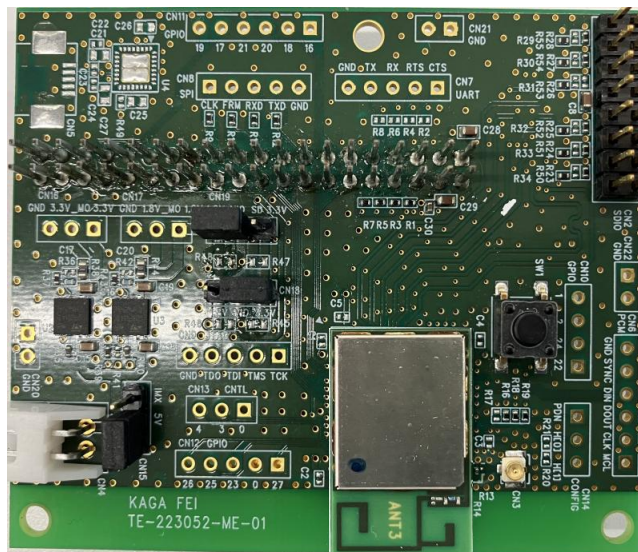


Wireless LAN 802.11ax
+
Bluetooth® 5.4 (BR/EDR + Low Energy)
Module
Evaluation Board

(For WKI611AA1)

WKI611AA1-EVB



This evaluation board is for experimental verification only and does not guarantee the quality.

The circuits, components, and software used on the evaluation board may not be the latest.

Note: This module requires device drivers subject to Japan's export control regulations. Depending on the customer's country or application (e.g., weapons), these drivers may not be available to all customers.

For details, please contact your nearest KAGA FEI sales office.

Japanese Website: <https://www.kagafei.com/jp/>

English Website: <https://www.kagafei.com/jp/eng/>

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Revision History

6-Jan.2026> Ver.1.0 Initial Release
8-Jan.2026> Ver.1.1 Figure correction

1. Introduction

This evaluation board was developed for communication testing of Wireless LAN / Bluetooth® / Bluetooth® LE modules designed and sold by KAGA FEI.

2. Compatible Module

WKI611AA1

3. Accessories

1	Evaluation Board (WKI611AA1-EVB)	1 piece
2	SDIO Interface Cable	1 piece
3	DC Power Cable	1 piece

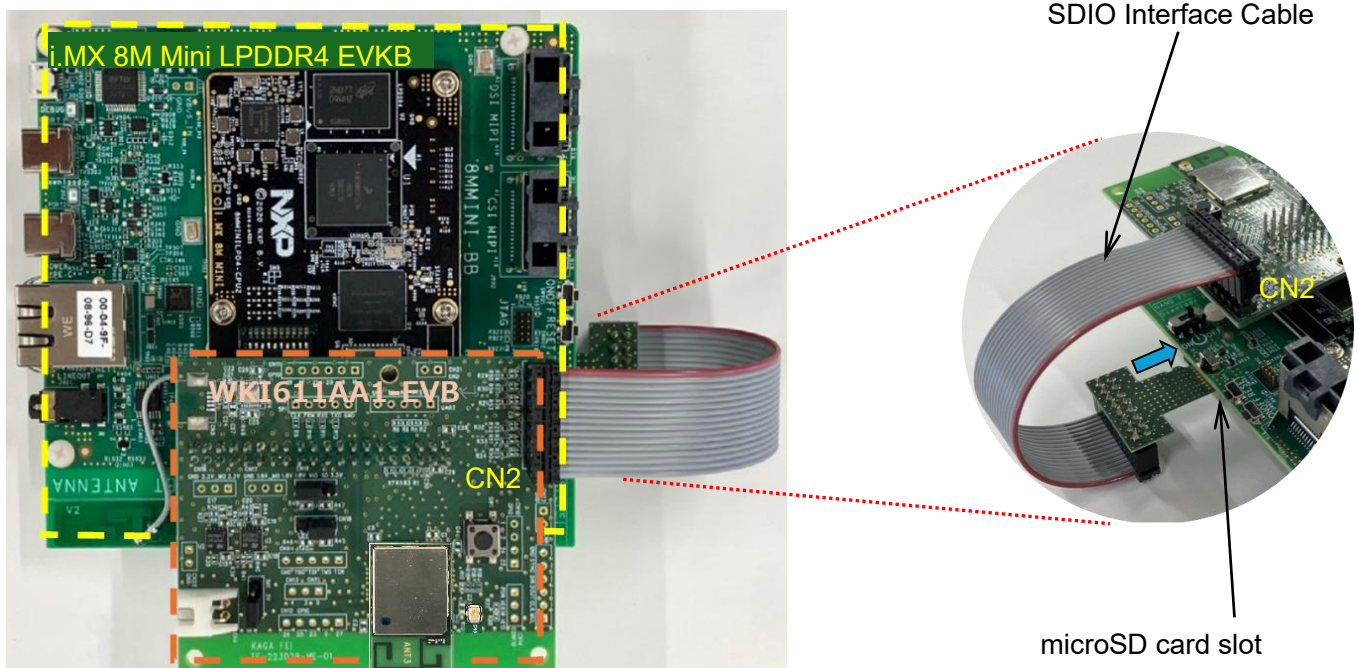
4. Recommended Operating Environment

NXP Evaluation Kit: i.MX 8M Mini LPDDR4-EVKB

5. Connection Example

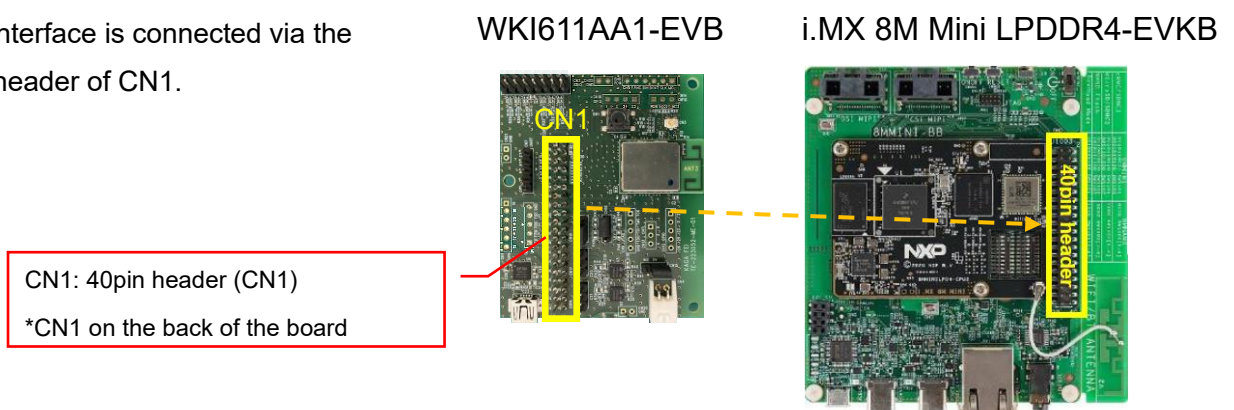
[SDIO]

Attach the included SDIO interface cable to CN2 and connect it to the microSD card slot.

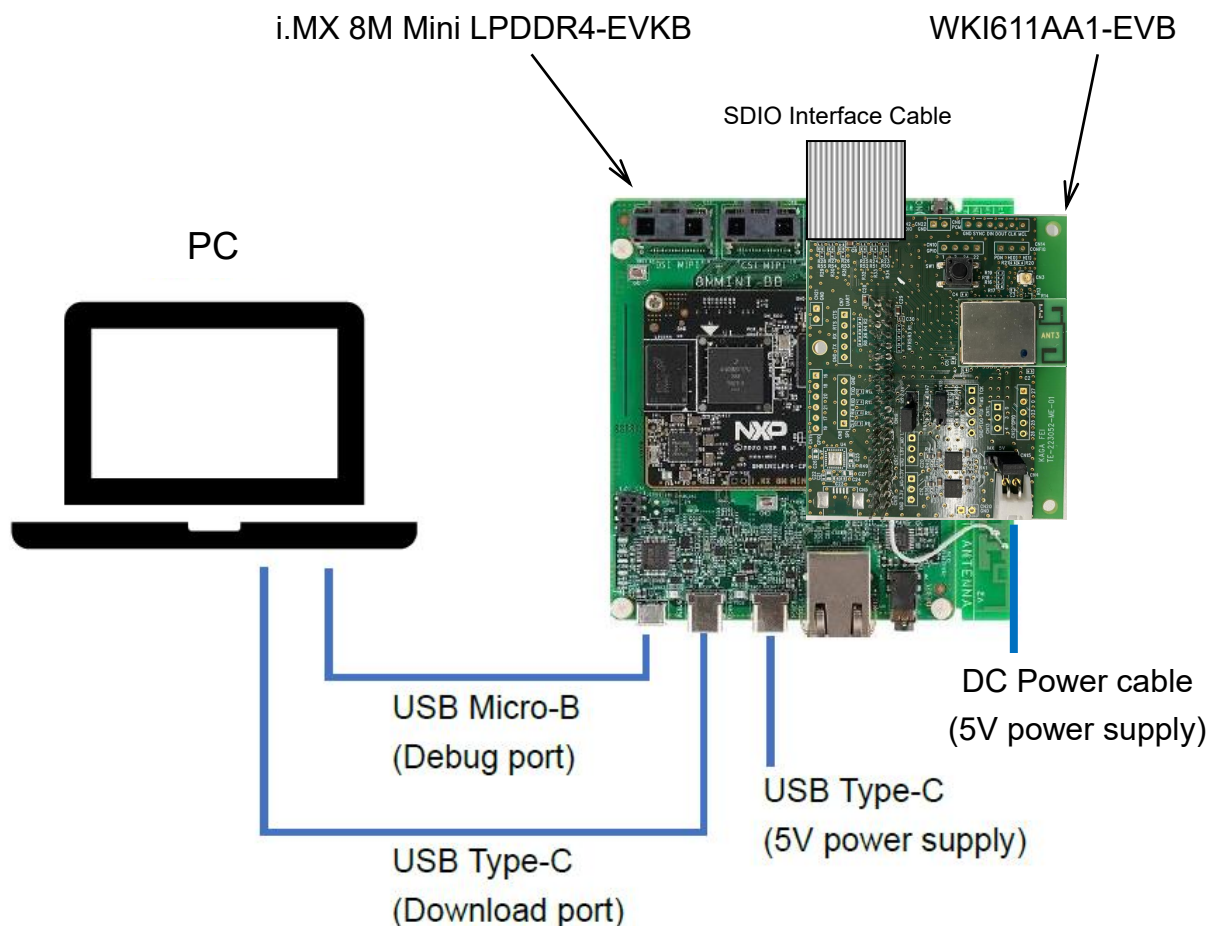


[UART]

UART interface is connected via the 40-pin header of CN1.



[PC and NXP EVK connection image]



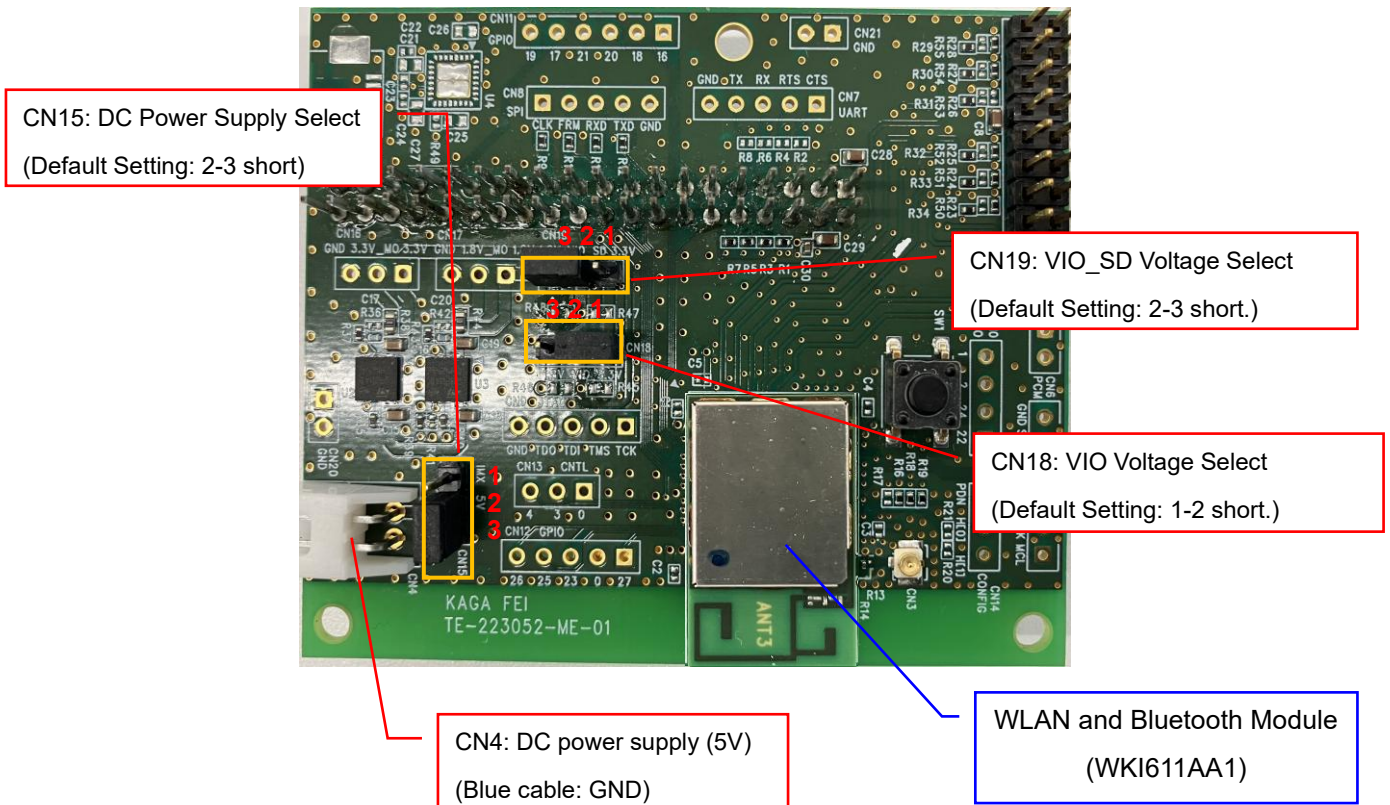
* For detailed information on connecting the 8MMiniLPDDR4-EVKB to a PC, please refer to the following document on limited user website.

> WKI611_IMX8MM_UserGuide

Registration is required to access the limited user website.

Please refer to the instructions included with WKI611AA1-EVB for details on how to register.

6. Evaluation Board Layout



7. Pin Description of Evaluation Board

WKI611AA1-EVB

CN15: DC Power Supply Select (Default Setting:2-3 short.)

No.	Pin name	Direction	Description
1	IMX	Input	5.0V output from i.MX EVB
2	5V	Output	5.0V input
3	-	Input	5.0V output from DC Power Cable(CN4)

CN18: VIO Voltage Select (Default Setting: 1-2 short.)

No.	Pin name	Direction	Description
1	3.3V	Output	3.3V output.
2	VIO	Input	Input for VIO
3	1.8V	Output	1.8V output.

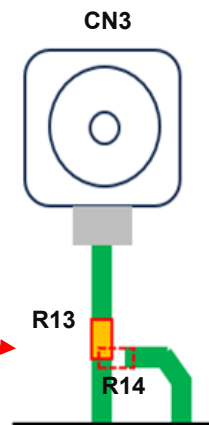
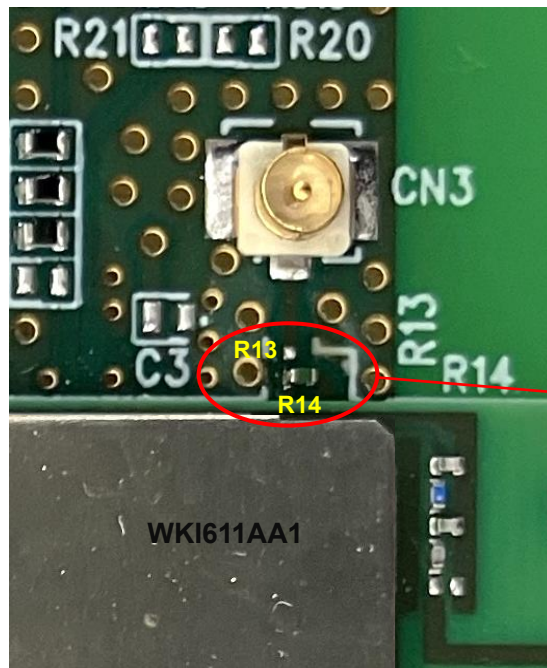
CN19: VIO_SD Voltage Select (Default Setting: 2-3 short.)

No.	Pin name	Direction	Description
1	3.3V	Output	3.3V output.
2	VIO SD	Input	Input for VIO_SD
3	1.8V	Output	1.8V output.

8. Antenna Configuration

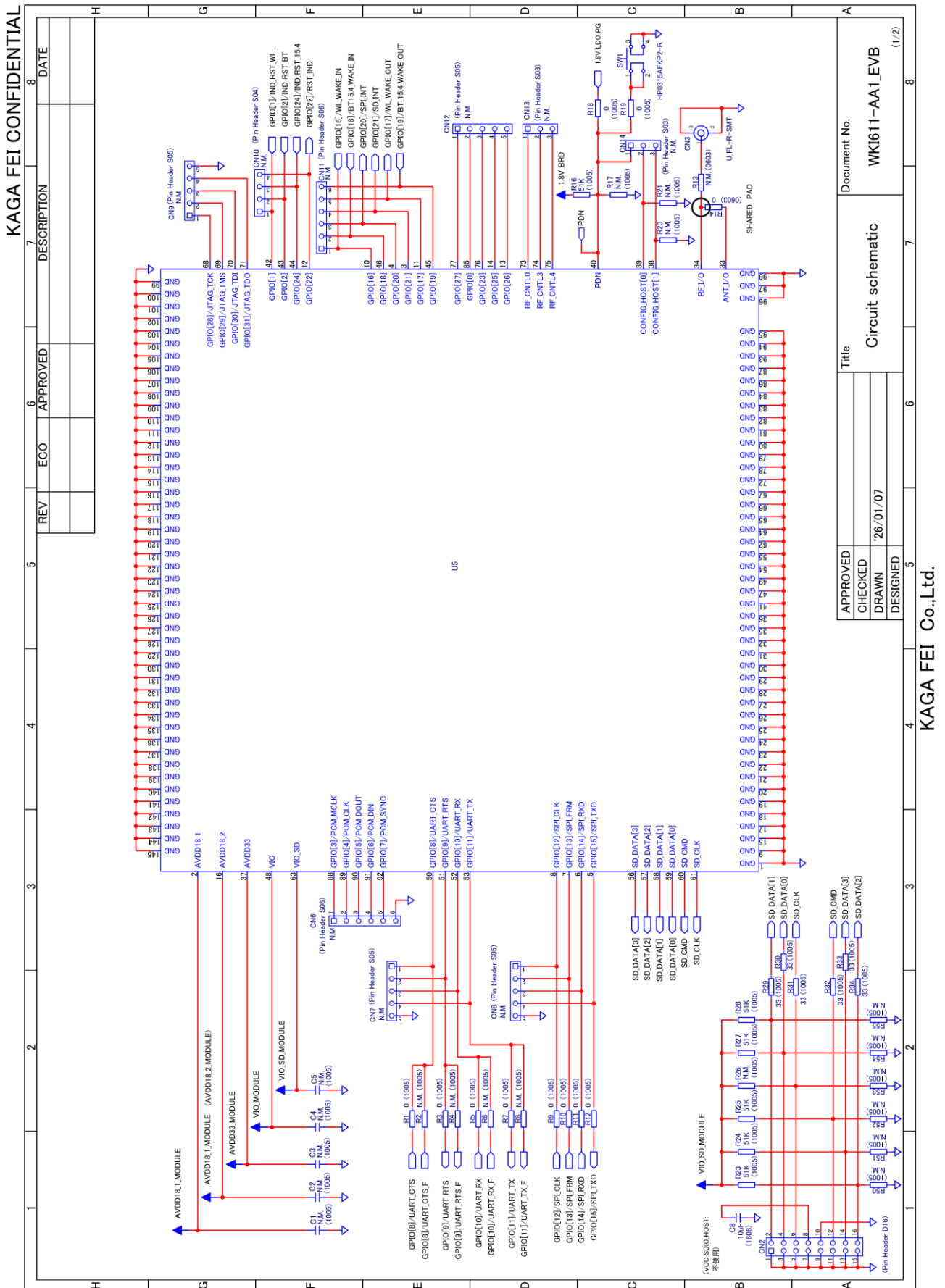
The WKI611AA1-EVB allows you to switch between the built-in antenna and the U.FL connector by changing the jumper resistor placement.

Mount the jumper resistor on R14 to connect to the built-in antenna, and on R13 to connect to the U.FL. The default jumper position is R14.

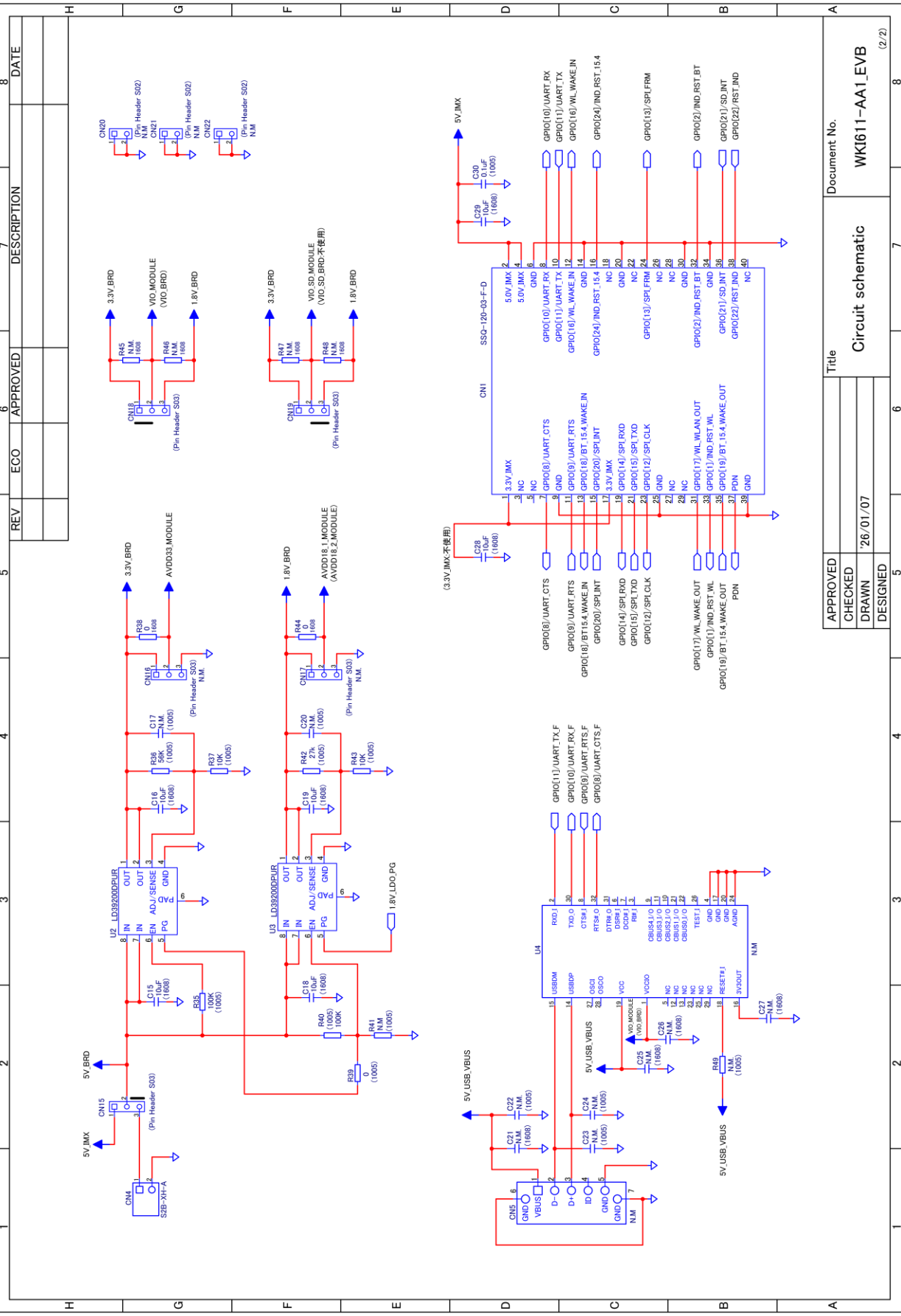


When using a U.FL connector, mount the jumper R14 to R13.

9. WKI611AA1-EVB Circuit Diagram



KAGA FEI CONFIDENTIAL



APPROVED	CHECKED	DRAWN	DESIGNED

Document No.	WKI611-AA1_EVB
Circuit schematic	

KAGA FEI Co., Ltd.