

# Renesas Starter Kit for RL78/G1C (48Pin) CPU Board Schematics

REV	REF	DATE	DRAWN BY
1.00	Release	10.04.2013	YOI

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## 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.

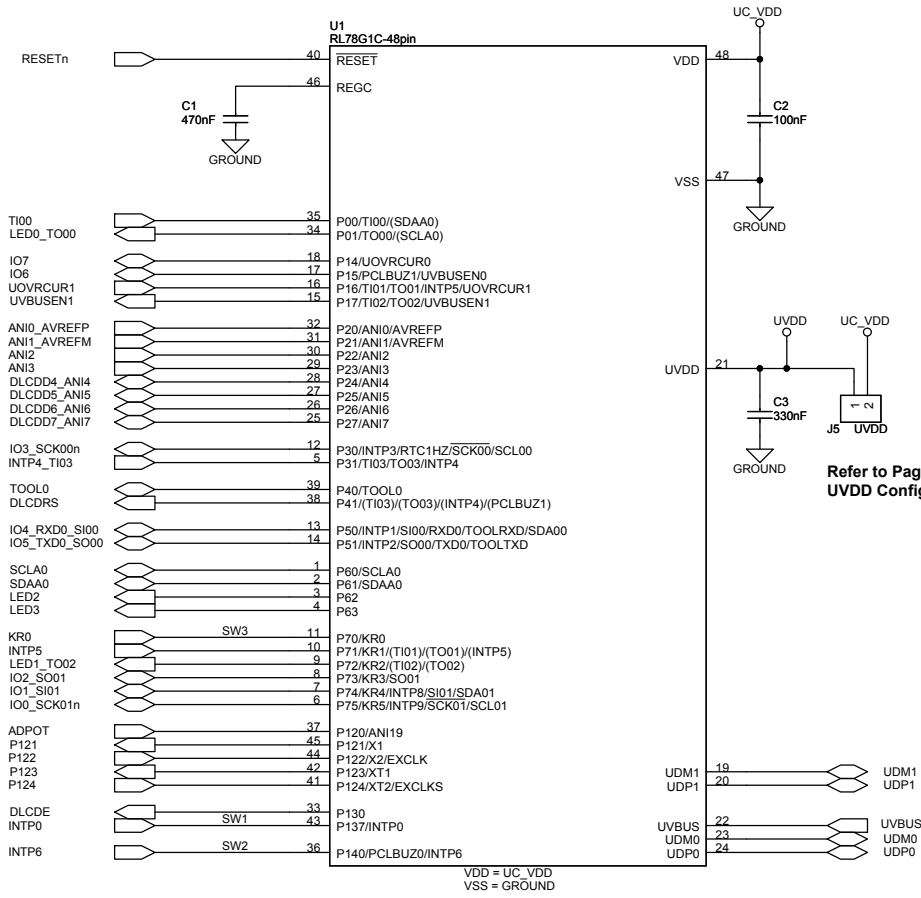
## Board Variation:

R0K5010JGC000BE : WS/MP RSK Product Board

REEL Drawing No. D011212\_04

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RL78/G1C(48LQFP) Microcontroller

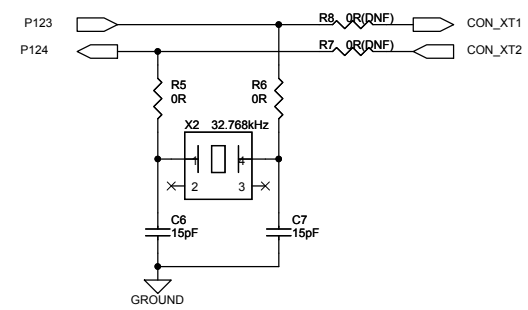
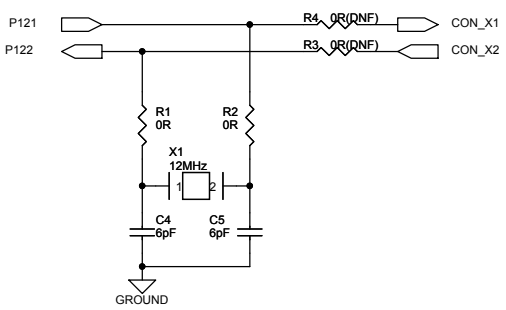
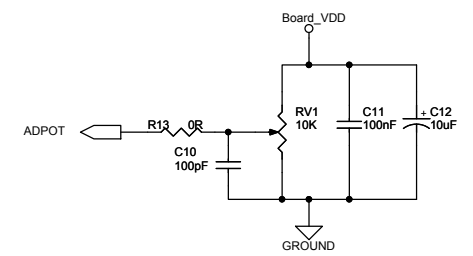
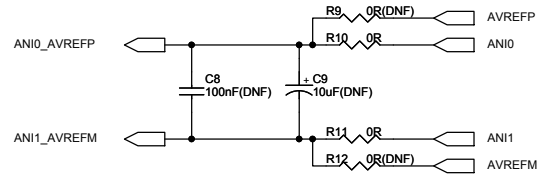


VDD = UC\_VDD  
VSS = GROUND

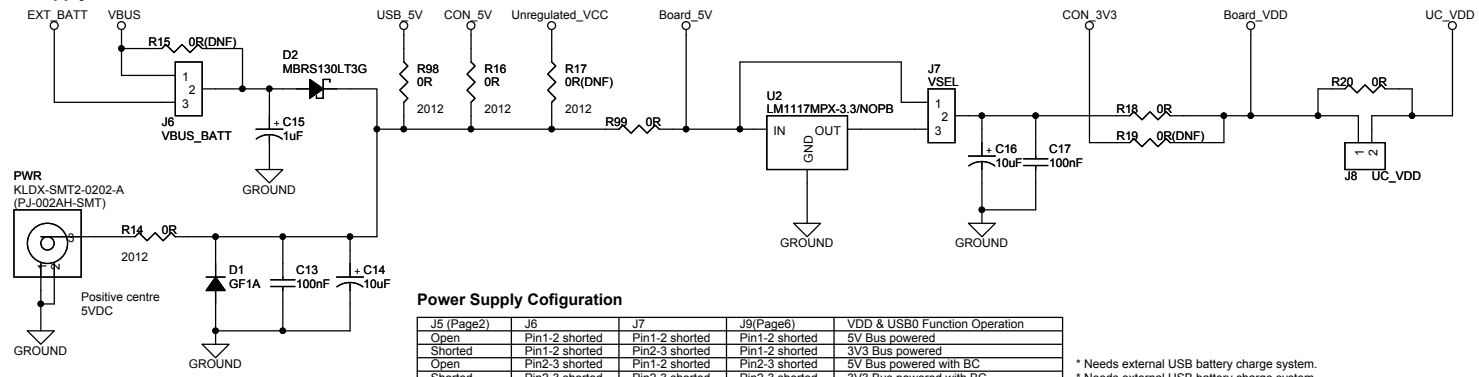
Refer to Page3 for UVDD Configuration for USB0 Function

ADC Channel / AVREF Configuration

Enables AD Channel	R9, R12	R10, R11	C8, C9
Enables AVREF	Remove	Fit	Remove
	Fit	Remove	Fit



### Power Supply Unit

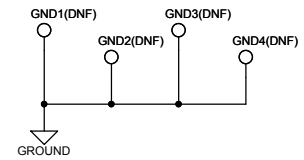


#### Power Supply Configuration

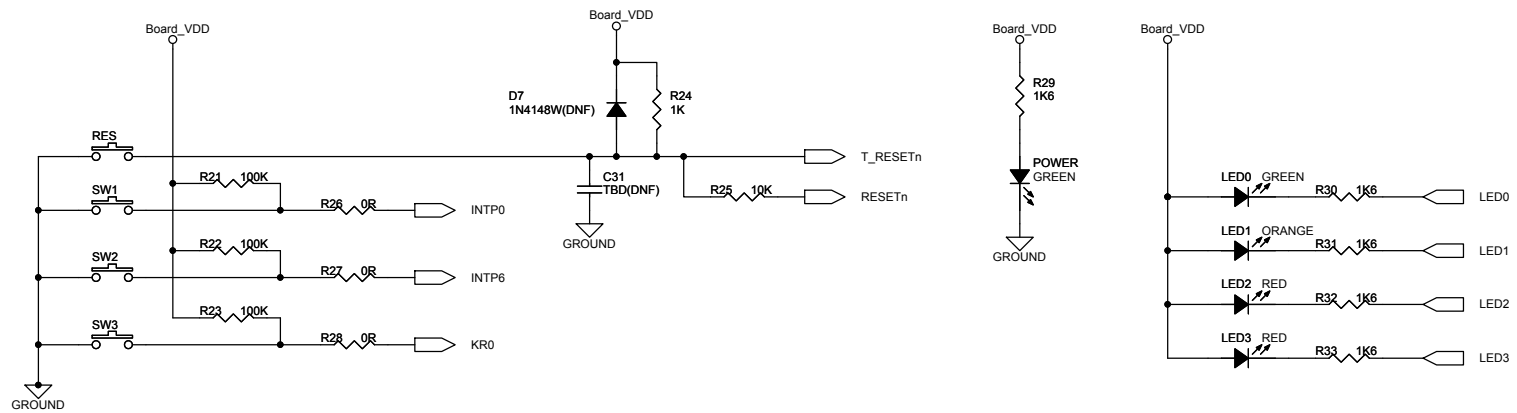
J5 (Page2)	J6	J7	J9 (Page6)	VDD & USB0 Function Operation
Open	Pin1-2 shorted	Pin1-2 shorted	Pin1-2 shorted	5V Bus powered
Shorted	Pin1-2 shorted	Pin2-3 shorted	Pin1-2 shorted	3V3 Bus powered
Open	Pin2-3 shorted	Pin1-2 shorted	Pin2-3 shorted	5V Bus powered with BC
Shorted	Pin2-3 shorted	Pin2-3 shorted	Pin2-3 shorted	3V3 Bus powered with BC
Open	All open	Pin1-2 shorted	All open	5V Self powered
Shorted	All open	Pin2-3 shorted	All open	3V3 Self powered

\* Needs external USB battery charge system.  
 \* Needs external USB battery charge system.

### Ground Test Point

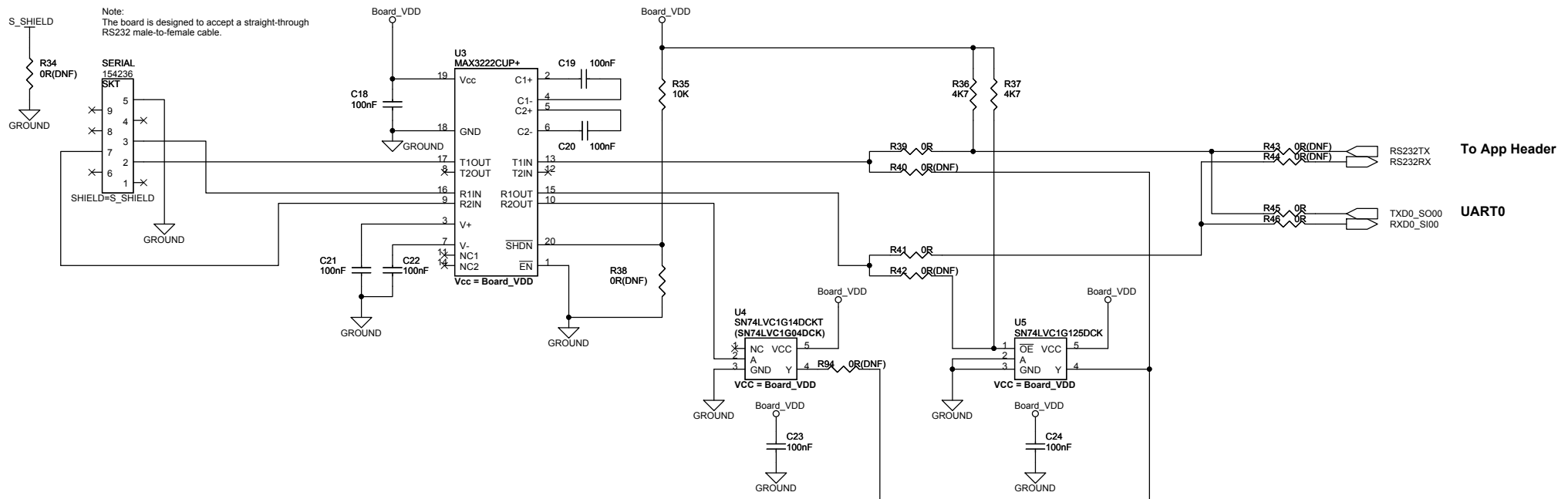


### Switches, Reset, LEDs

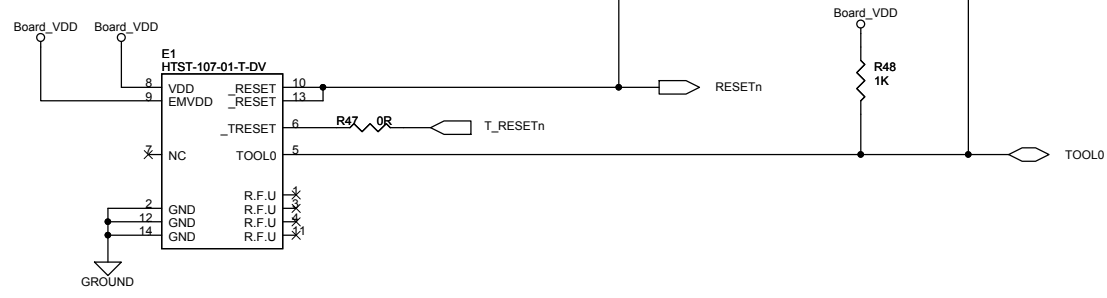


### Serial Port

Note:  
The board is designed to accept a straight-through RS232 male-to-female cable.

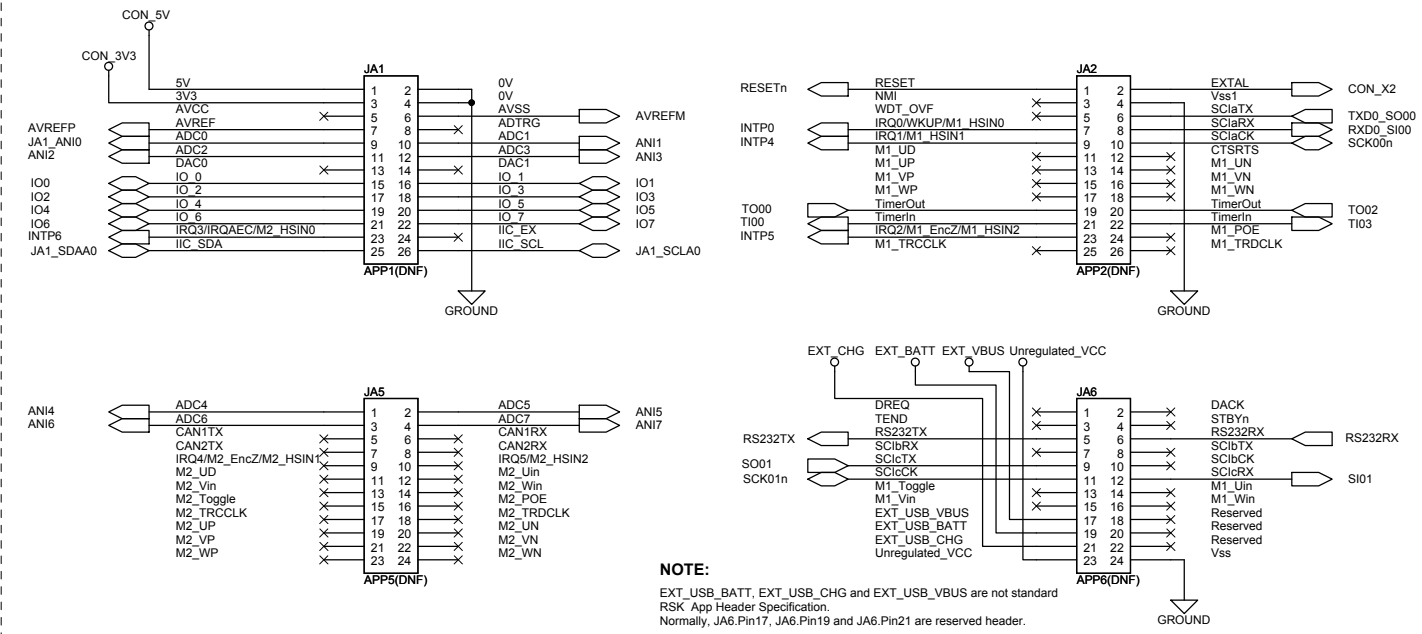


### E1 Emulator Interface

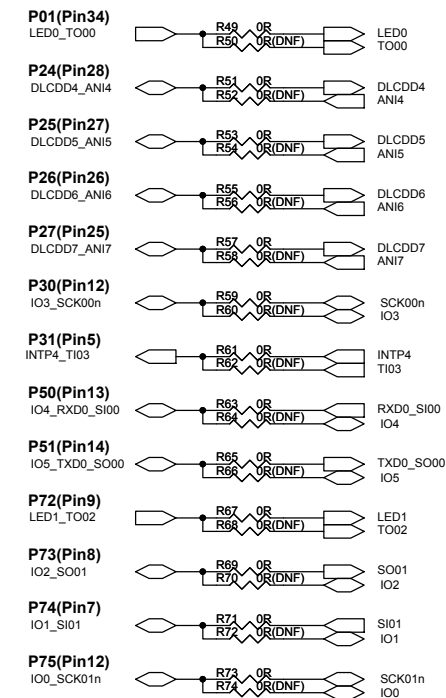


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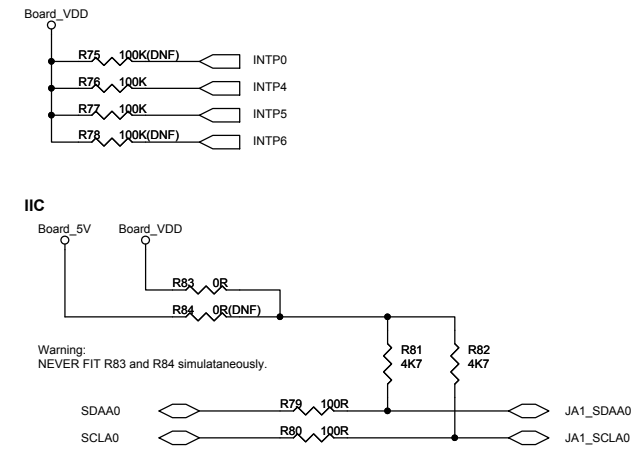
# Application Headers



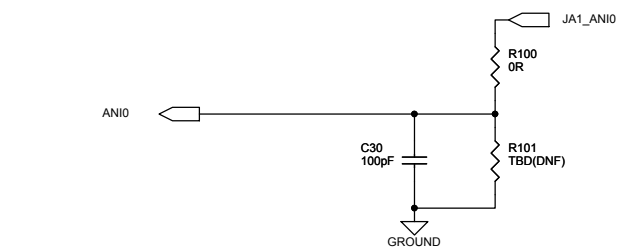
## MCU Pin Function Select



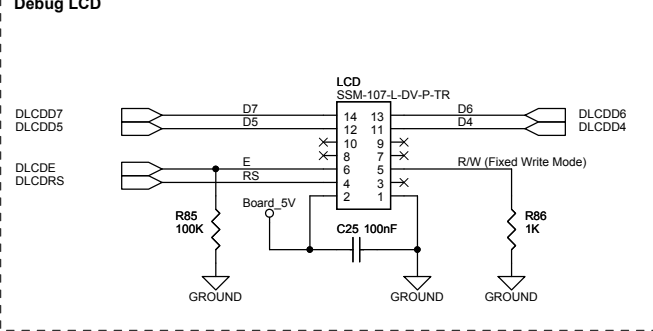
## Option pull-up resistor



## External USB Battery Charge IC Monitor

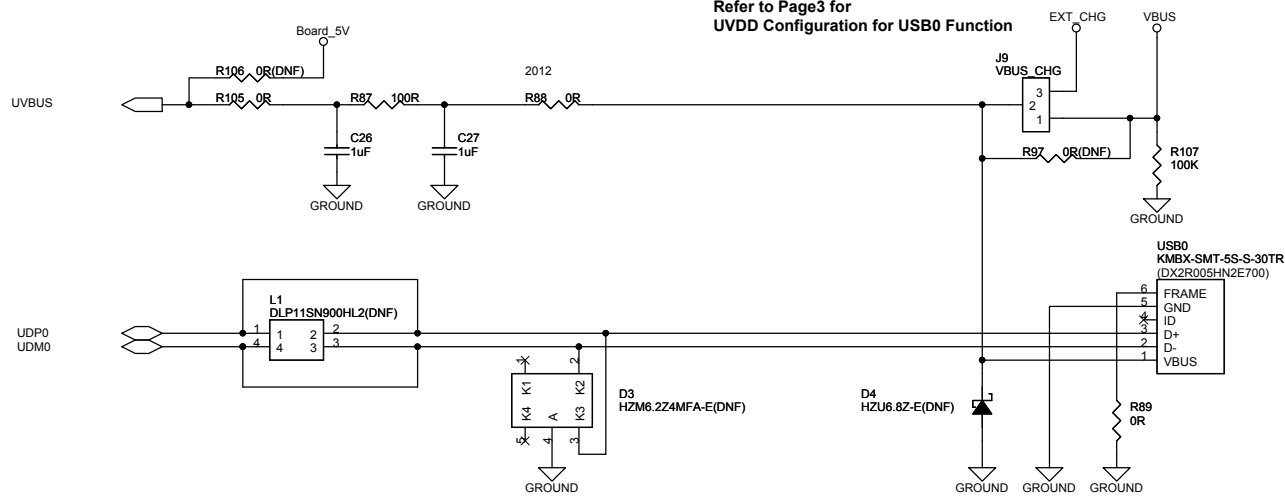


## Debug LCD

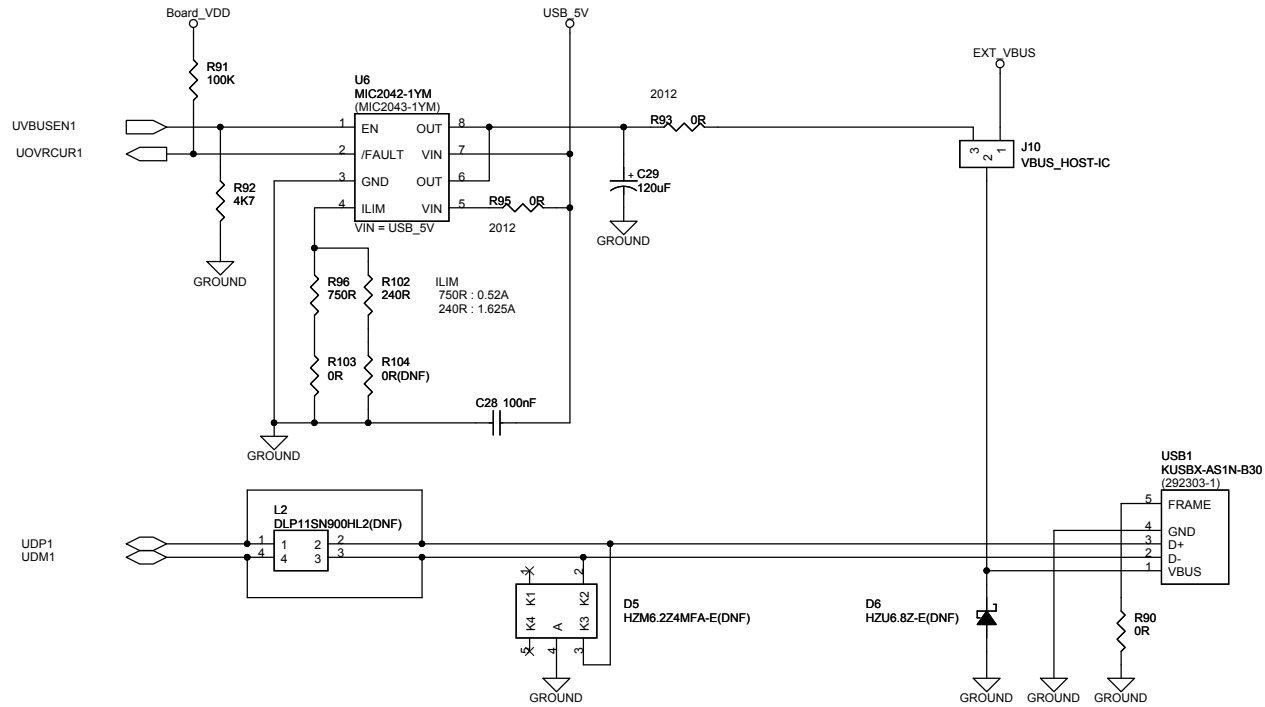


**USB0 Function**

Refer to Page3 for  
UVDD Configuration for USB0 Function

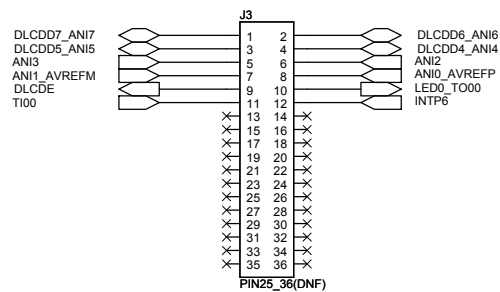
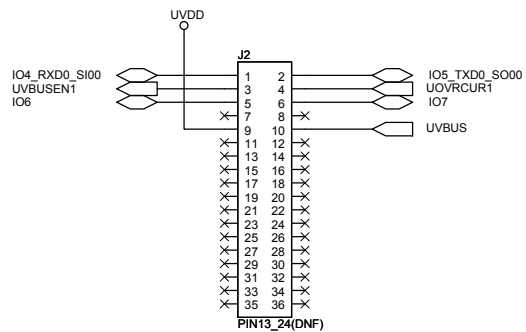
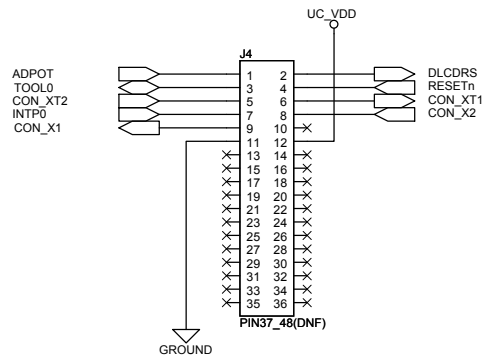
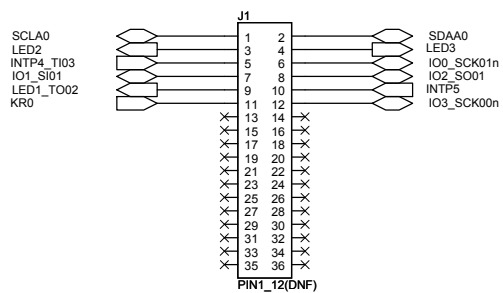


**USB1 Host**



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Microcontroller Pin Headers



# Revision History

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1.00	10.04.2013	---	1st edition.

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