

# Renesas Starter Kit for RX130

## CPU Board Schematics

REV	REF	DATE	DRAWN BY
1.00	Release	28.10.2015	YOI

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### Note:

C : Capacitor  
D : Diode  
R : Fixed Resistor  
RV : Potentiometer  
U : Integrated Circuit  
X : Crystal, Oscillator  
RES : Reset Switch  
SW : Switch  
LED : Light Emitting Diode  
PWR : Power Jack  
J : Connector, Jumper

\* "DNF" marking means that component is not fitted by default.

### Board Code:

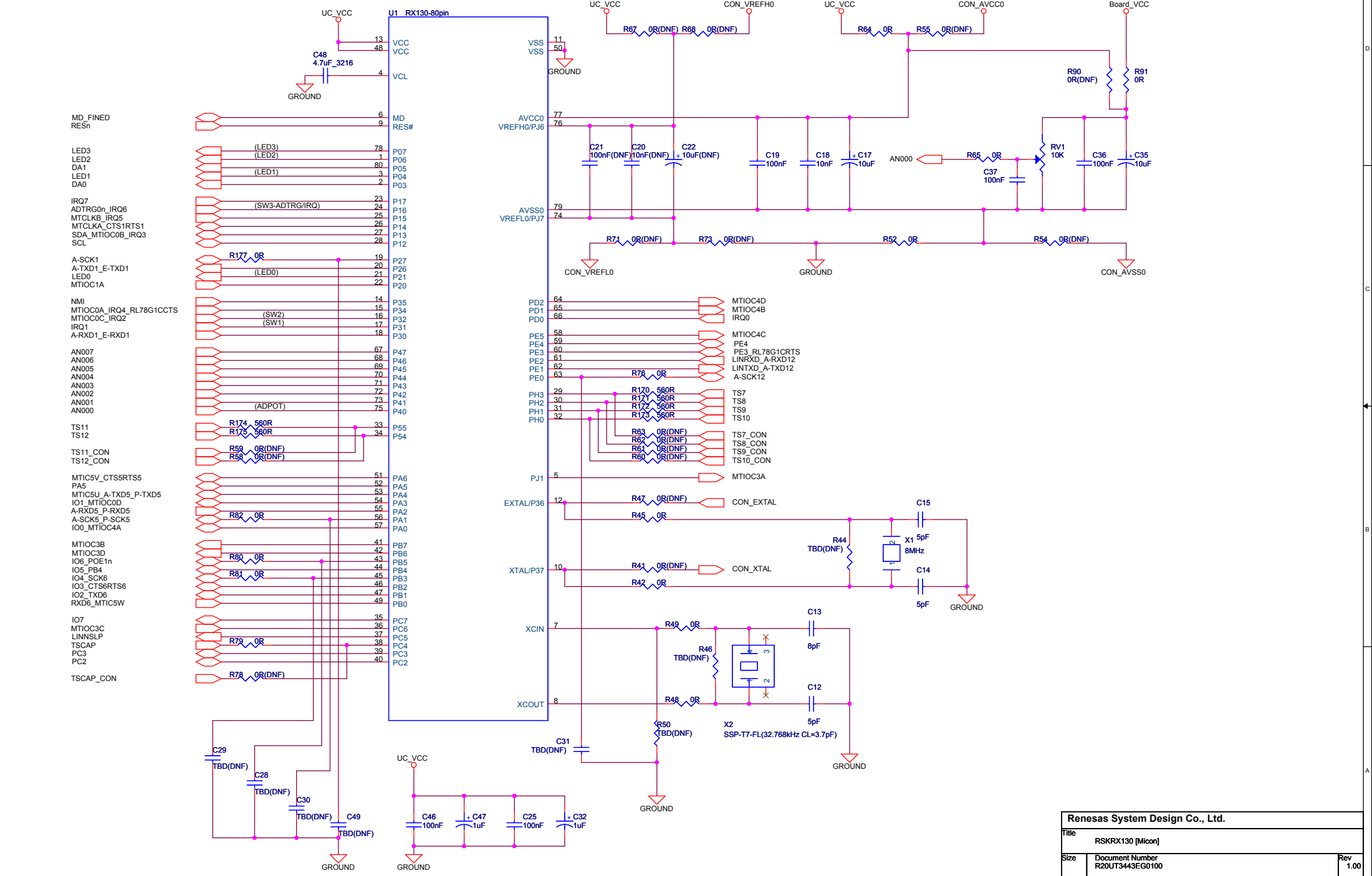
RTK5005130C00000BE : MP Board

REEL Drawing No. D014342\_04

Renesas System Design Co., Ltd.			
Title			
RSKRX130 [Index]			
Size	Document Number		Rev
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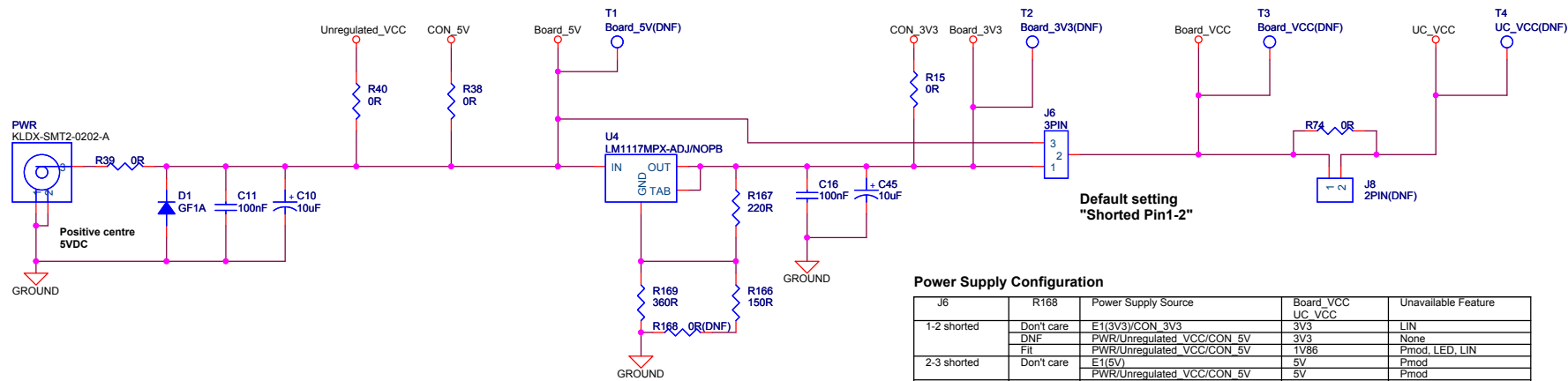
**RX130 Microcontroller**

**Note:**  
 Microcontroller pins are not described by the full pin function.  
 For full pin function details, refer to RX130 datasheet.



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Title RSKRX130 [Micon]		
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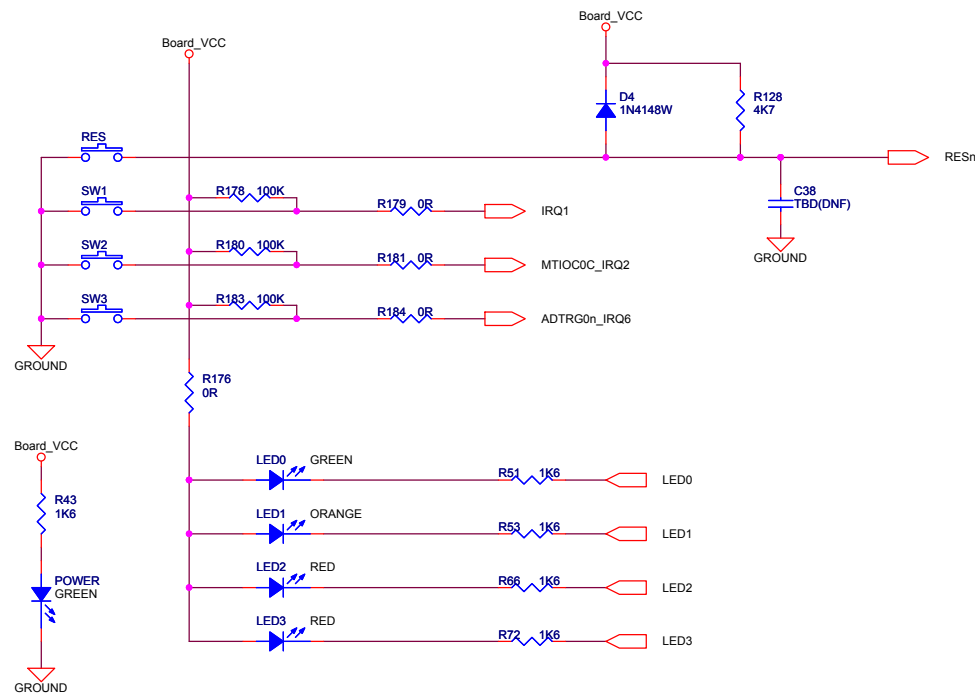
### Power Supply Unit



### Power Supply Configuration

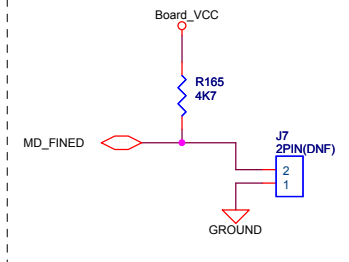
J6	R168	Power Supply Source	Board_VCC UC_VCC	Unavailable Feature
1-2 shorted	Don't care	E1(3V3)/CON_3V3	3V3	LIN
	DNF	PWR/Unregulated_VCC/CON_5V	3V3	None
	Fit	PWR/Unregulated_VCC/CON_5V	1V86	Pmod, LED, LIN
2-3 shorted	Don't care	E1(5V)	5V	Pmod
	Don't care	PWR/Unregulated_VCC/CON_5V	5V	Pmod
All Open	Don't care	DO NOT USE	DO NOT USE	DO NOT USE

### Switches, LEDs, RESET

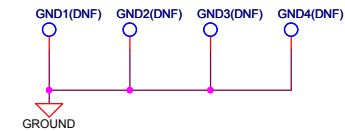


### MCU Operating Mode Configuration

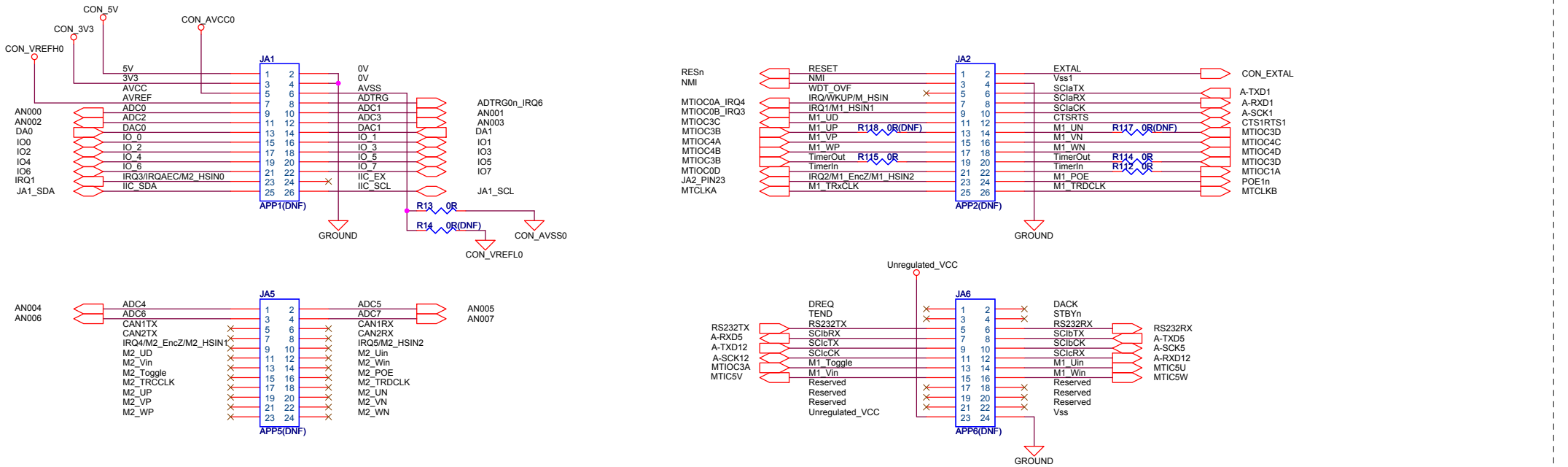
J7	Operating Mode
Open/DNF	Single Chip Mode
Shorted Pin	Boot Mode (SCI)



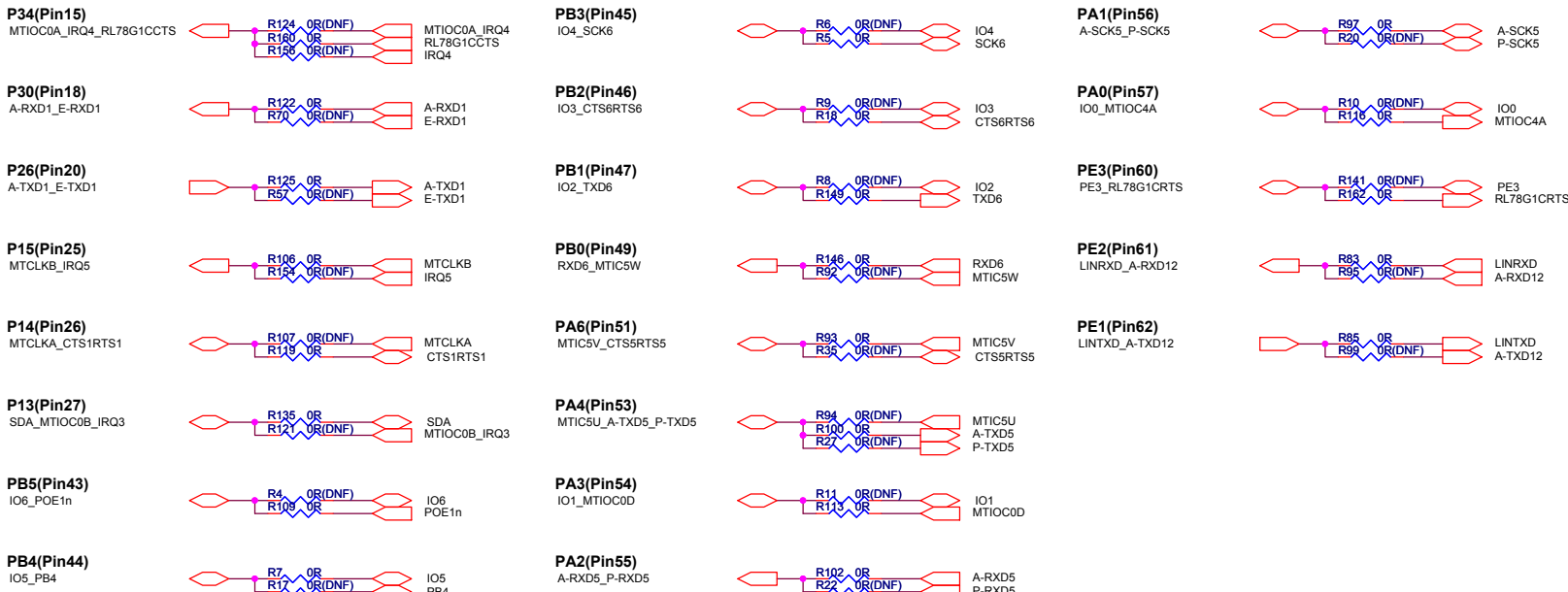
### Ground Test Point



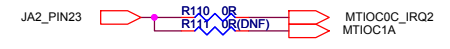
### Application Headers



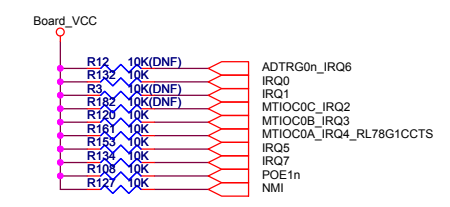
### MCU Pin Function Select

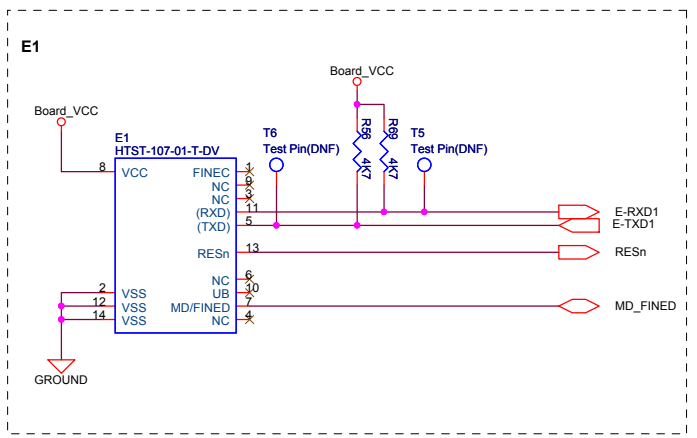


### Application Header Function Select



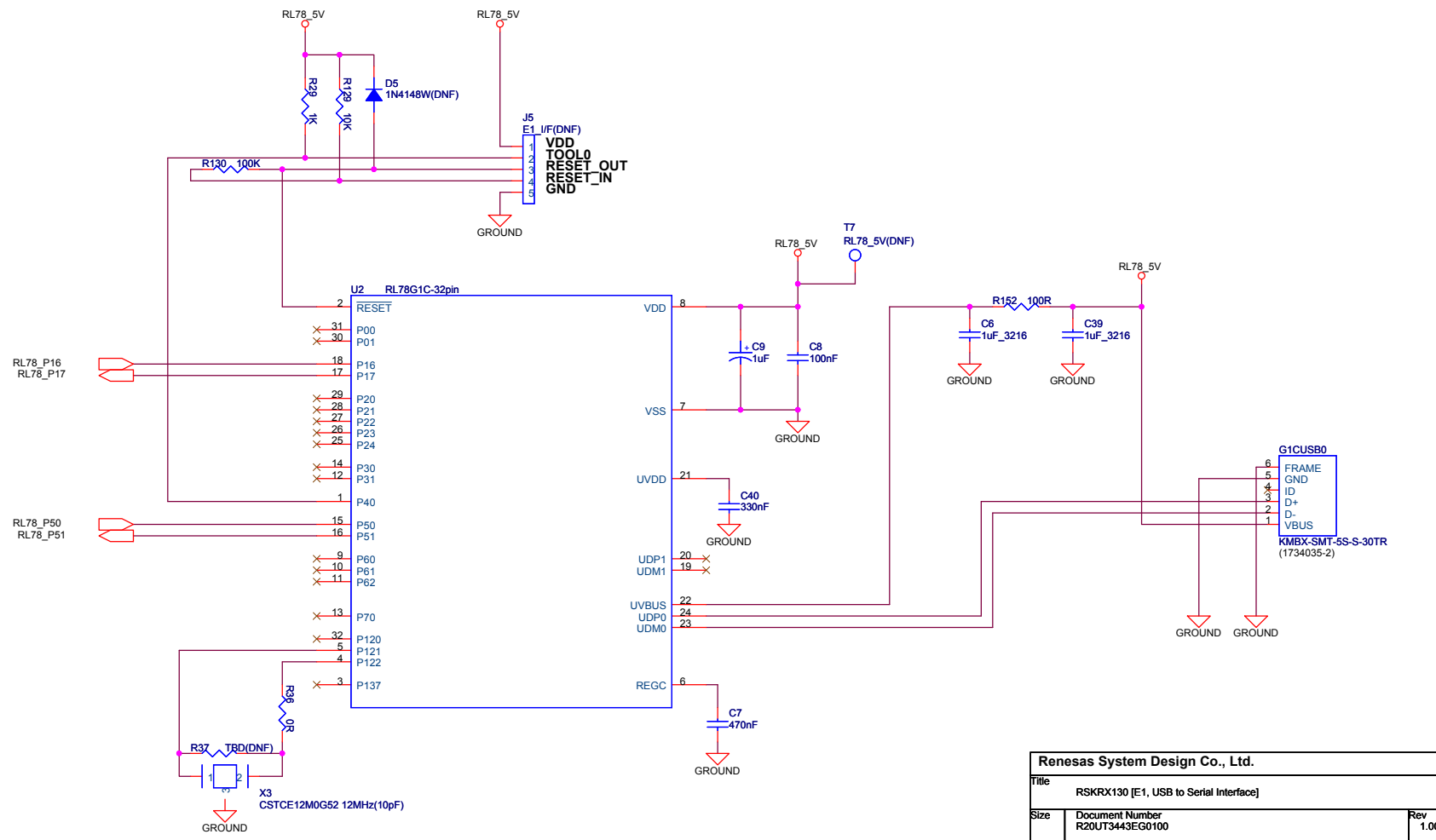
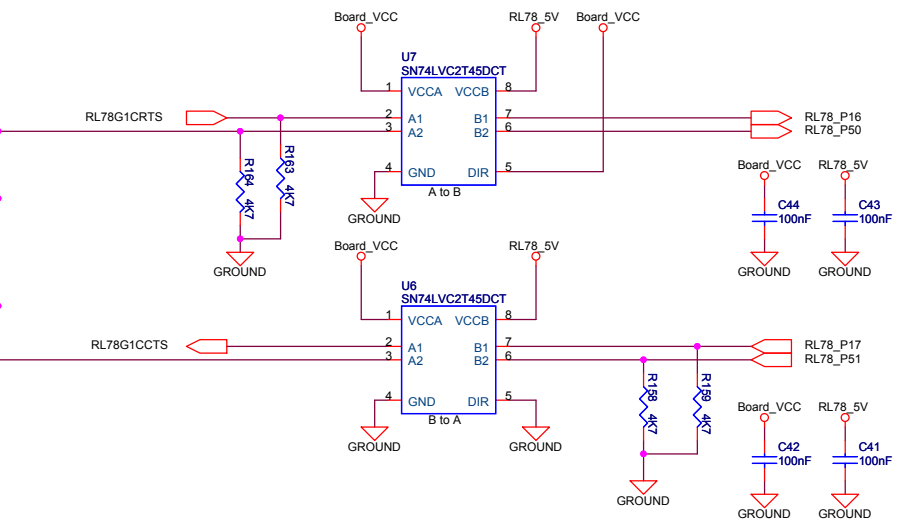
### Pull-up resistor





**USB to Serial Port Interface**

**To App Header**

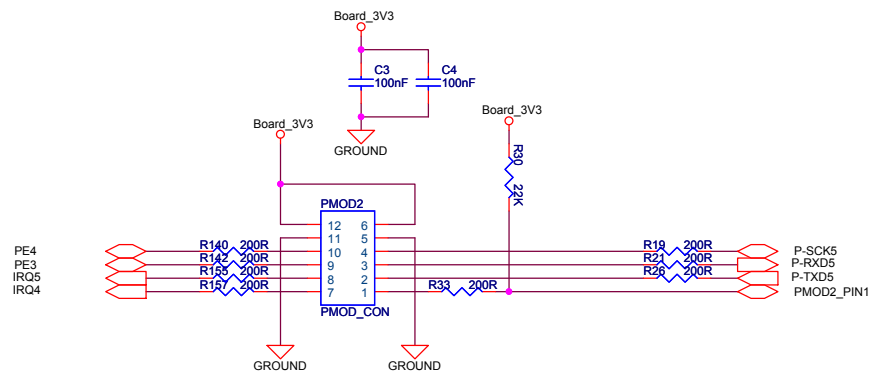
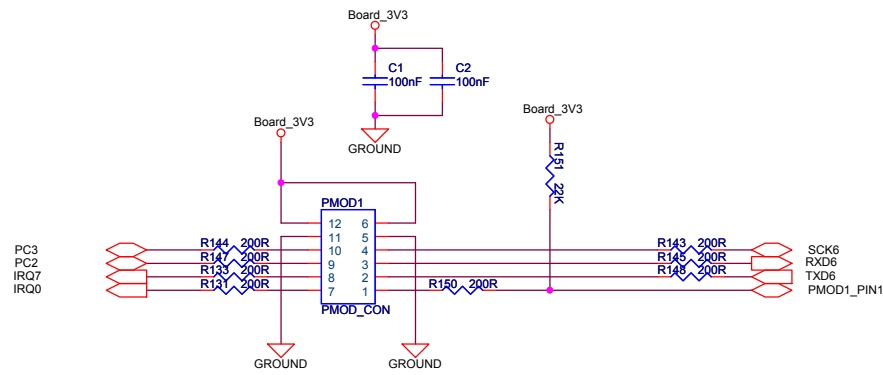


<b>Renesas System Design Co., Ltd.</b>		
Title	RSKRX130 [E1, USB to Serial Interface]	
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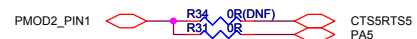
### Pmod Interface

**PMOD1: Angle type connector**

**PMOD2: Vertical type connector (spare)**



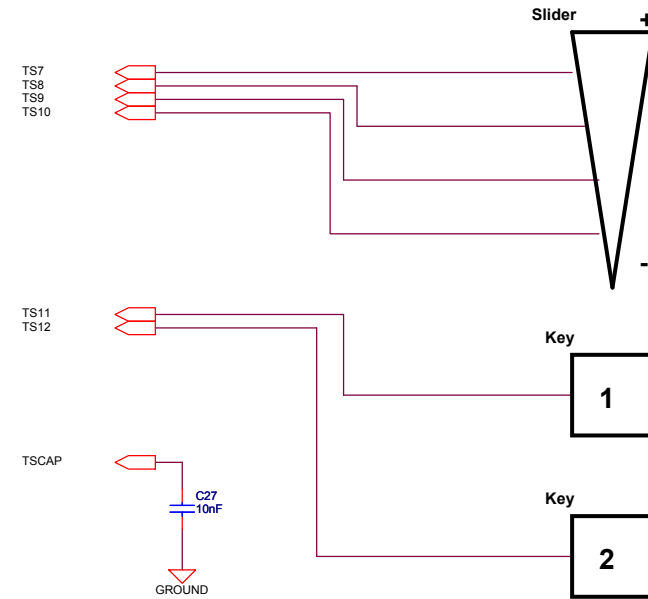
#### Pmod Function Select



### Touch Interface

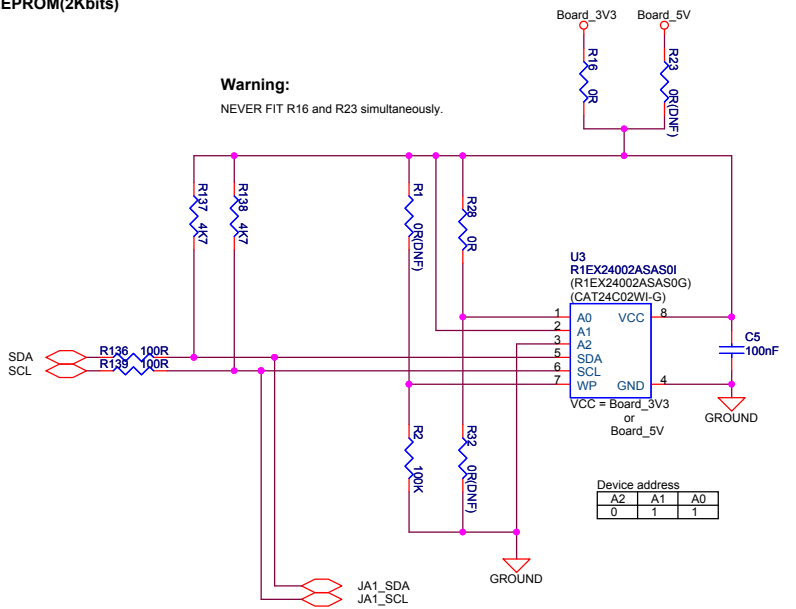
#### Note:

Touch signals require careful route pattern.  
For technical design information, please refer to application note 'CTSU Basis of Cap touch detection' (R30AN0218EJ).

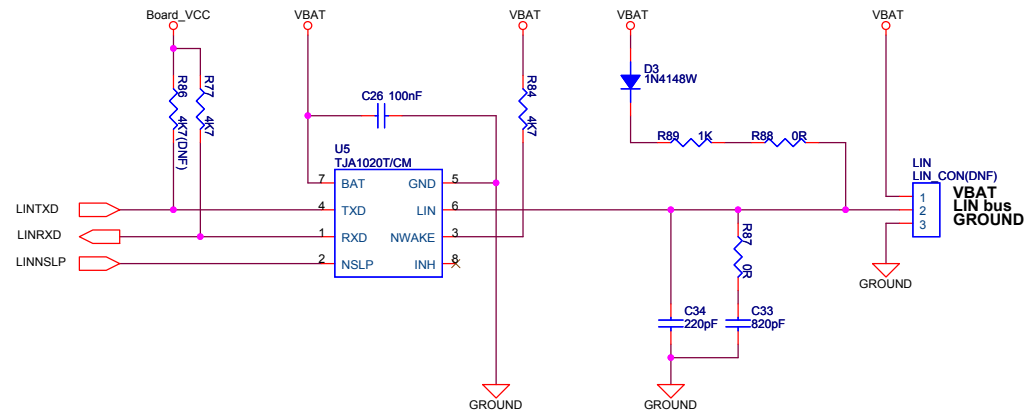


IIC EEPROM(2Kbits)

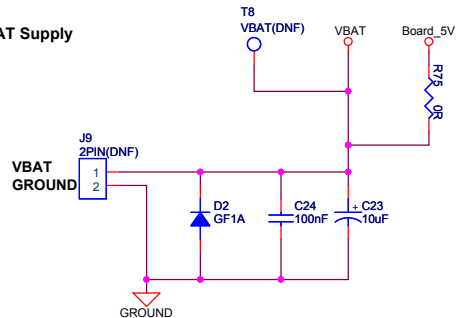
**Warning:**  
NEVER FIT R16 and R23 simultaneously.



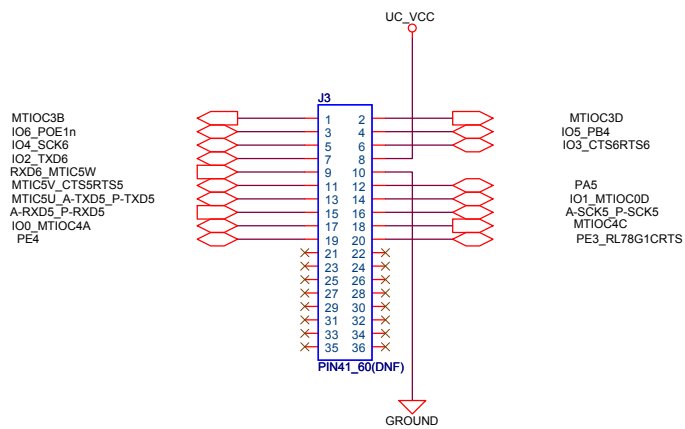
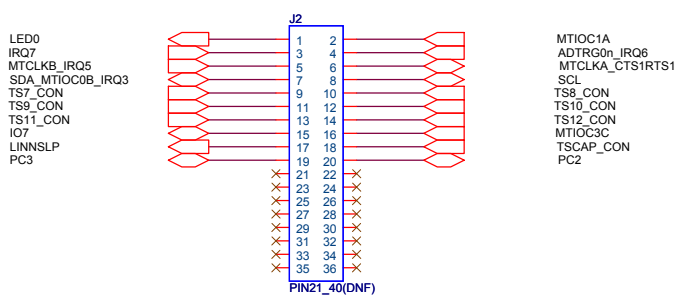
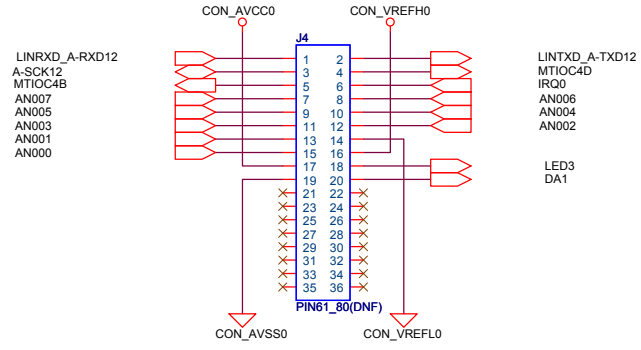
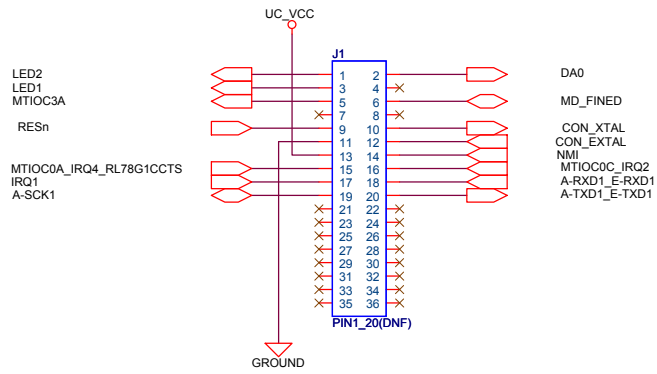
LIN



VBAT Supply



Microcontroller Pin Headers





# Revision History

REV	DATE	PAGE	DESCRIPTION
1.00	28.10.2015	---	1st release edition.

<b>Renesas System Design Co., Ltd.</b>			
Title			
RSKRX130 [Revision History]			
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	R20UT3443EG0100		1.00
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