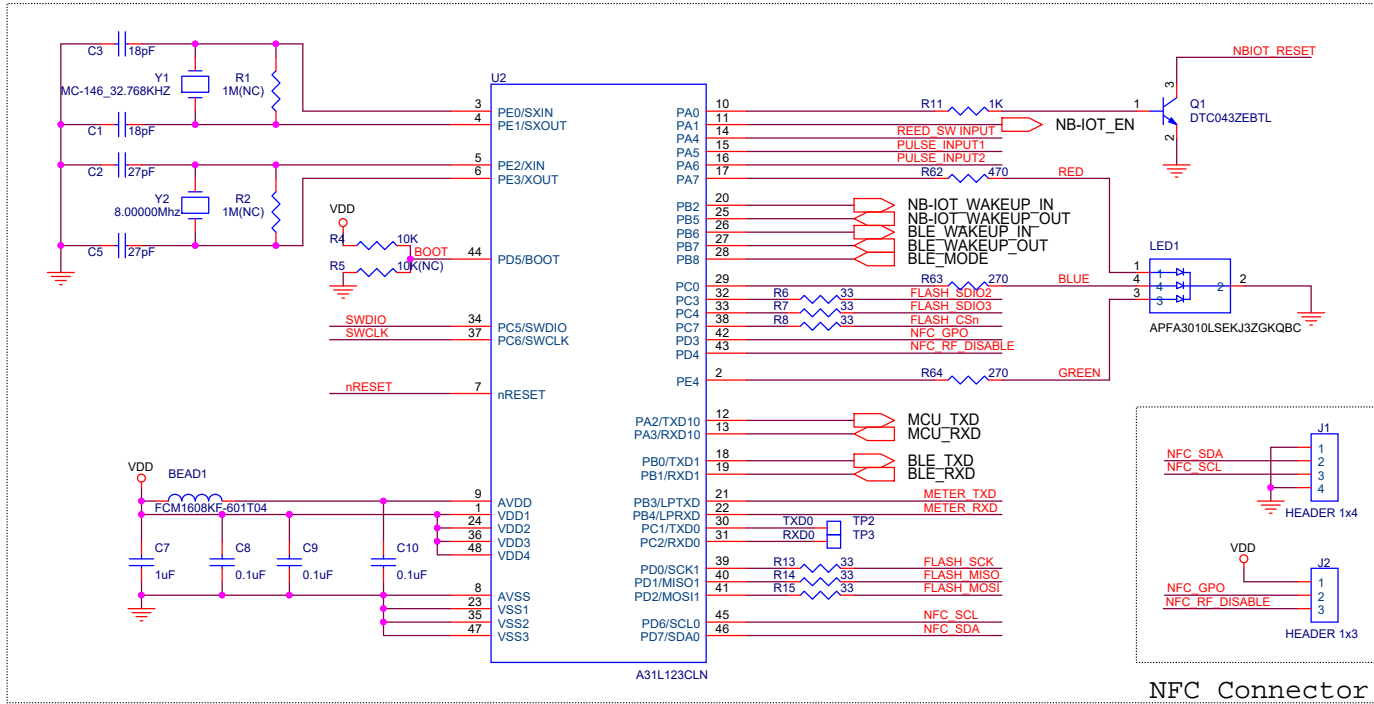


NB-IoT 32bit

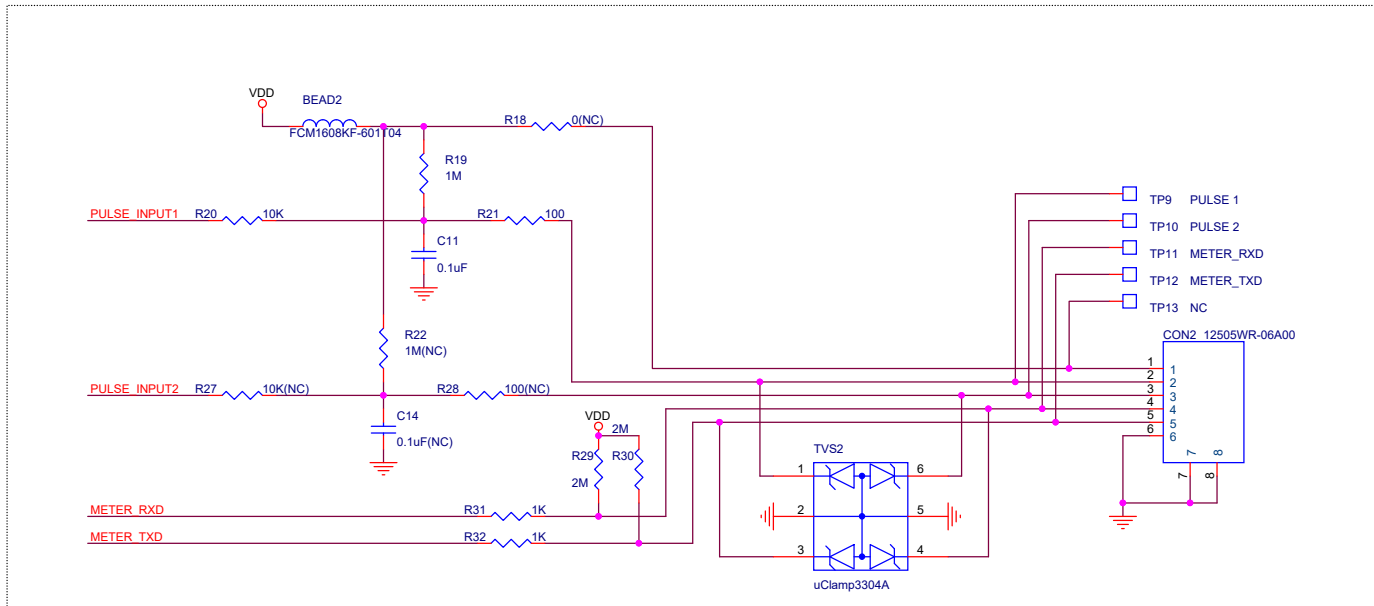
Table of Contents	Revision History
<div>- MAIN BOARD -</div> <div>00.TITLE</div> <div>01.MCU</div> <div>02.NB-IOT_MODULE</div> <div>03.BLUETOOTH</div> <div>04.POWER</div> <div>- NFC BOARD -</div> <div>1.NFC</div>	<div>REV1.0 : 2025-05-22</div> <div>1차보드</div>
PCB INFORMATION	Board Composition
<div>1. SIZE(mm) : 71 x 98.5 x 1.6T</div> <div>2. LAYER : 2-layer</div> <div>3. Color : 녹색 유광 / SILK : White, 양면</div> <div>4. 표면처리 : HAL</div>	<div>Subject : LGU+ NB-IoT 32bit</div> <div>Model Name: GAAM-NB-32</div> <div>MCU: A31L123FNN(ABOV)</div> <div>NB-IoT Module: LGU+(QUECTEL)</div>

MCU

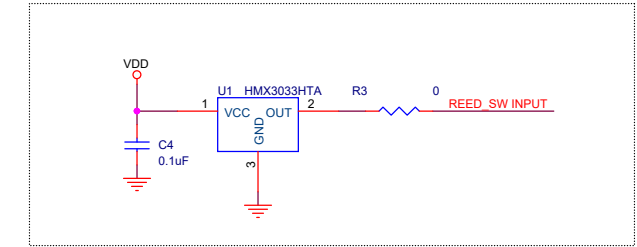


NFC Connector

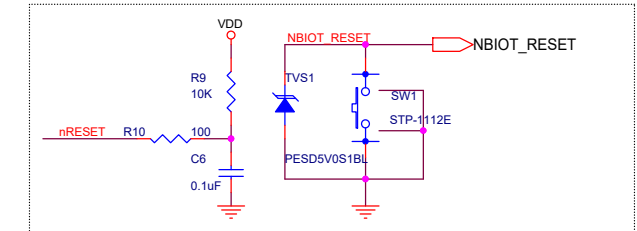
METER Communication



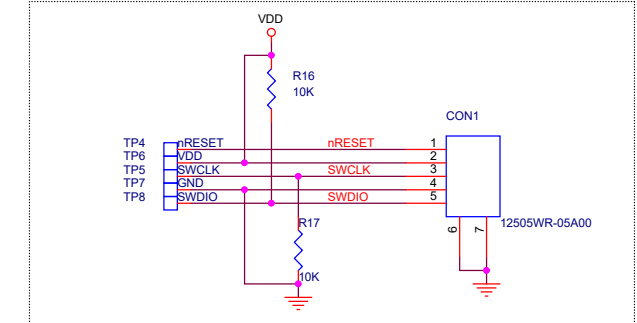
Magnetic Sensor



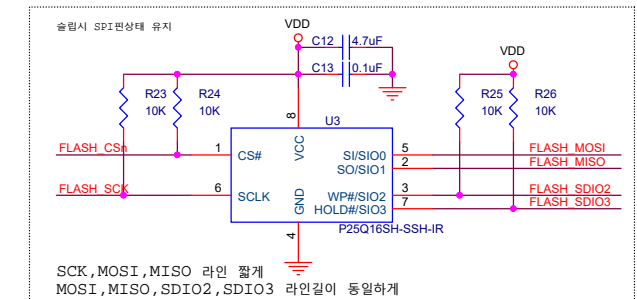
Reset



Firmware Download(SWD)

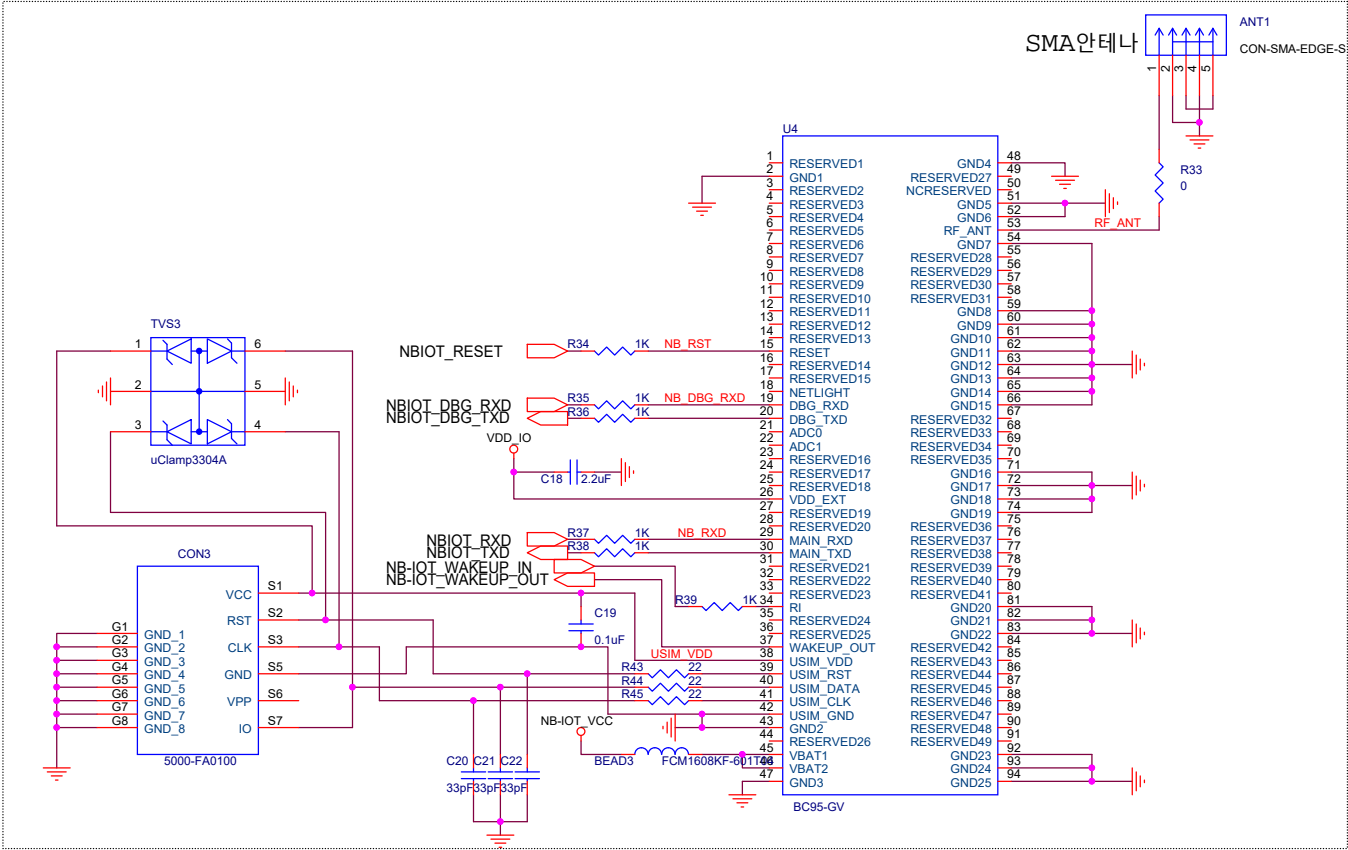


FLASH

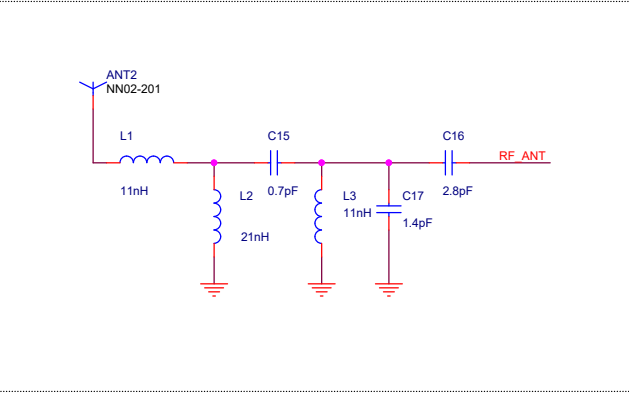


GAAM TECH Co., Ltd.			
Title			
LGU+ NB-IoT 32bit			
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A3	01. MCU	1.0	
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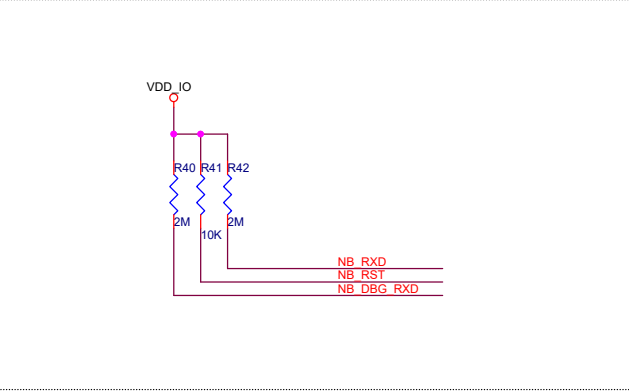
LGU+ NB-IoT Module



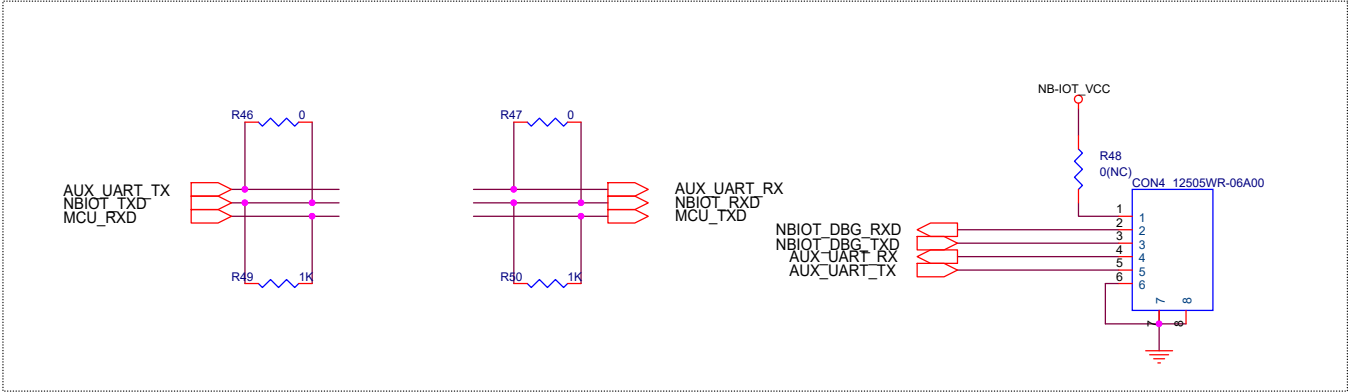
내장안테나



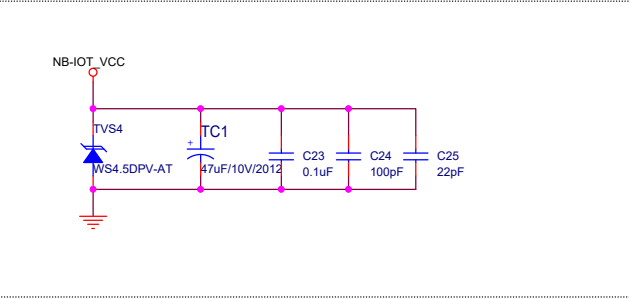
VDD_IO Interface

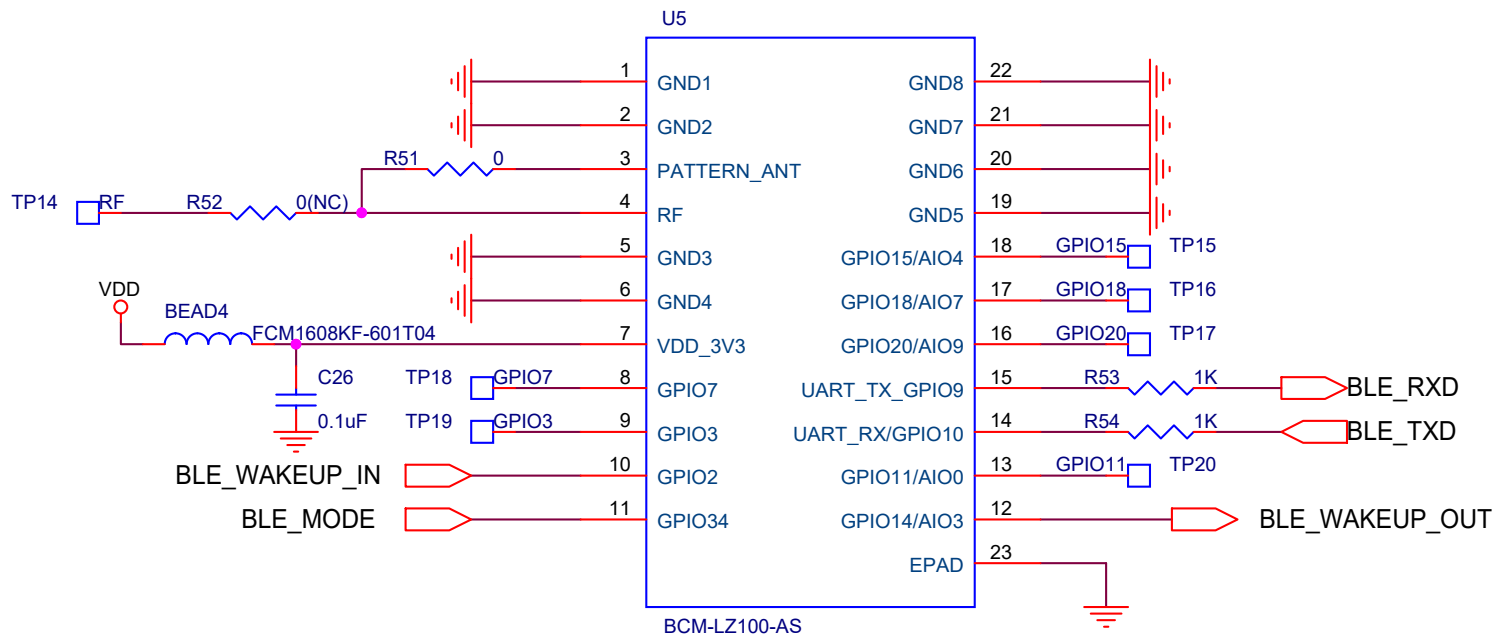


NB-IoT Module UART



Bypass CAP



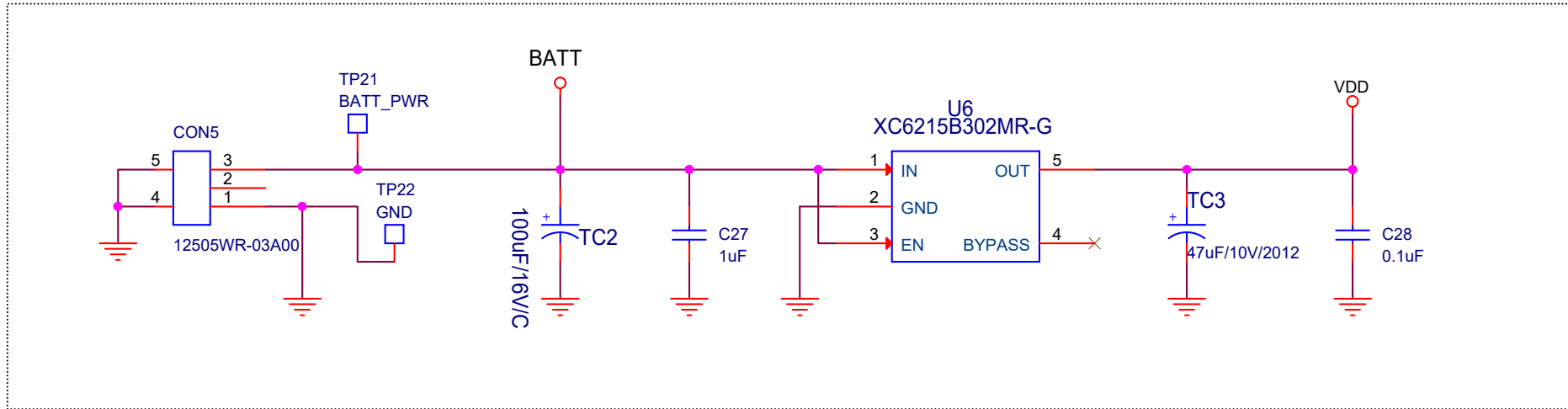


GPIO	Name	Direction	I/O	Description
PIO.14	Connected State	Output	Low	BLE Device Disconnected.
			High	BLE Device Connected.
PIO.34	Command Mode State	Input	Low	Command Mode (상대 장치 연결이 되어 있는 경우.)
			High	BLE Data Transfer Mode (상대 장치 연결이 되어 있는 경우.)
PIO.02	Sleep Wakeup	Input	Both (default : Low)	1. BT가 AT 명령을 통해 uart off sleep mode 동작 상태 일 때, Uart On. 2. BT가 AT 명령을 통해 Deep sleep mode 동작 상태 일 때, Device Reset wake up.

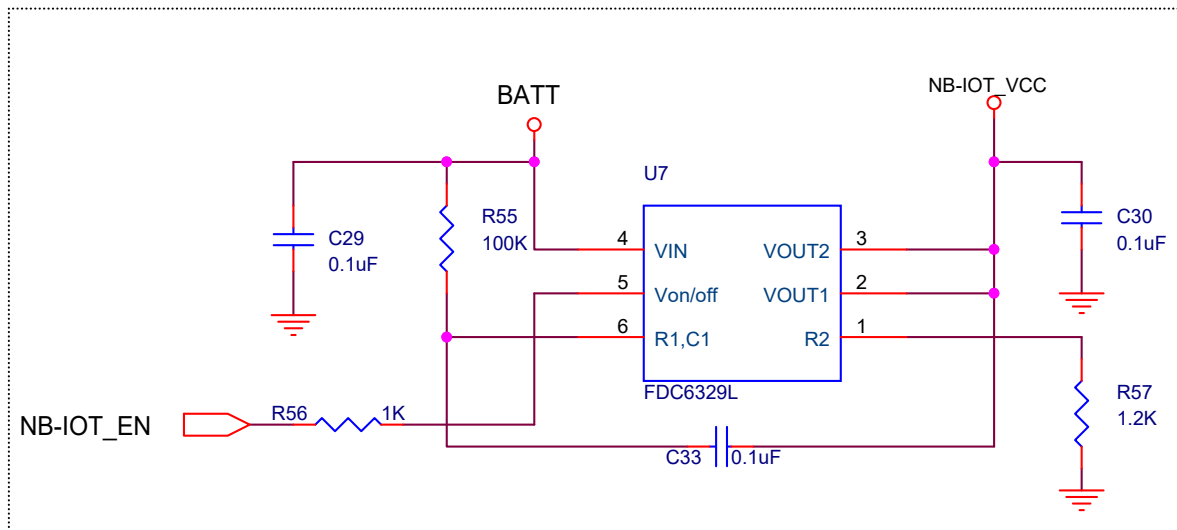
Ex> BT Uart wake up : PIO.02 (default : LOW) -> PIO.02 (High) -> PIO.02 (LOW) = BT Uart Init

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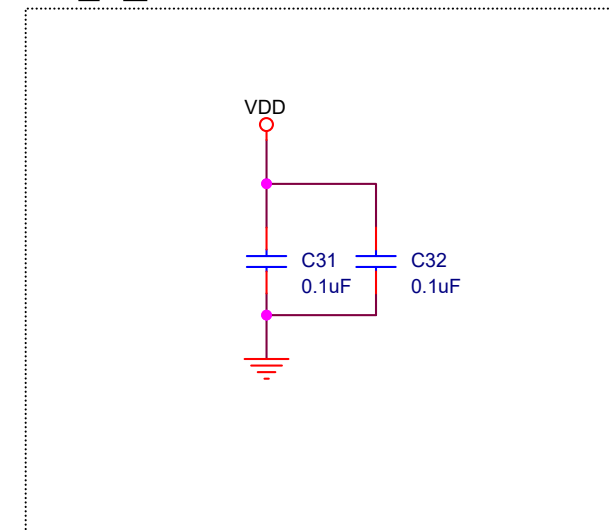
Batt Input & 3.0V Output



NB-IoT Module Power



Bypass CAP



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Title

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Document Number

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