ATM3325 Tag Reference Design

Release Date	Revision	Design Eng.	Design Notes
08/22/2022	VO	Yancey Yang	Initial release
01/06/2023	V1	Yancey Yang	Update the RFIO and antenna matching value
05/16/2023	V2	Yancey Yang	Update the RFIO value - L11 is changed to 5.1nH(TDK) - L2 is changed to 3nH(TDK) - C20 is changed to 1.2pF - C65 is changed to 22pF R17=NC, R16=0 ohm, C6=1uF, C17=1uF, R70=10K

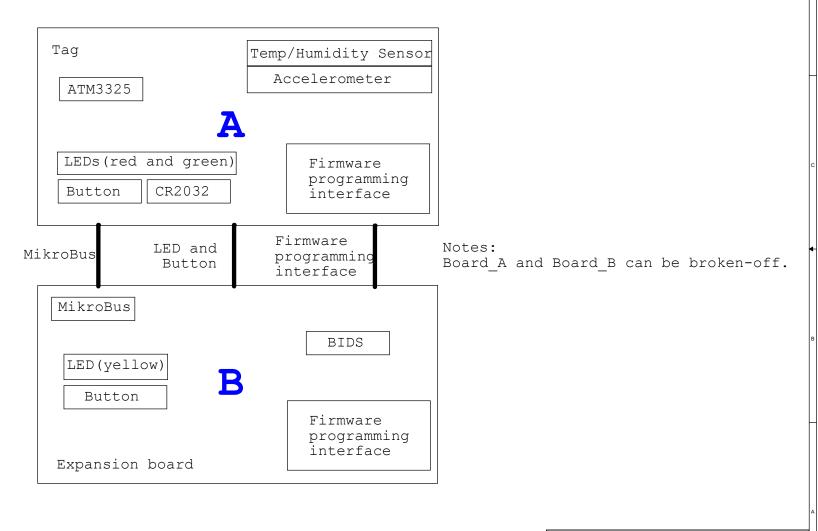
Atmosic Technologies, Inc

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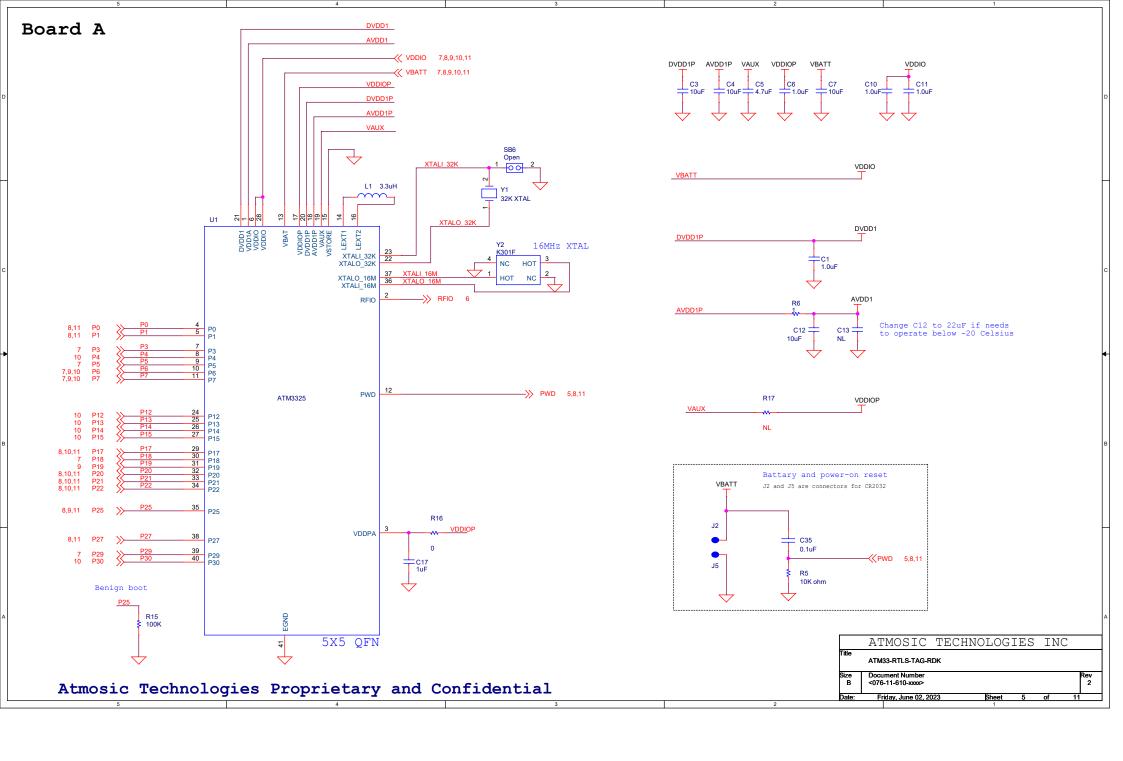
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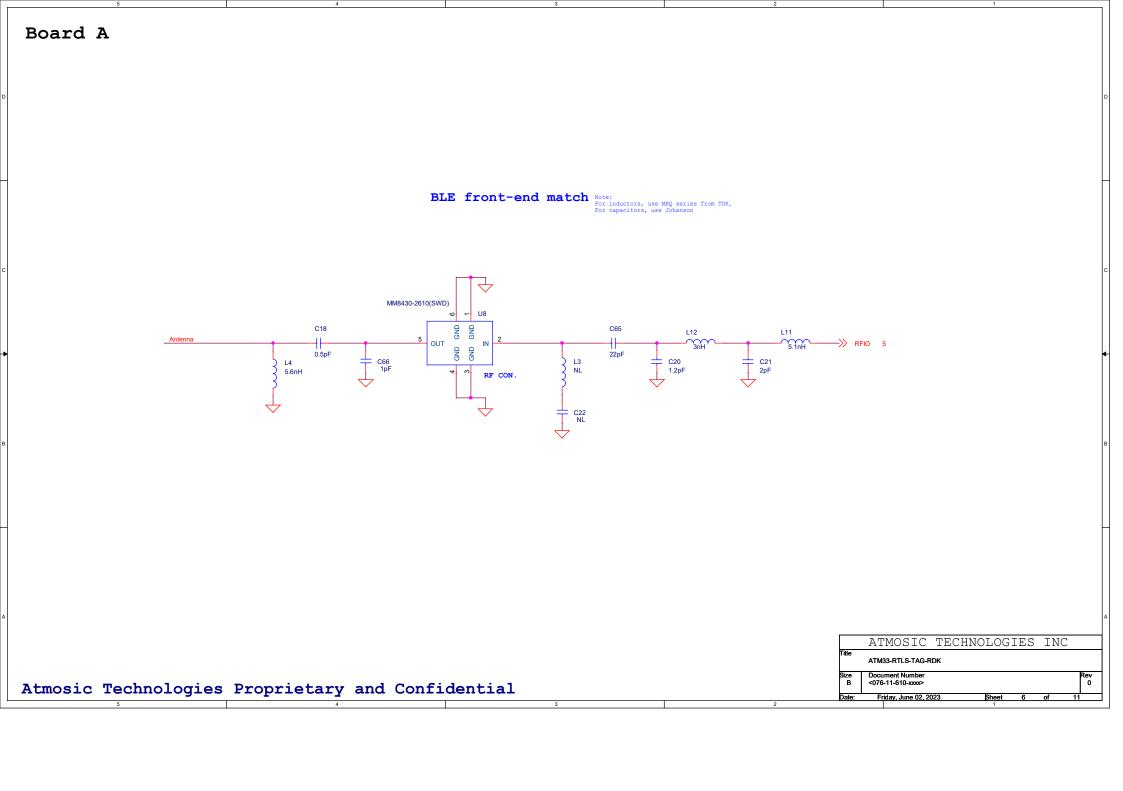
Block Diagram



Block Diagram - A BLE Tx/Rx Board-B RF con. MM8430-2610(SWD RFIO Match P25 Yellow LED For the control of yellow LED P19 For the control of button Button SCL Р6 SDA Р7 PWM(P30) G INT INT (P20) P18 Motion sensor RHT sensor UARTO RX(P22) UARTO TX (P21) Long push: ATM33 enters SOC OFF mode Р5 Button Single push: ATM33 cold start into active SCL(P6)Red LED PЗ Red/green color SDA(P7) -For operation/battery status. -LED on every 30 secs P29 Green LED ATM3325 VDDPA VDDIOP Board-B VDDIO ogram VDDIO VBAT CR2032 VBAT PWD P25 (BBOOT) pro PO (SWDCLK) Board-B \Box Б- Ф P1 (SWDIO) Firmware &Debug i MOSI(P14) P20 (UARTO CTS MISO(P15) P17 (UARTO RTS SCK (P12) P21 (UARTO TX) CS(P13) P22 (UARTO RX) RST (P17) ATMOSIC TECHNOLOGIES INC AN (P4) P27 (UART1 TX) ATM33-RTLS-TAG-RDK Document Number Rev 0 <076-11-610-xxxx> Friday, June 02, 2023 Sheet

Block Diagram - B P25 Yellow LED P19 Button External P30 5V PWM INT P20 RX P22 TXP21 SCL Р6 MikroBUS SDA Р7 From Board A BIDS P14 VDDIO MOSI e program interface VBAT P15 MISO P12 SCK PWD CS P13 P25 (BBOOT) P17 RST 3.3V PO (SWDCLK) AN Ρ4 Firmware &Debug ir P1 (SWDIO) P20 (UARTO CTS) VBAT P17 (UARTO RTS) P21 (UARTO_TX) P22 (UARTO RX) P27 (UART1 TX) ATM33-RTLS-TAG-RDK Document Number Friday, June 02, 2023

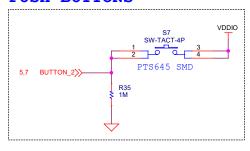


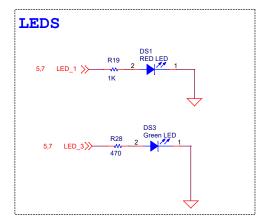


Board A

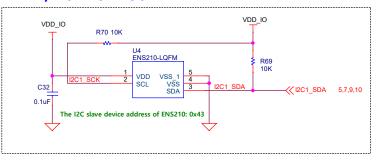
GPIO MUX

PUSH BUTTONS

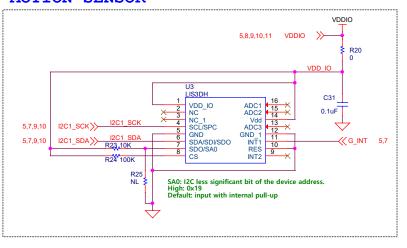




TEMP/HUM SENSOR



MOTION SENSOR

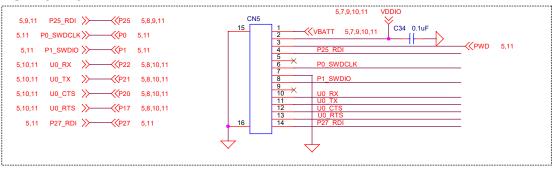


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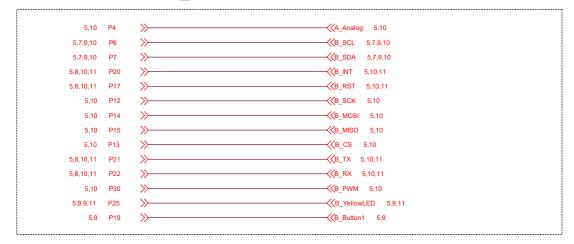


GPIO MUX

JTAG PROGRAMMING



GPIOs to Board B (On Board B)



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