REV	REF	DATE	DRAWN BY
1.00	Release	13.06.2013	YOI

Renesas Starter Kit for RX111
CPU Board Schematics

Note:

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

* "DNF" marking means that component does not fit by default.

Board Code:

R0K505111C000BE : WS/MP Board

REEL Drawing No. D011672_04

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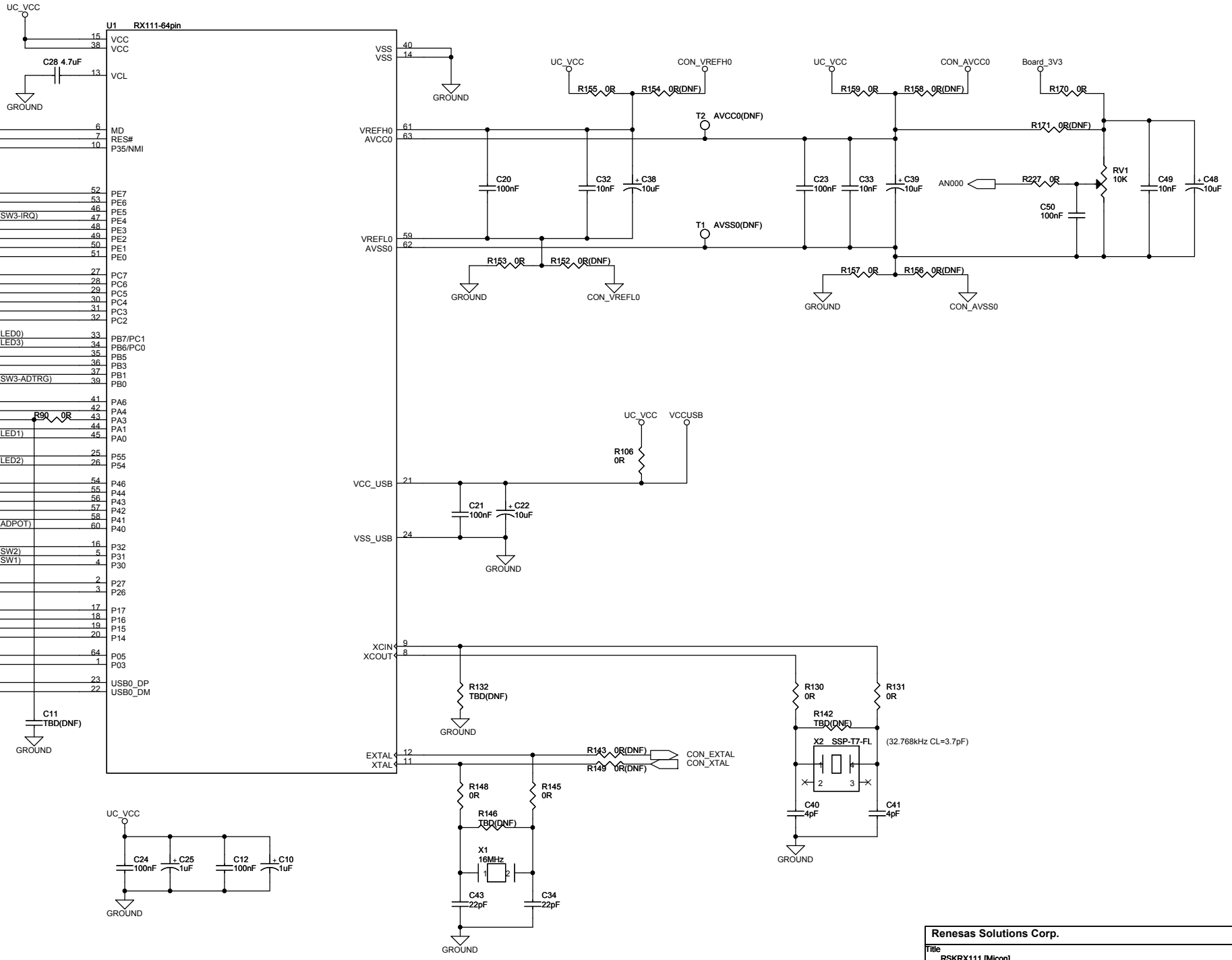
RX111 Microcontroller

Note:

Microcontroller's pins are not described by the full pin function.
For full pin function details, refer to latest RX111 datasheet.



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Title: RSKRX111 [Micon]		
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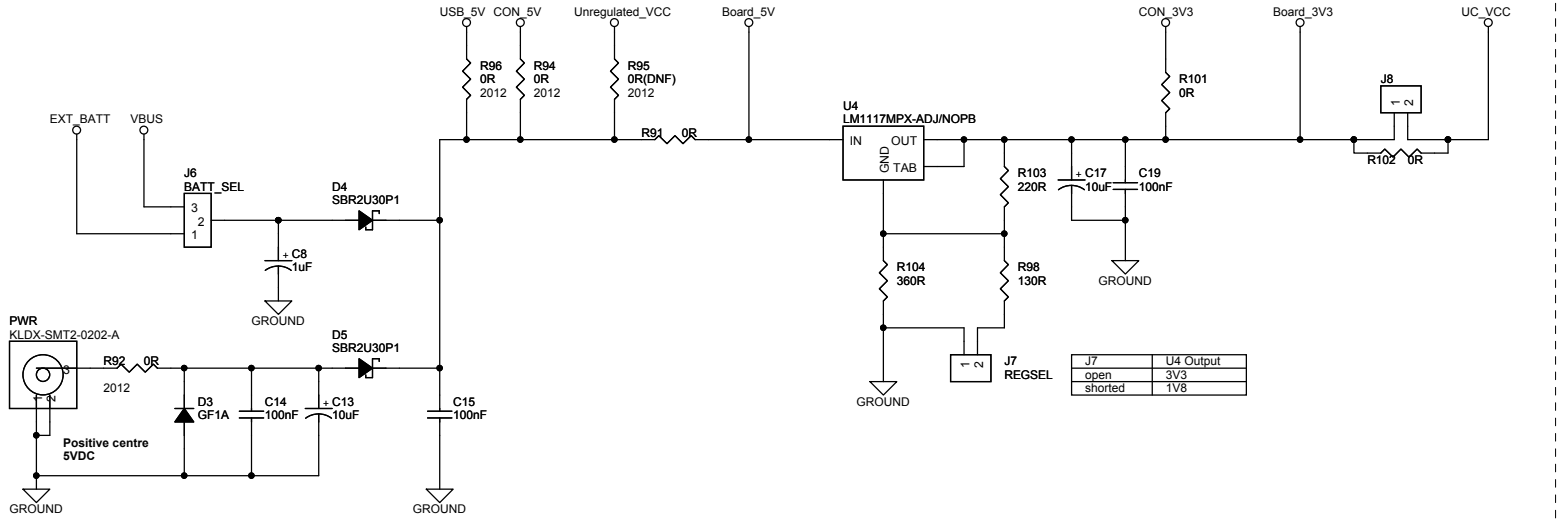
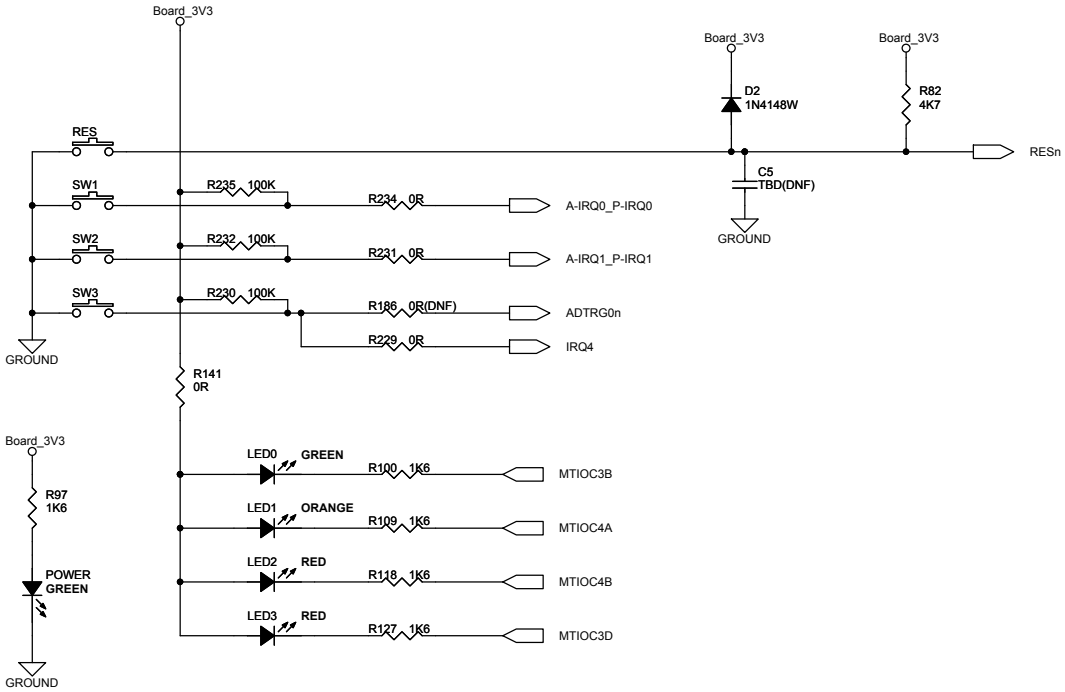
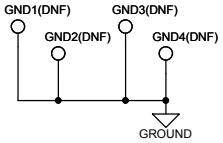
Power Supply Unit



Switches, LEDs, RESET



Ground Test Point



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Title: RSKRX111 [PSU, RESET, SW, LED]		
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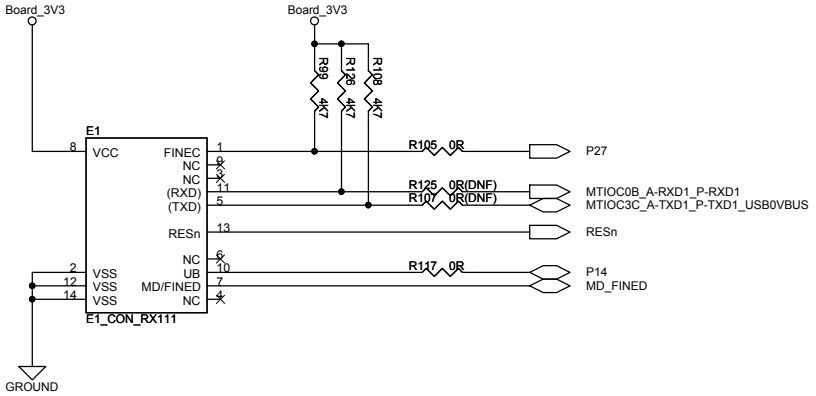
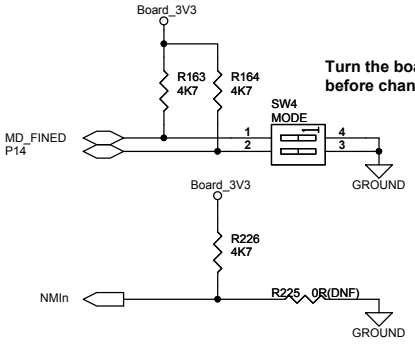
E1 Emulator Interface



MCU Mode Settings



Turn the board power off before changing SW4 settings.

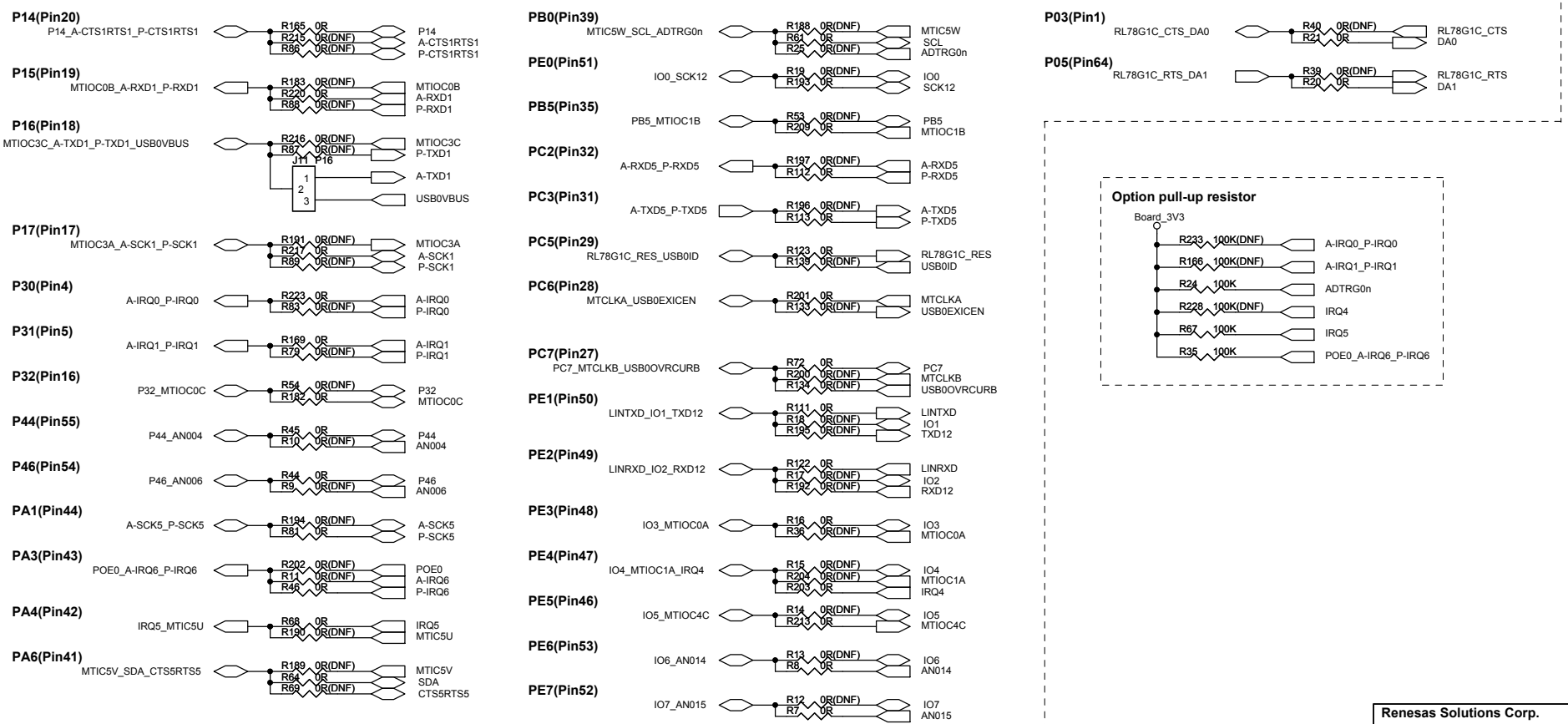
MCU Operating Mode Configuration

SW4 Pin1	SW4 Pin2	Operating Mode
OFF	Don't care	Single Chip Mode
ON	OFF	Boot Mode (SCI)
ON	ON	USB Boot Mode

USB Boot Mode Power Configuration

R225	Power Configuration for USB Boot Mode
Fit	Self Powered
Remove	Bus Powered

MCU Pin Function Select



Option pull-up resistor

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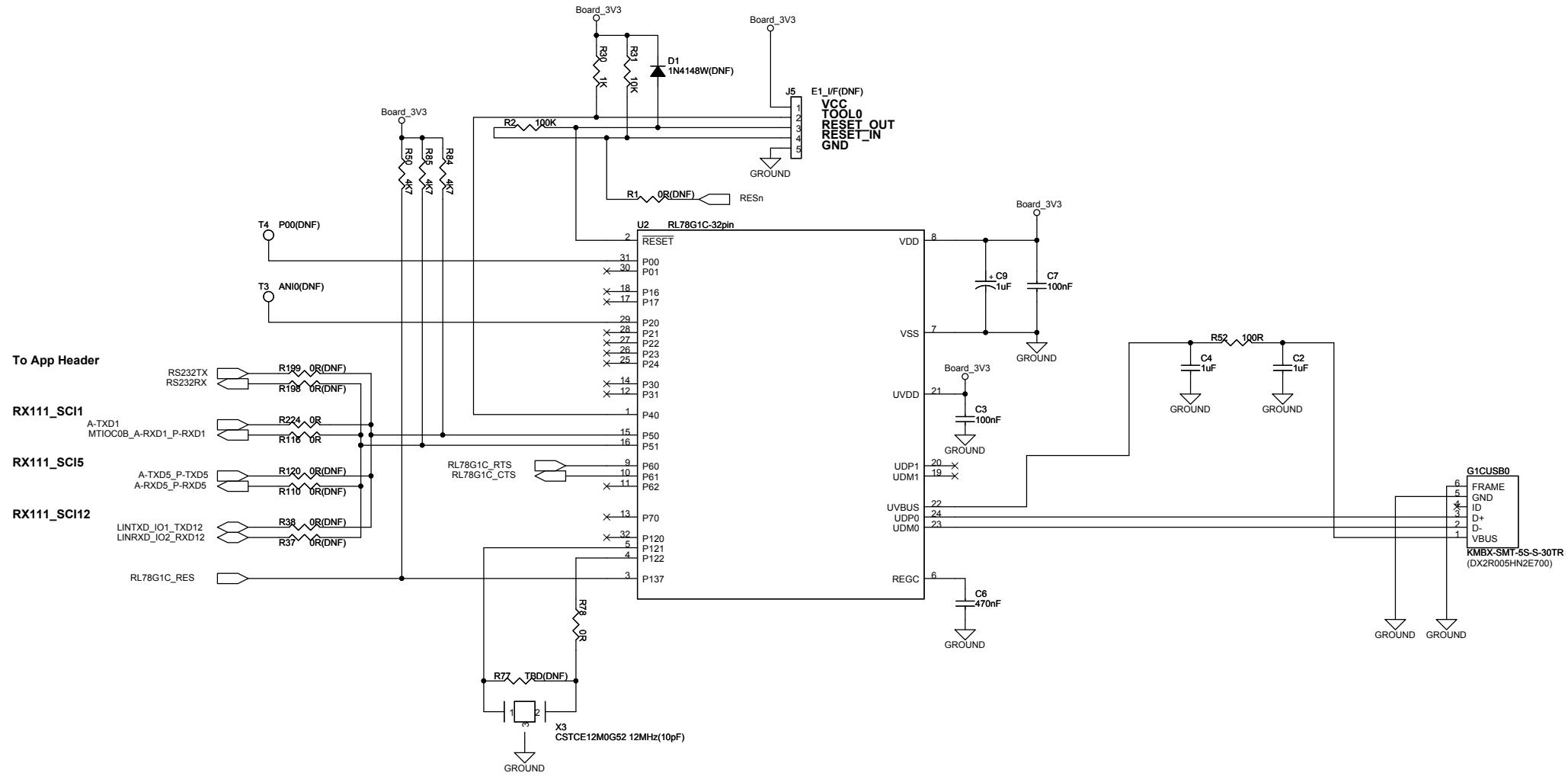
Virtual COM Interface



Renesas Solutions Corp.		
Title: RSKRX111 [Virtual COM Interface]		
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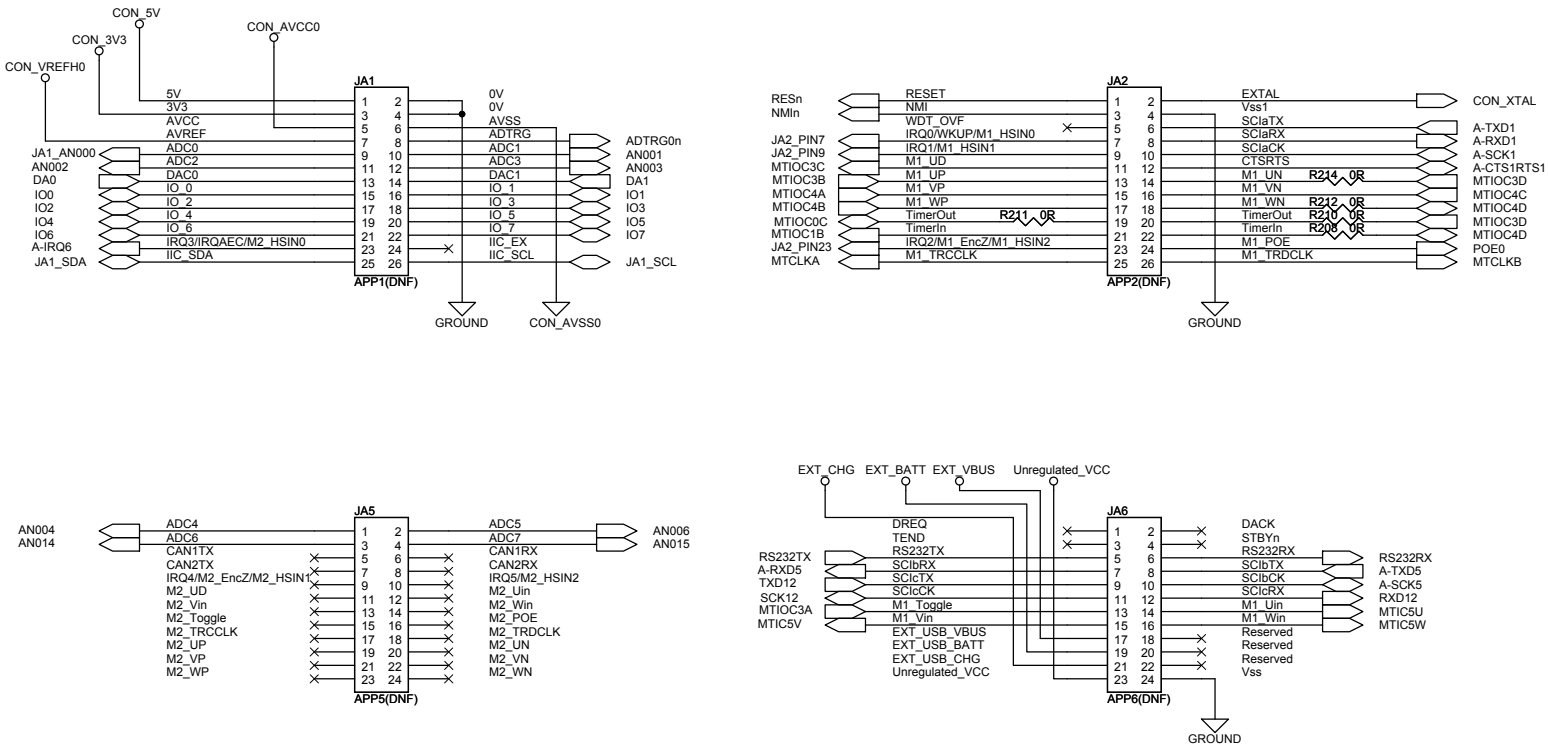
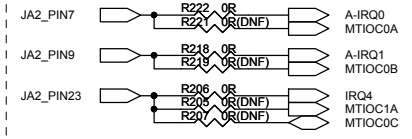
Application Headers



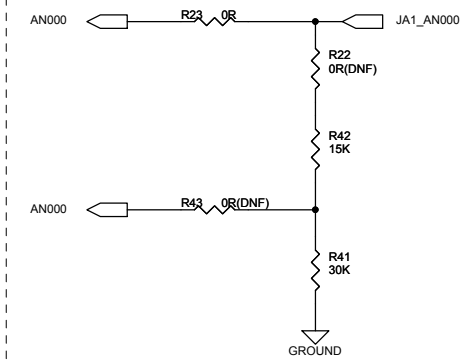
NOTE:

EXT_USB_BATT, EXT_USB_CHG and EXT_USB_VBUS are not standard RSK App Header Specification.
Normally, JA6.Pin17, JA6.Pin19 and JA6.Pin21 are reserved header.

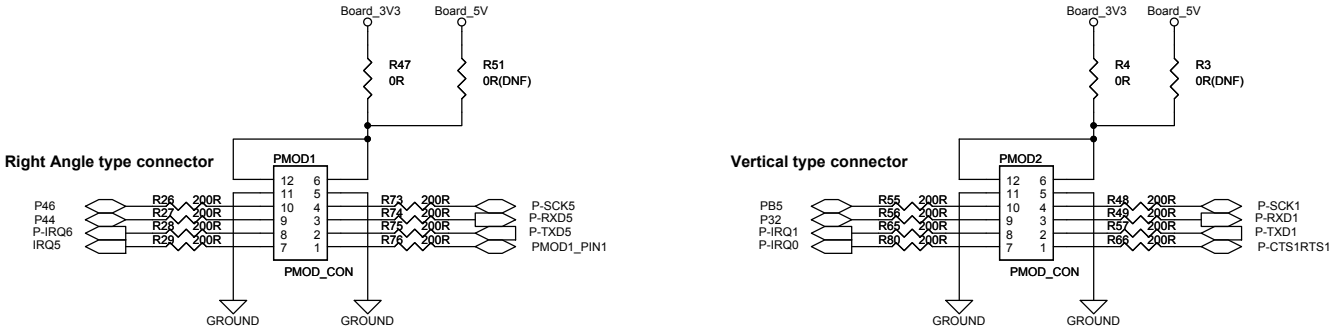
Application Header Function Select



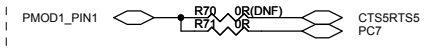
External USB Battery Charge IC Monitor



Pmod



PMod Header Function Select



Renesas Solutions Corp.		
Title: RSKRX111 [Application Headers, Pmod]		
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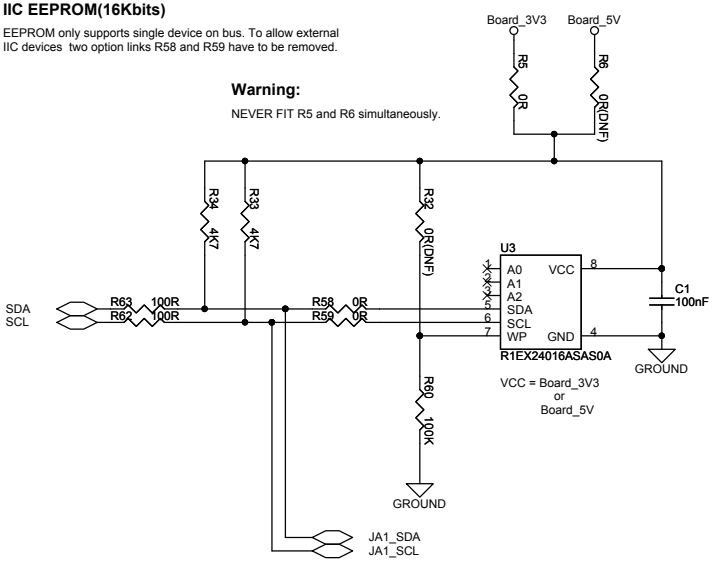
IIC EEPROM(16Kbits)

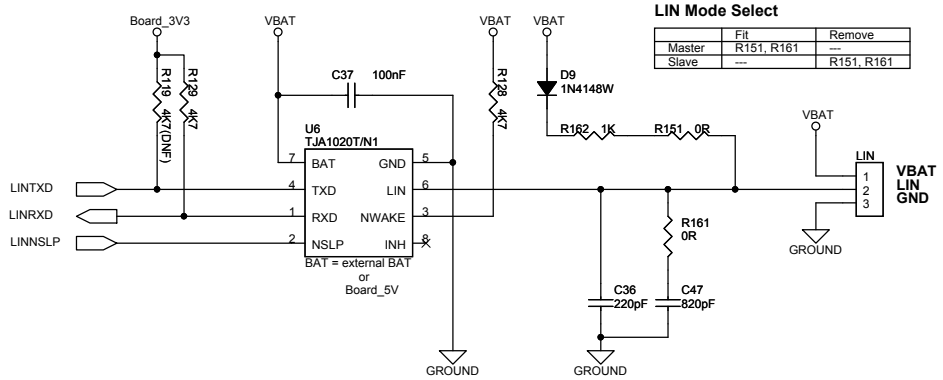
EEPROM only supports single device on bus. To allow external IIC devices two option links R58 and R59 have to be removed.

Warning:

NEVER FIT R5 and R6 simultaneously.



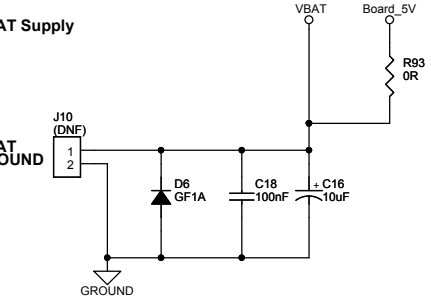
LIN



LIN Mode Select

	Fit	Remove
Master	R151, R161	---
Slave	---	R151, R161

VBAT Supply



Warning:
As for default setting, Board_5V is supplied to VBAT via R93.
When external power is supplied to VBAT, please be sure to remove R93.

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Title: RSKRX111 [IIC EEPROM, LIN]		
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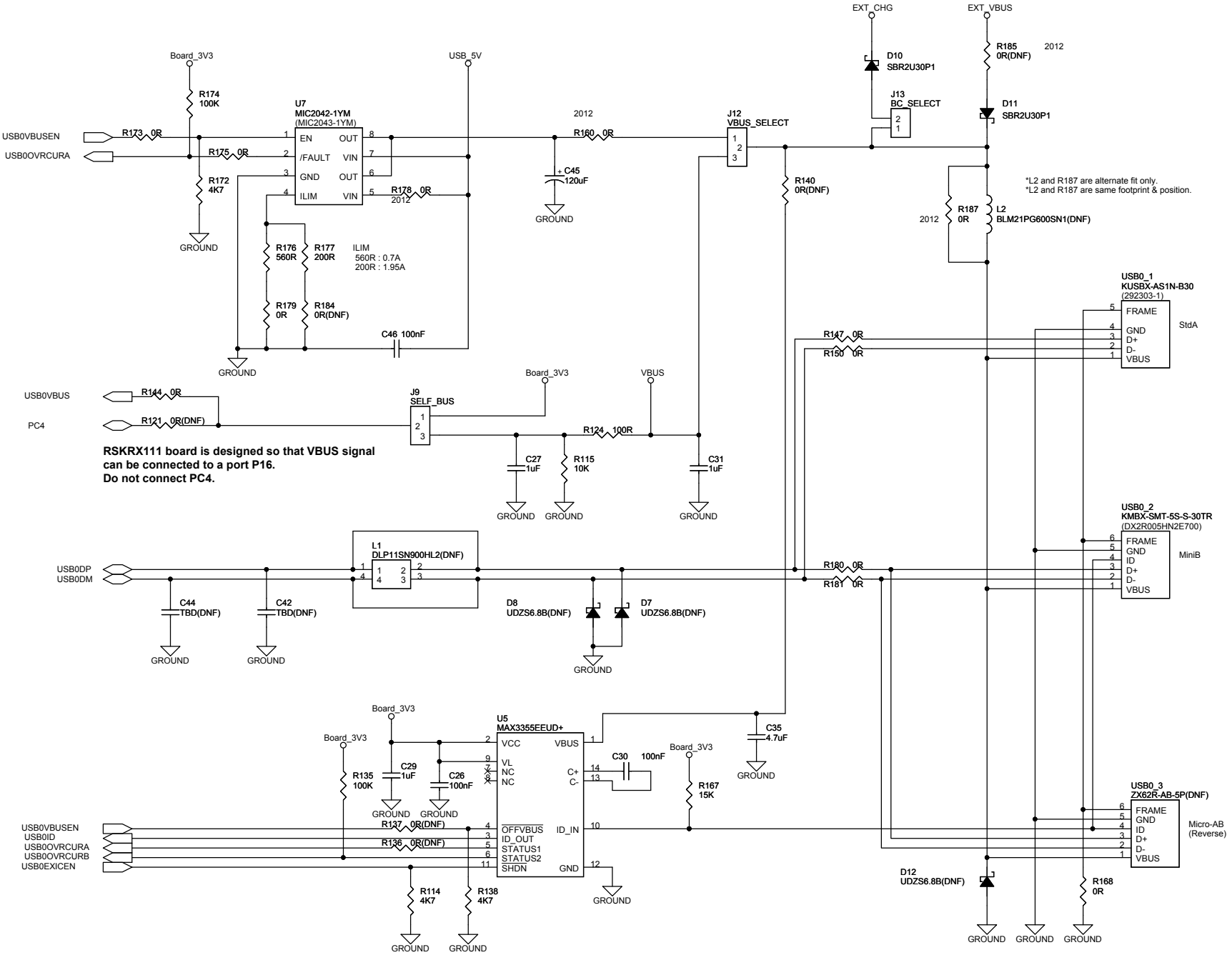
USB0 Host/Function/OTG

VBUS0 Self-powered/Bus-powered Configuration for Function Mode

J9	
1-2 shorted	Bus-powered
2-3 shorted	Self-powered



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Title: RSKRX111 [USB]		
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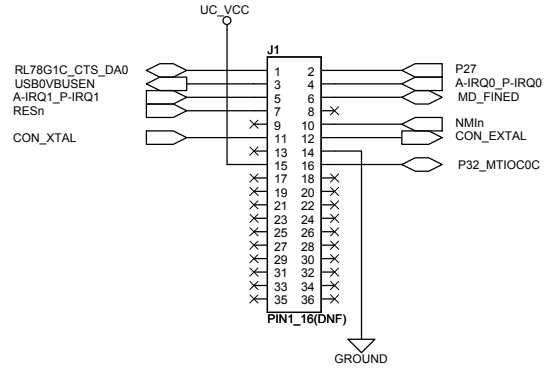
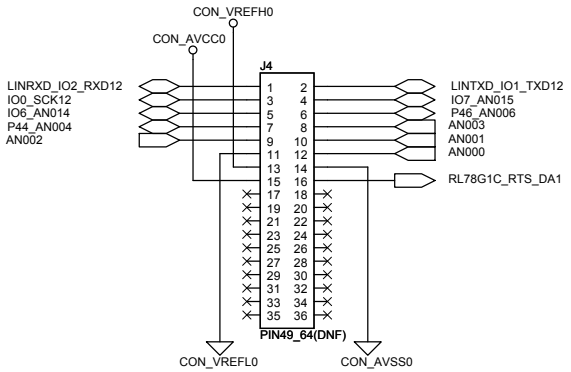
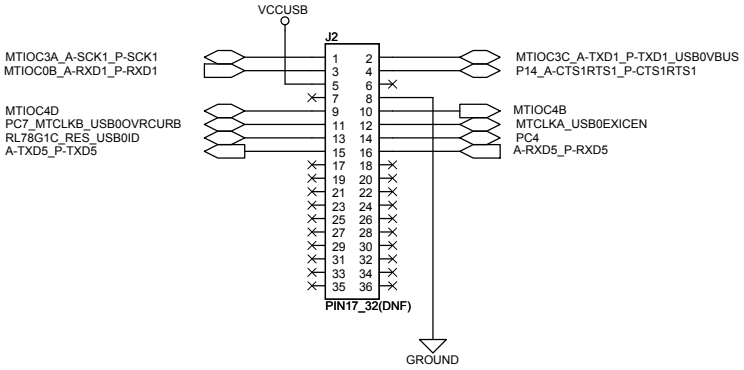
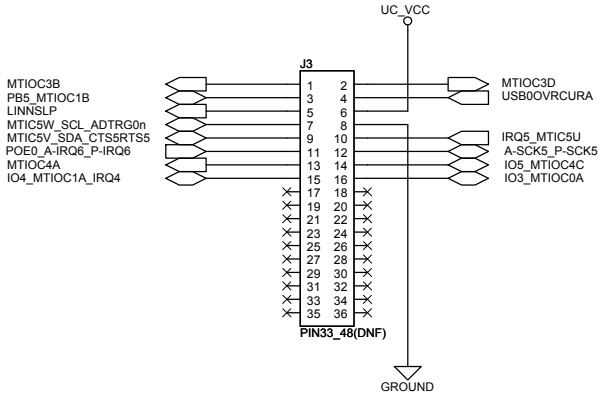
Microcontroller Pin Headers









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Title: RSKRX111 [Microcontroller Pin Headers]		
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Revision History

REV	DATE	PAGE	DESCRIPTION
1.00	13.06.2013	---	1st release edition.

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