

FM3-144SD1NQ

1. Power supply selection ( Note: \* default setting)

POWER SOURCE

	CN37	CN35
DC 5V	1-2	2-3
USB VBUS	2-3 *	2-3 *
JTAG V-supply	Open	1-2

VCC SELECTION

	CN32	CN38	CN39	CN40	CN41	CN43
3.3V	1-2	1-2	1-2 *	1-2	1-2	1-2
5V	1-2 *	2-3 *	2-3	1-2 *	1-2 *	1-2 *
JTAG V-supply	2-3	2-3	1-2	1-2	1-2	1-2

Note: CN41 should be OPEN when USB-less FM3 is used.

2. Switch, Jumper Pin Settings ( Note: \* default setting )

	FUNCTION	SETTING	ACTION
SW1	RESET	PUSH ON	RESET
		PUSH OFF	NOT RESET
SW2	MD0	1-2	HIGH
		2-3 *	LOW
SW3	MD1	1-2	HIGH
		2-3 *	LOW
SW4	FM4 USB SELECTION	5-6      2-3	USB HOST
		4-5 *      1-2*	USB DEVICE
CN7	CAN TRANSCEIVER MODE CONTROL	1-2 *	STANDBY MODE
		2-3	HI-SPEED MODE
CN8	TX0_0(CAN TX)	1-2	CONNECT TO CAN TRANSCEIVER
		2-3 *	OPEN
CN10	RX0_0(CAN RX)	1-2	CONNECT TO CAN TRANSCEIVER
		2-3 *	OPEN
CN11	CAN RX and TX CONNECTION	1-2	SHORT
		2-3 *	OPEN
CN12	SOT0_0 (UART TX)	1-2	PULL-DOWN
		2-3	CONNECT TO RS TRANSCEIVER
		3-4 *	OPEN
CN13	SIN0_0 (UART RX)	1-2	CONNECT TO RS TRANSCEIVER
		2-3 *	OPEN

CN15	MD1	1-2 *	CONNECT TO MD1 SWITCH
		2-3	OPEN
CN16	UDP0 (USB D+)	1-2	CONNECT TO USB CONNECTOR
		2-3 *	OPEN
CN18	UDM0 (USB D-)	1-2	CONNECT TO USB CONNECTOR
		2-3 *	OPEN
CN19	P50	1-2	CONNECT TO VBUS CONTROL IC FLG
		2-3 *	OPEN
CN21	P51	1-2	CONNECT TO VBUS CONTROL IC EN
		2-3 *	OPEN
CN20	P61	1-2	CONNECT TO USB D+ PULL-UP CONTROL
		2-3 *	OPEN
CN23	P60(USB CONN. DET.)	1-2	CONNECT TO USB VBUS
		2-3 *	OPEN
CN25	TEST CONNECTOR	1-2	DO NOT SET THIS
		2-3 *	ALWAYS SET THIS
CN24	TEST CONNECTOR	1-2 *	ALWAYS SET THIS
		2-3	DO NOT SET THIS
CN27	TEST CONNECTOR	N/A	DO NOT USE THIS CONNECTOR
CN28	TEST CONNECTOR	N/A	DO NOT USE THIS CONNECTOR
CN29	TDO	1-2 *	PULL-UP
		2-3	OPEN
CN30	TCK	1-2 *	PULL-UP
		2-3	PULL-DOWN
CN31	xTRST	1-2 *	PULL-UP
		2-3	OPEN
CN5	AVRH	1-2 *	CONNECT TO AVCC
CN6	AVRL	1-2 *	CONNECT TO AVSS

Revision history:  
2013/5/9 Initial revision

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The following precautions apply to the product described in this manual.

Before moving the product, be sure to turn off all the power supplies and unplug the cables. Watch your step when carrying the product. Do not use the product in an unstable location such as a place exposed to strong vibration or a sloping surface.

Do not place anything on the product or expose the product to physical shocks. Do not carry the product after the power has been turned on. Doing so may cause a malfunction due to overloading or shock.

Since the product contains many electronic components, keep it away from direct sunlight, high temperature, and high humidity to prevent condensation. Do not use or store the product where it is exposed to much dust or a strong magnetic or electric field for an extended period of time. Inappropriate operating or storage environments may cause a fault.

Use the product within the ranges given in the specifications. Operation over the specified ranges may cause a fault.

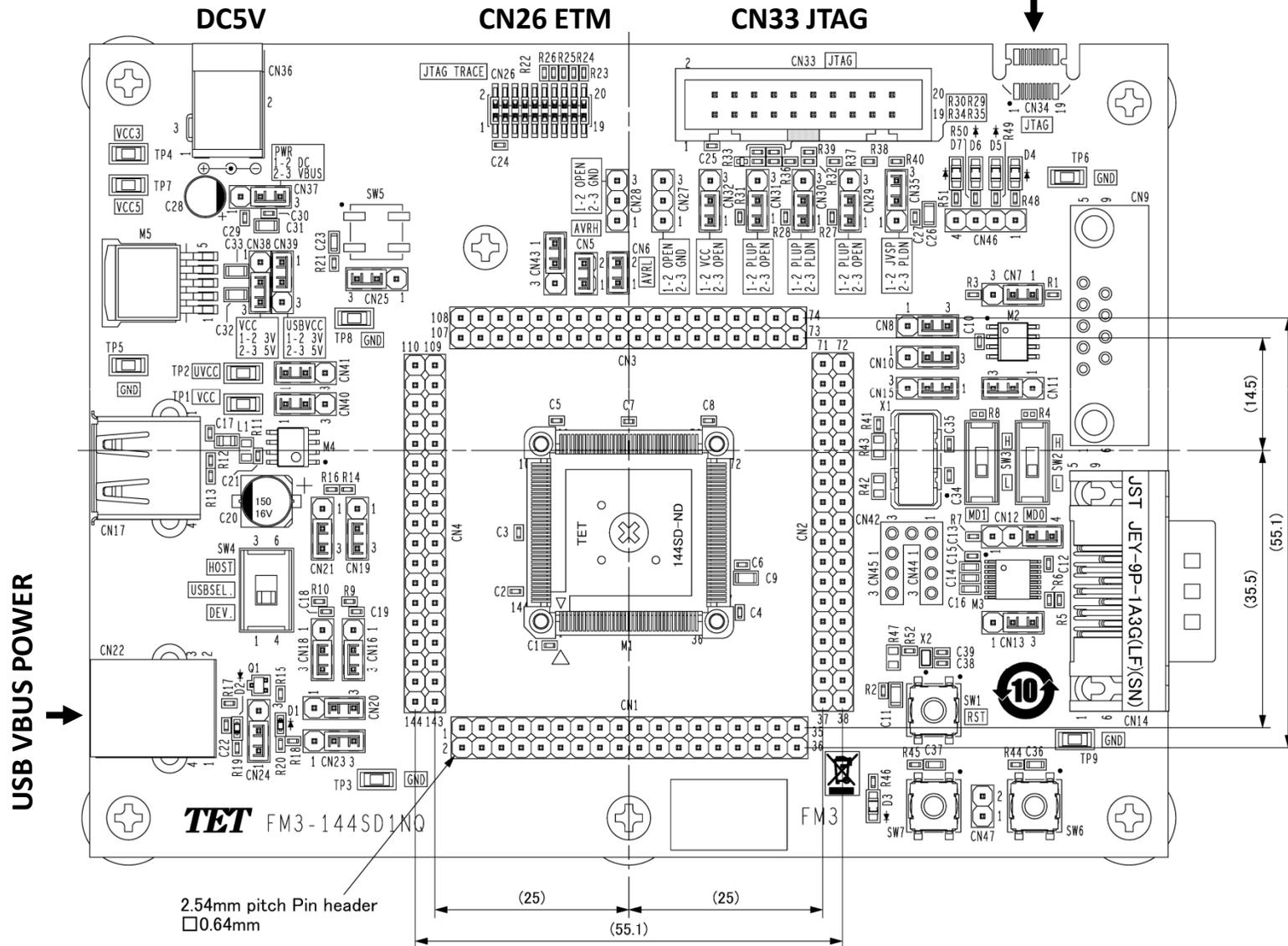
To prevent electrostatic breakdown, do not let your finger or other object come into contact with the metal parts of any of the connectors. Before handling the product, touch a metal object (such as a door knob) to discharge any static electricity from your body.

Always turn the power off before connecting or disconnecting any cables from the product. When unplugging a cable, unplug the cable by holding the connector part without pulling on the cable itself. Pulling the cable itself or bending it may expose or disconnect the cable core, resulting in a fault.

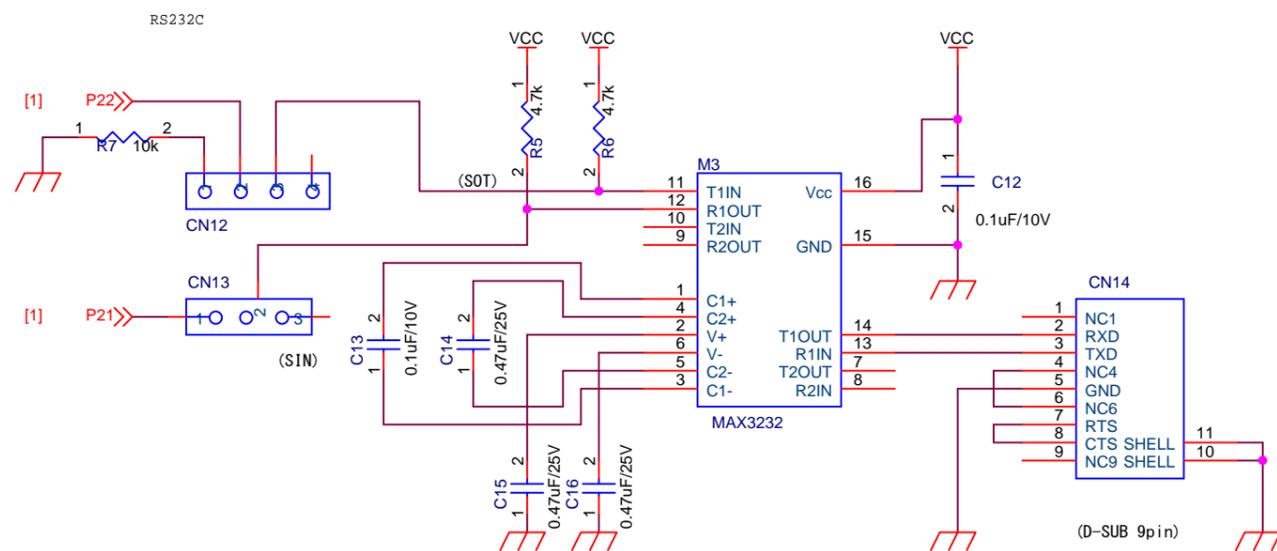
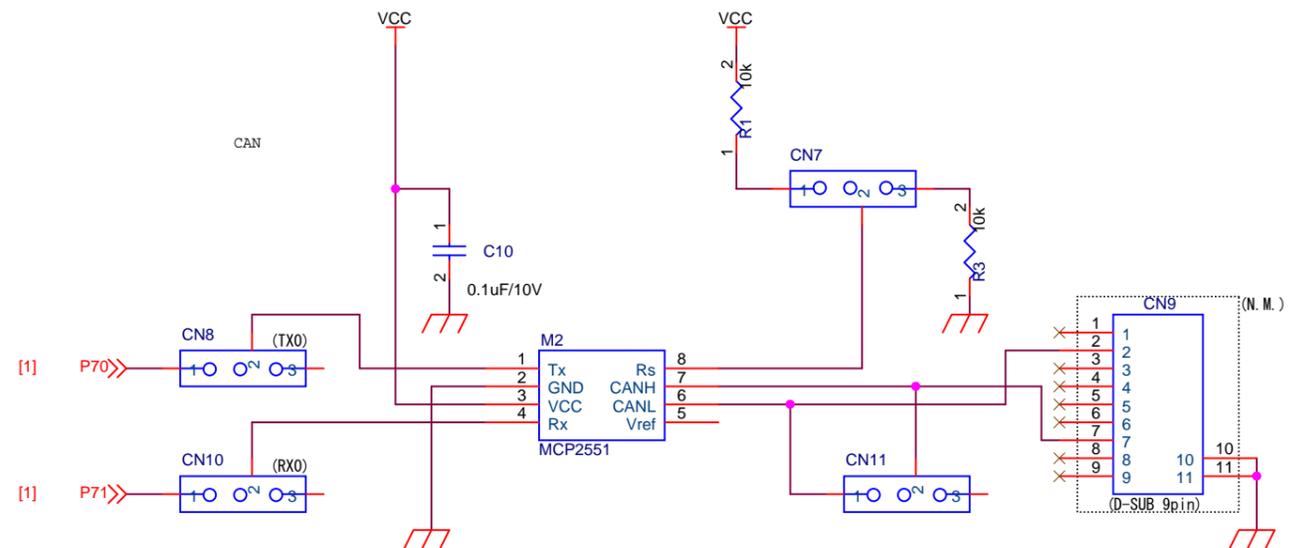
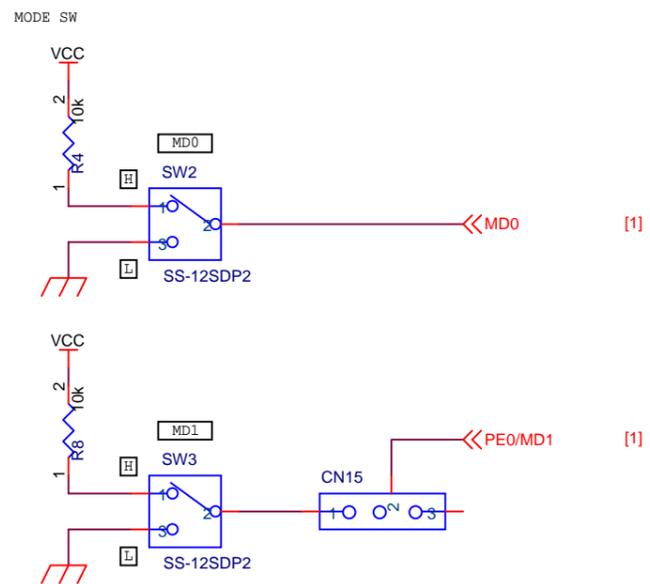
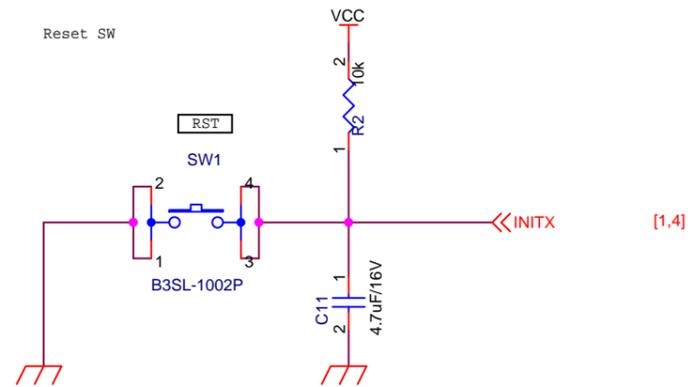
It is recommended that it be stored in the original packaging. Transporting the product may cause a damage or fault. Therefore, keep the packaging materials and use them when re-shipping the product.

**FM3-144SD1NQ (FIGURE EXAMPLE BELOW)**

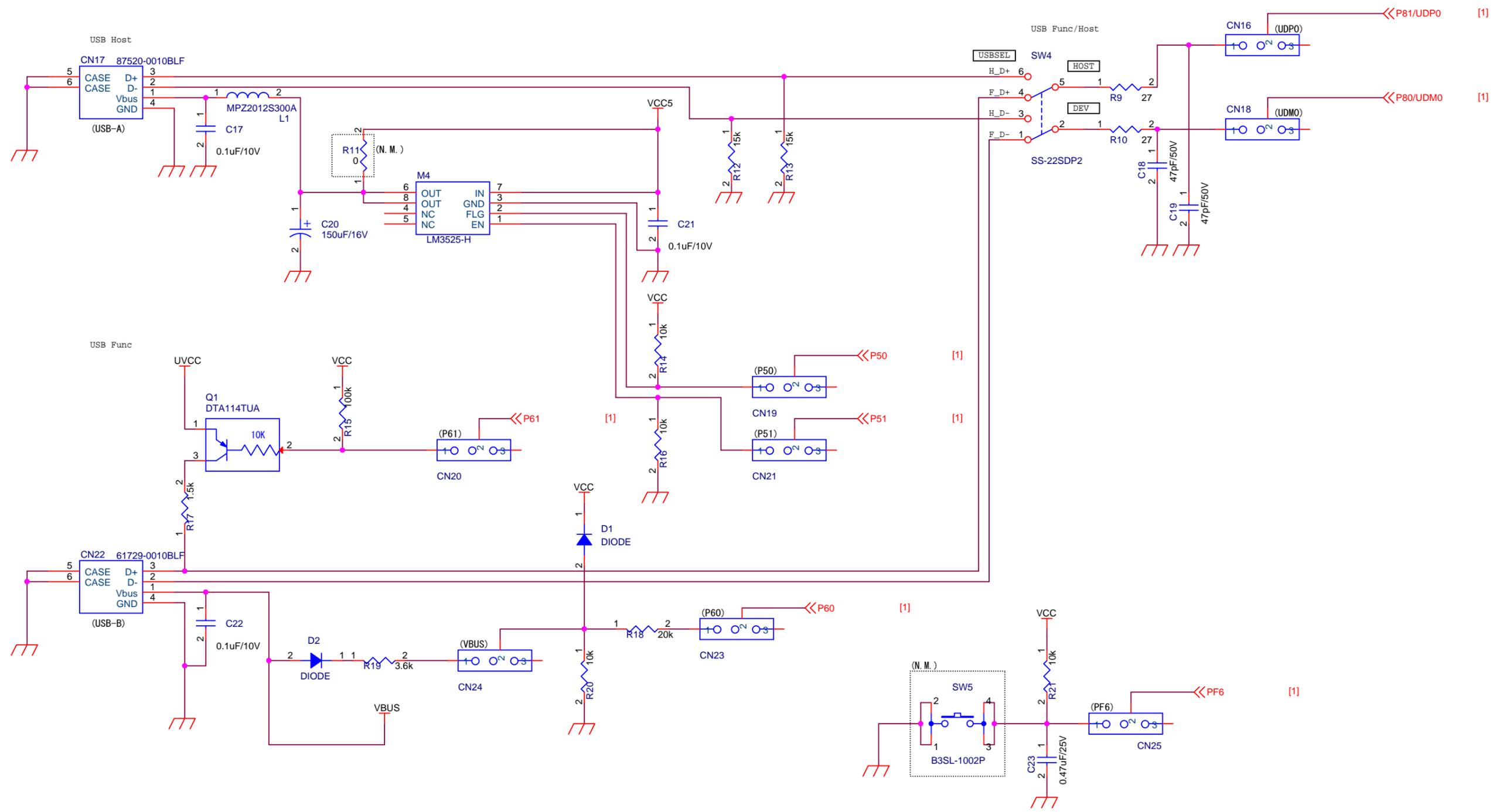
**CN34 JTAG  
TET SICA20C20Y-GA101  
(NOT MOUNTED)**



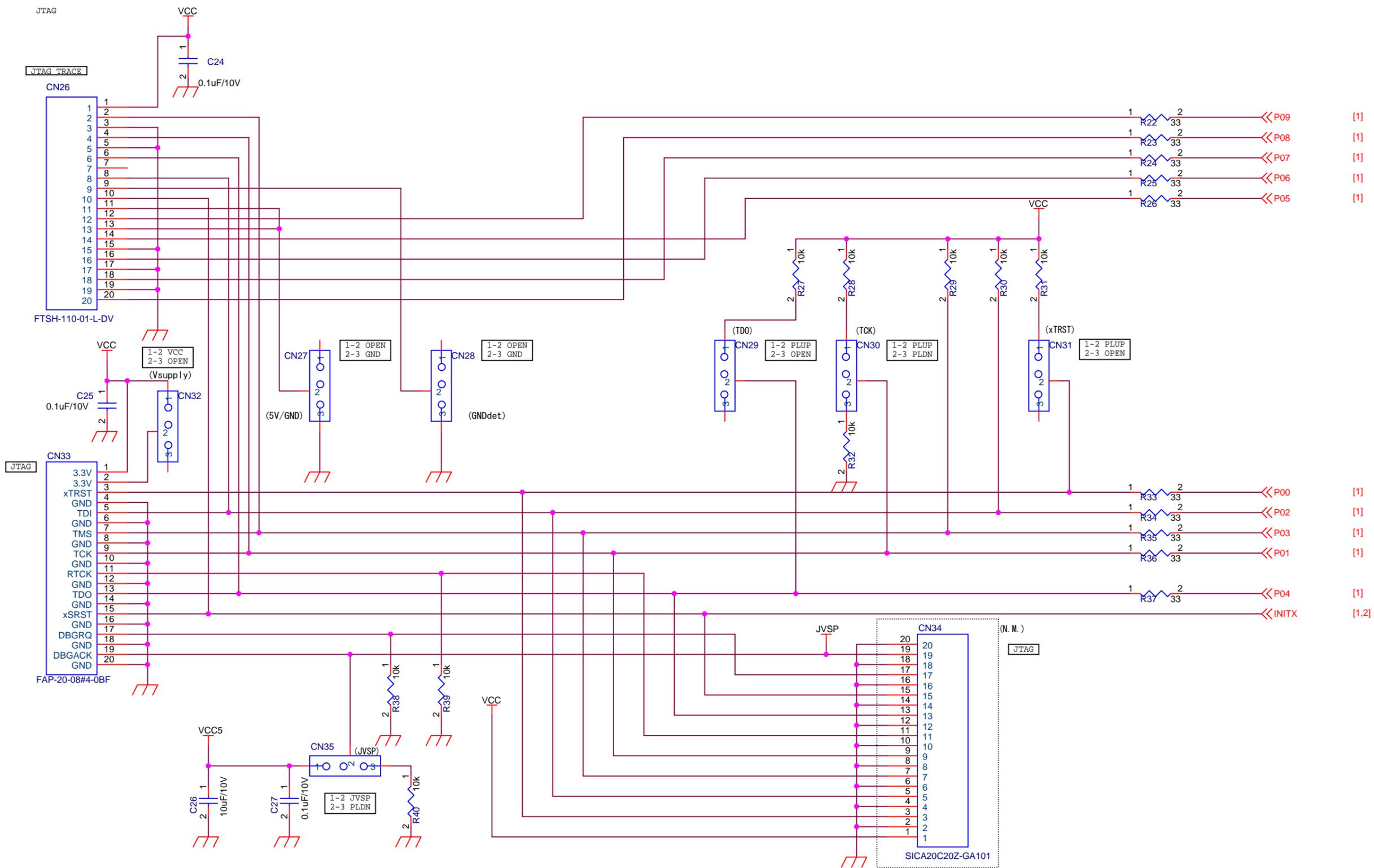




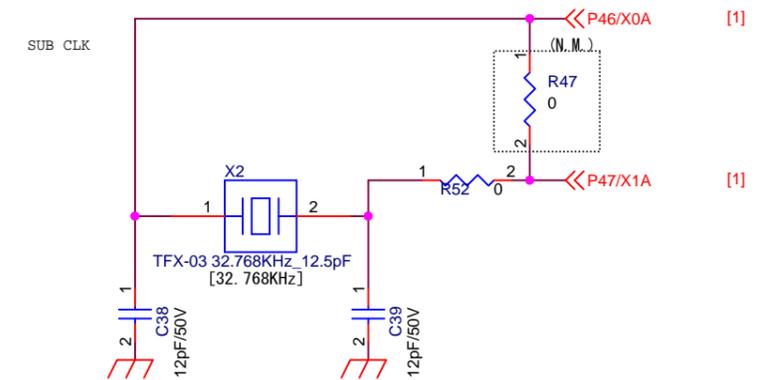
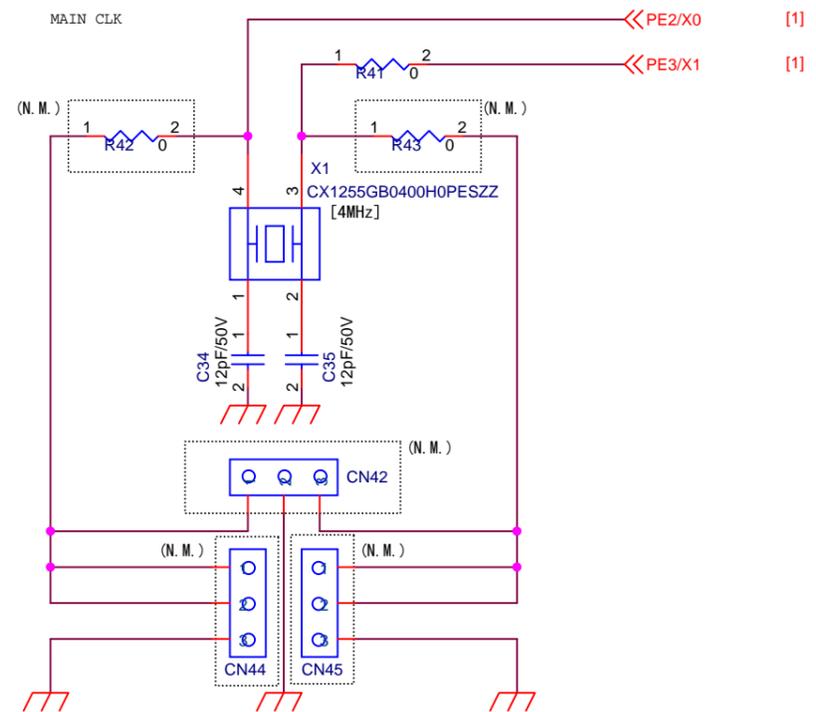
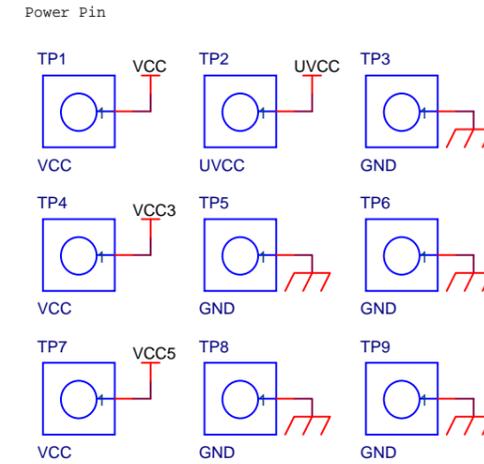
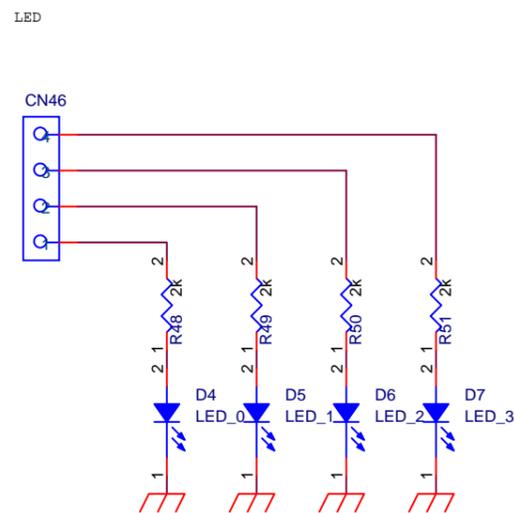
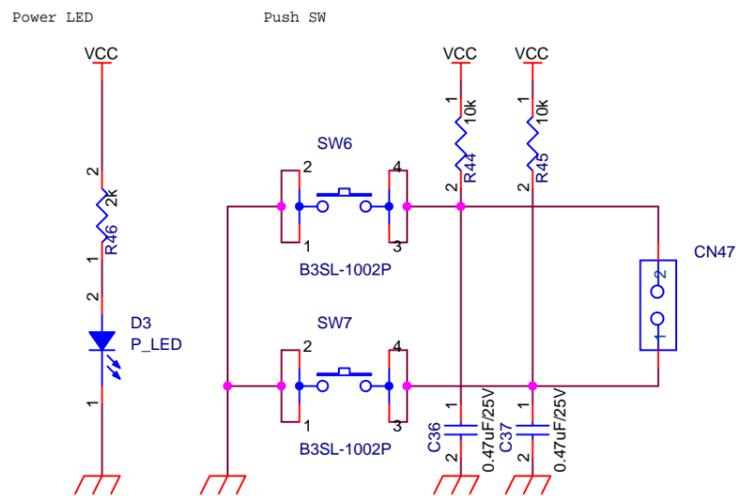
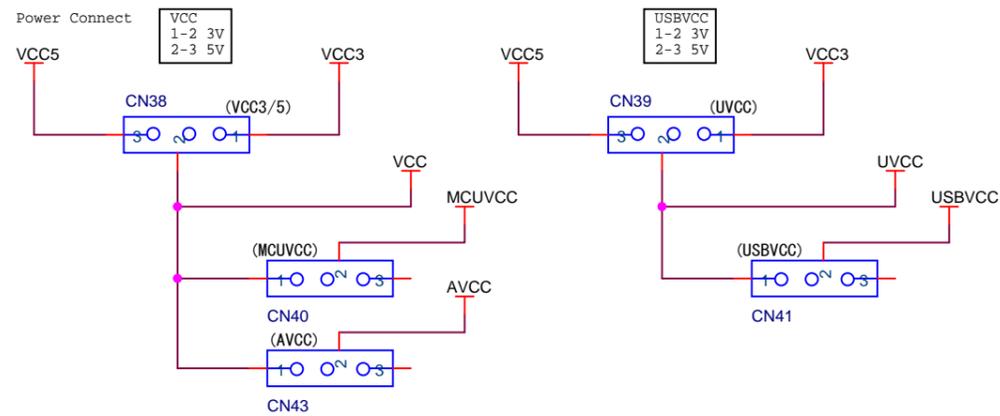
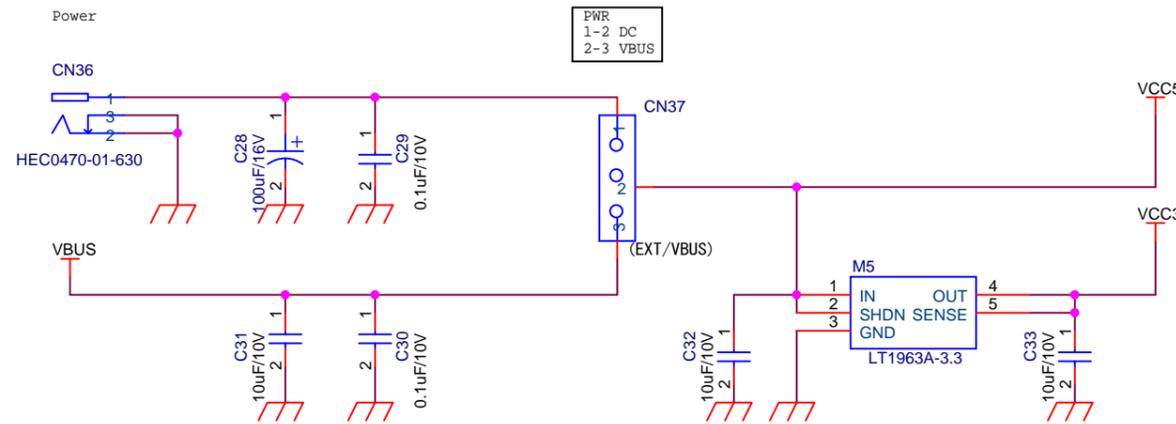
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MODE,RESET,CAN,RS232C										Draw.No.			
Ed.	Date	Desig.	Check	Appr.	Description					Fujitsu Semiconductor Limited			
Desig.				Check	Appr.					Sheet	2	/	5



					Title		FM3 Evaluation Board (LQFP-144)	
							USB	
					Draw.No.			
Ed.	Date	Desig.	Check	Appr.	Description			
Desig.				Check	Appr.		Fujitsu Semiconductor Limited	Sheet 3 / 5



					Title		FM3 Evaluation Board (LQFP-144)	
					JTAG			
					Draw.No.			
Ed.	Date	Desig.	Check	Appr.	Description			
Desig.			Check	Appr.				
						Fujitsu Semiconductor Limited	Sheet	4 / 5



					Title	
					FM3 Evaluation Board (LQFP-144)	
					POWER,LED,SWITCH,CLOCK	
					Draw.No.	
Ed.	Date	Desig.	Check	Appr.	Description	
Desig.			Check	Appr.		
					Fujitsu Semiconductor Limited	Sheet 5 / 5

## 中華人民共和國「電子情報製品污染防止管理弁法」の対応

Compliance with Administration on the Control of Pollution Caused by Electronic Information Products of the People's Republic of China

## 电子信息产品污染控制管理办法（第 39 号）



这标记是按照 2006 年 2 月 28 日公布的[电子信息产品污染控制管理办法]以及 SJ/T11364-2006[电子信息产品污染控制标识要求]在中国销售的电子信息产品的环保使用期限。如遵守关于这产品的安全或使用上的注意，在这期限内（从生产日期起算）不会因产品中的有害物质漏到外部，或发生突然变异，而引起环境污染和对人体或财产的重大影响。

## 产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷线路板	×	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 规定的限量要求以下。  
 ×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 规定的限量要求。