

Renesas Starter Kit for RX630 CPU Board Schematics

REV	REF	DATE	DRAWN BY
1.00	Release	04.04.2011	YOI
2.00	TRAC#1998, 2043	13.09.2011	YOI

PAGE	DESCRIPTION
1	INDEX
2	RX630 Microcontroller
3	PSU, RESET, Switches, LEDs
4	E1 Emulator, MCU Mode Setting, Serial Port
5	Application Headers, Header Function Select, MCU Pin Function Select
6	Debug LCD, CAN, USB
7	Microcontroller Pin Headers

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 Variation:

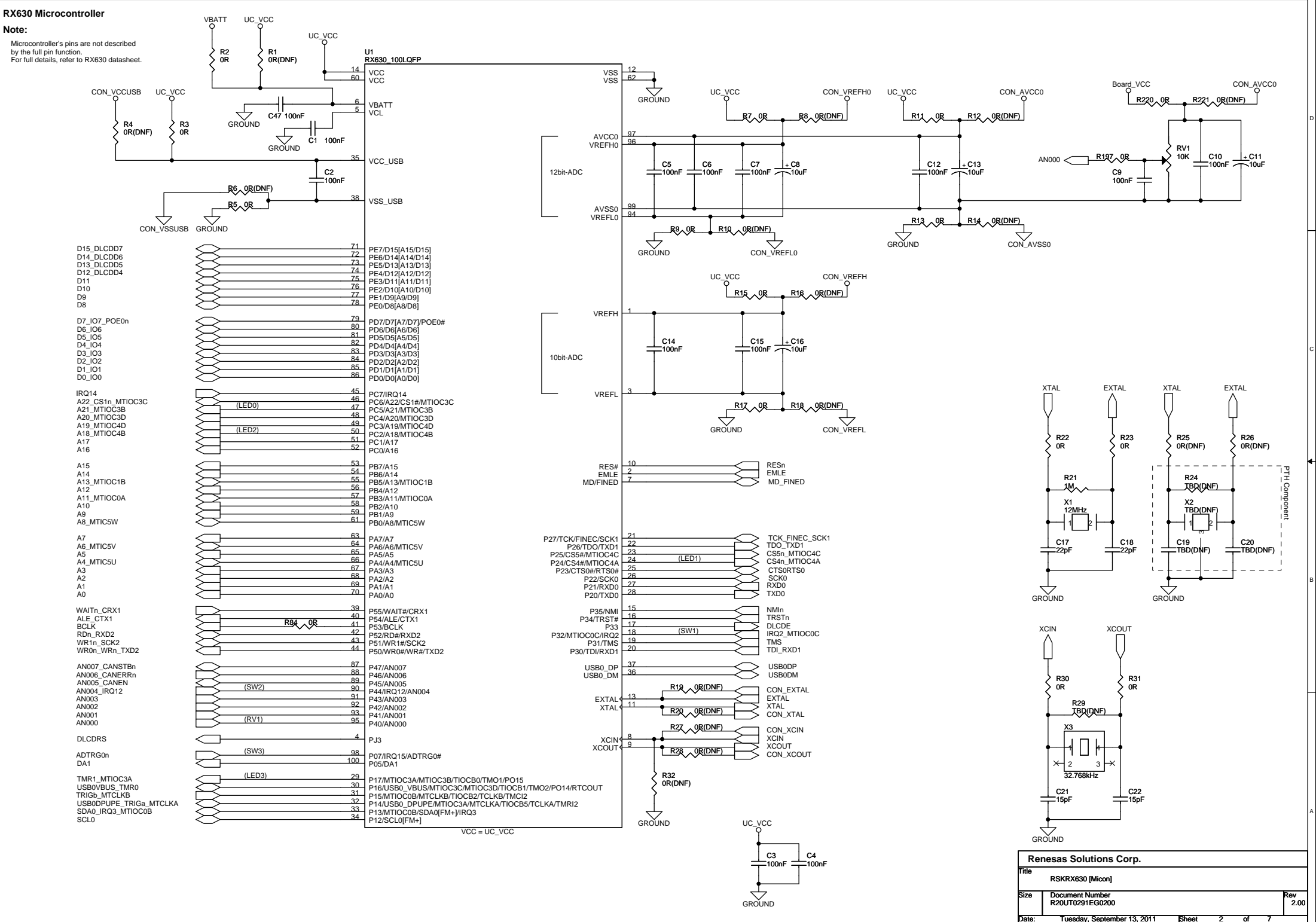
R0K505630C000BE : WS/MP Product

REE Drawing No. D010162

Renesas Solutions Corp.			
Title RSKRX630 [INDEX]			
Size	Document Number R20UT0291EG0200	Rev 2.00	
Date:	Tuesday, September 13, 2011	Sheet 1	of 7

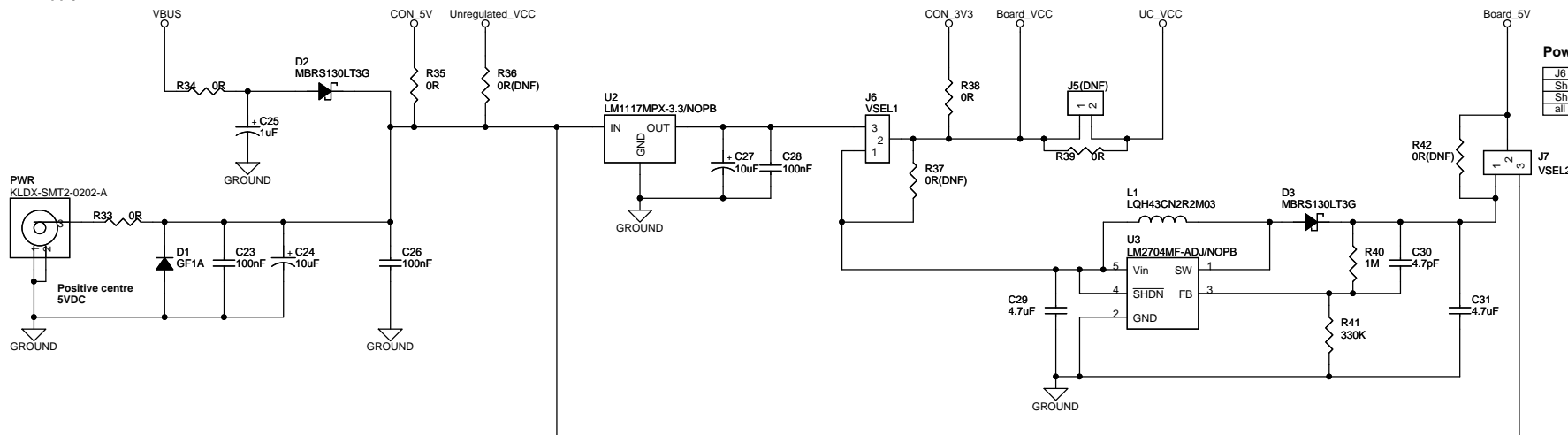
RX630 Microcontroller

Note:
Microcontroller's pins are not described by the full pin function.
For full details, refer to RX630 datasheet.



Reenas Solutions Corp.		
Title: RSKRX630 [Micon]		
Size: R20UT0291EG0200	Document Number: R20UT0291EG0200	Rev: 2.00
Date: Tuesday, September 13, 2011	Sheet: 2	of 7

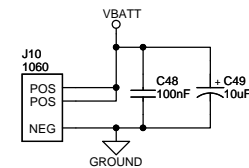
Power Supply Unit



Power Supply Configuration

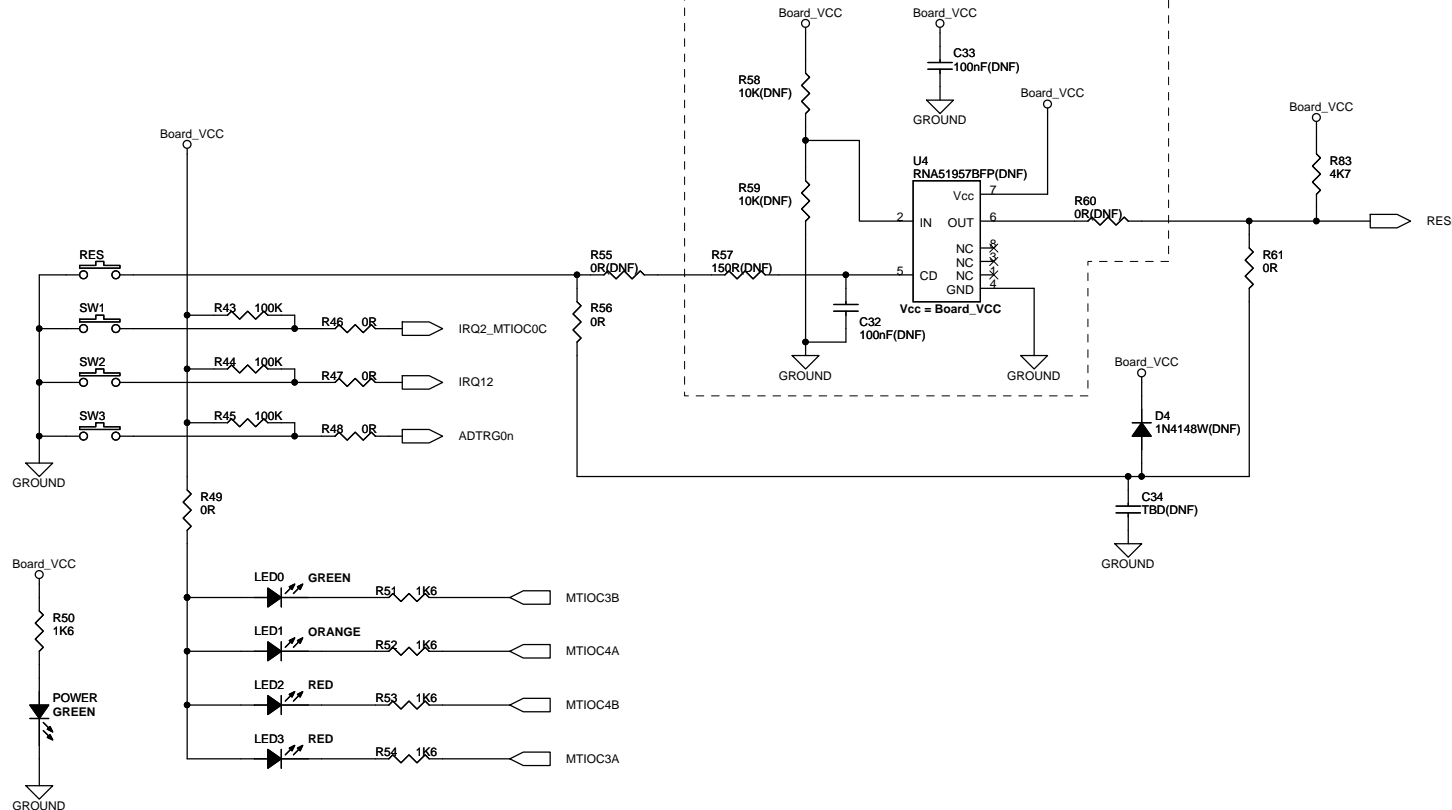
J6	J7	Supply Type
Shorted Pin1-2	Shorted Pin1-2	E1(3V3), CON_3V3
Shorted Pin2-3	Shorted Pin2-3	PWR, VBUS, CON_5V
all open	all open	DO NOT SET

Coin cell holder for VBATT

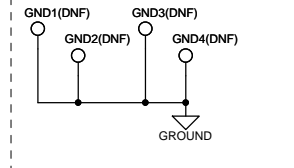


Switches, LEDs, RESET

**Circuit not Fitted on RSKRX630 CPU Board.
RX630 internal Power on Reset is used.**



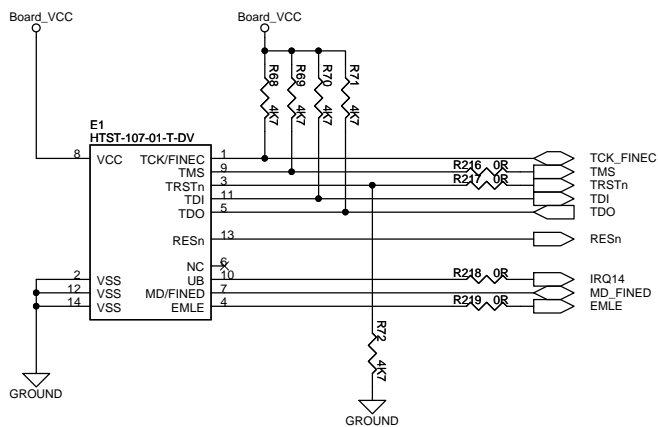
Ground Test Point



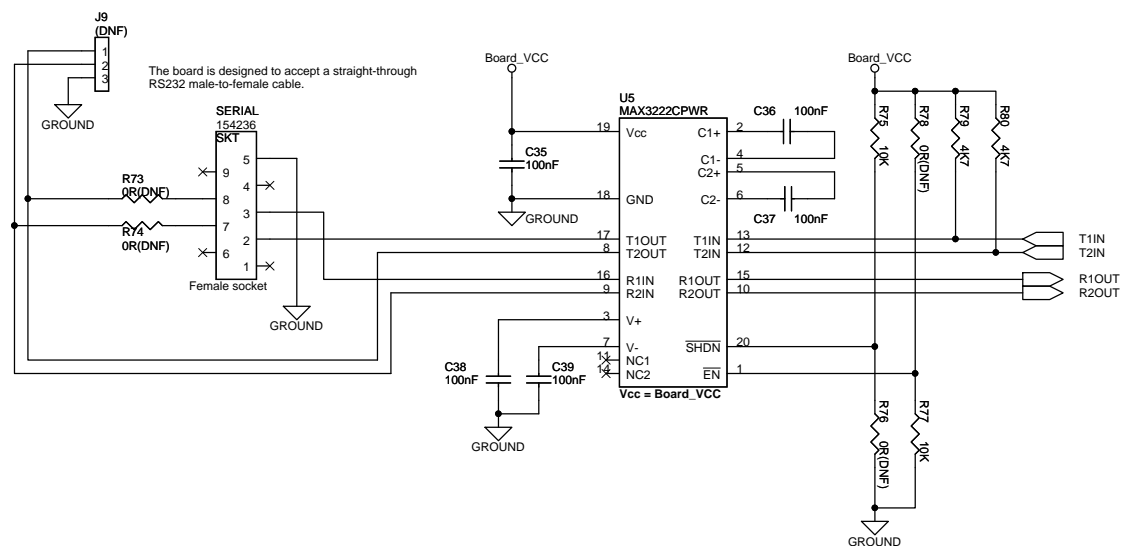
Renesas Solutions Corp.

Title		
RSKRX630 [PSU, RESET, SW, LED]		
Size	Document Number	Rev
	R20UT0291EG0200	2.00
Date:	Tuesday, September 13, 2011	Sheet 3 of 7

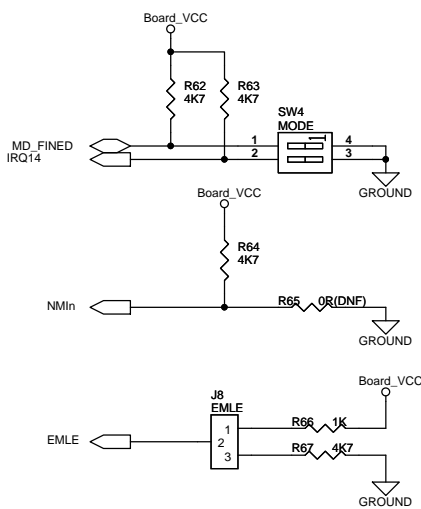
E1 Emulator Interface



Serial Port



MCU Mode Settings



MCU Operating Mode Configuration

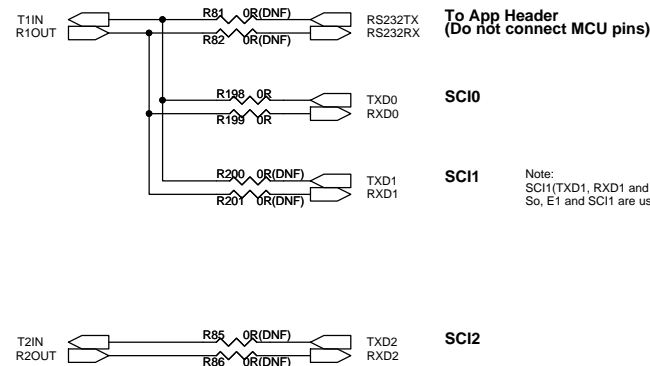
SW4 Pin1	SW4 Pin2	Operating Mode
OFF	Don't care	Single Chip Mode
ON	OFF	User Boot Mode
ON	ON	USB Boot Mode
ON	ON	Boot Mode (SC1)

USB Boot Mode Power Configuration

R65	Power Configuration for USB Boot Mode
Fit	Self Powered
Remove	Bus Powered

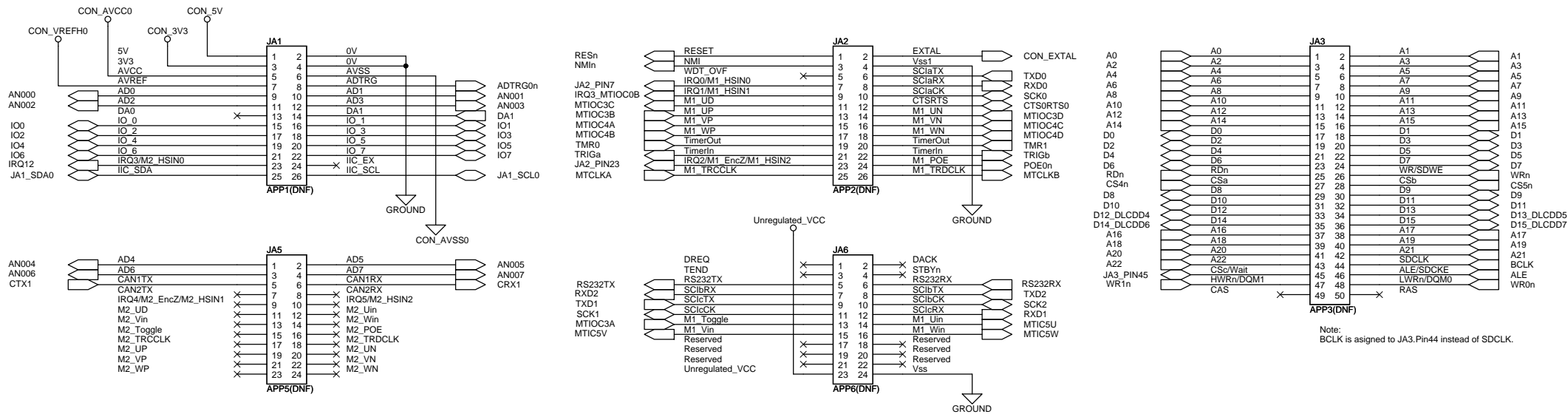
Emulator Configuration

J8	Emulator Configuration
Shorted Pin1-2	E1 debugging with Hot plug-in
Shorted Pin2-3	E1 normal debugging
	Microcontroller single operation (without E1)
all open	DO NOT SET



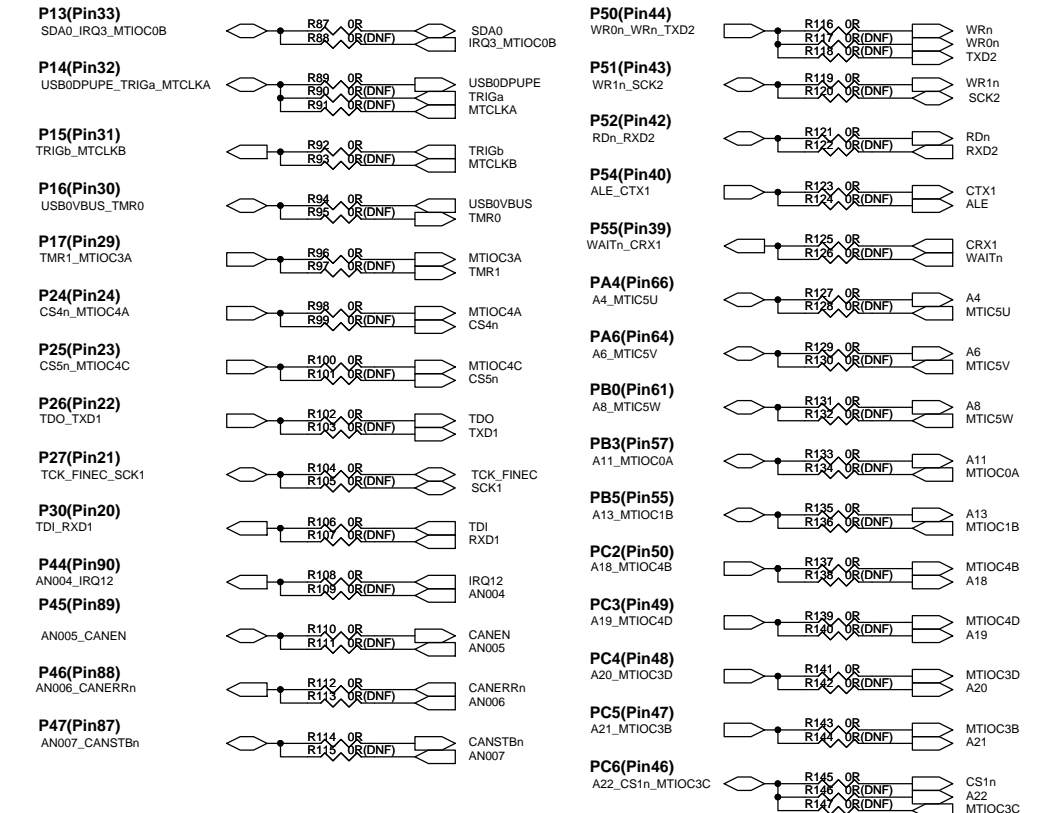
Note:
SC1(TXD1, RXD1 and SCK1) is sharing with the JTAG pins.
So, E1 and SC1 are used exclusively.

Application Headers

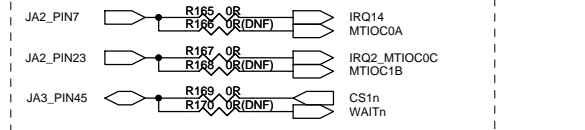


Note:
BCLK is assigned to JA3.Pin44 instead of SDCLK.

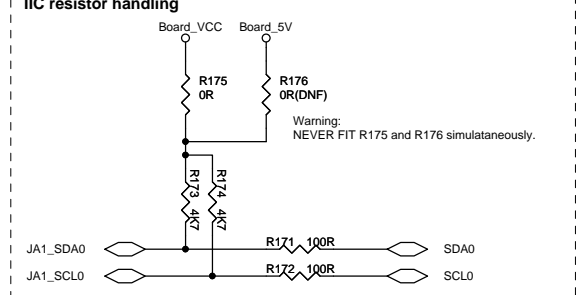
MCU Pin Function Select



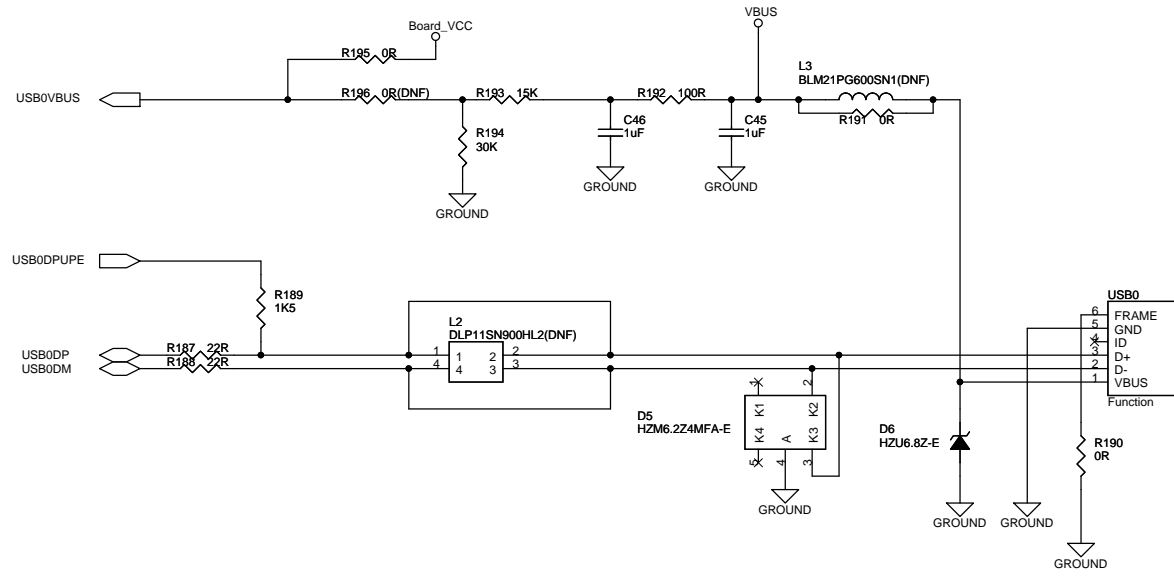
Header Function Select



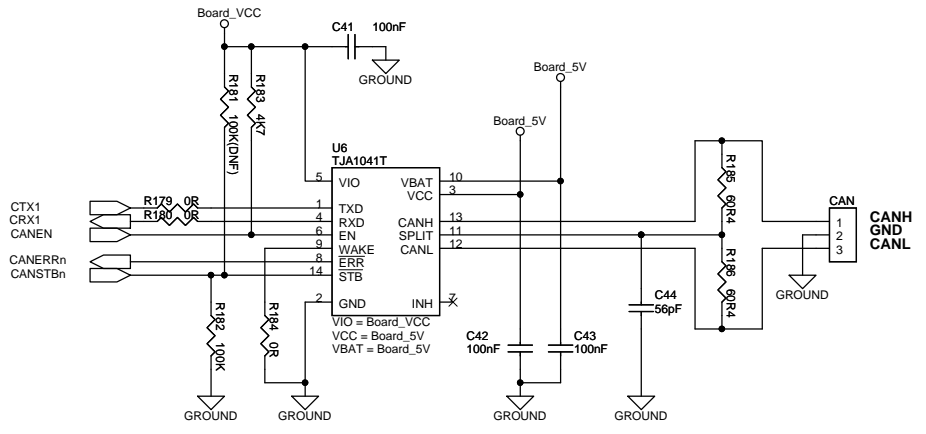
IIC resistor handling



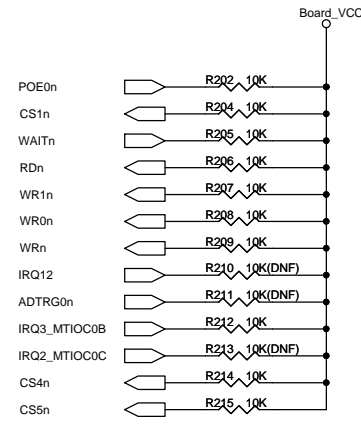
USB



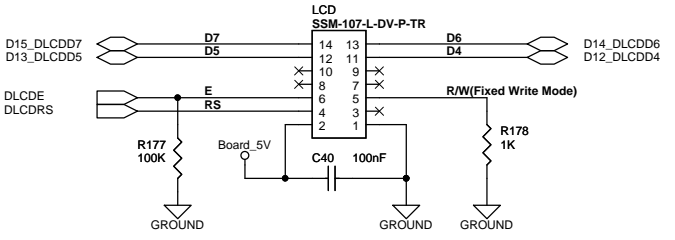
CAN



Pull-up resistor



Debug LCD



Microcontroller Pin Headers

