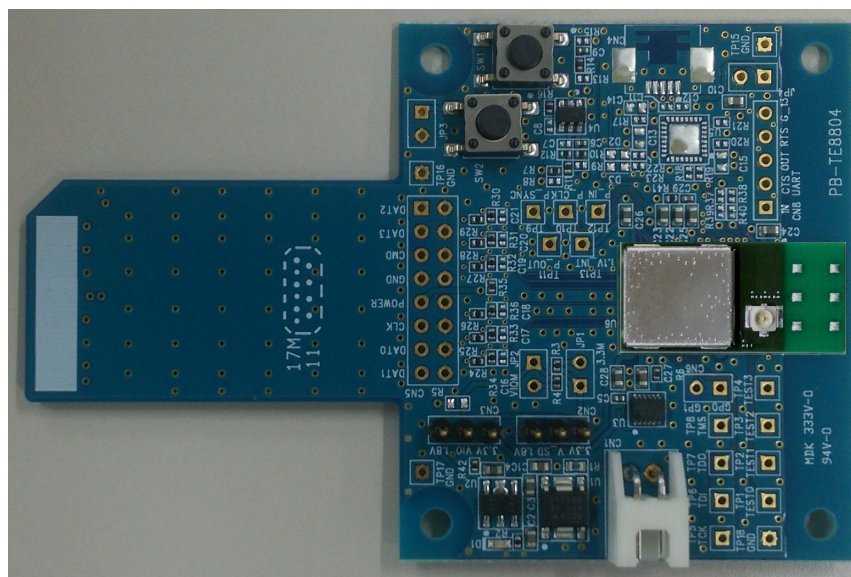


WBSEGVDXG

Wireless LAN and Bluetooth® Module Evaluation Board

(For WYSEGVDXG)

WBSEGVDXG



This evaluation board is an object for experiment of operation, and does not guarantee quality. Moreover, the conditions of a module of operation are not recommended in the schematic, the parts, the software, etc. currently used for evaluation board.

WBSEGVDXG

ATTENTION: This module requires device drivers that are under Japan export control. Depending on the customer's country and application (e.g. weapons), Taiyo Yuden may not be able to provide these drivers to all customers. Please contact your local Taiyo Yuden sales office for additional information.

To contact your local sales office and for additional product information, please visit www.ty-top.com.

WBSEGVDXG

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Rev. Records

Apr.08.2019> Ver.1.0 Release

May.24.2019> Ver.1.1 Update

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Introduction

This evaluation board is developed for communication test of **Wireless LAN** and **Bluetooth®** module which TAIYO YUDEN develops and sells.

This evaluation board makes it possible to perform easily the communication test of **Wireless LAN** and **Bluetooth®** module of TAIYO YUDEN.

Conformity module

WYSEGVDXG

Accessories

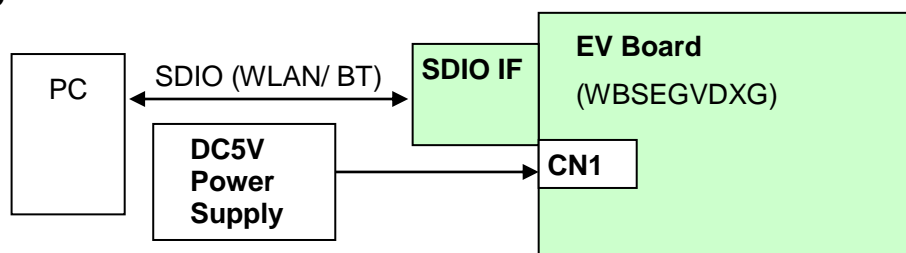
1	Evaluation Board (WBSEGVDXG)	1 piece
2	DC Power Cable	1 piece

Recommendation operation environment

PC with Linux Fedora18 with software development option and SDIO interface(CPU 1000MHz or higher)
 Attention: PC with SDIO is required. Although SDIO and SD Memory Card have the same slot shape, they are not compatible. WLAN Module and Evaluation Board will not work if they are connected to SD memory card slot.

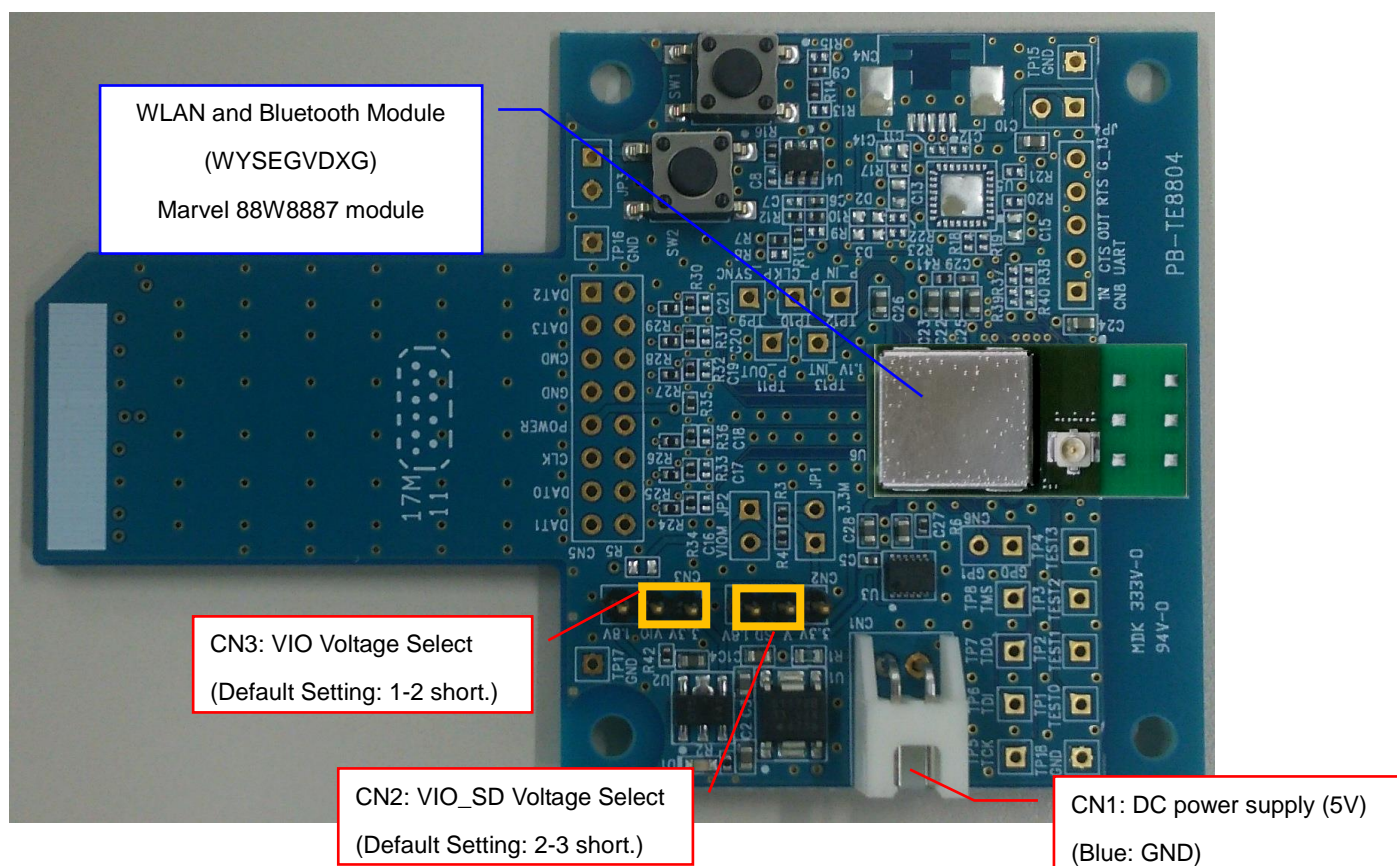
The example of connection

SDIO



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Evaluation board layout



Pin description of evaluation board

WBSEGVDXG (TE8804)

CN1: DC Power Supply

No.	Pin name	Direction	Description
1	5V	Input	5.0V input.
2	GND	GND	Ground

CN2: 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.

CN3: 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.

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BOM of evaluation board

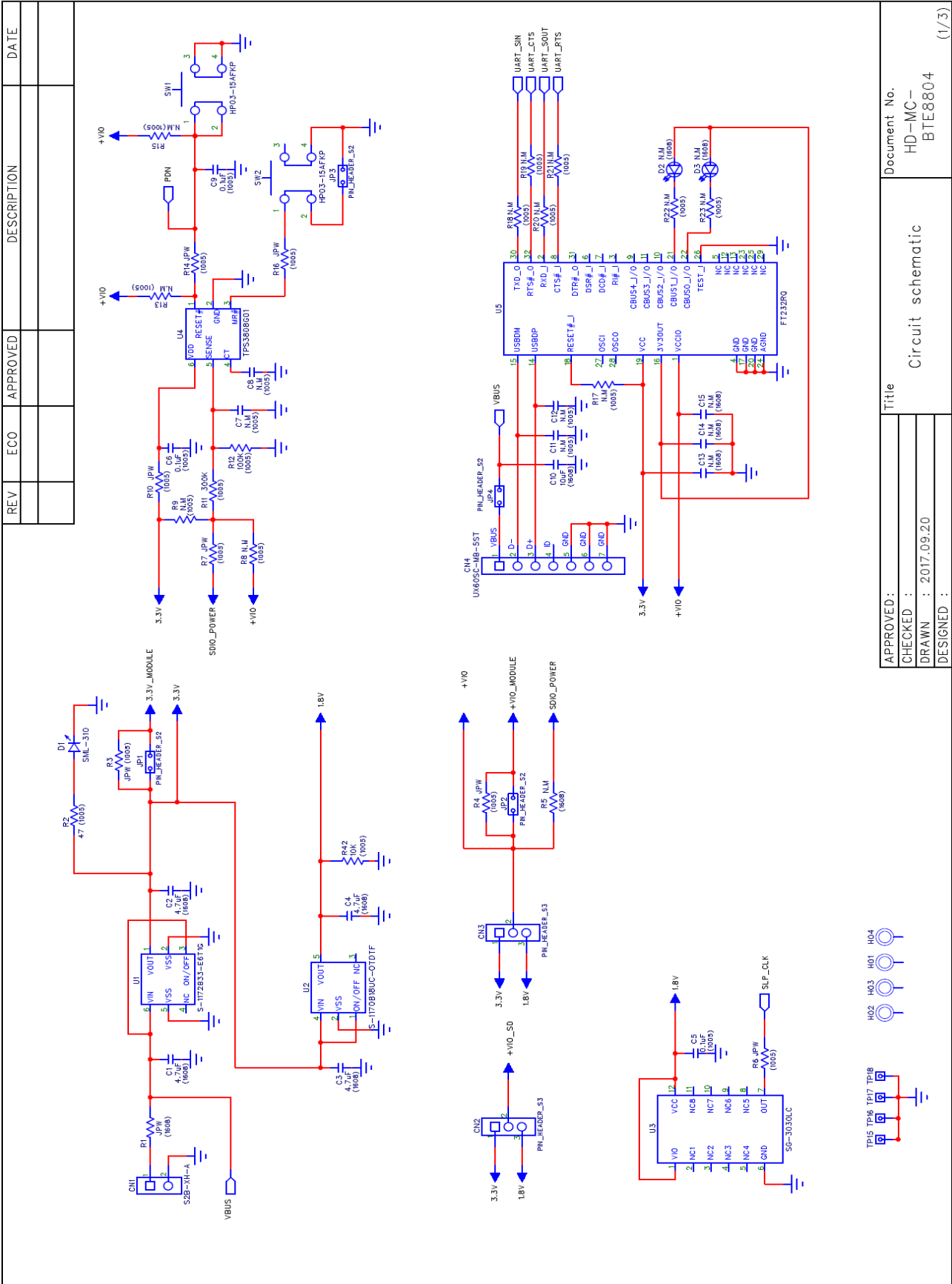
WBSEGVDXG (TE8804)

Ref Name	Description	Parts name	Supplier
U1	IC(LDO 3.3V)	S-1172B33-E6T1G	SII or equivalent
U2	IC(LDO1.8V)	S-1170B18UC-OTDTF	SII or equivalent
U3	IC(32.768kHz clock)	SG-3030LC	EPSON or equivalent
U4	IC	TPS3808G01DBVT	TI or equivalent
U5	N.M	N.M.	
U6	Module	WYSEGVDXG	TAIYO YUDEN
SW1	SWITCH	HP03-15AFKP2	NKK SWITCHES or equivalent
SW2	SWITCH	HP03-15AFKP2	NKK SWITCHES or equivalent
CN1	CONNECTOR	S2B-XH-A	JST or equivalent
CN2	CONNECTOR	PIN_HEADER_S3	
CN3	CONNECTOR	PIN_HEADER_S3	
CN4-CN8	N.M.	N.M.	
JP1-JP4	N.M.	N.M.	
C1	CAPACITOR	LMK107 BJ475KA	TAIYO YUDEN
C2	CAPACITOR	LMK107 BJ475KA	TAIYO YUDEN
C3	CAPACITOR	LMK107 BJ475KA	TAIYO YUDEN
C4	CAPACITOR	LMK107 BJ475KA	TAIYO YUDEN
C5	CAPACITOR	EMK105 BJ104KV	TAIYO YUDEN
C6	CAPACITOR	EMK105 BJ104KV	TAIYO YUDEN
C7-C8	N.M.	N.M.	
C9	CAPACITOR	EMK105 BJ104KV	TAIYO YUDEN
C10	CAPACITOR	JMK107 BJ106MA	TAIYO YUDEN
C11-C21	N.M.	N.M.	
C22	CAPACITOR	JMK107 BJ106MA	TAIYO YUDEN
C23	CAPACITOR	JMK107 BJ106MA	TAIYO YUDEN
C24	CAPACITOR	JMK107 BJ106MA	TAIYO YUDEN
C25	CAPACITOR	JMK107 BJ106MA	TAIYO YUDEN
C26	CAPACITOR	JMK107 BJ106MA	TAIYO YUDEN
C27	CAPACITOR	JMK107 BJ106MA	TAIYO YUDEN
C28	CAPACITOR	JMK107 BJ106MA	TAIYO YUDEN
C29	CAPACITOR	UMK105 CH100CV-F	TAIYO YUDEN
R1	RESISTOR	MCR03EZHZJ000	ROHM or equivalent
R2	RESISTOR	MCR01 MRT J 470	ROHM or equivalent

WBSEGVDXG

Ref Name	Description	Parts name	Supplier
R3	RESISTOR	MCR01 MRT J000	ROHM or equivalent
R4	RESISTOR	MCR01 MRT J000	ROHM or equivalent
R5	N.M.	N.M.	
R6	RESISTOR	MCR01 MRT J000	ROHM or equivalent
R7	RESISTOR	MCR01 MRT J000	ROHM or equivalent
R8-R9	N.M.	N.M.	
R10	RESISTOR	MCR01 MRT J000	ROHM or equivalent
R11	RESISTOR	MCR01 304J	ROHM or equivalent
R12	RESISTOR	MCR01 MRT J104	ROHM or equivalent
R13	N.M.	N.M.	
R14	RESISTOR	MCR01 MRT J000	ROHM or equivalent
R15	N.M.	N.M.	
R16	RESISTOR	MCR01 MRT J000	ROHM or equivalent
R17-R23	N.M.	N.M.	
R24	RESISTOR.	MCR01 MRT J220	ROHM or equivalent
R25	RESISTOR.	MCR01 MRT J220	ROHM or equivalent
R26	RESISTOR.	MCR01 MRT J220	ROHM or equivalent
R27	RESISTOR.	MCR01 MRT J220	ROHM or equivalent
R28	RESISTOR.	MCR01 MRT J220	ROHM or equivalent
R29	RESISTOR.	MCR01 MRT J220	ROHM or equivalent
R30	RESISTOR	MCR01 MRT J473	ROHM or equivalent
R31	RESISTOR	MCR01 MRT J473	ROHM or equivalent
R32	RESISTOR	MCR01 MRT J473	ROHM or equivalent
R33	RESISTOR	MCR01 MRT J473	ROHM or equivalent
R34	RESISTOR	MCR01 MRT J473	ROHM or equivalent
R35	RESISTOR	MCR01 MRT J102	ROHM or equivalent
R36	RESISTOR	MCR01 MRT J473	ROHM or equivalent
R37-R40	N.M.	N.M.	
R41	RESISTOR	MCR01 MRT J104	ROHM or equivalent
R42	RESISTOR	MCR01 103J	ROHM or equivalent
D1	LED	SML-D12M	ROHM or equivalent
D2-D3	N.M.	N.M.	
TP1-13	N.M.	N.M.	
TP15-18	N.M.	N.M.	

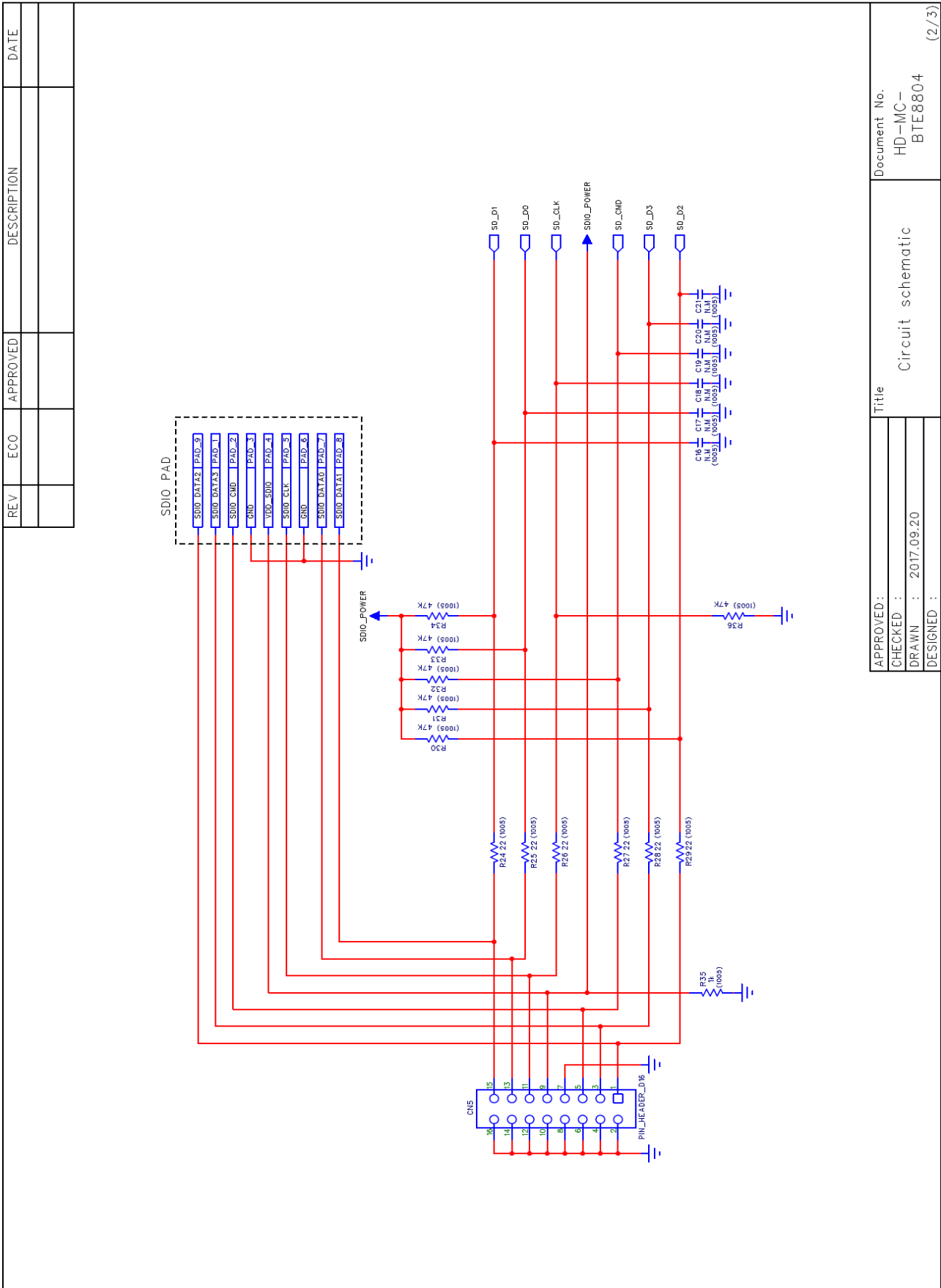
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DRAWN : 2017.09.20	BTE8804
DESIGNED :	(1/3)

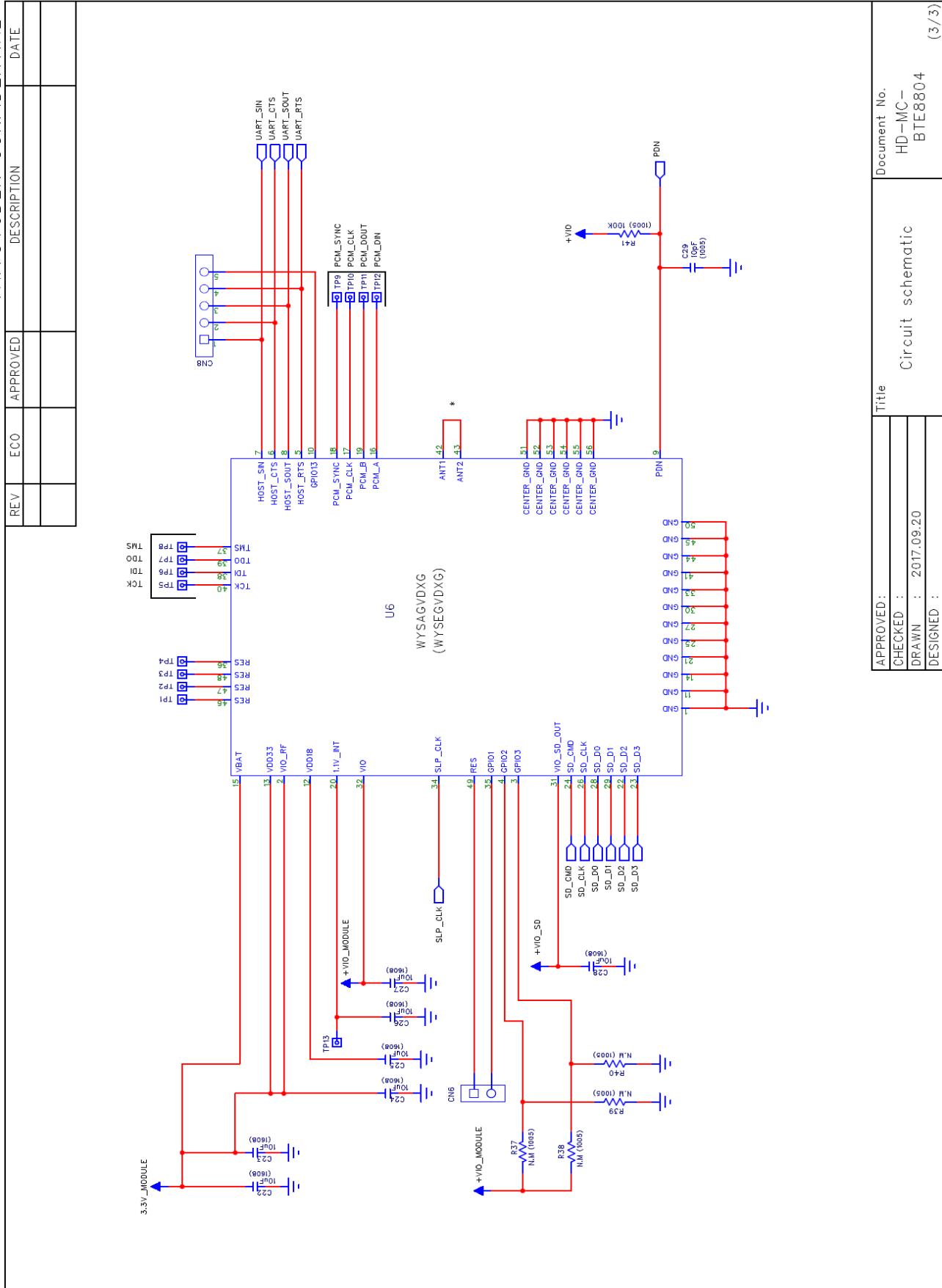
Title	Circuit schematic
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WBSEGVDXG



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DESIGNED :		(2/3)

WBSEGVDXG



Title	Document No.
APPROVED :	HD-MC-BTE8804
CHECKED :	(3/3)
DRAWN : 2017.09.20	Circuit schematic
DESIGNED :	