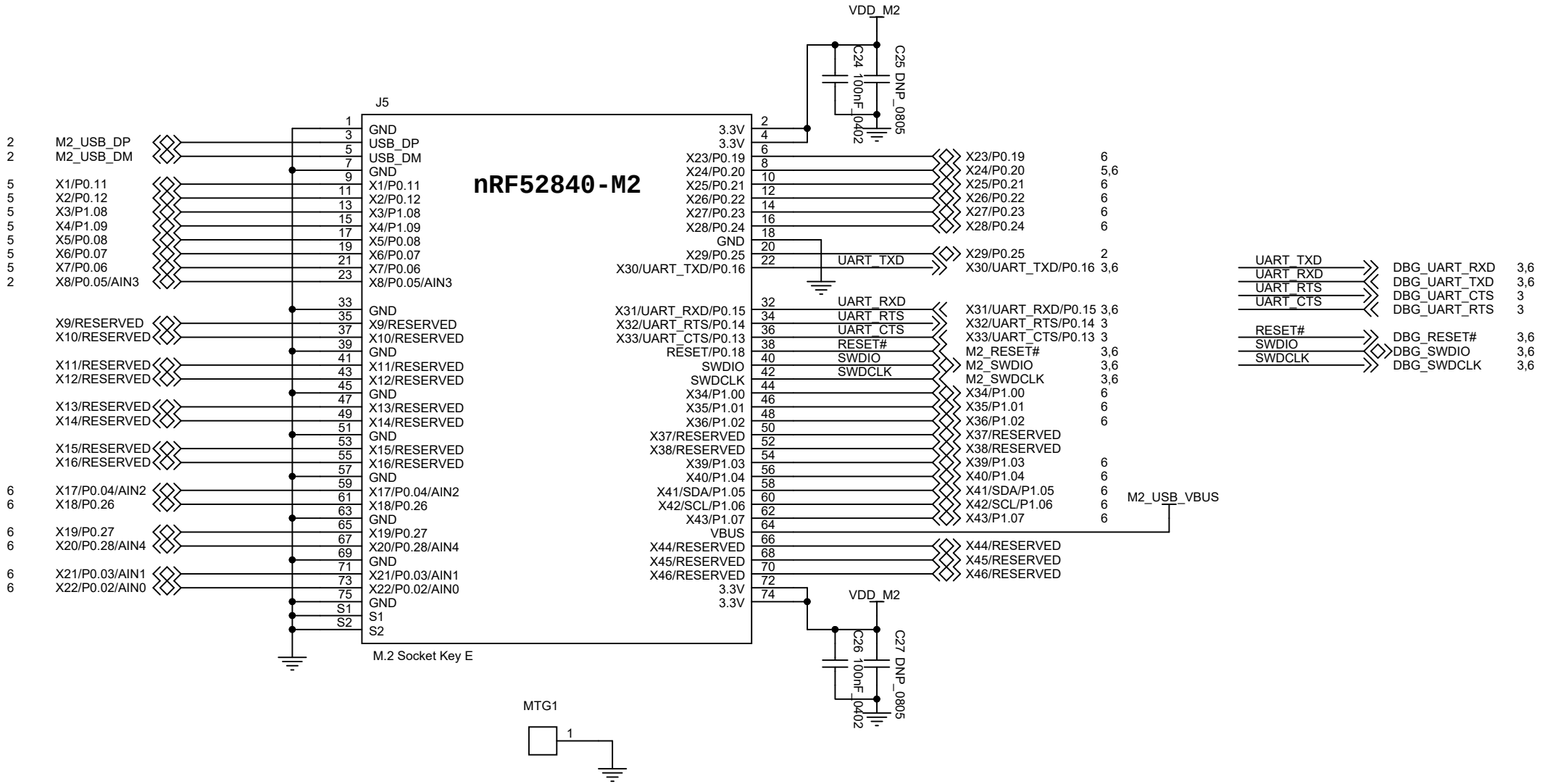

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Size	A4
Document Number	M2-DOCK_NRF52840
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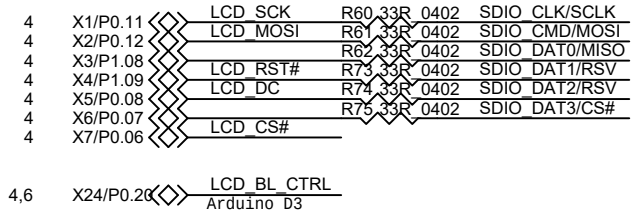

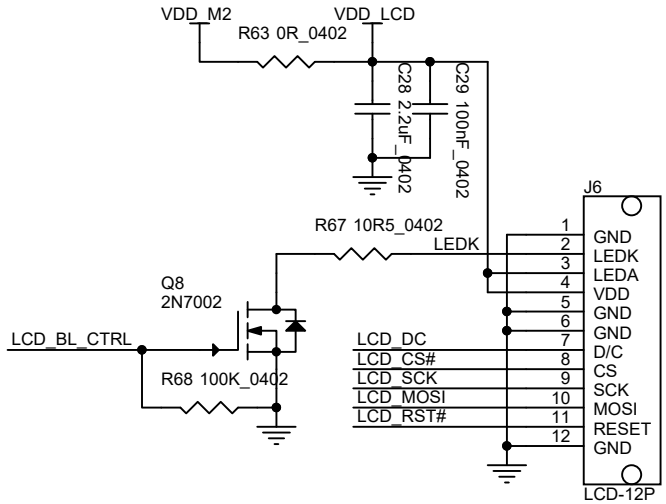

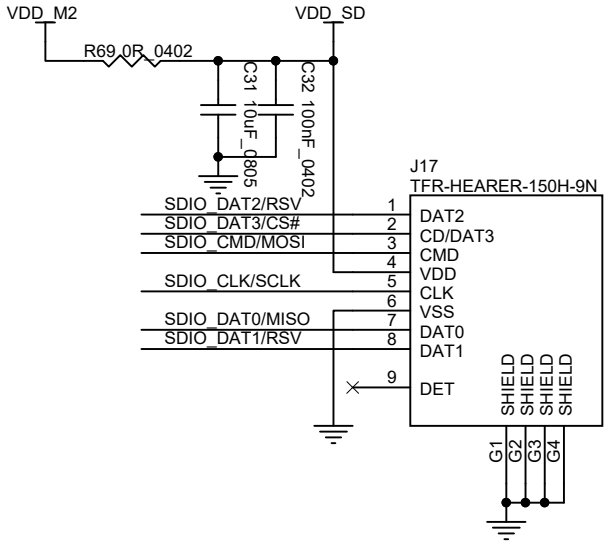

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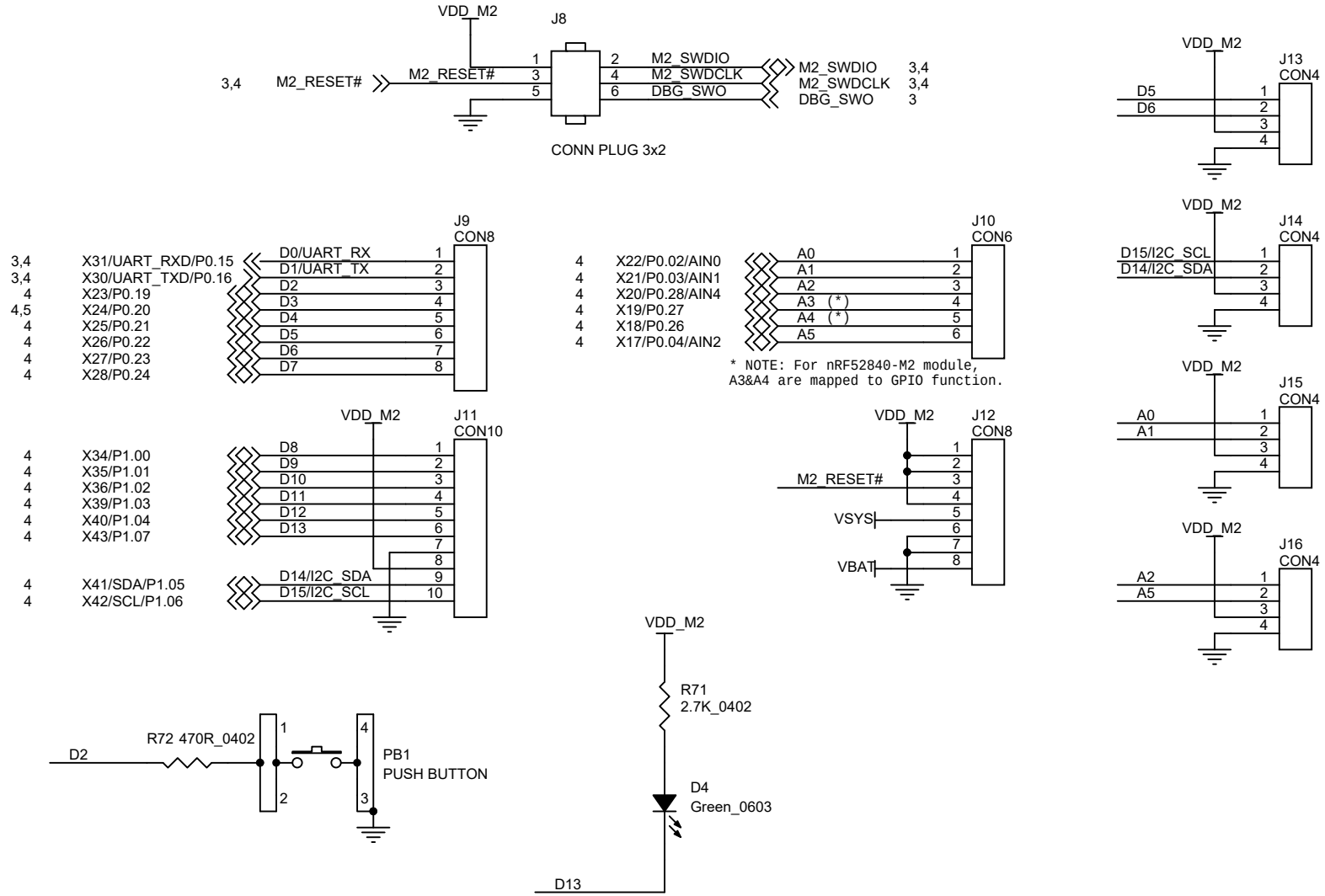

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