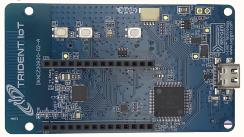
DKNCZ20 - Z-Wave Eval Kit

Board Function / Title	Page
Title Page	1
Peripherals	2
Power	3
Radio	4
SEGGER J-Link OB	5

PCB



PCBDKNCZ20B20-02

REVISION	DESCRIPTION	DATE	APPROVED
A01	Release	02/18/2025	02/25/2025

LEGAL NOTICE:
TRIDENT IOT, LLC ("TRIDENT") AND/OR ITS LICENSORS DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THIS SCHEMATIC OR ANY INFORMATION CONTAINED WITHIN THIS SCHEMATIC. IT IS PROVIDED "AS-IS" FOR REFERENCE ONLY. TRIDENT DOES NOT WARRANT THAT THIS DESIGN WILL MEET THE SPECIFICATIONS, BE SUITABLE FOR YOUR APPLICATION OR FIT FOR ANY PARTICULAR PURPOSE, OR WILL OPERATE IN YOUR IMPLEMENTATION. TRIDENT AND ITS LICENSORS DO NOT WARRANT THAT THE DESIGN IMPLIED IN THIS SCHEMATIC IS PRODUCTION-WORTHY. YOU SHOULD COMPLETELY VALIDATE AND TEST YOUR DESIGN IMPLEMENTATION TO CONFIRM SYSTEM FUNCTIONALITY FOR YOUR APPLICATION.

TRIDENT IoT
Website: www.TridentIoT.com
Support: Support@TridentIoT.com

Board Name: DKNCZ20 - Z-Wave Eval Kit

APPROVALS	DATE
DSN: MA, AN	02/18/2025
CHK: AN, JS, BW	02/25/2025

TITLE: Title Page

SIZE: B | Part Number: DKNCZ20B20-02 | REV: A01

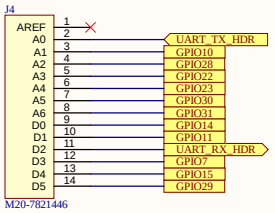
CONFIDENTIAL AND PROPRIETARY

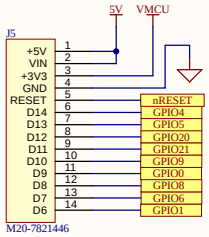
DKNCZ20B20-02 A01 SHT 1

REVISION	DESCRIPTION	DATE	APPROVED
A01	Release	02/25/2025	AN, JS, BW

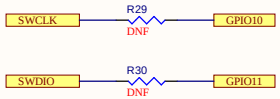
GPIO Breakout Headers

J4 Pin Function		
1	AREF	
2	GPIO17	UART_TX
3	GPIO10	SWCLK/SPI0_SCLK/PWM
4	GPIO28	SDA/PWM/AIO4
5	GPIO22	SPI0_SDATA0/SCL/PWM/AIO1
6	GPIO23	SPI0_SDATA1/SDA/PWM/AIO2
7	GPIO30	SPI0_SDATA0/SCL/PWM/AIO6
8	GPIO31	SPI0_SDATA1/SDA/PWM/AIO7
9	GPIO14	SPI0_SDATA2/PWM/SCL
10	GPIO11	SWDIO/SPI0_CSN0/PWM/SDA
11	GPIO16	UART_RX
12	GPIO7	SPI0_CSN0/PWM/SDA
13	GPIO15	SPI0_SDATA3/PWM/SDA
14	GPIO29	SPI0_CSN0/PWM/SDA



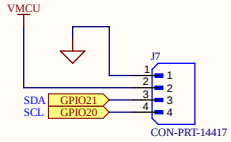


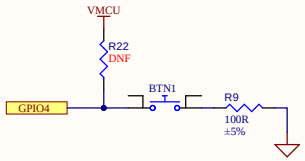
J5 Pin Function		
1	+5V	
2	VMCU	
3	+3V3	
4	GND	
5	RESET	nRESET
6	GPIO4	SPI0_DATA2/SPI0_CSN1/SCL/PWM
7	GPIO5	SPI0_SDATA3/SDA/PWM
8	GPIO20	SPI0_SCLK/SCL/PWM
9	GPIO21	SPI0_CSN0/SDA/PWM/AIO0
10	GPIO9	SPI0_SDATA1/PWM
11	GPIO0	SPI0_CSN1/PWM
12	GPIO8	SPI0_DATA0/PWM
13	GPIO6	SPI0_SCLK/PWM
14	GPIO1	SPI0_CSN1/SDA/PWM

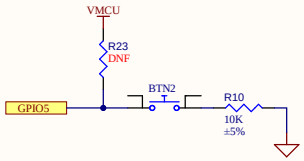


NOTE: Populate R29 and R30 to utilize GPIO10 and GPIO11 on J4
Firmware configuration must set GPIO10 and GPIO11 to GPIO mode

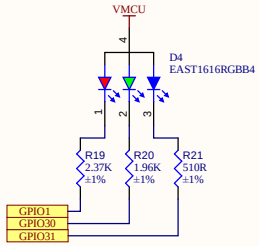
Buttons





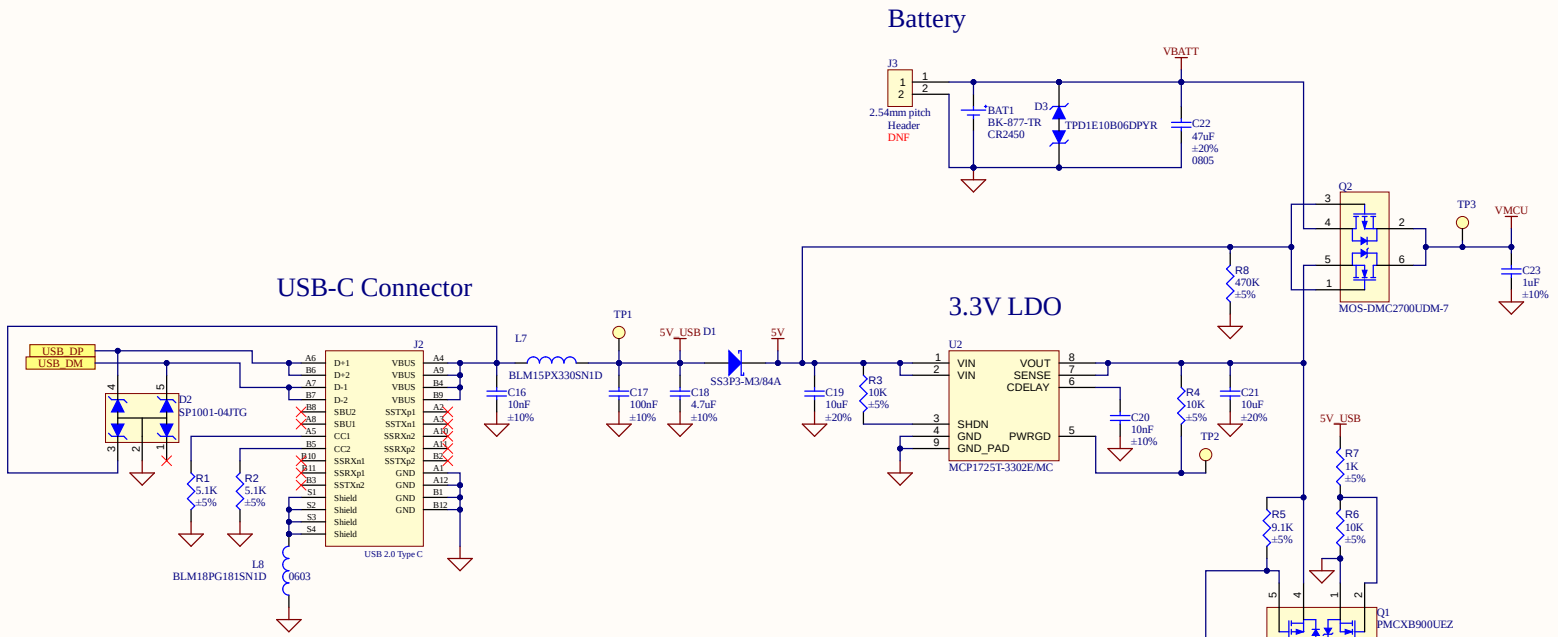


RGB LED



TRIDENT IoT	Website: www.TridentIoT.com Support: Support@TridentIoT.com	Board Name	DKNCZ20 - Z-Wave Eval Kit
APPROVALS	DATE	TITLE	Peripherals
DSN: MA, AN	02/18/2025		
CHK: AN, JS, BW	02/25/2025	SIZE B / Part Number DKNCZ20B20-02	REV A01
CONFIDENTIAL AND PROPRIETARY		SHEET 2 OF 5	

DKNCZ20B20-02 A01 2



REVISION	DESCRIPTION	DATE	APPROVED
A01	Release	02/25/2025	AN, JS, BW

DKNCZ20B20-02 A01 3

TRIDENT IoT
Website: www.TridentIoT.com
Support: Support@TridentIoT.com

Board Name: DKNCZ20 - Z-Wave Eval Kit

APPROVALS	DATE
DSN: MA, AN	02/18/2025
CHK: AN, JS, BW	02/25/2025

TITLE: Power

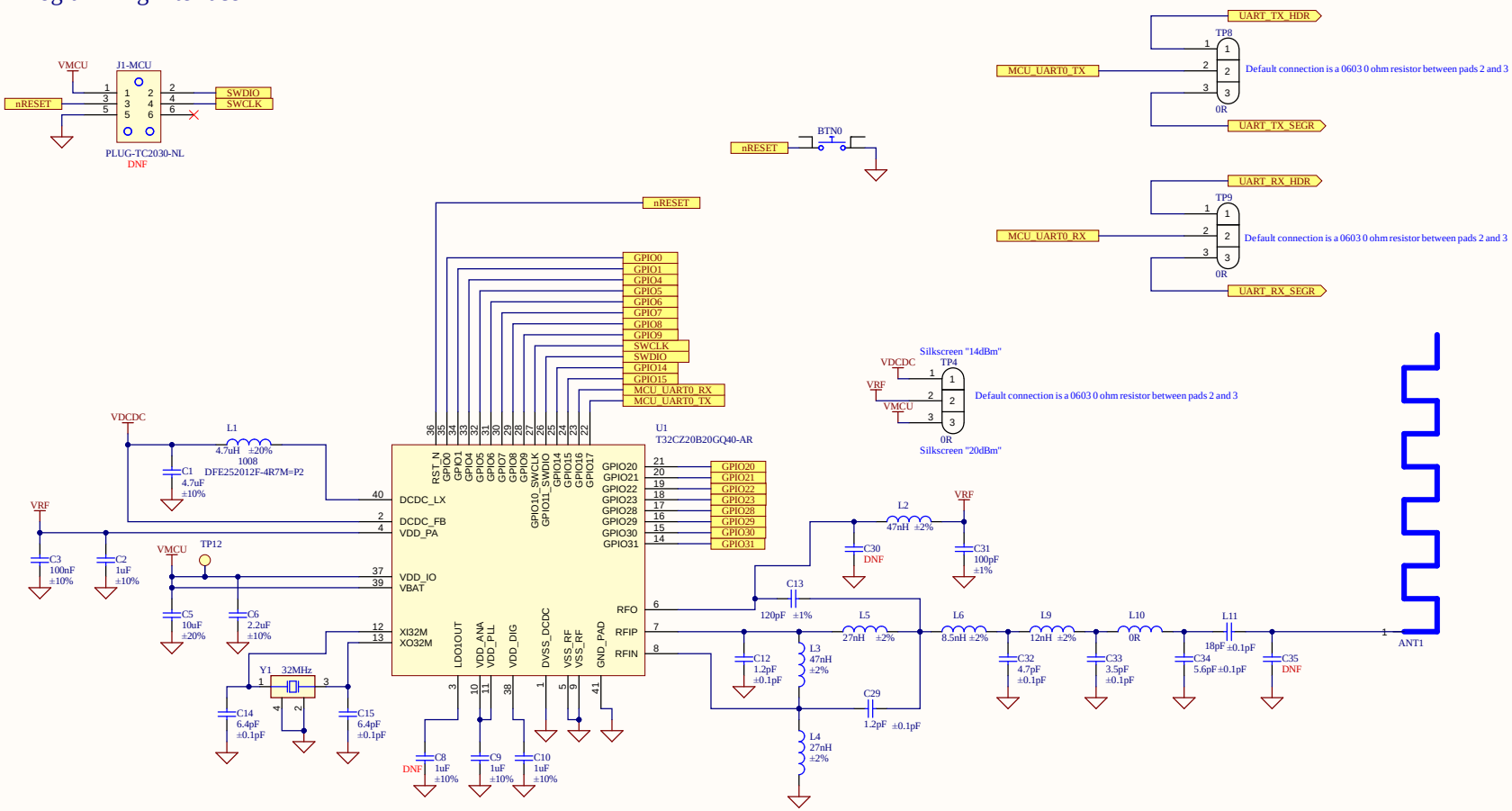
SIZE: B | Part Number: DKNCZ20B20-02 | REV: A01

CONFIDENTIAL AND PROPRIETARY

SHEET 3 OF 5

REVISION	DESCRIPTION	DATE	APPROVED
A01	Release	02/25/2025	AN, JS, BW

Programming Interface

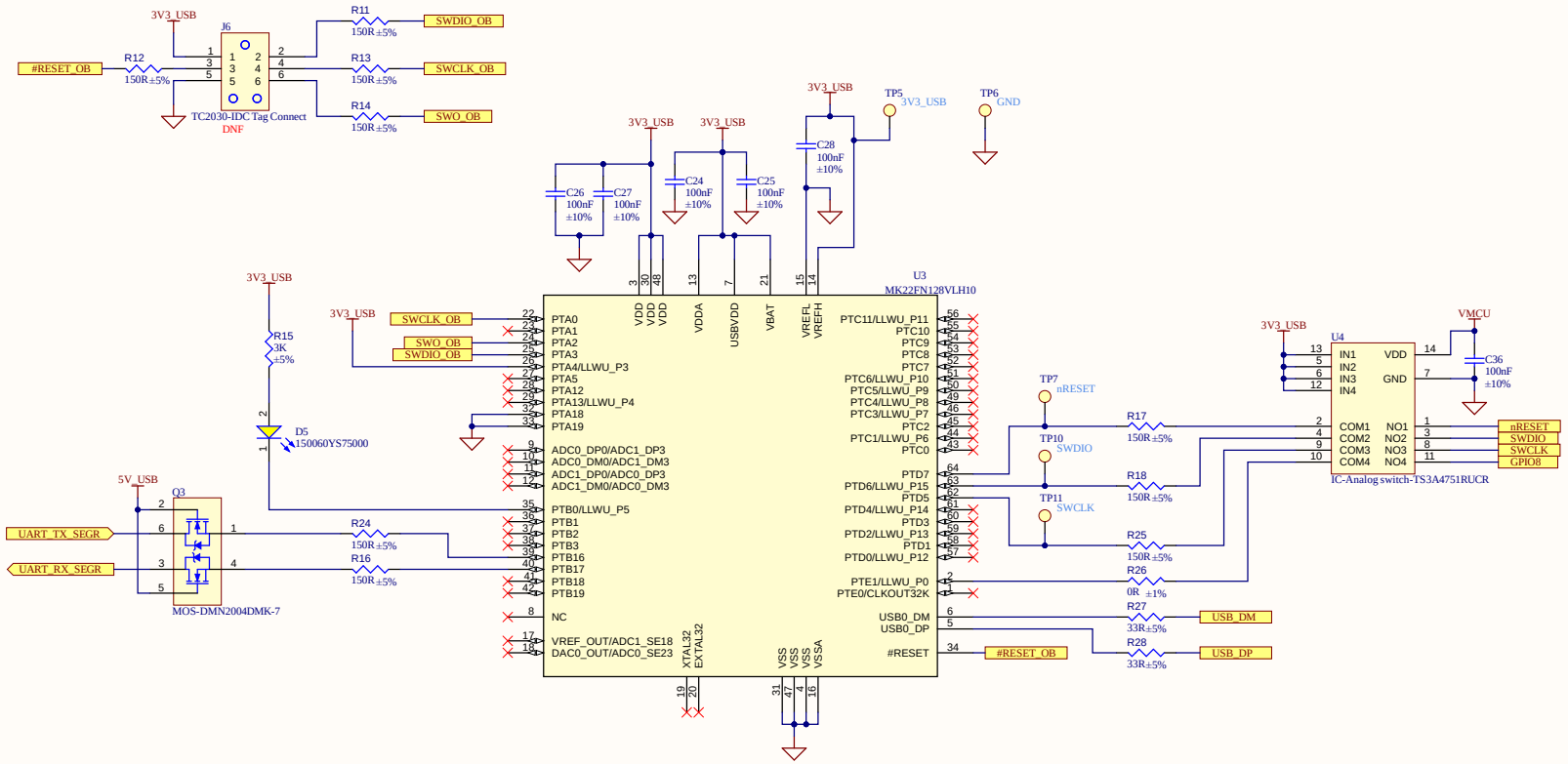


APPROVALS	DATE	TITLE	Radio
DSN: MA, AN	02/18/2025		
CHK: AN, JS, BW	02/25/2025	SIZE B	Part Number DKNCZ20B20-02 REV A01
CONFIDENTIAL AND PROPRIETARY		SHEET 4 OF 5	

TRIDENT IoT
Website: www.TridentIoT.com
Support: Support@TridentIoT.com

Board Name: DKNCZ20 - Z-Wave Eval Kit

DKNCZ20B20-02 A01 4



REVISION	DESCRIPTION	DATE	APPROVED
A01	Release	02/25/2025	AN, JS, BW

DKNCZ20B20-02 A01 5

TRIDENT IoT
Website: www.TridentIoT.com
Support: Support@TridentIoT.com

Board Name: DKNCZ20 - Z-Wave Eval Kit

APPROVALS	DATE
DSN: MA, AN	02/18/2025
CHK: AN, JS, BW	02/25/2025

TITLE: SEGGER J-Link OB

SIZE: B | Part Number: DKNCZ20B20-02 | REV: A01

CONFIDENTIAL AND PROPRIETARY

SHEET 5 OF 5