

Renesas Starter Kit for RX66T CPU Board Schematics

REV	REF	DATE	DRAWN BY
1.00	Release	14.06.2018	KOS

SHEET	DESCRIPTION
1	INDEX
2	RX66T MCU
3	MCU Pin Function Select
4	PSU
5	E1/E2 Lite Emulator, MCU & Emulator Mode Setting, Pull-up Resistors
6	Reset, Switches, LEDs
7	USB to Serial Interface
8	Pmod Interface, IIC EEPROM
9	Application Headers
10	MCU Pin Headers
11	CAN, LIN

Note:

- C : Capacitor
- D : Diode
- R : Fixed Resistor
- RV : Potentiometer
- MR : Resistor Array
- L : Inductor
- 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:

RTK50566T0C00000BE : RSKRX66T MP Board

Abbreviations:

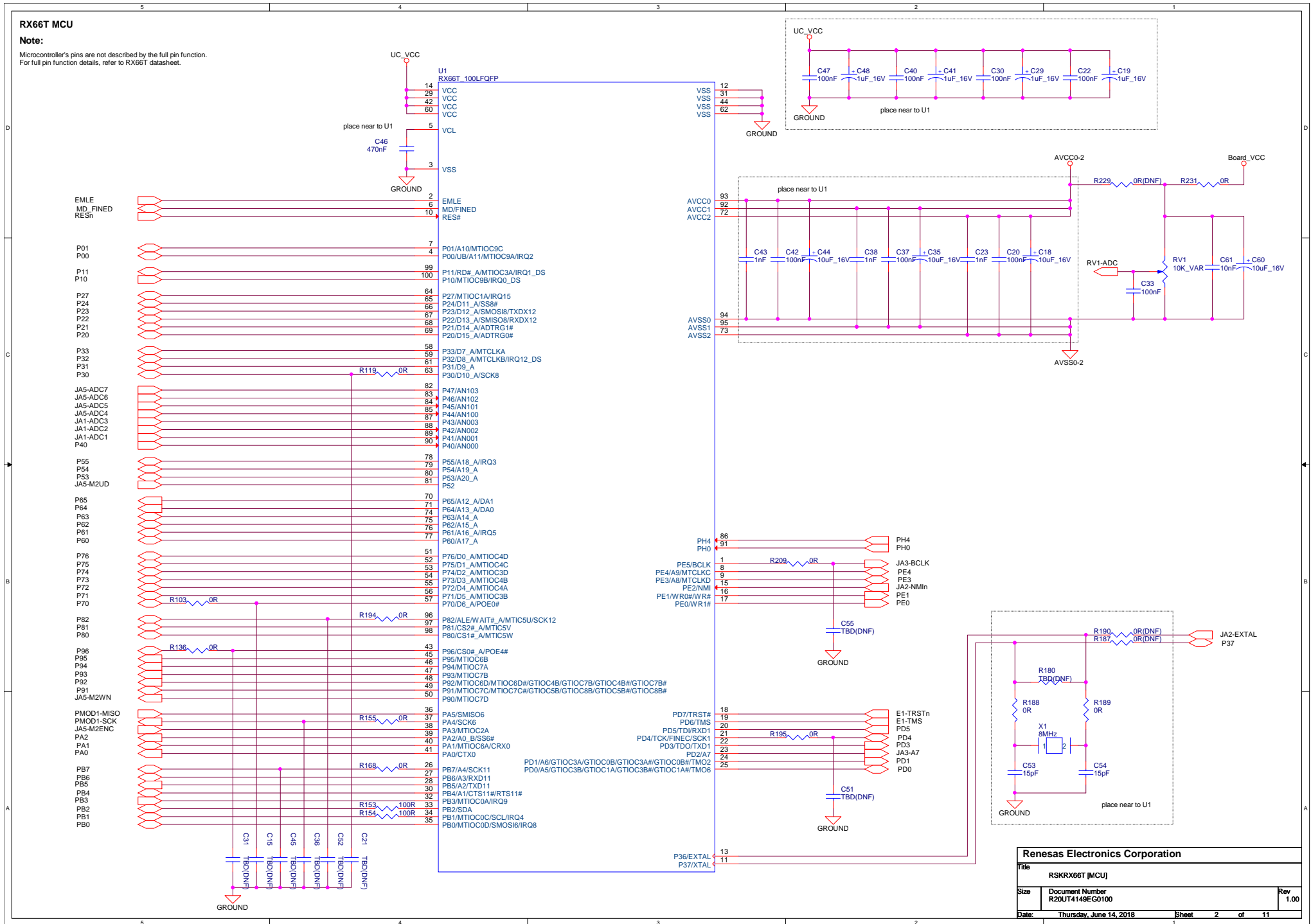
- CAN : Controller Area Network
- IIC : Philips(TM) Inter-Integrated Circuit Connection Bus
- LED : Light Emitting Diode
- LIN : Local Interconnect Network
- MCU : Microcontroller Unit
- PSU : Power Supply Unit
- RSK : Renesas Starter Kit
- USB : Universal Serial Bus

REEL Drawing No. D015892_04

Renesas Electronics Corporation			
Title RSKRX66T [Index]			
Size	Document Number R20UT4149EG0100	Rev	1.00
Date:	Thursday, June 14, 2018	Sheet	1 of 11

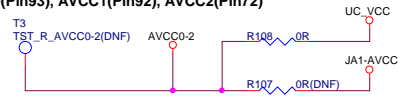
RX66T MCU

Note:
Microcontroller's pins are not described by the full pin function.
For full pin function details, refer to RX66T datasheet.

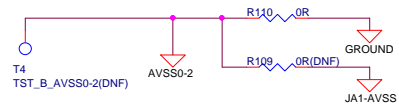


MCU Pin Function Select

AVCC0(Pin93), AVCC1(Pin92), AVCC2(Pin72)



AVSS0(Pin94), AVSS1(Pin95), AVSS2(Pin73)



RES#(Pin10)

RESn



EMLE(Pin2)

EMLE



MD_FINED(Pin6)

MD_FINED



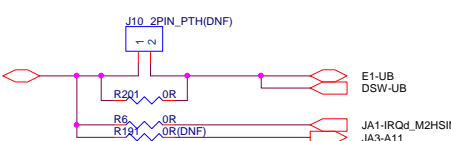
P01(Pin7)

P01



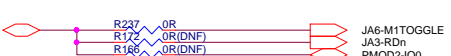
P00(Pin4)

P00



P11(Pin99)

P11



P10(Pin100)

P10



P27(Pin64)

P27



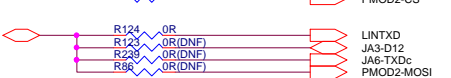
P24(Pin65)

P24



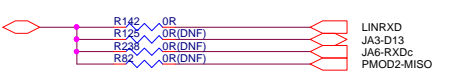
P23(Pin66)

P23



P22(Pin67)

P22



P21(Pin68)

P21



P20(Pin69)

P20



P33(Pin58)

P33



P32(Pin59)

P32



P31(Pin61)

P31



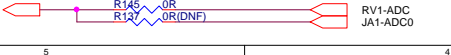
P30(Pin63)

P30



P40(Pin90)

P40



P55(Pin78)

P55



P54(Pin79)

P54



P53(Pin80)

P53



P65(Pin70)

P65



P64(Pin71)

P64



P63(Pin74)

P63



P62(Pin75)

P62



P61(Pin76)

P61



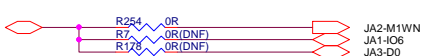
P60(Pin77)

P60



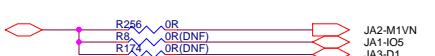
P76(Pin51)

P76



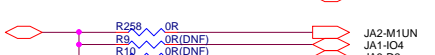
P75(Pin52)

P75



P74(Pin53)

P74



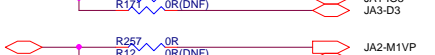
P73(Pin54)

P73



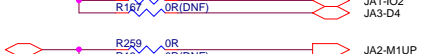
P72(Pin55)

P72



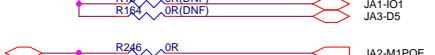
P71(Pin56)

P71



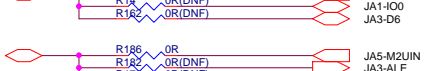
P70(Pin57)

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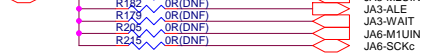
P82(Pin96)

P82



P81(Pin97)

P81



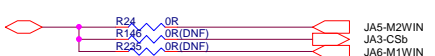
P80(Pin98)

P80



P96(Pin43)

P96



P95(Pin45)

P95



P94(Pin46)

P94



P93(Pin47)

P93



P92(Pin48)

P92



P91(Pin49)

P91



PA2(Pin39)

PA2



PA1(Pin40)

PA1



PA0(Pin41)

PA0



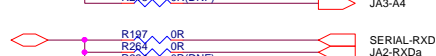
PB7(Pin26)

PB7



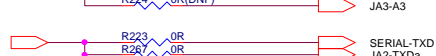
PB6(Pin27)

PB6



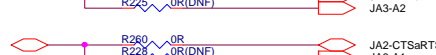
PB5(Pin28)

PB5



PB4(Pin30)

PB4



PB3(Pin32)

PB3



PB2(Pin33)

PB2



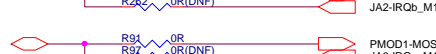
PB1(Pin34)

PB1



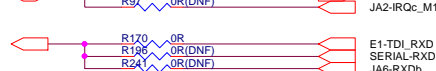
PB0(Pin35)

PB0



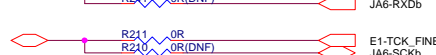
PD5(Pin20)

PD5



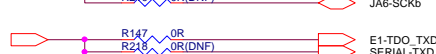
PD4(Pin21)

PD4



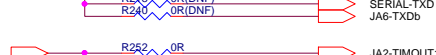
PD3(Pin22)

PD3



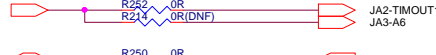
PD1(Pin24)

PD1



PD0(Pin25)

PD0



PE4(Pin8)

PE4



PE3(Pin9)

PE3



PE1(Pin16)

PE1

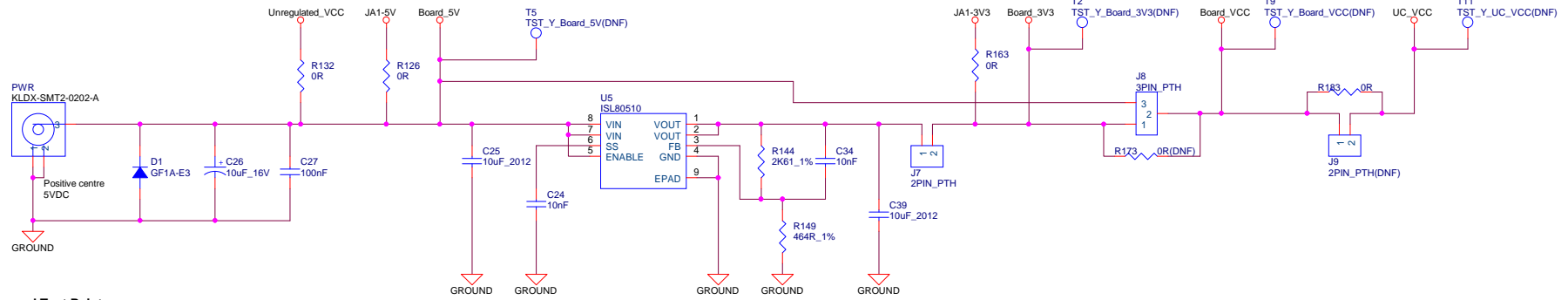


PE0(Pin17)

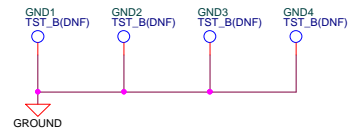
PE0



Power Supply Unit



Ground Test Point



Power Supply Configuration

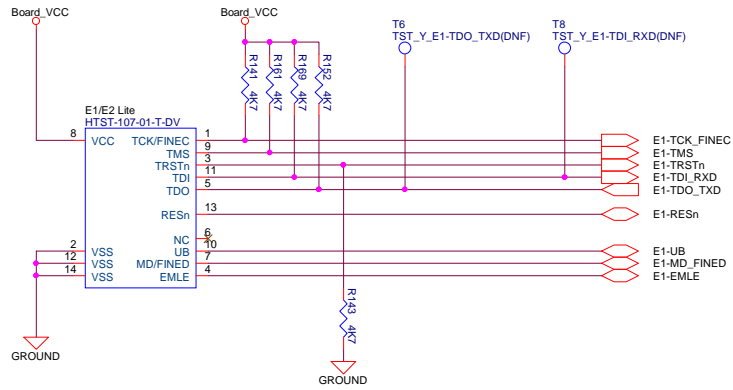
J8	R173	J7	Power Supply Source	Board_VCC UC_VCC	Unavailable Feature
1-2 shorted	DNF	shorted pin	PWR\Unregulated_VCC\JA1-5V	3V3	5V interface Pmods
		open	E1(3V3)\E2_Liter(3V3)\JA1-3V3	3V3	CAN_LIN_5V interface Pmods
2-3 shorted	DNF	shorted pin	PWR\Unregulated_VCC\JA1-5V	5V	Pmod LCD and other 3V3 interface Pmods
		open	E1(5V)	5V	Pmod LCD and other 3V3 interface Pmods
		open	PWR\Unregulated_VCC\JA1-5V\E1(5V)	5V	Pmod LCD and other 3V3 interface Pmods
All Open/DNF	Fit	shorted pin	PWR\Unregulated_VCC\JA1-5V	3V3	5V interface Pmods
		open	E1(3V3)\E2_Liter(3V3)\JA1-3V3	3V3	CAN_LIN_5V interface Pmods

<- Default Settings

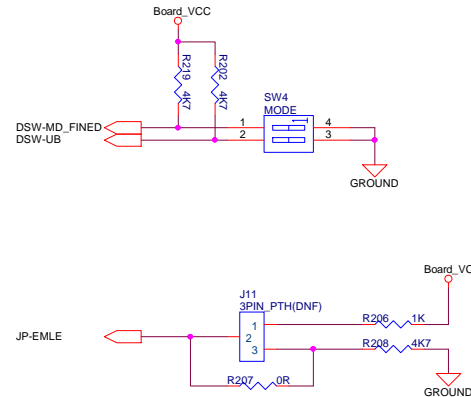
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Title			RSKRX66T [PSU]		
Size	Document Number				Rev
	R20UT4149EG0100				1.00
Date:	Thursday, June 14, 2018			Sheet	4 of 11

E1/E2 Lite Emulator Interface



MCU & Emulator Mode Setting



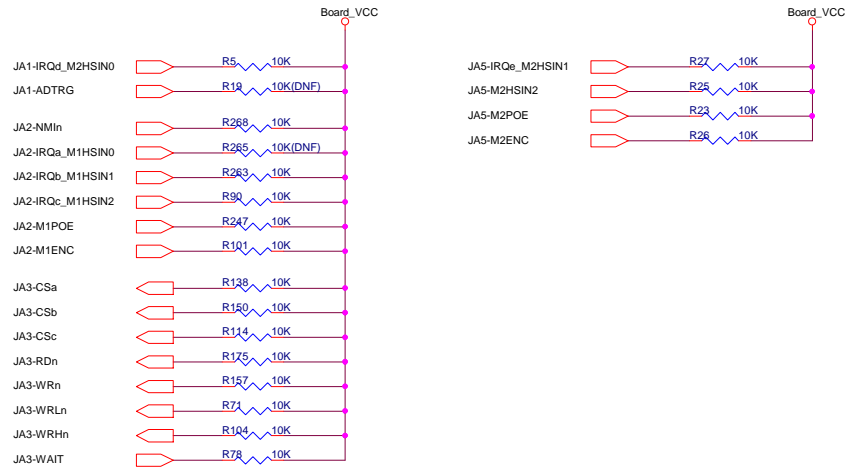
MCU Operating Mode Configuration

SW4 Pin1	SW4 Pin2	Operating Mode
OFF	Don't care	Single Chip Mode
ON	ON	SCI Boot Mode
ON	OFF	User Boot Mode

Emulator Configuration

J11	Emulator Configuration
Shorted Pin1-2	E1/E2 Lite debugging with Hot plug-in
Shorted Pin2-3	E1/E2 Lite normal debugging
All open	Microcontroller single operation (without emulator)
	DO NOT SET

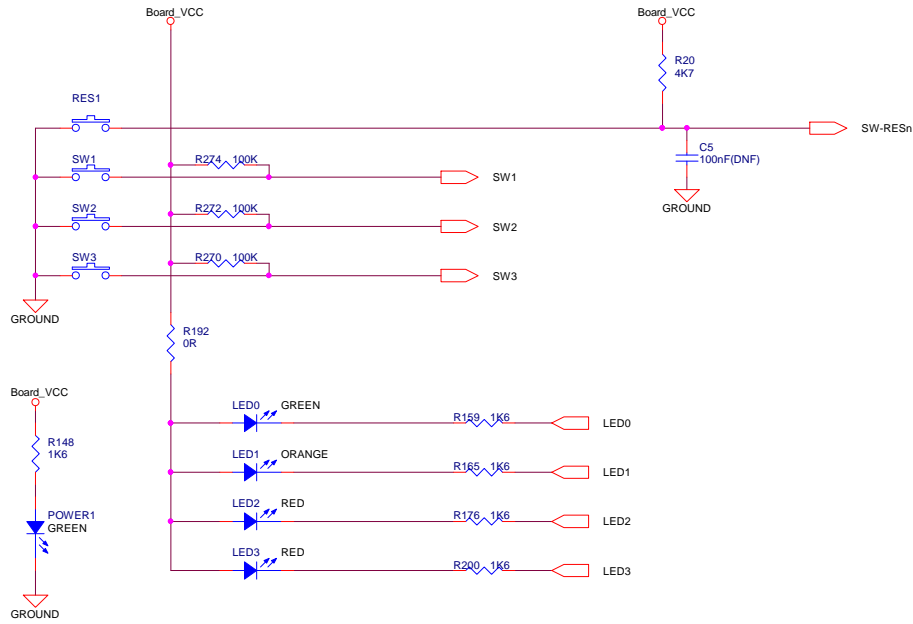
Pull-up resistors



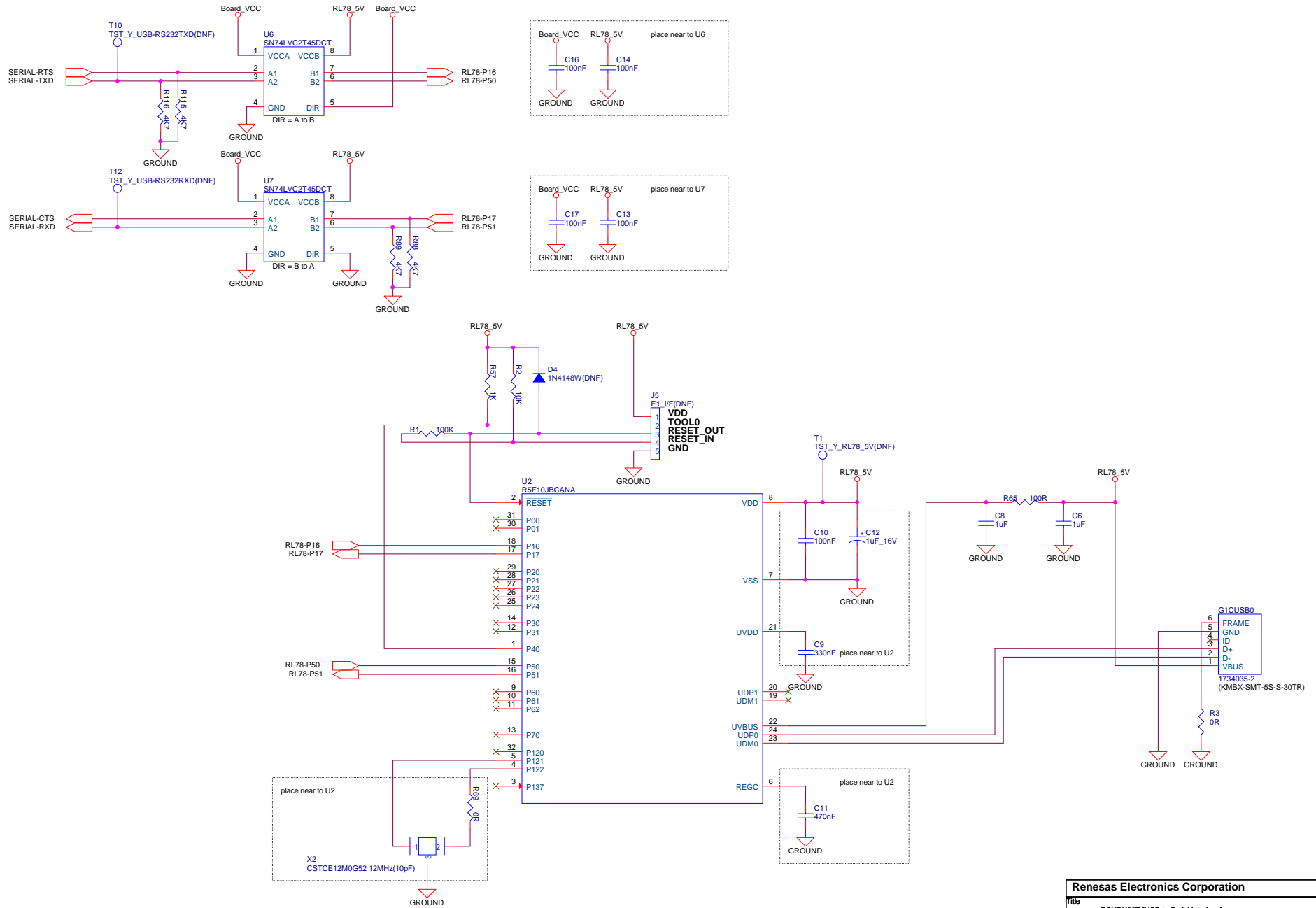
Renesas Electronics Corporation

Title			RSKRX66T [E1/E2 Lite, MCU & Emulator Mode Setting, Pull-up resistors]		
Size	Document Number			Rev	1.00
	R20UT4149EG0100				
Date:	Thursday, June 14, 2018	Sheet	5	of	11

Reset, Switches, LEDs

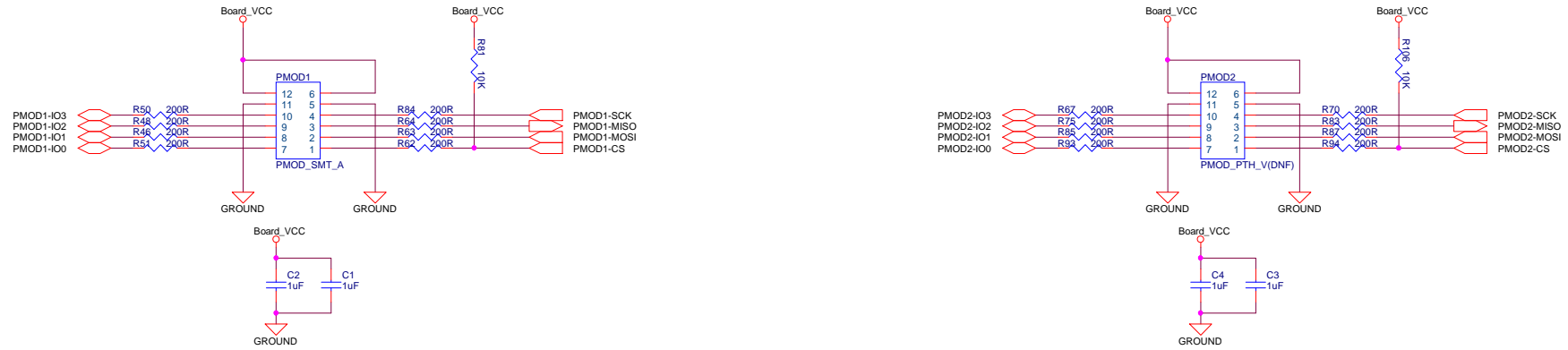


USB to Serial Interface



Pmod Interface

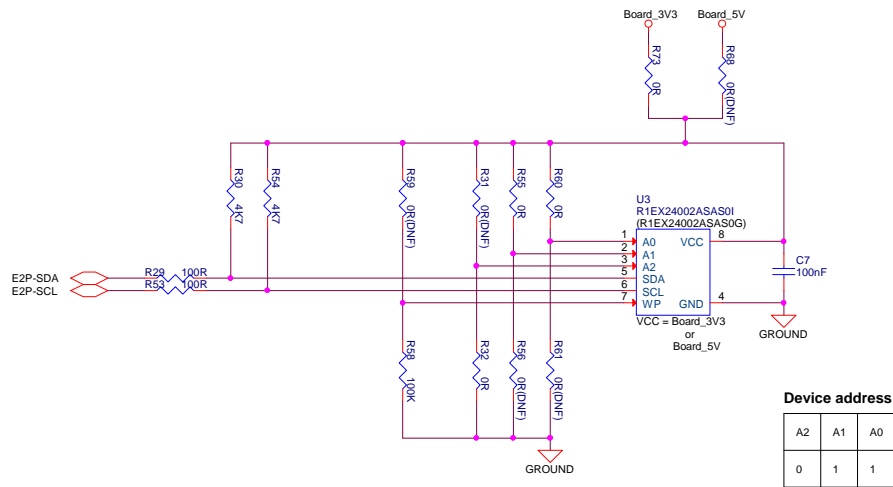
PMOD1: Angle type connector
PMOD2: Vertical type connector (spare)



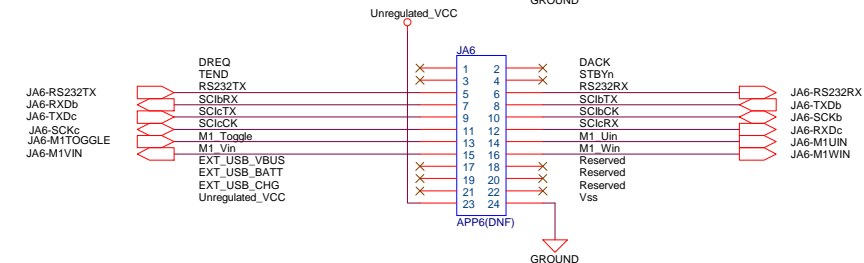
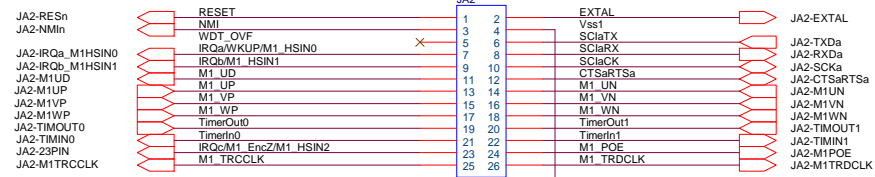
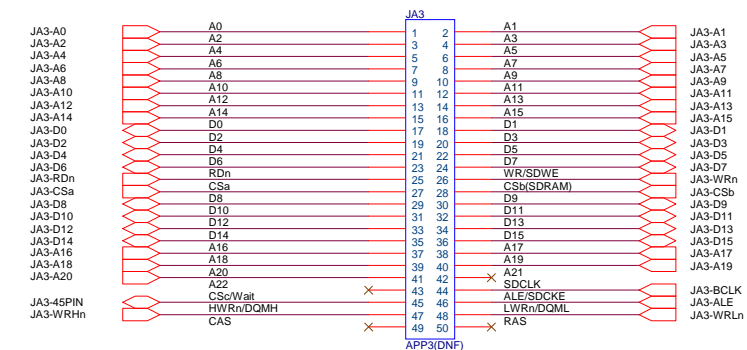
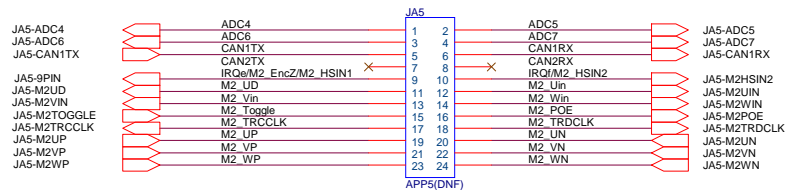
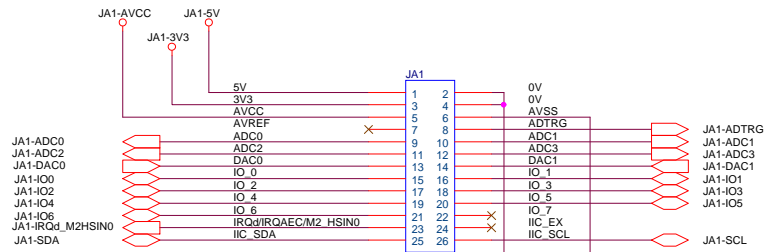
IIC EEPROM(2Kbits) - RIIC

Warning:

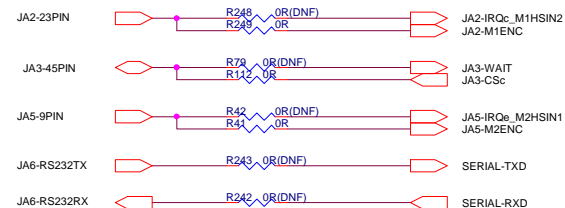
NEVER FIT R68 and R73 simultaneously.



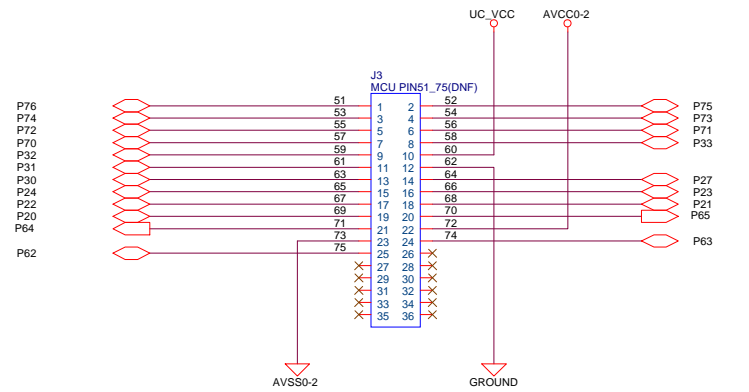
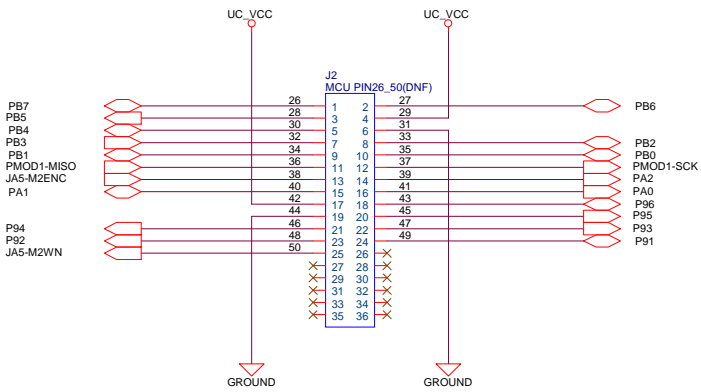
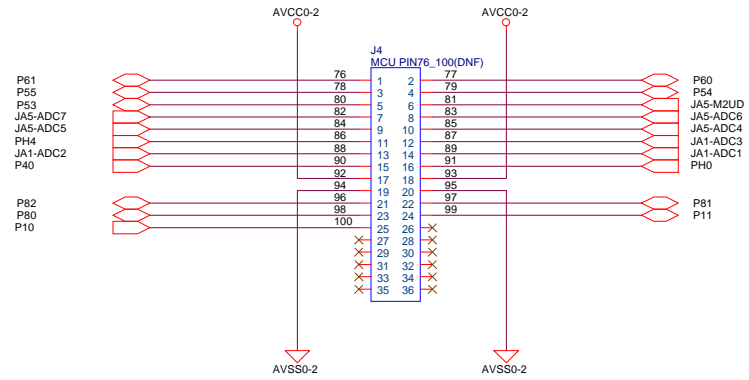
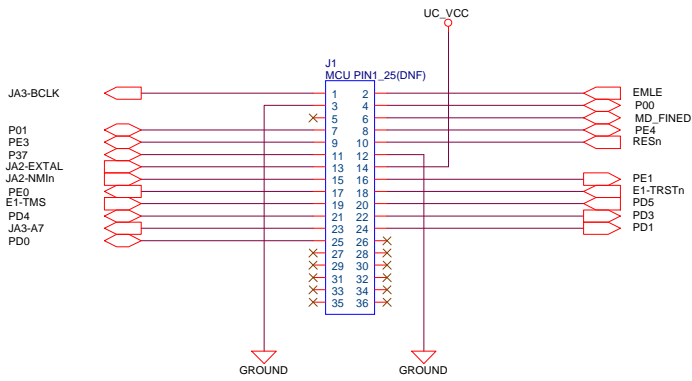
Application Headers



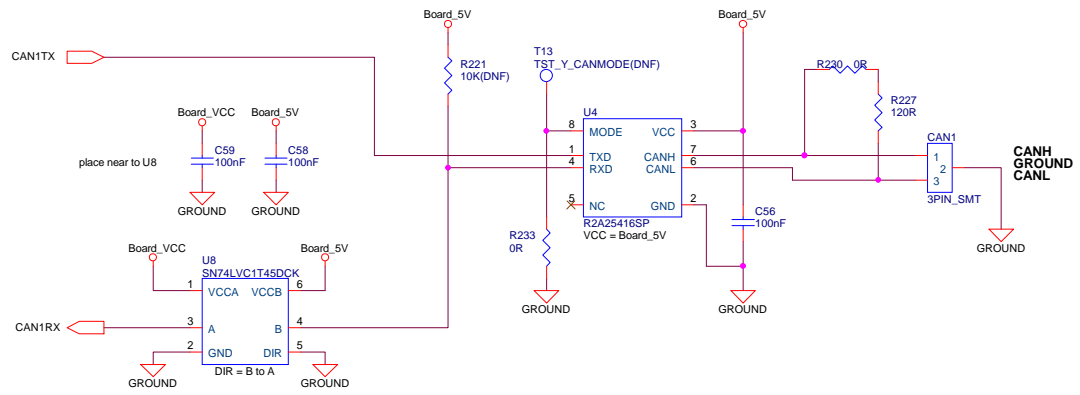
Application Header Function Select



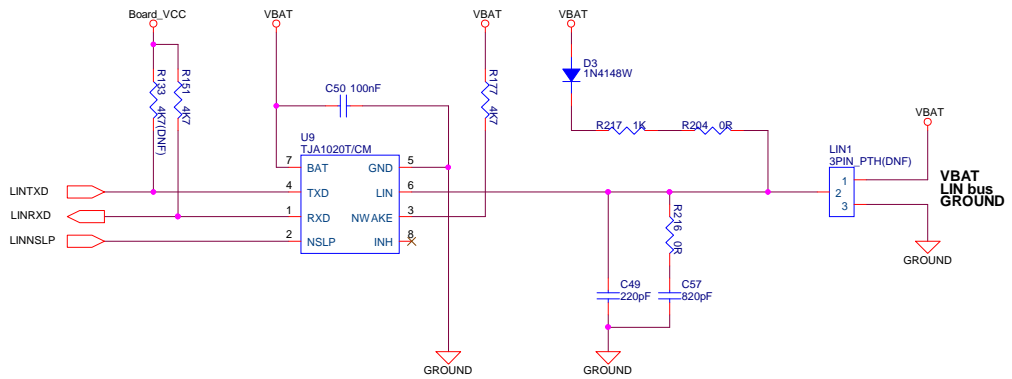
MCU Pin Headers



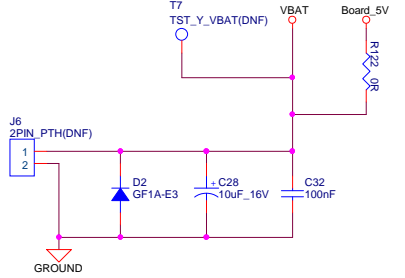
CAN



LIN



VBAT Supply



LIN Mode Configuration

	Fit	Remove
Master	R204, R216	---
Slave	---	R204, R216

Warning:
Remove R122 if VBAT > 5V is possible.

Revision History

REV	DATE	SHEET	DESCRIPTION
1.00	14.06.2018	---	1st release edition.

Renesas Electronics Corporation			
Title RSKRX66T [Revision History]			
Size	Document Number	Rev	1.00
	R20UT4149EG0100		
Date:	Thursday, June 14, 2018	Sheet	X of X