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100/10Mbps Ethernet interface

UL = UnLoaded = normally not mounted component.

Default jumper settings are indicated in the schematic.  
However, always check jumper positions on actual boards  
since there is no guarantee that all jumpers are in default place.

### Rev 2.1

No schematic changes, only layout update.

### Rev 2.0

Added R114, R115 and C81.  
Changed J14 to 2x7 pin list. Added OTP control jumper.  
Added 100/10Mbps Ethernet interface (all of page 8).

### Rev 1.1

Change RS232 DSUB9 to Male pinout.  
Corrected USB TX/RX LED mixup on page 5.  
Added R102/R103/R104/R105.

### Rev 1.0

Original revision



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TITLE: LPC31xx Base Board v2.1

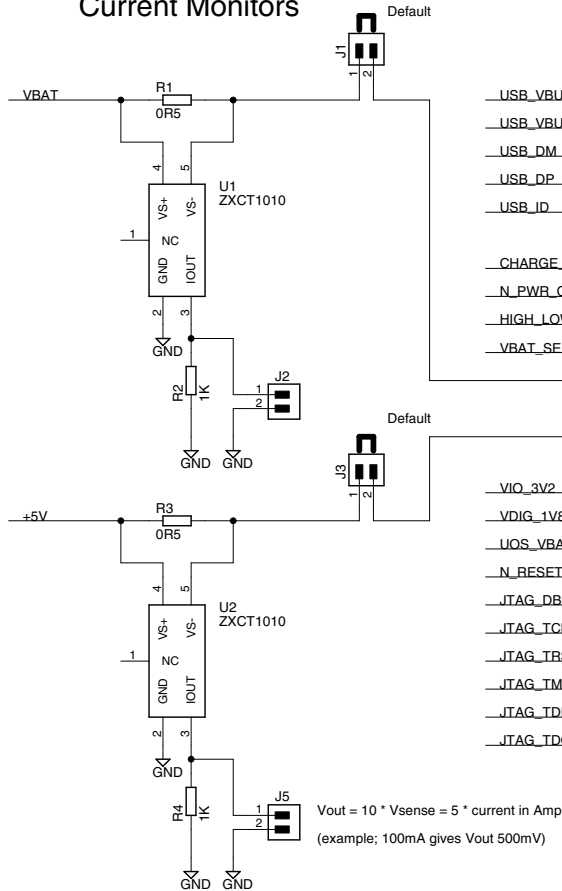
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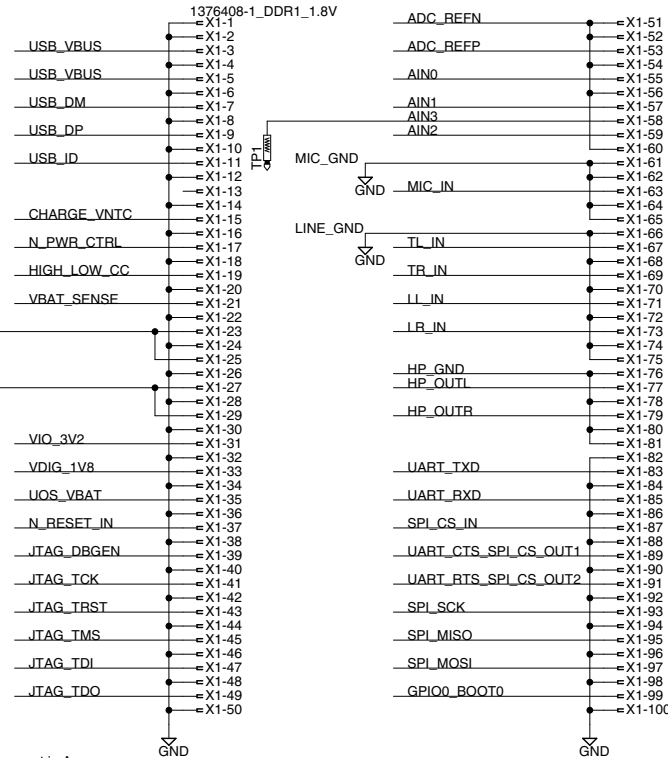
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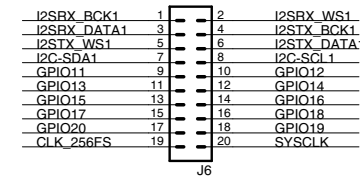
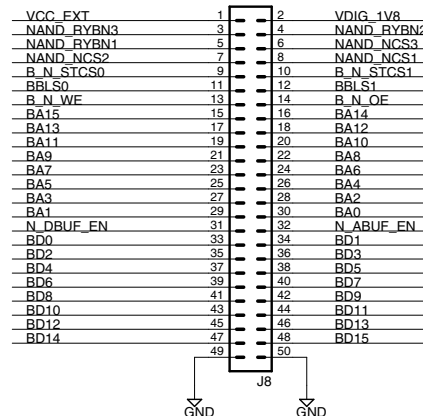
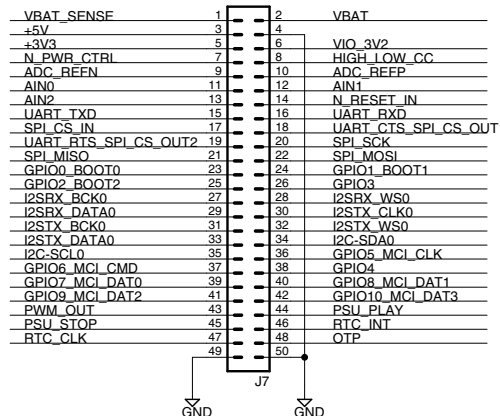
## Current Monitors



## LPC31xx OEM Board



## Expansion Connectors



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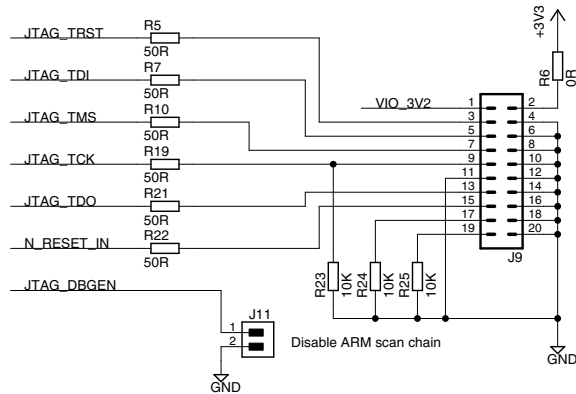
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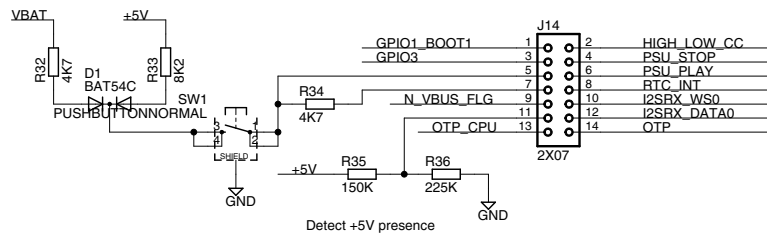
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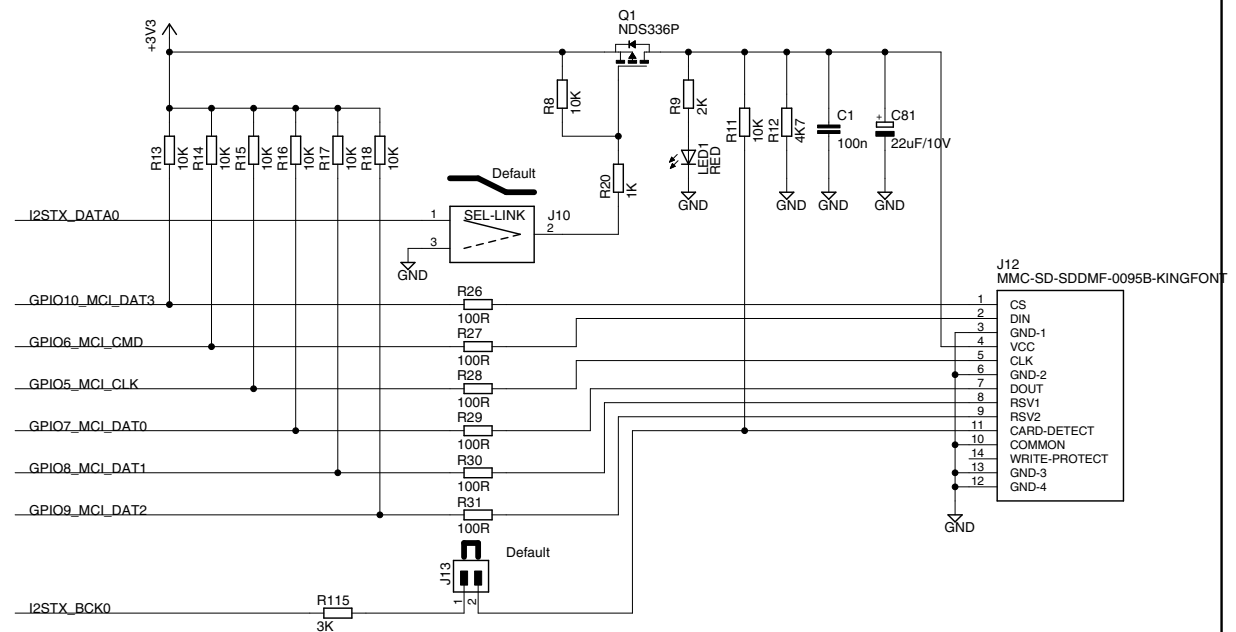
## JTAG Interface



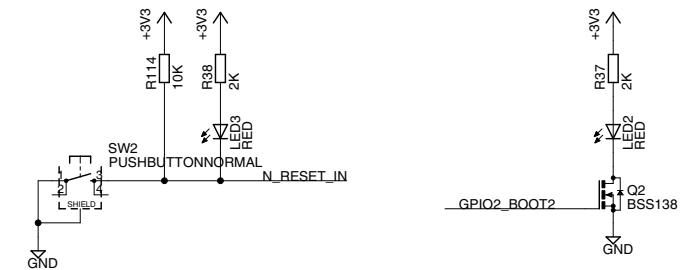
## Optional Connections



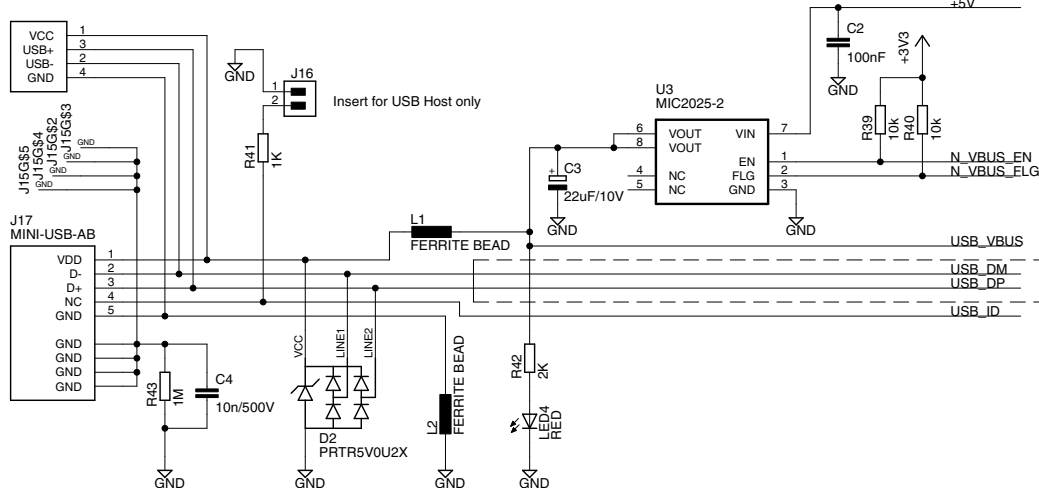
## MMC/SD Memory Card Interface



## Reset Push-button & LEDs



## USB Host/OTG Interface (with A & mini-AB connector)



45 ohm impedance routing, 90 ohm differential  
No tracks within 10 times trace width  
No via's and no sharp angles



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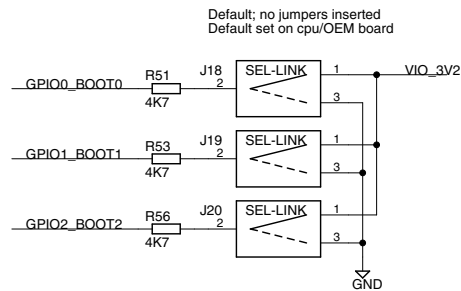
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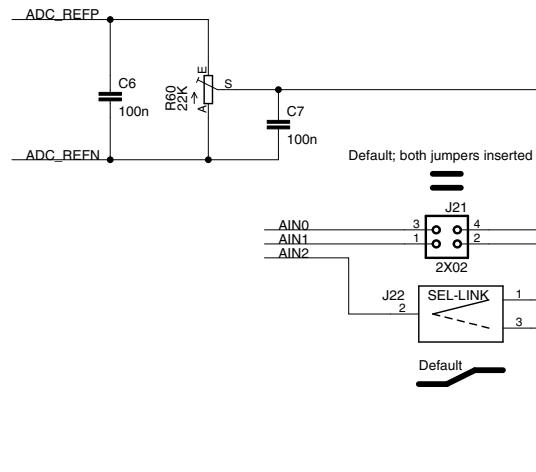
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## Boot mode

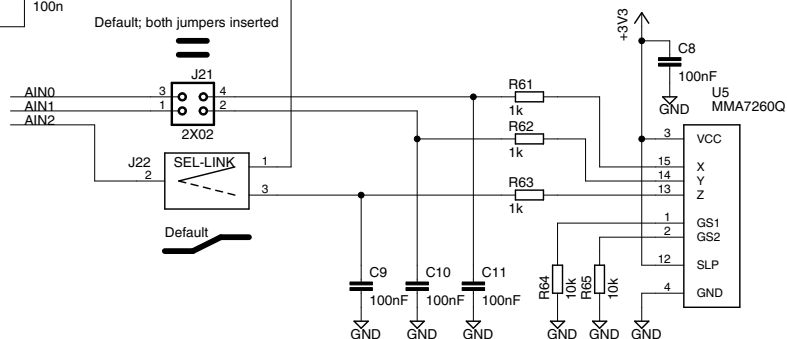
| GPIO0 | GPIO1 | GPIO2 | Boot source          |
|-------|-------|-------|----------------------|
| LOW   | LOW   | LOW   | NAND boot            |
| LOW   | LOW   | HIGH  | SPI boot             |
| LOW   | HIGH  | LOW   | USB via DFU class    |
| LOW   | HIGH  | HIGH  | MMC/SD card          |
| HIGH  | LOW   | HIGH  | Functional test mode |
| HIGH  | HIGH  | LOW   | UART 115.2kbps 8N1   |
| HIGH  | HIGH  | HIGH  | Test mode            |



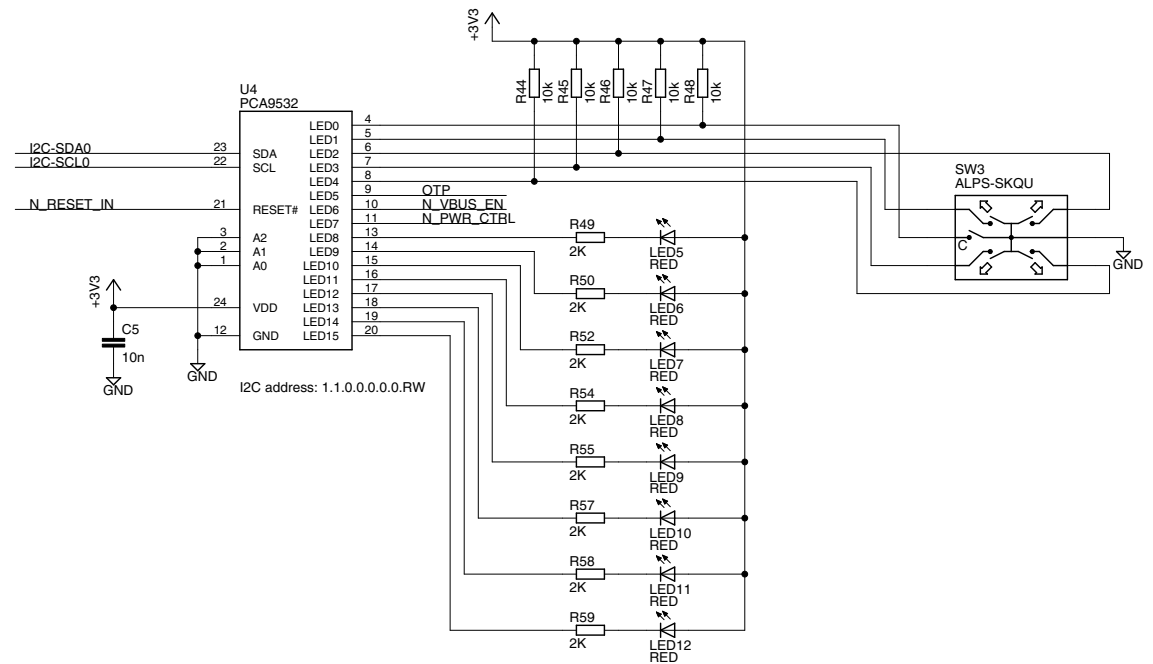
## Analog Input



## 3-axis accelerometer



## LEDs and 5-key joystick switch



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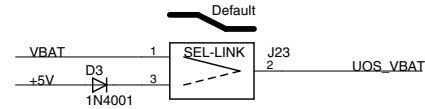
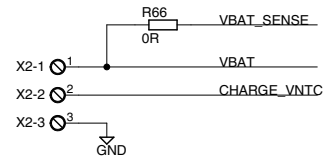
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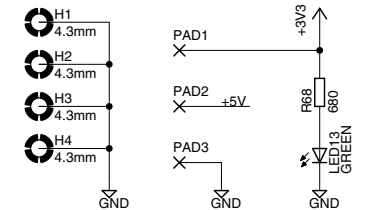
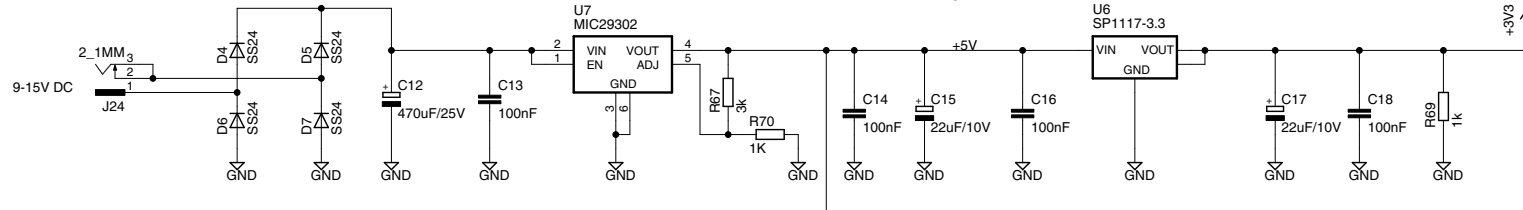
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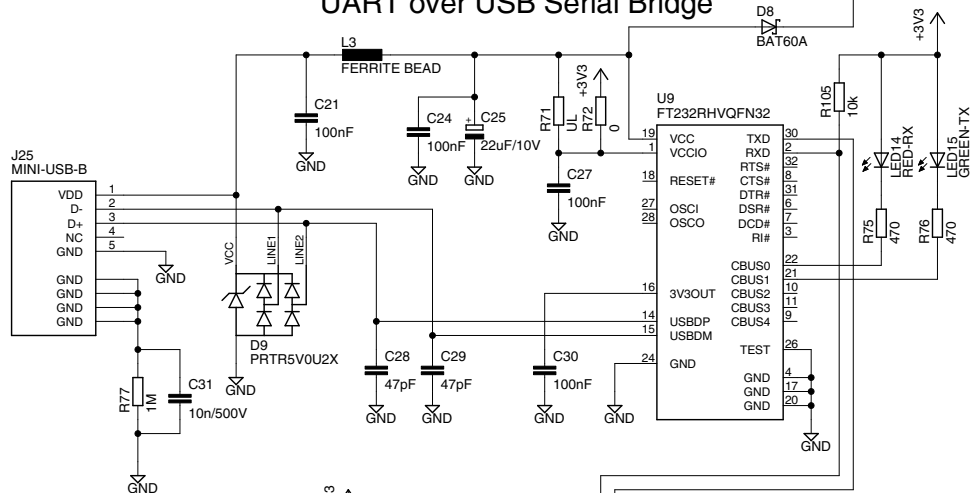
## Li-ion Battery



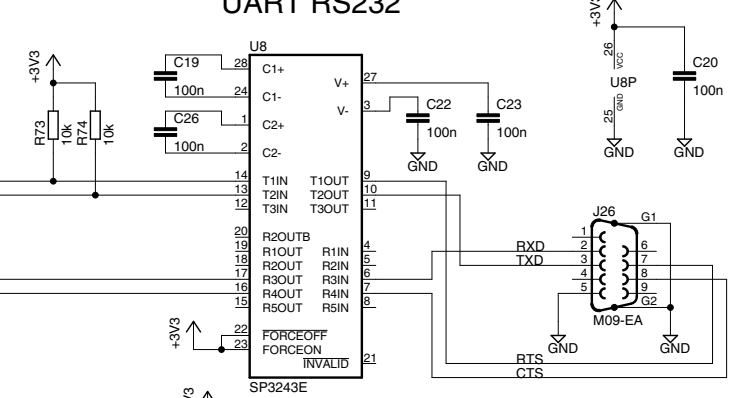
## Power Supply



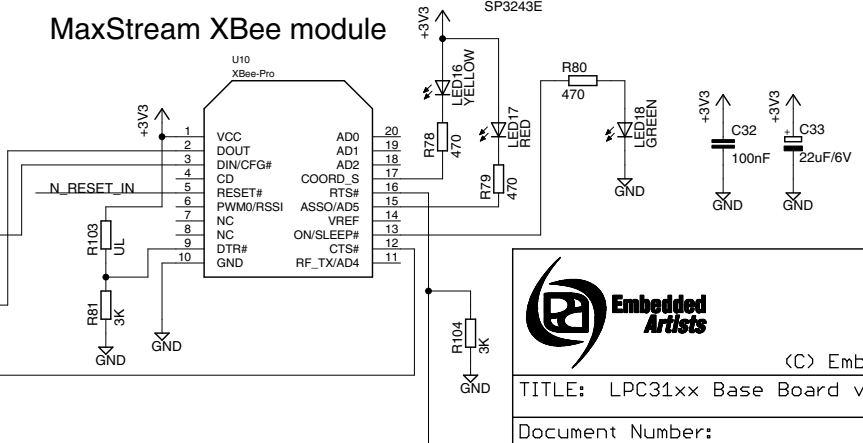
## UART over USB Serial Bridge



## UART RS232



## MaxStream XBee module



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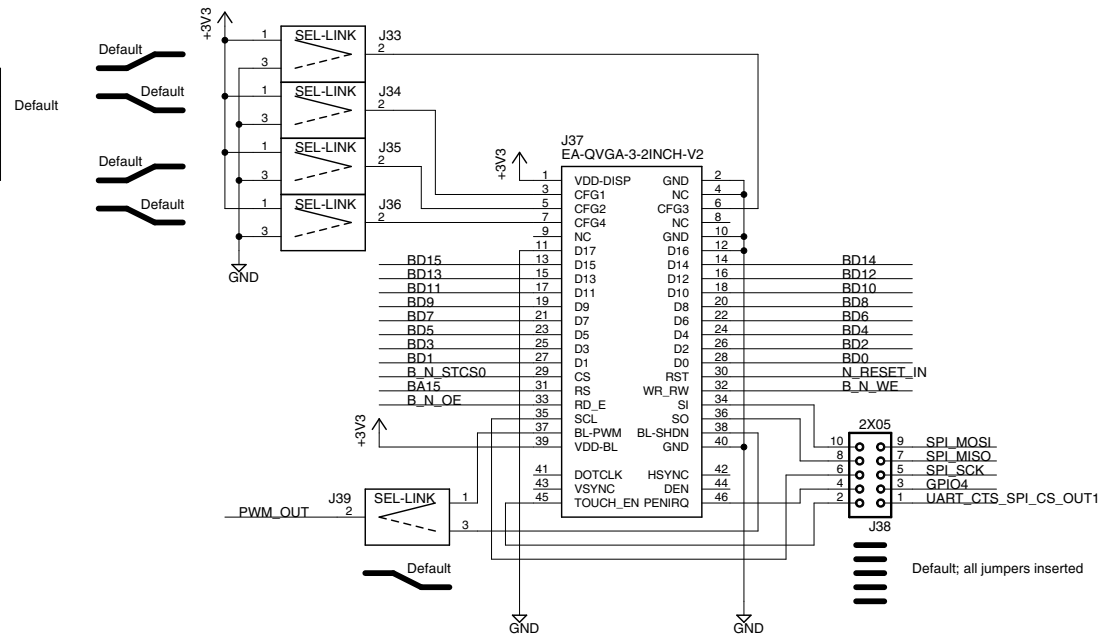
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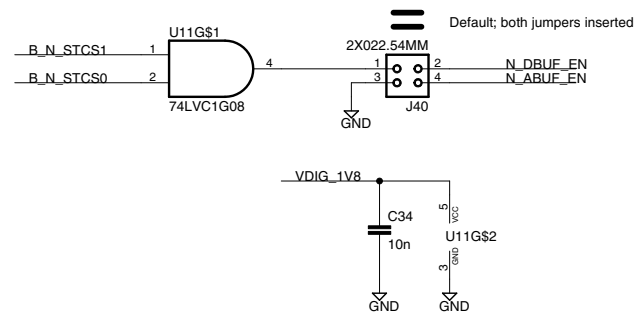
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## Interface Setting

| CFG1 | CFG2 | CFG3 | CFG4 | Interface mode  |
|------|------|------|------|-----------------|
| HIGH | LOW  | LOW  | HIGH | 16-bit parallel |
| LOW  | LOW  | HIGH | LOW  | 9-bit parallel  |
| LOW  | LOW  | LOW  | HIGH | 8-bit parallel  |



## Enable Buffers



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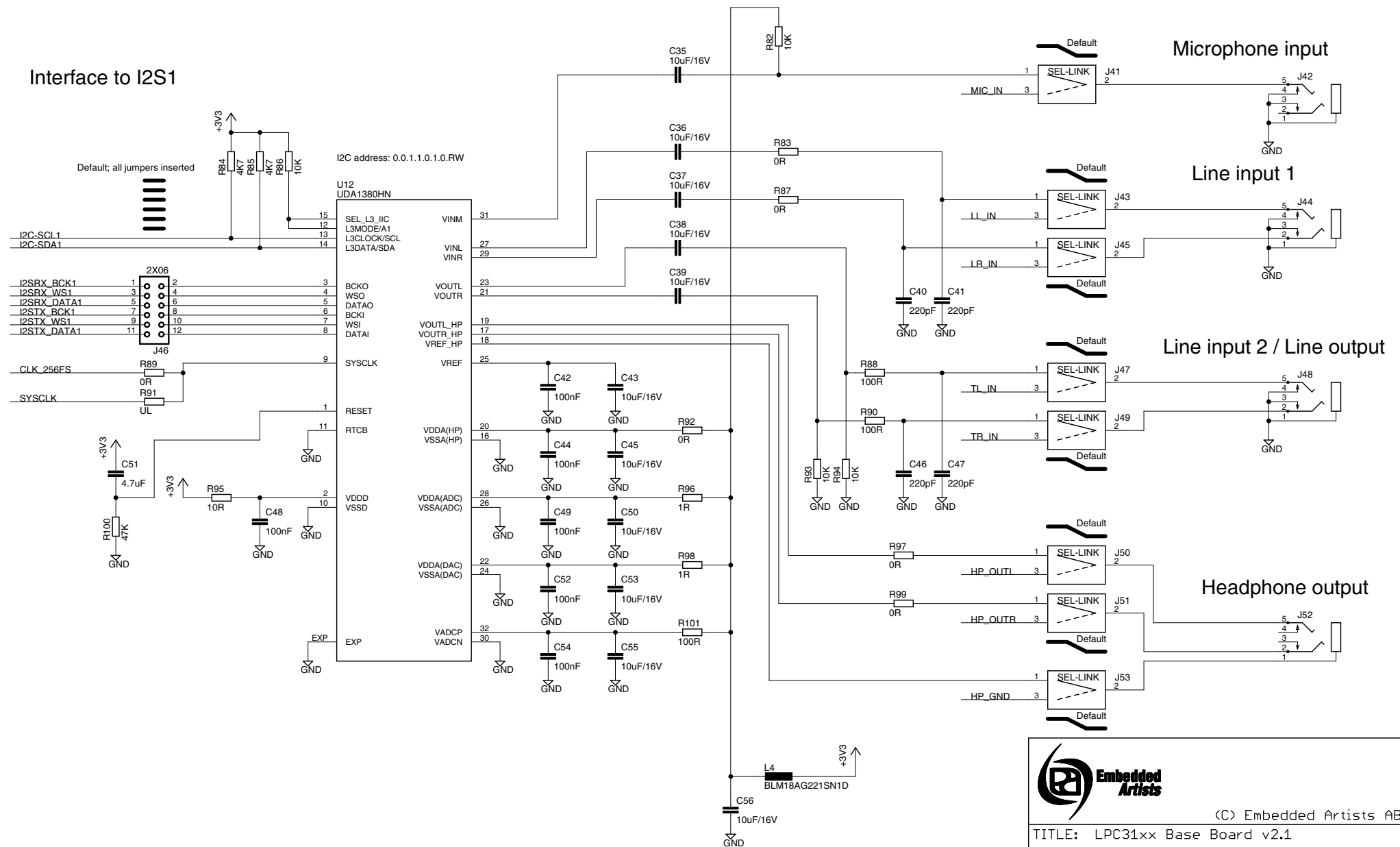
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## Stereo Audio Codec



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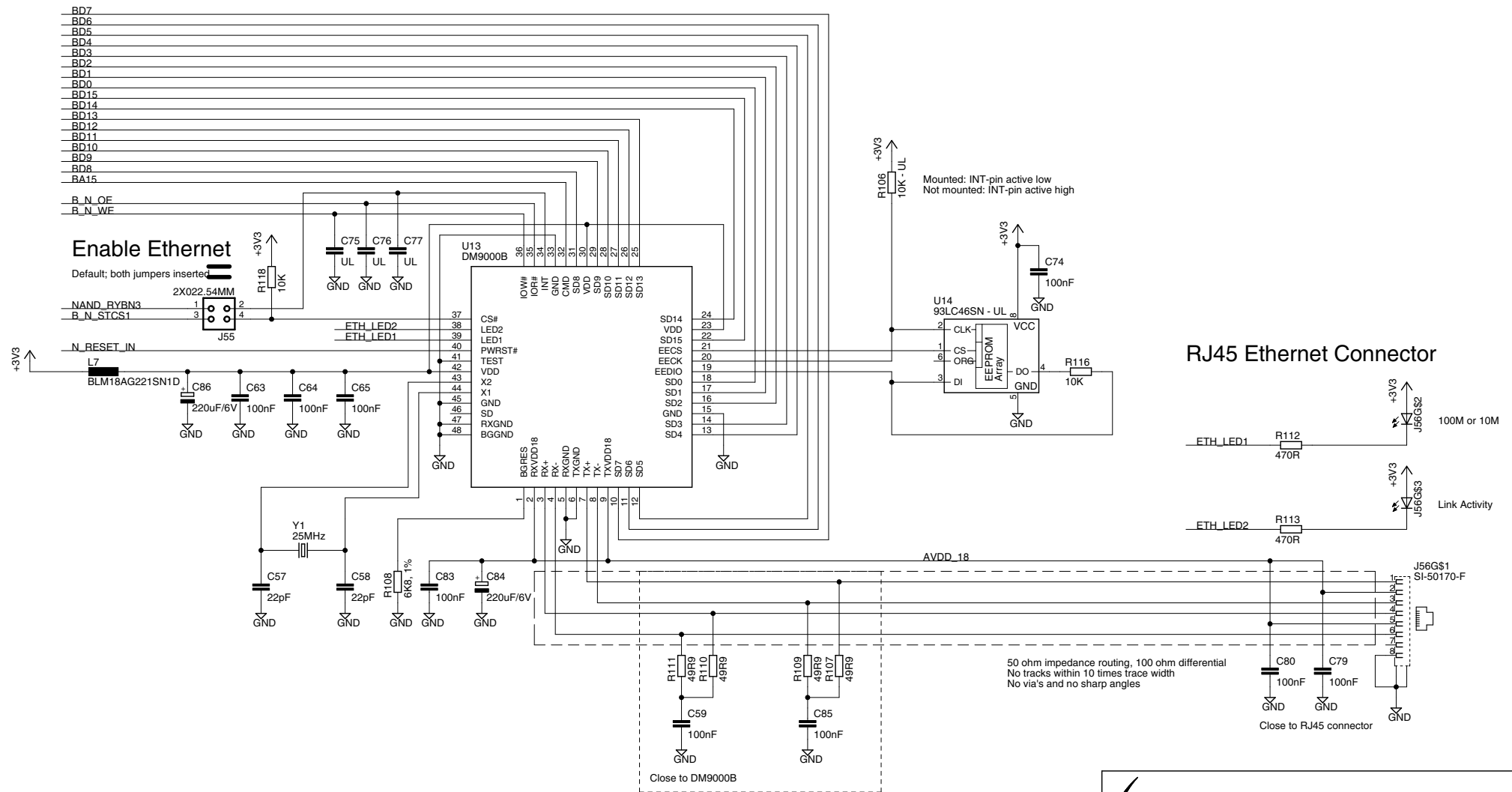
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## 10/100Mbps Ethernet



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