

place in scan matrix? would need 3-4 wires to UPPER board instead of 2!  
 No. UOL+ or UOL- can either be connected to GPIOs  
 or drive two FETs that sit in the keyboard matrix  
 in any case it is sufficient to connect GPIO-VOL+ and VOL- to two pins on the B2B connector

## Buttons

TITLE: GTA04b7-jr-first-beautify

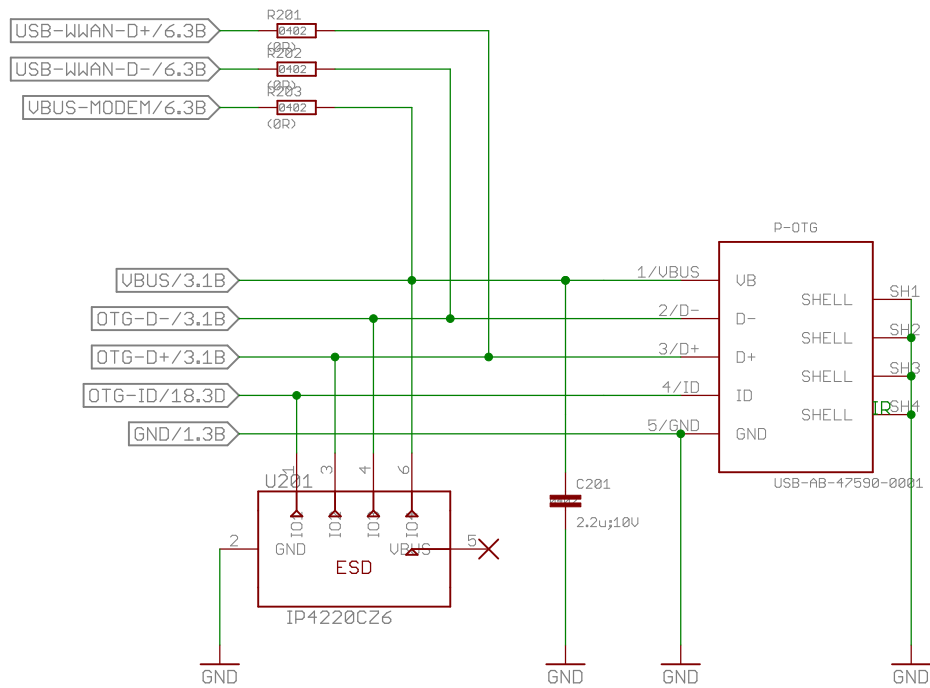
Document Number:

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v2b

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can be used to test/operate the modem through the OTG port (w/o UPPER PCB)



## OTG

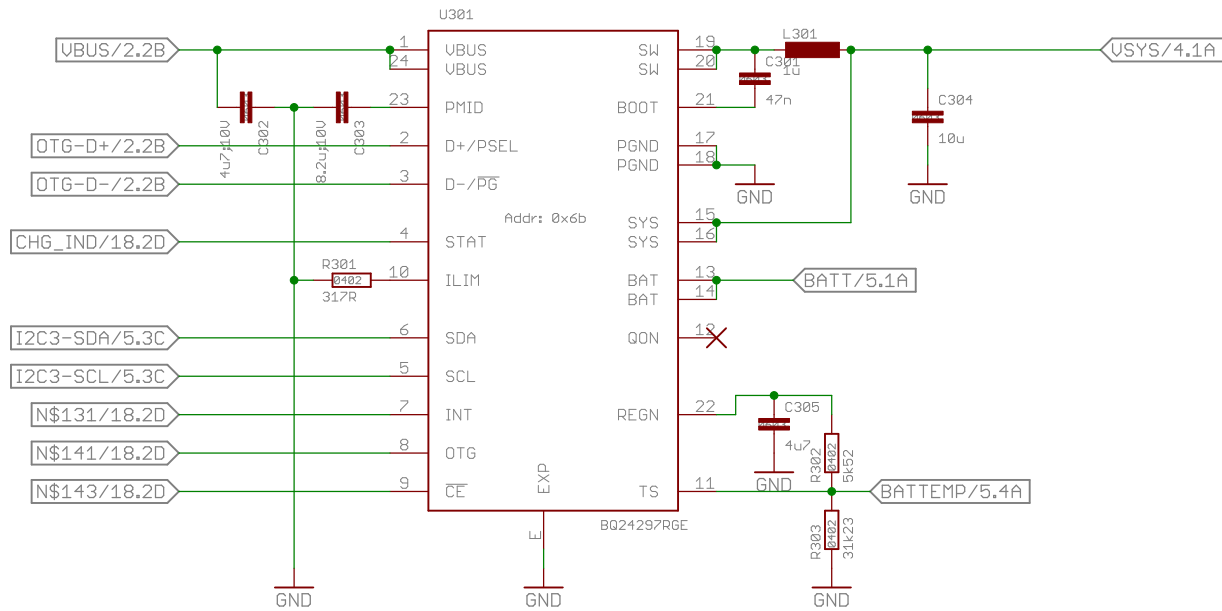
TITLE: GTA04b7-jr-first-beautify

Document Number:

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# Charger/OTG-Booster

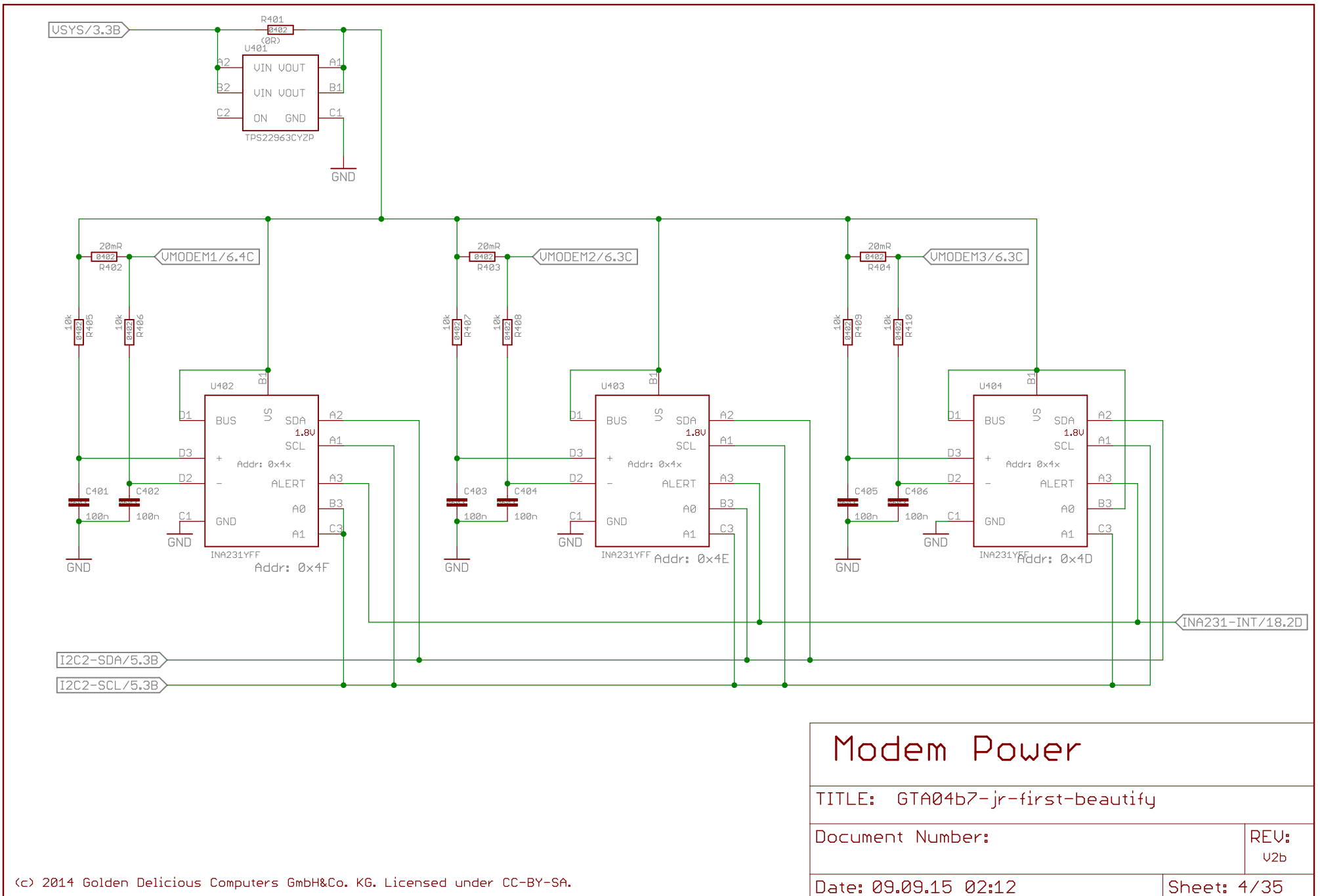
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## Modem Power

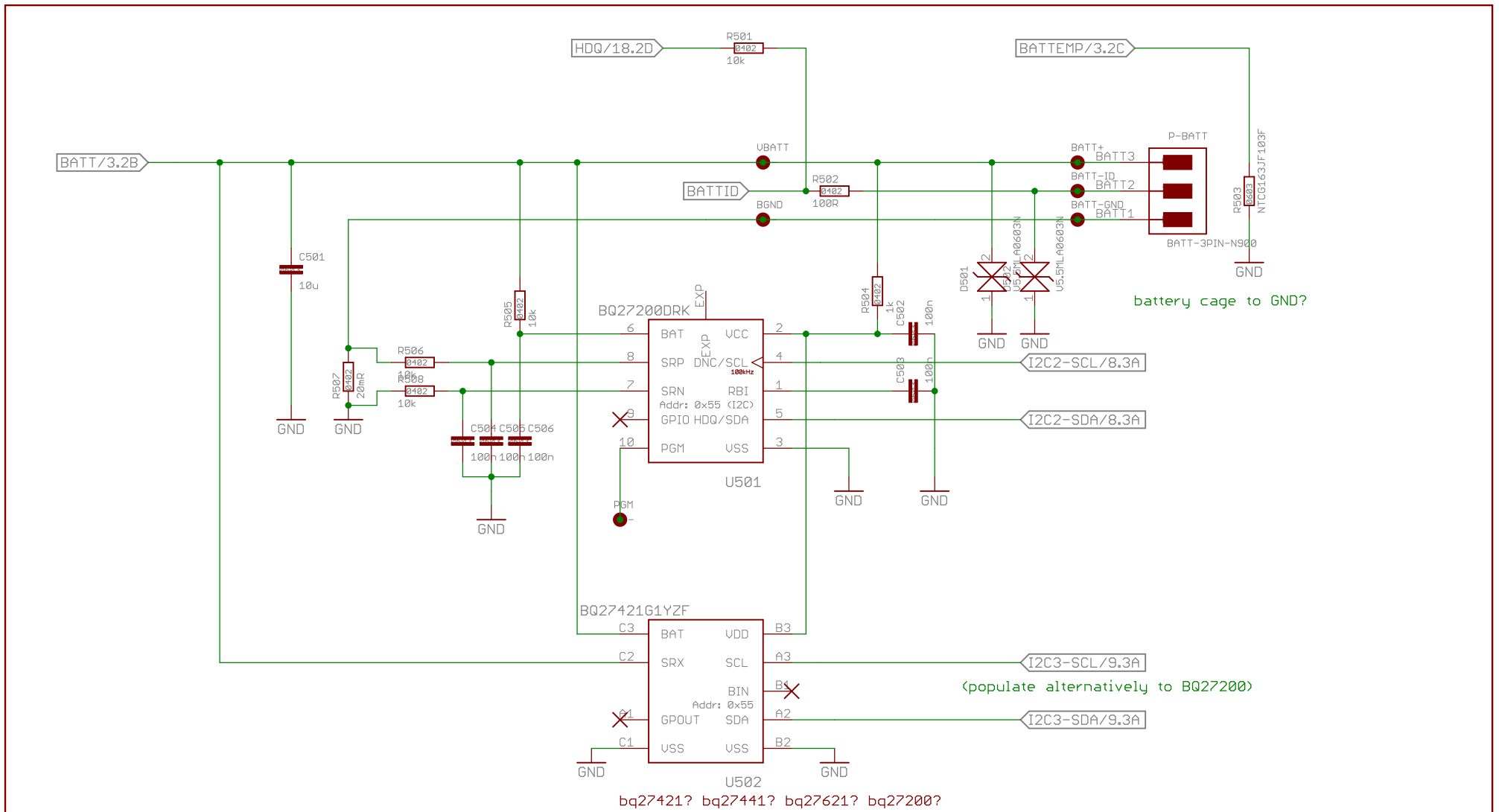
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# Fuel Gauge

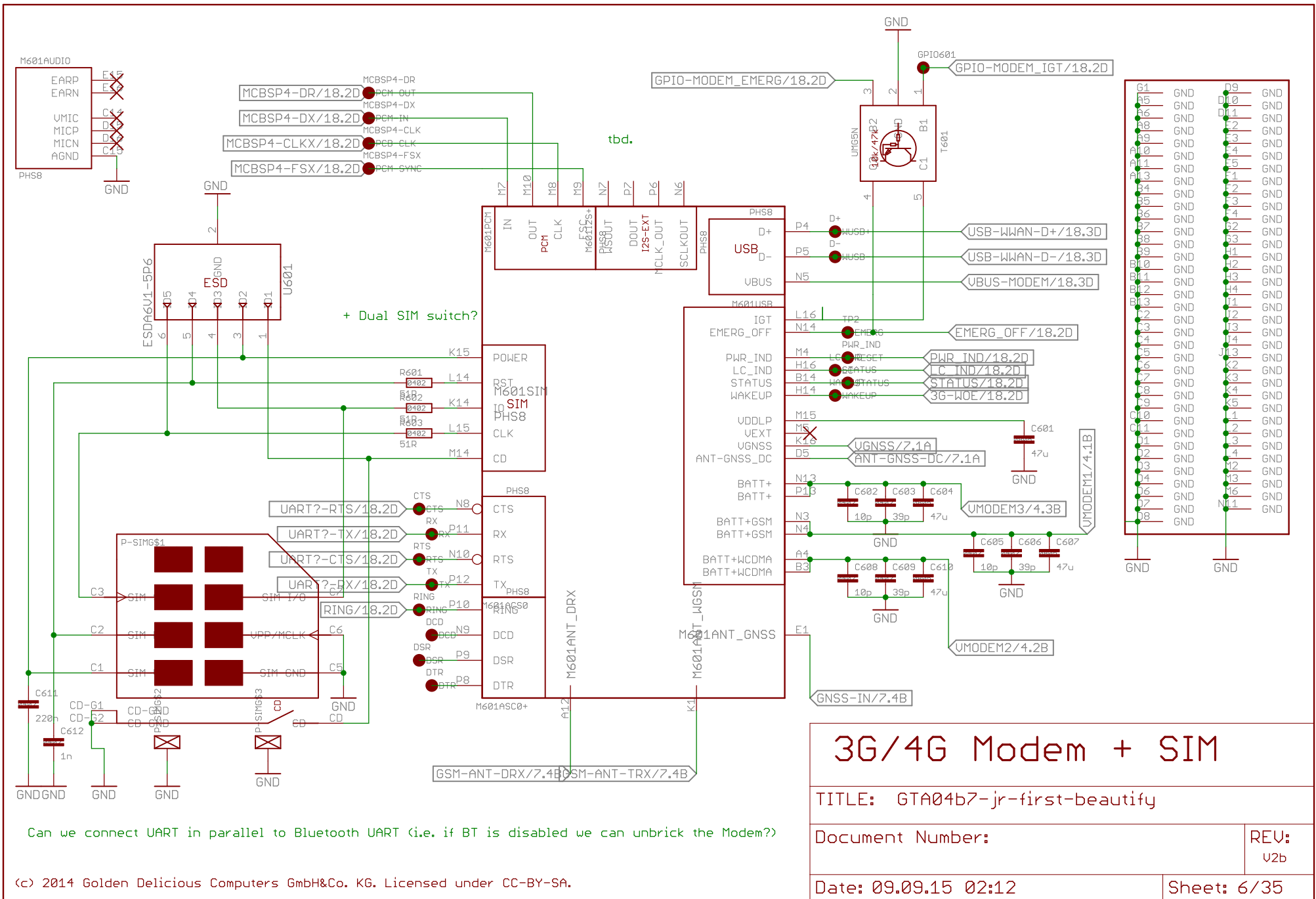
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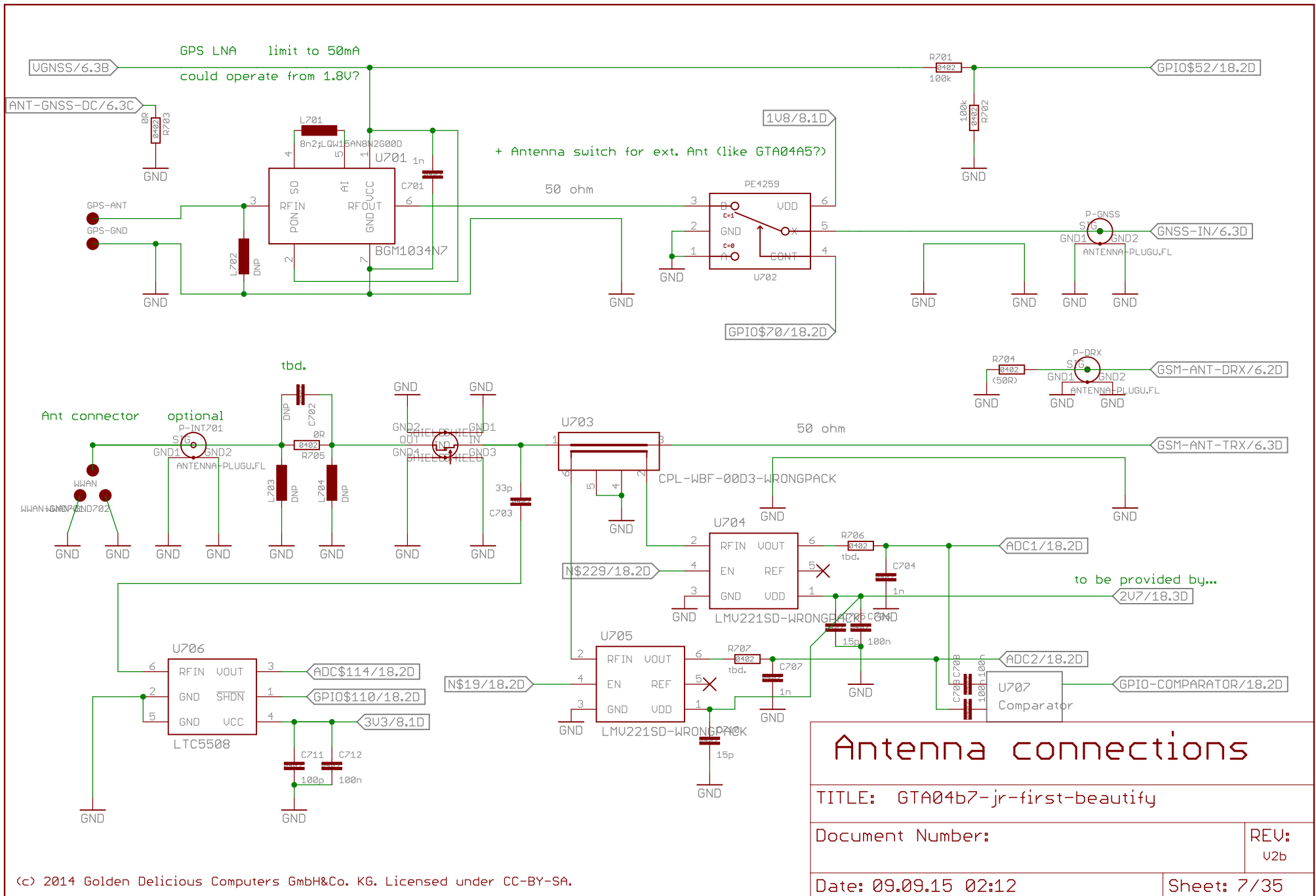


# 3G/4G Modem + SIM

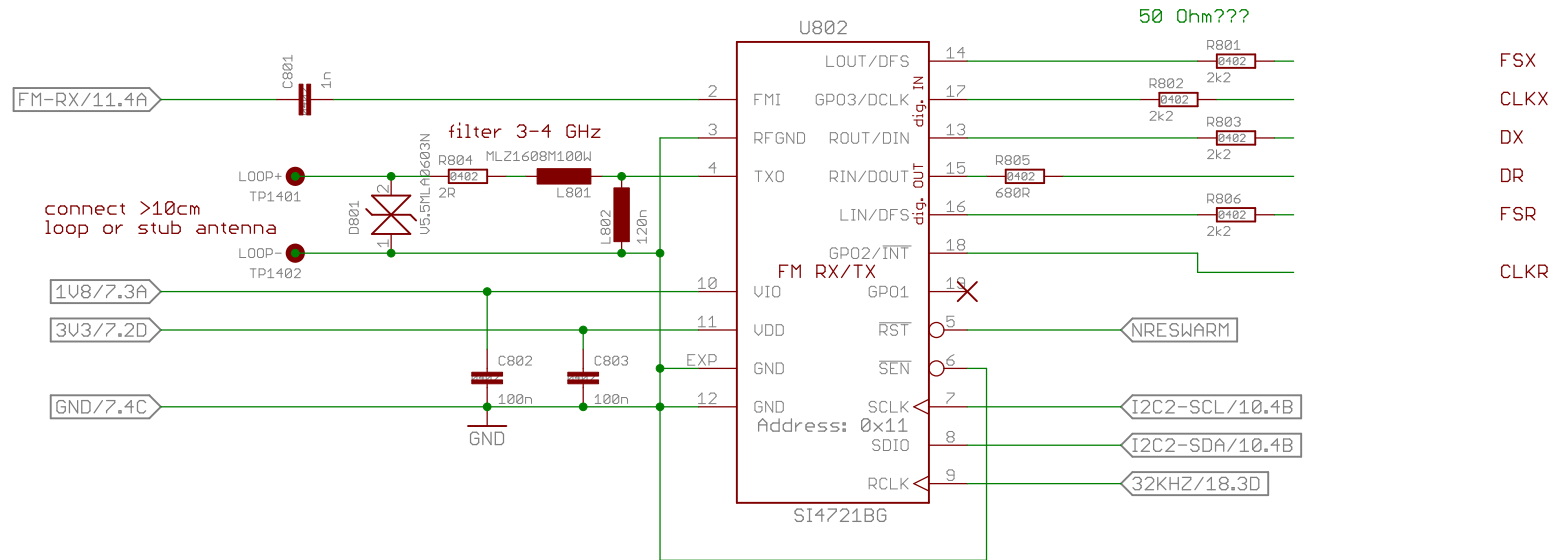
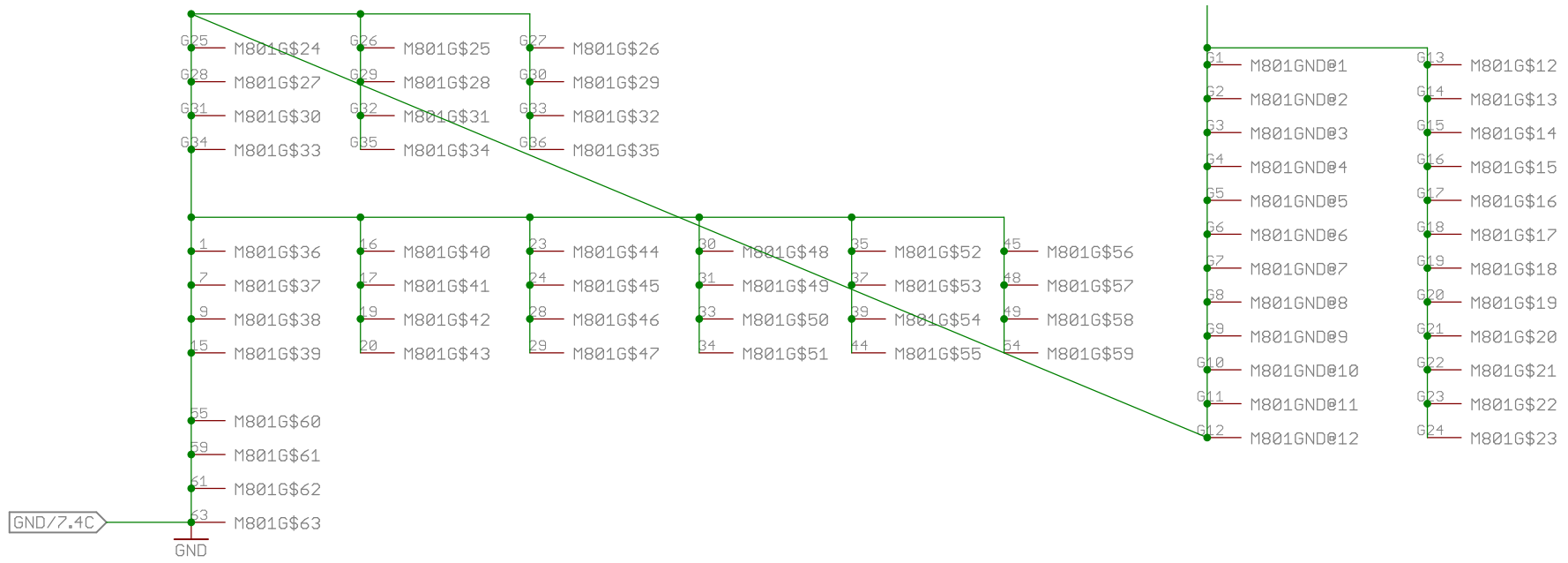
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<h1>Antenna connections</h1>	
TITLE: GTA04b7-jr-first-beautify	
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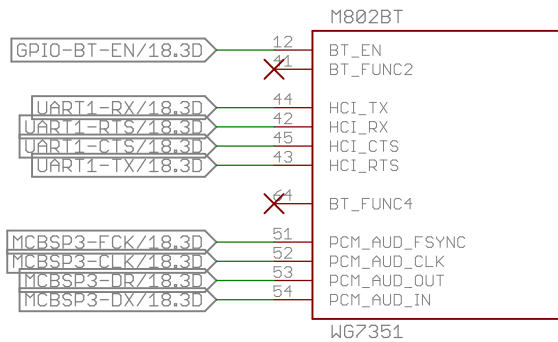
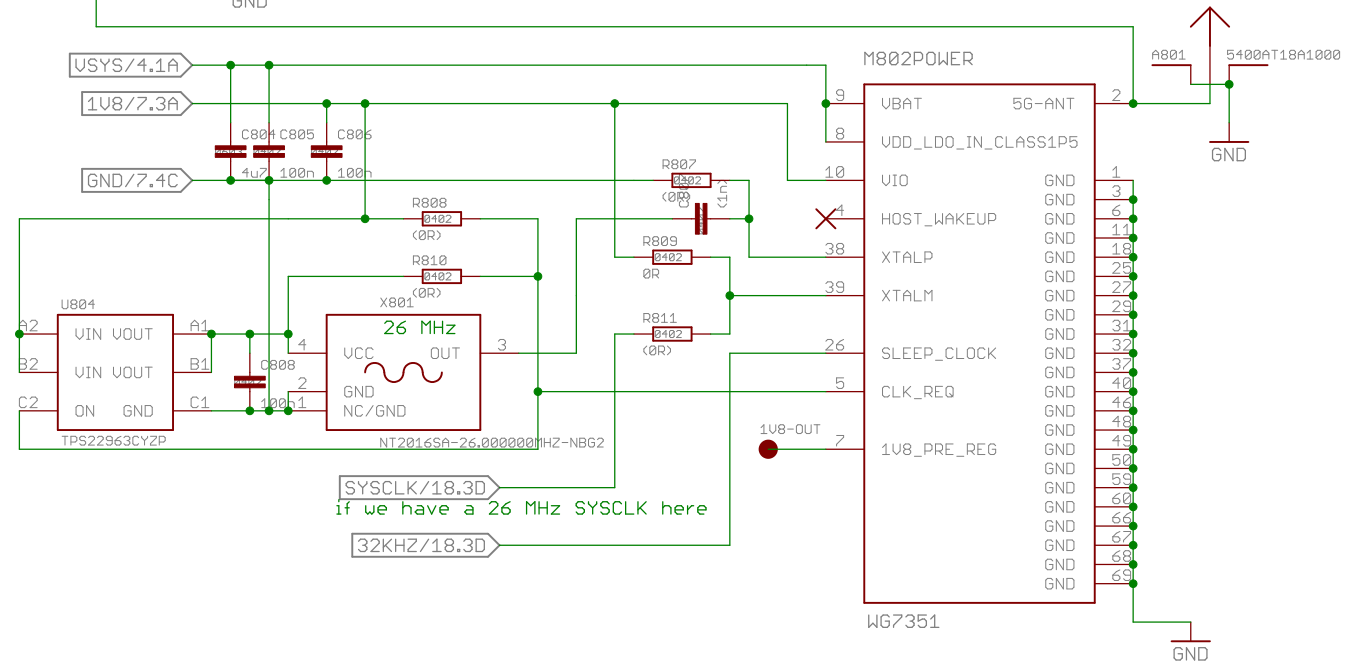
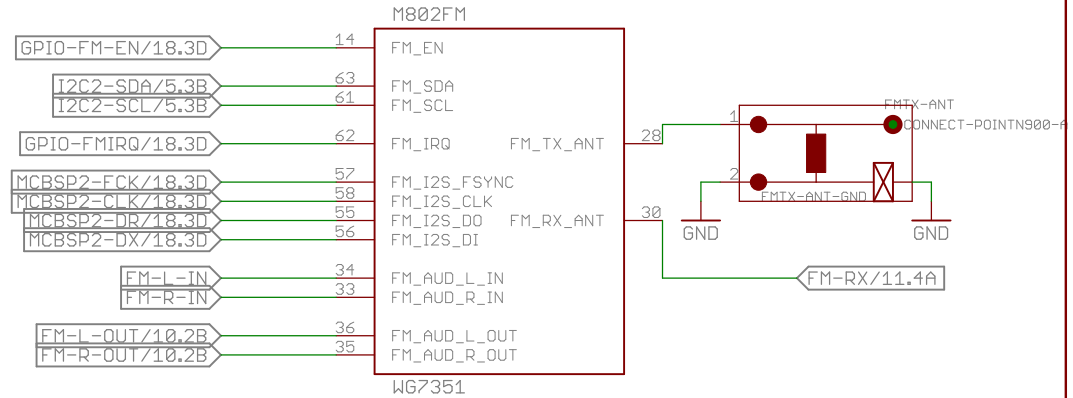
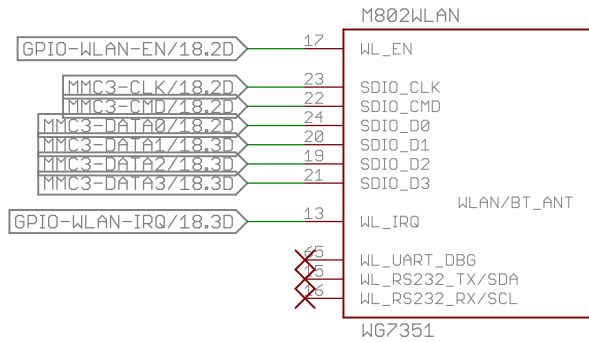
- FSX
- CLKX
- DX
- DR
- FSR
- CLKR

Si4705 is pin compatible (mostly) but RX-only



WiLink5

Dämpfungs-RC's?



# WLAN & Bluetooth & FM

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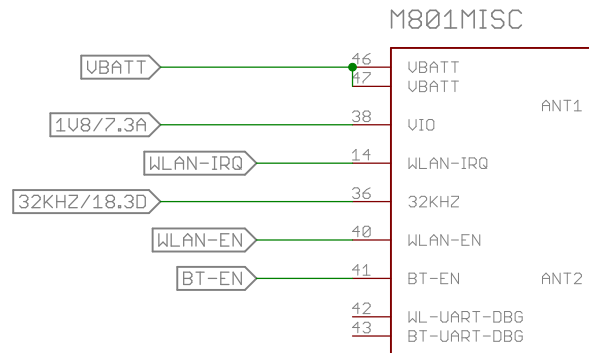
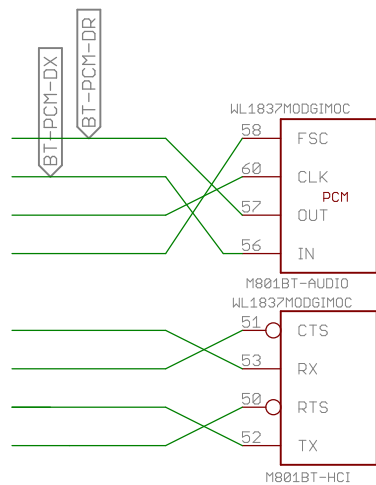
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REV:  
v2b

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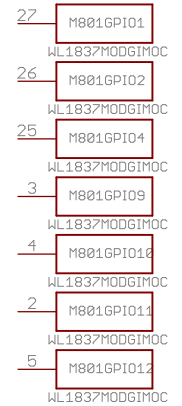
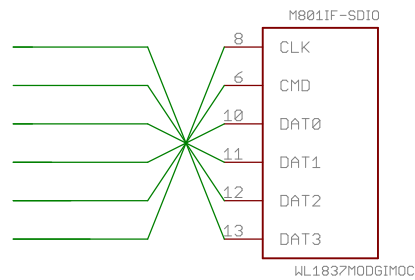
Sheet: 8/35

WiLink8



WL1837MODGIMOC

secondary (on the side of GTA04)  
could be 5.8GHz as well



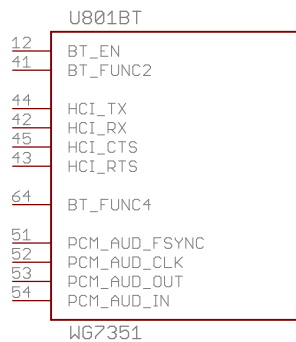
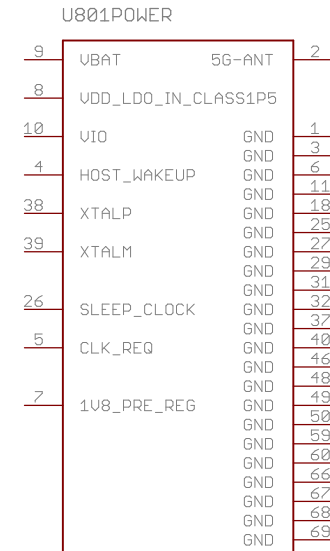
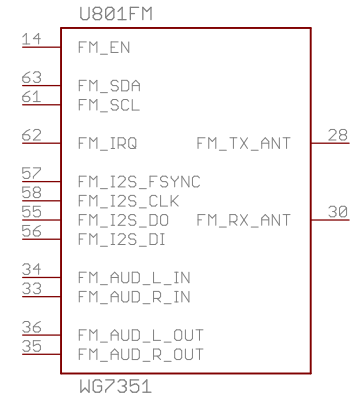
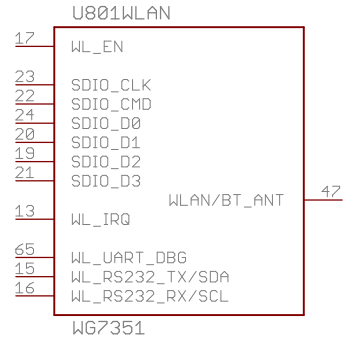
# WLAN & Bluetooth & FM

TITLE: GTA04b7-jr-first-beautify

Document Number:

REV:  
v2b

WiLink6

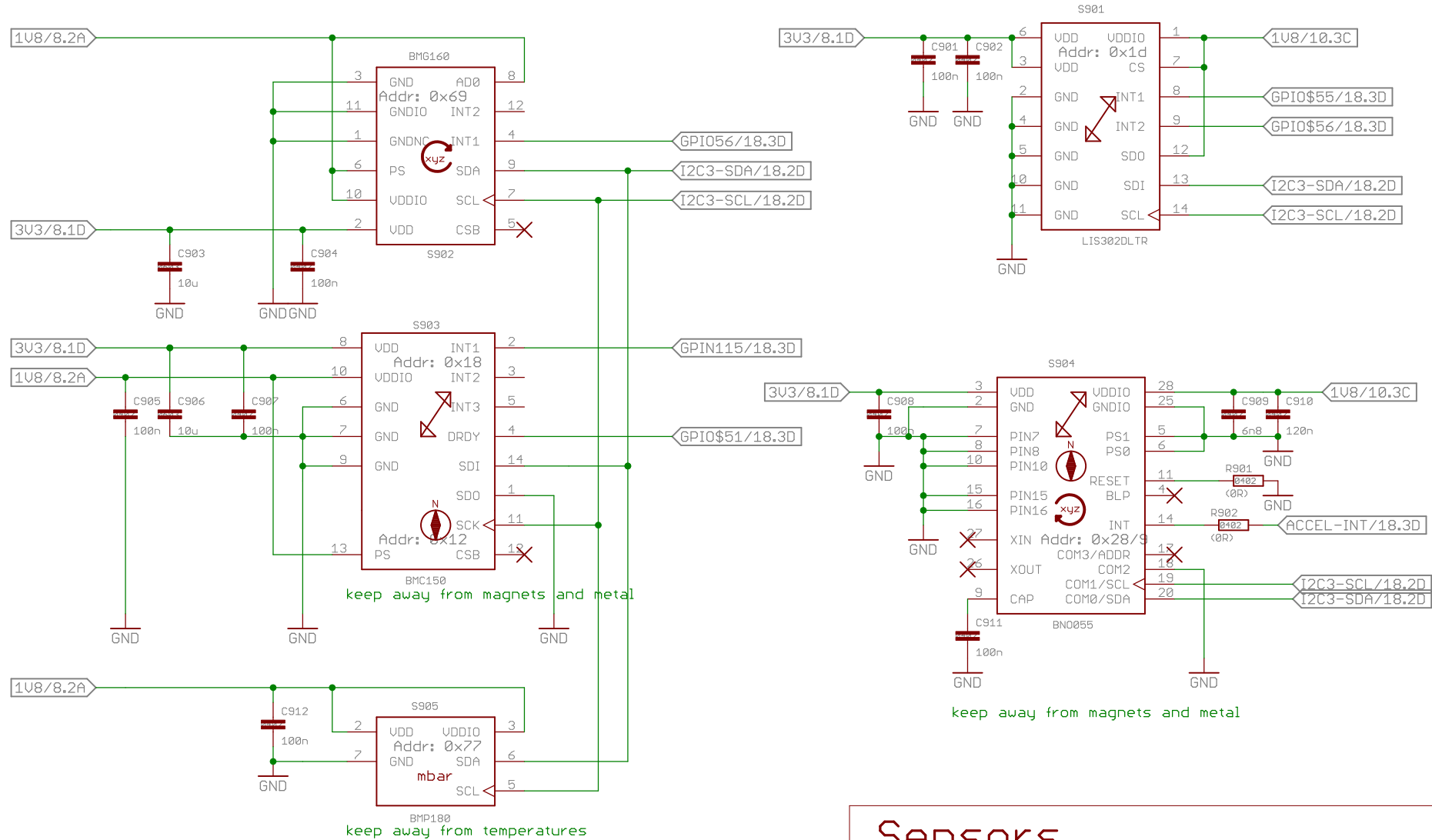


# WLAN & Bluetooth & FM

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Document Number:

REV:  
V2b



# Sensors

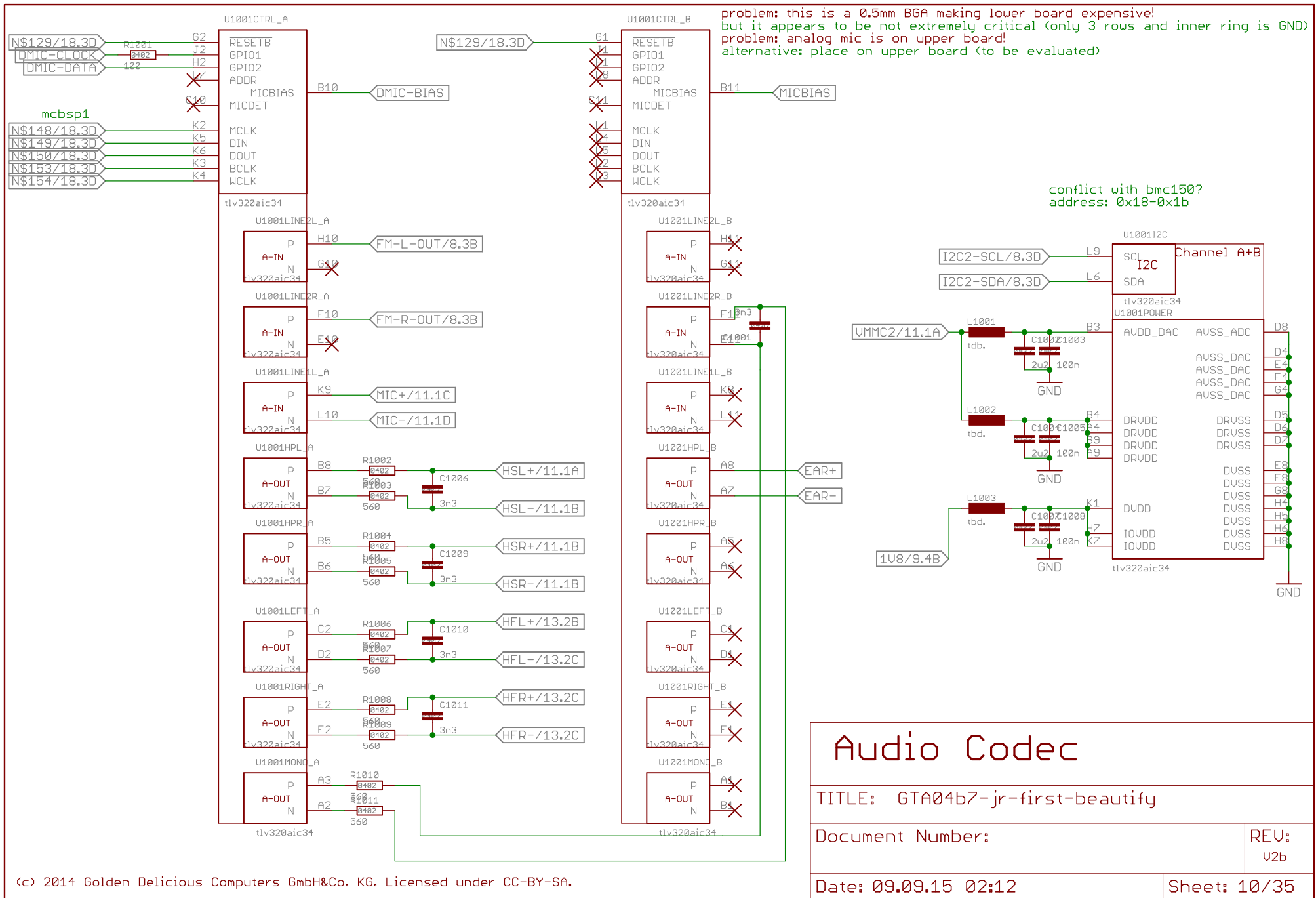
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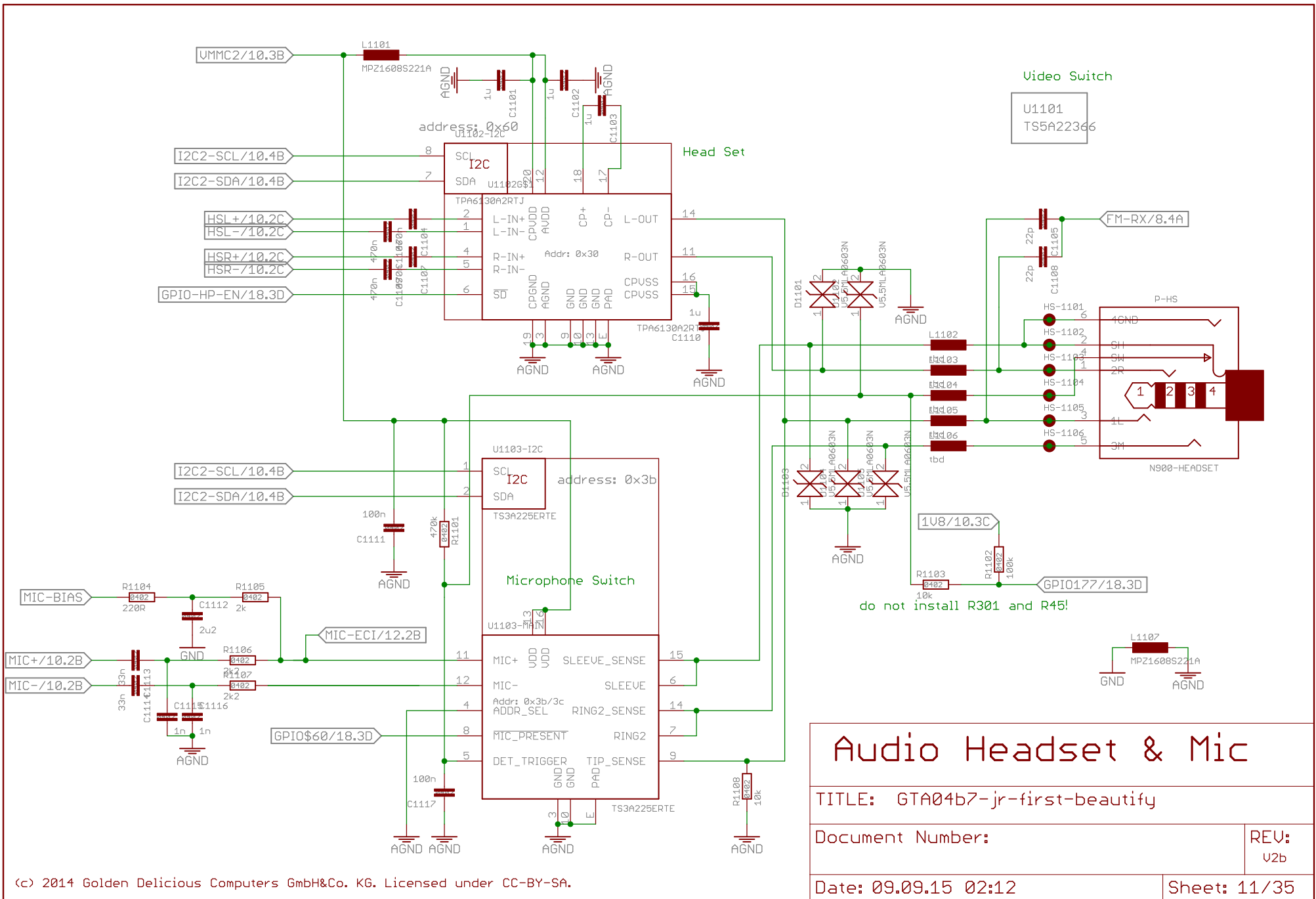
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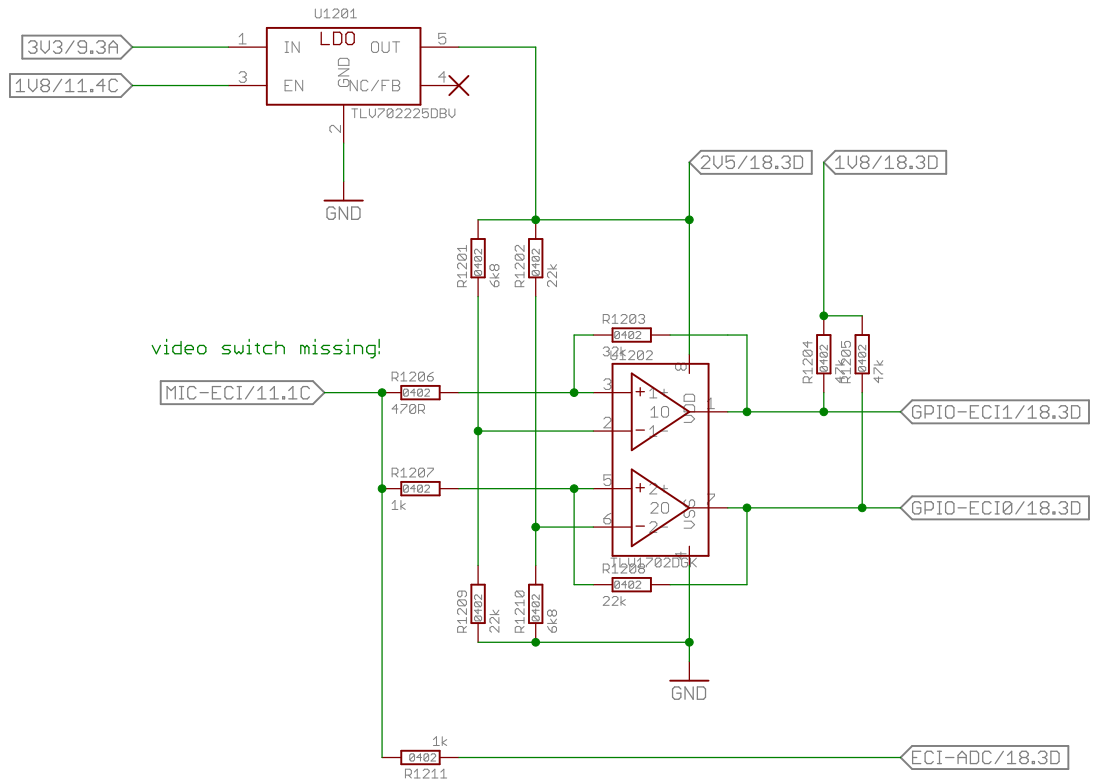
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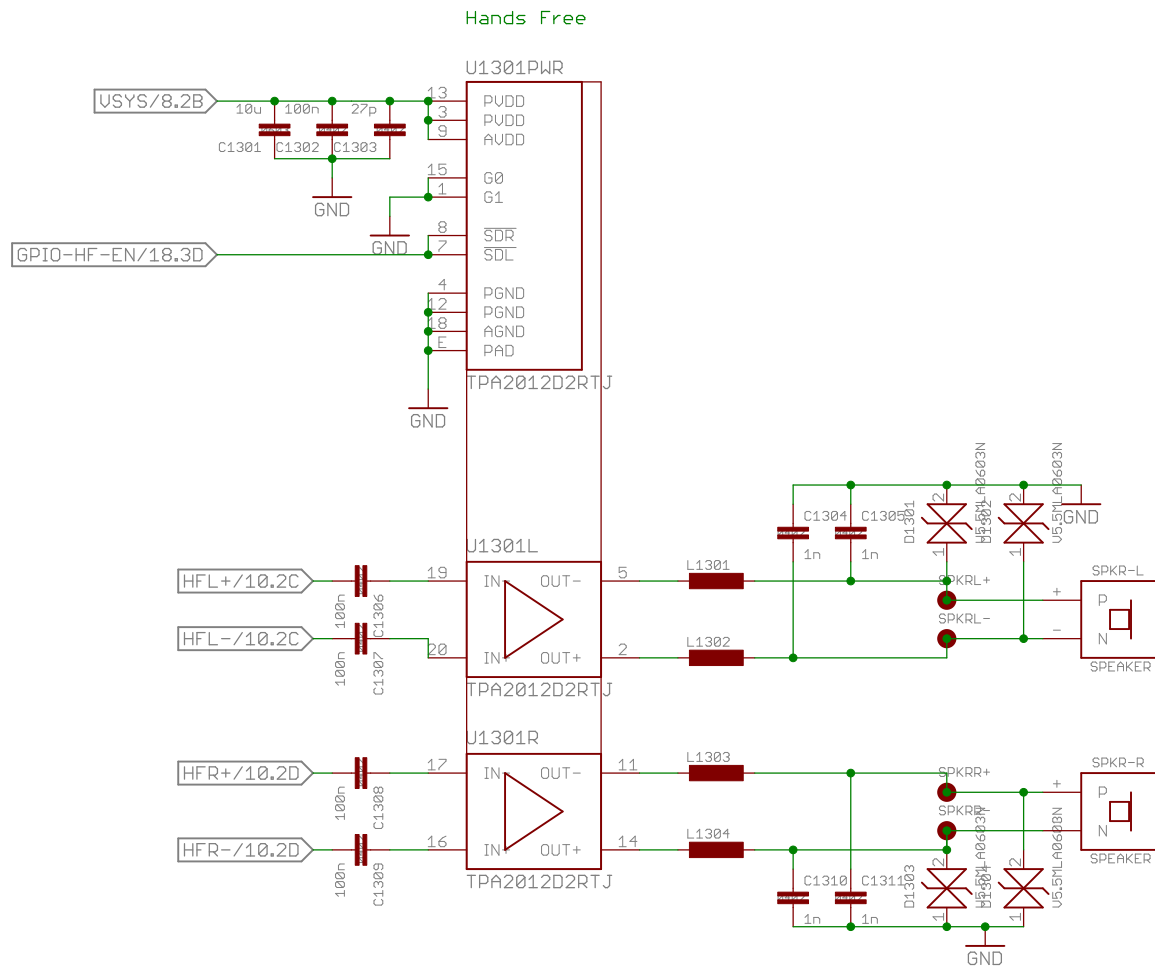
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<h1>ECI</h1>	
TITLE: GTA04b7-jr-first-beautify	
Document Number:	REV: v2b
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# Audio Handsfree

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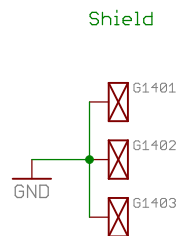
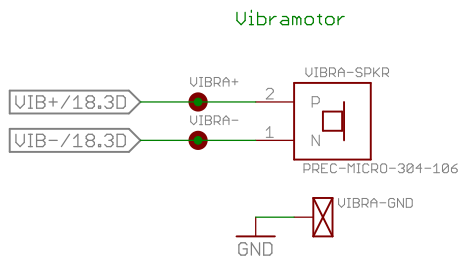
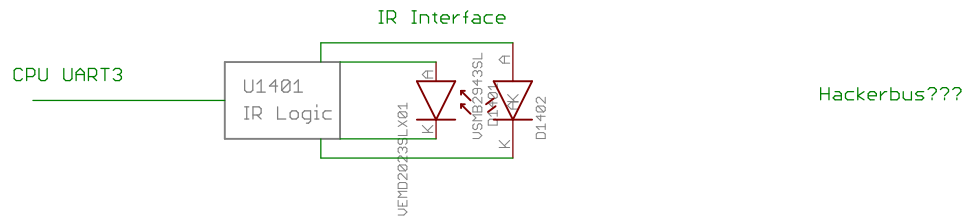
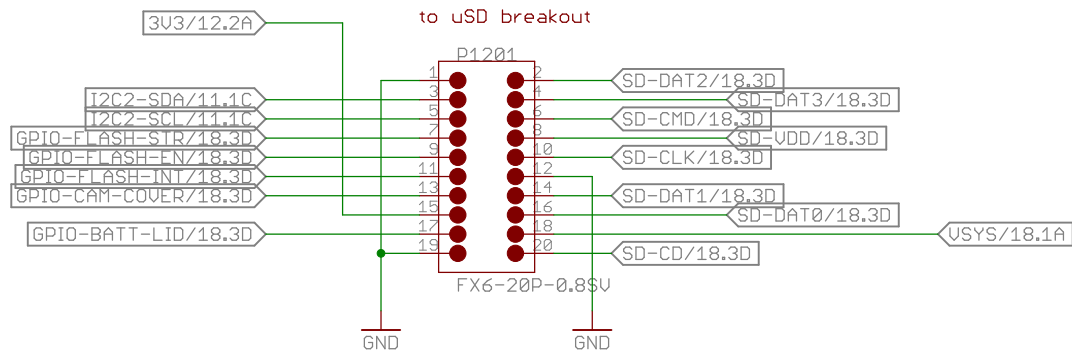
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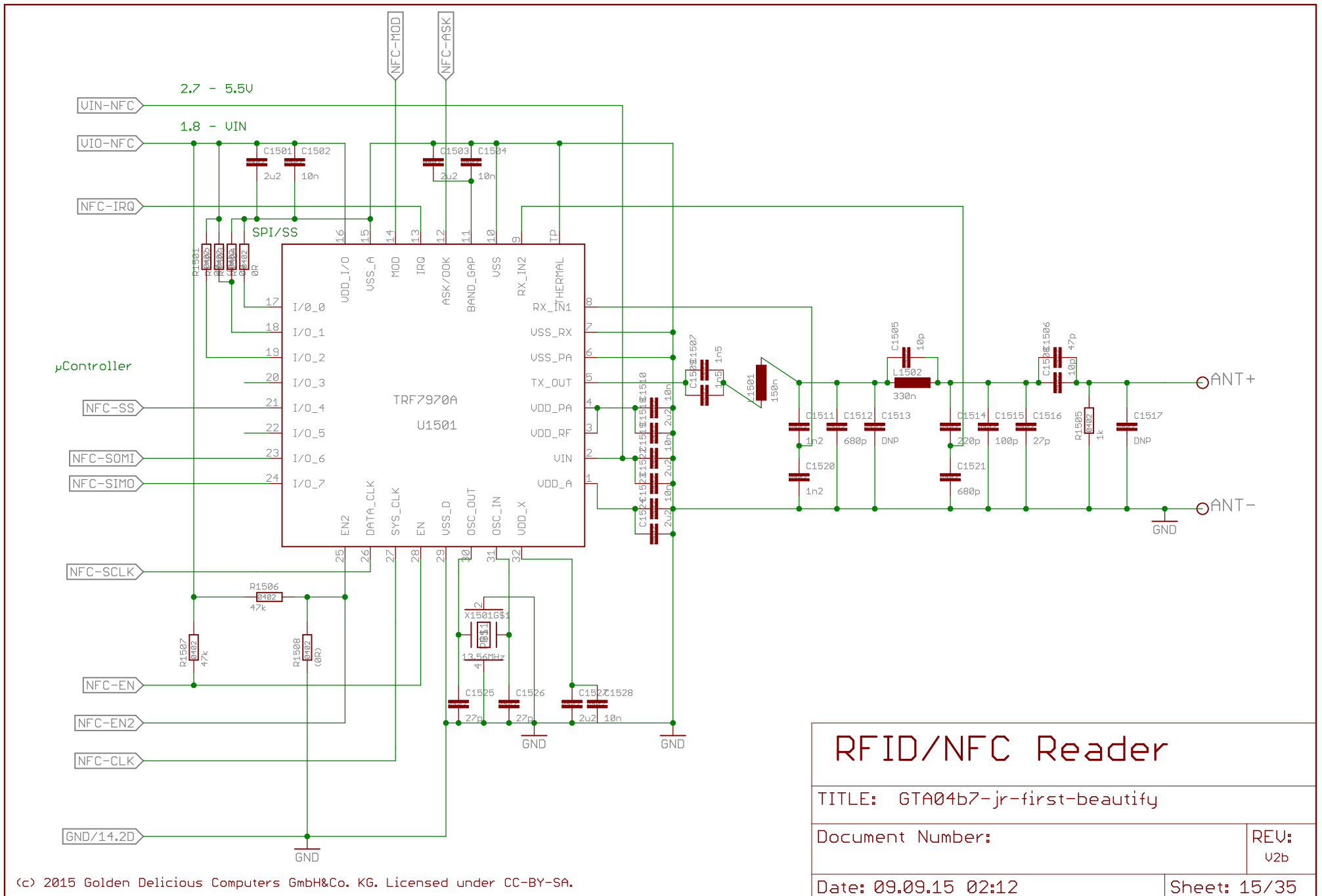
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<h1>Misc (lower)</h1>	
TITLE: GTA04b7-jr-first-beautify	
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# Hackerbus

TITLE: GTA04b7-jr-first-beautify

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v2b

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# Infrared

TITLE: GTA04b7-jr-first-beautify

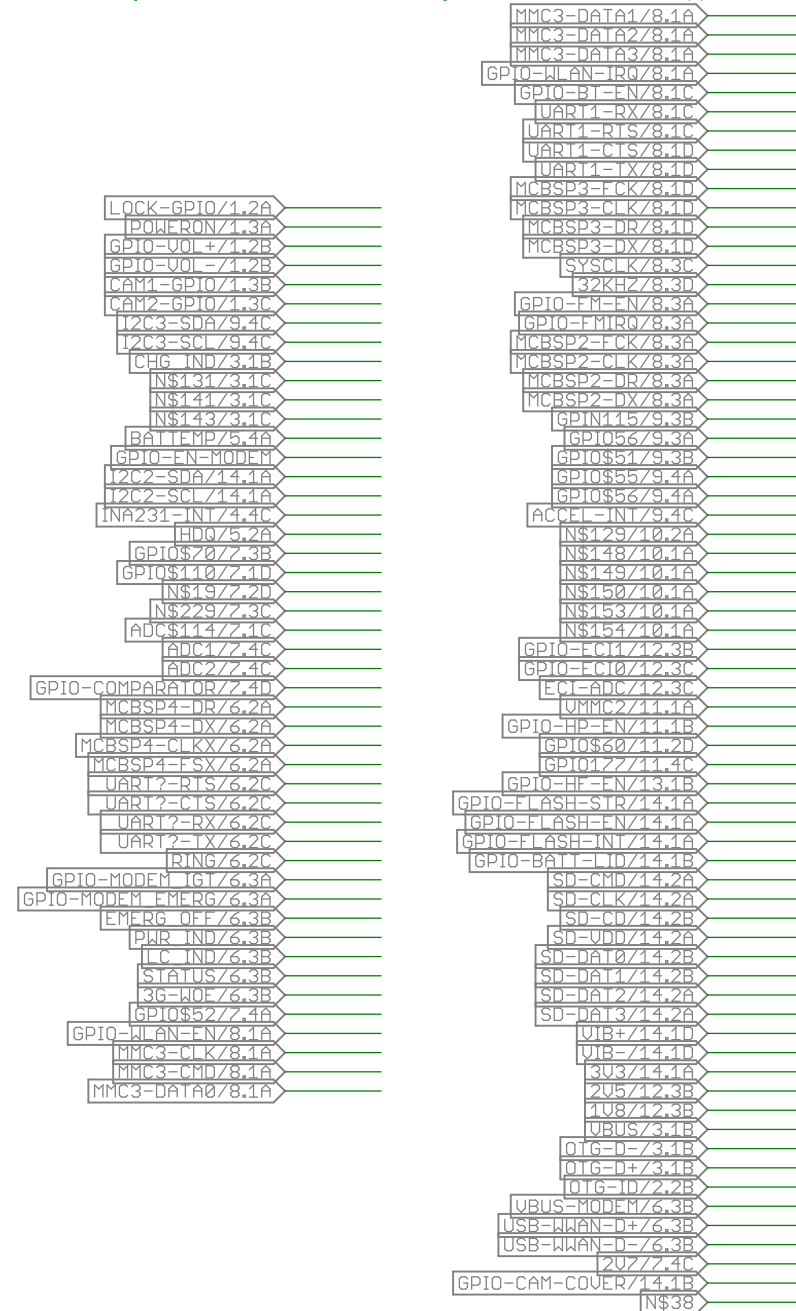
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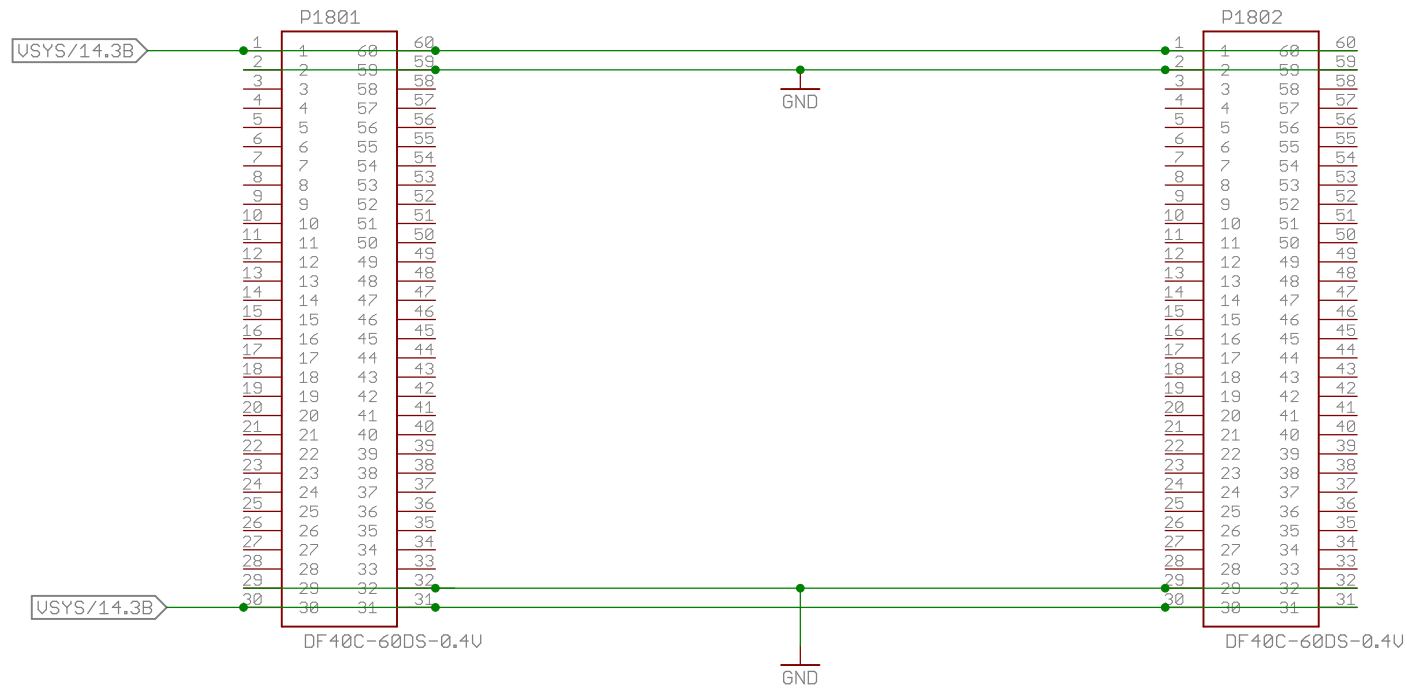
Date: 09.09.15 02:12

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ca. 130 signals (to be counted exactly after definition of upper/lower split)



Pin assignment must be optimized for final component placement  
 we might have to switch to 80 or 100 pin connectors



## B2B to upper board

TITLE: GTA04b7-jr-first-beautify

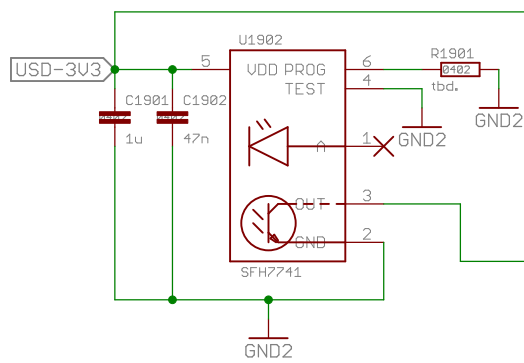
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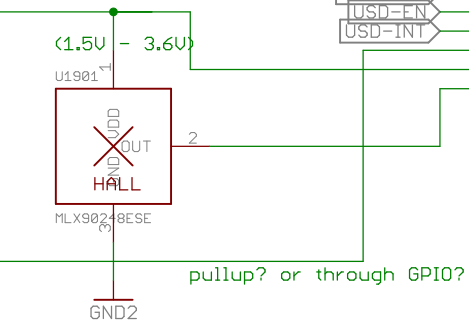
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Camera Cover detect

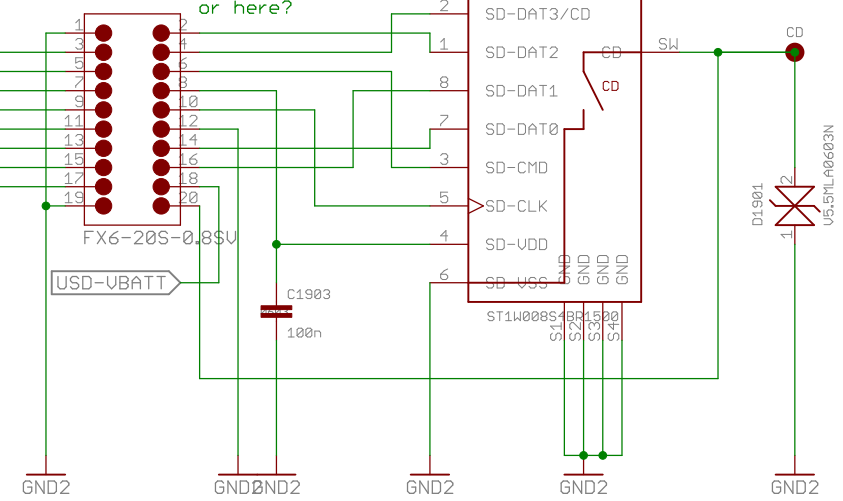


Battery Cover detect

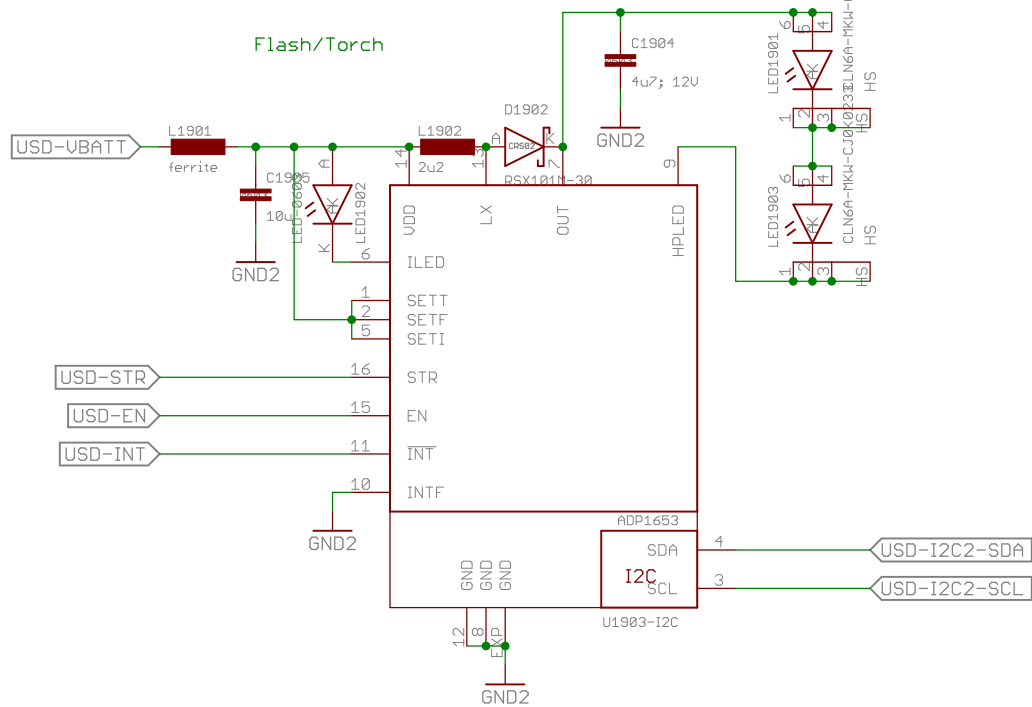


- USD-I2C2-SDA
- USD-I2C2-SCL
- USD-STR
- USD-EN
- USD-INT

ESD on CPU side or here?

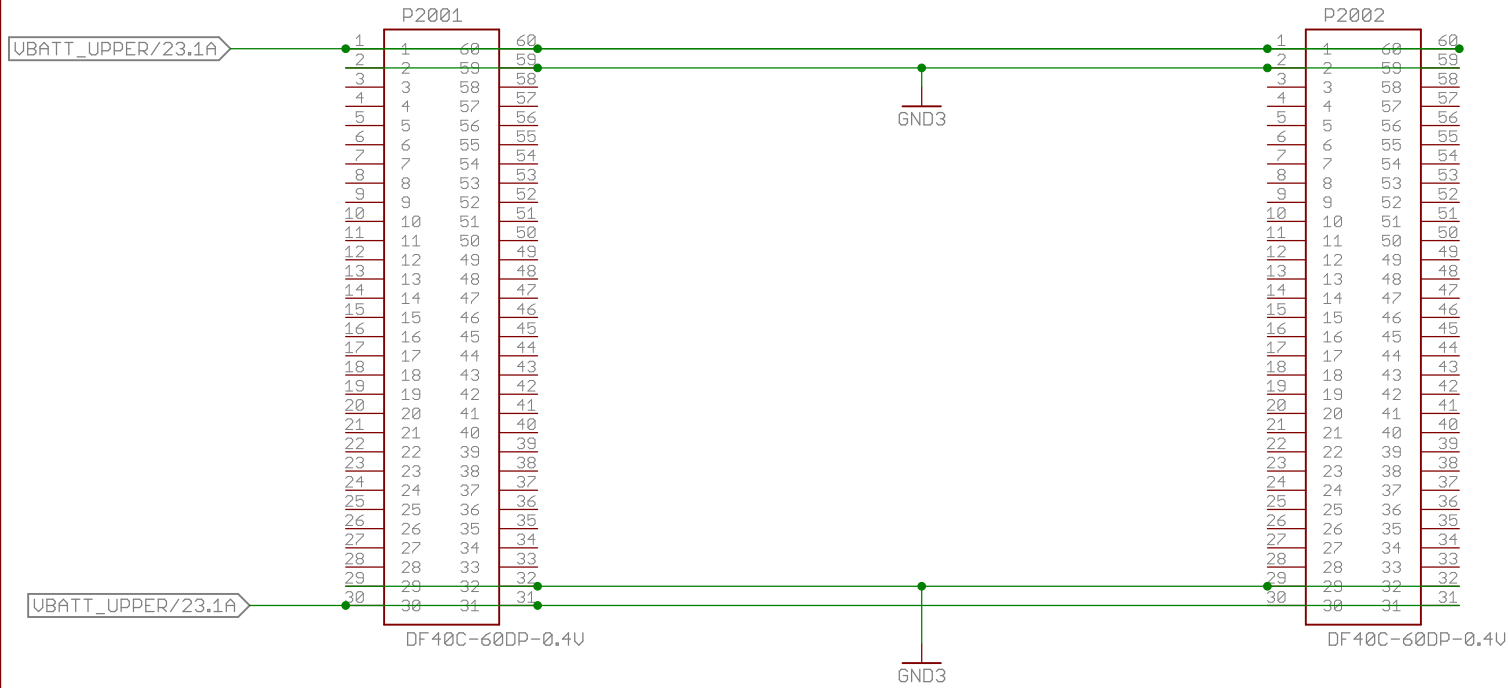


Flash/Torch

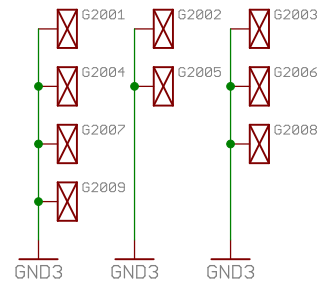


<h1>µSD Breakout Board</h1>	
TITLE: GTA04b7-jr-first-beautify	
Document Number:	REU: v2b
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to be adjusted to lower board connector



SHIELD



# B2B to lower board

TITLE: GTA04b7-jr-first-beautify

Document Number:

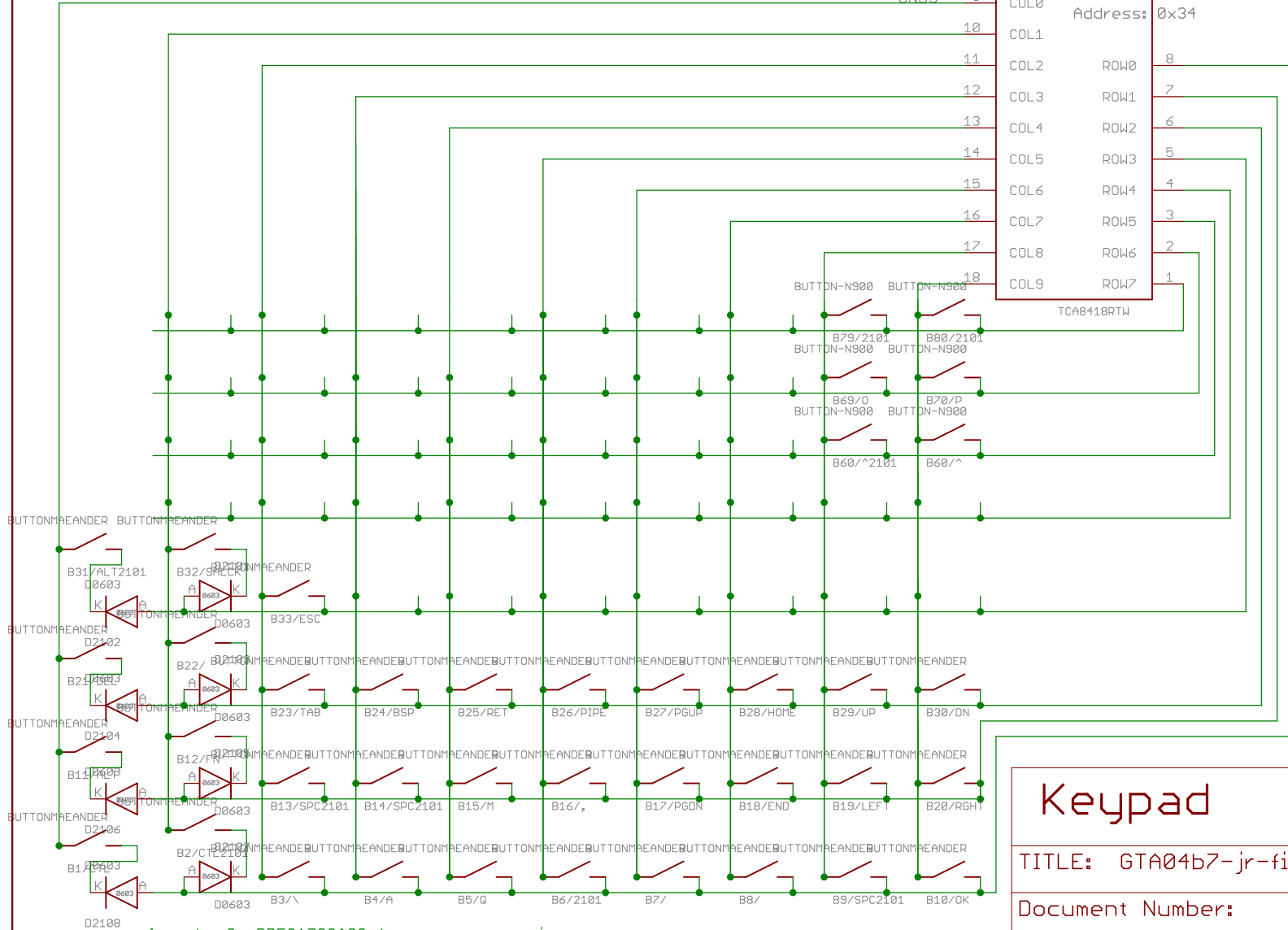
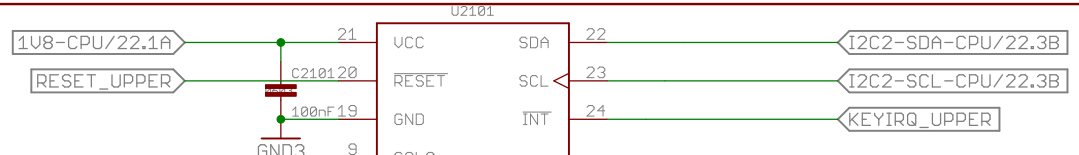
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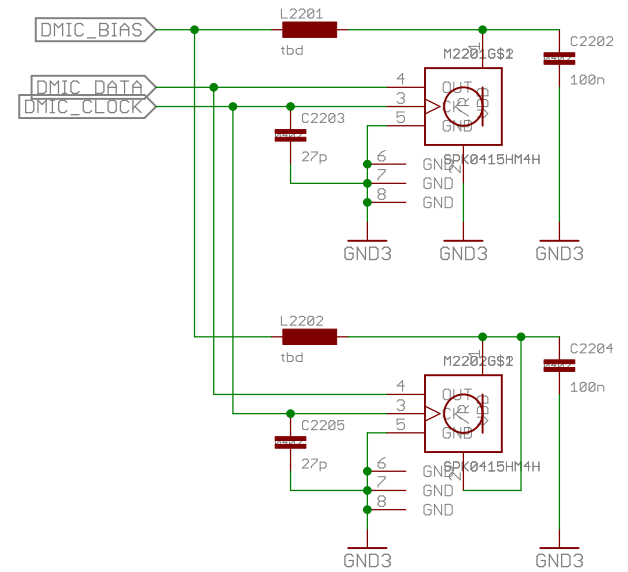
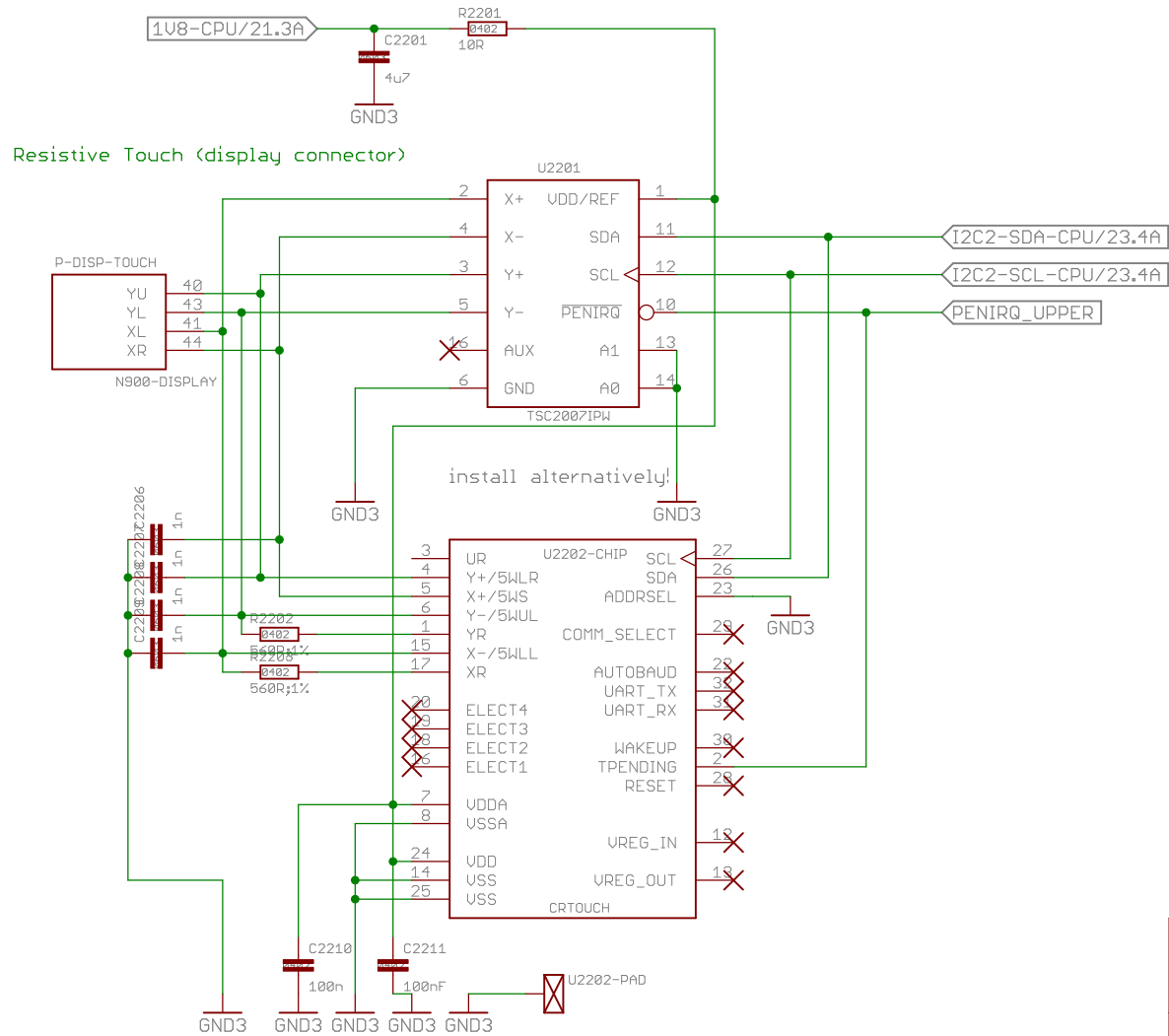
needs final tuning (which button on which position)  
 VOL+ and VOL- could drive FETs sitting in the matrix



# Keypad

TITLE: GTA04b7-jr-first-beautify	
Document Number:	REV: U2b
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replace by 2x RB521ZS8A30 for space constraints



## Display-Peripherals

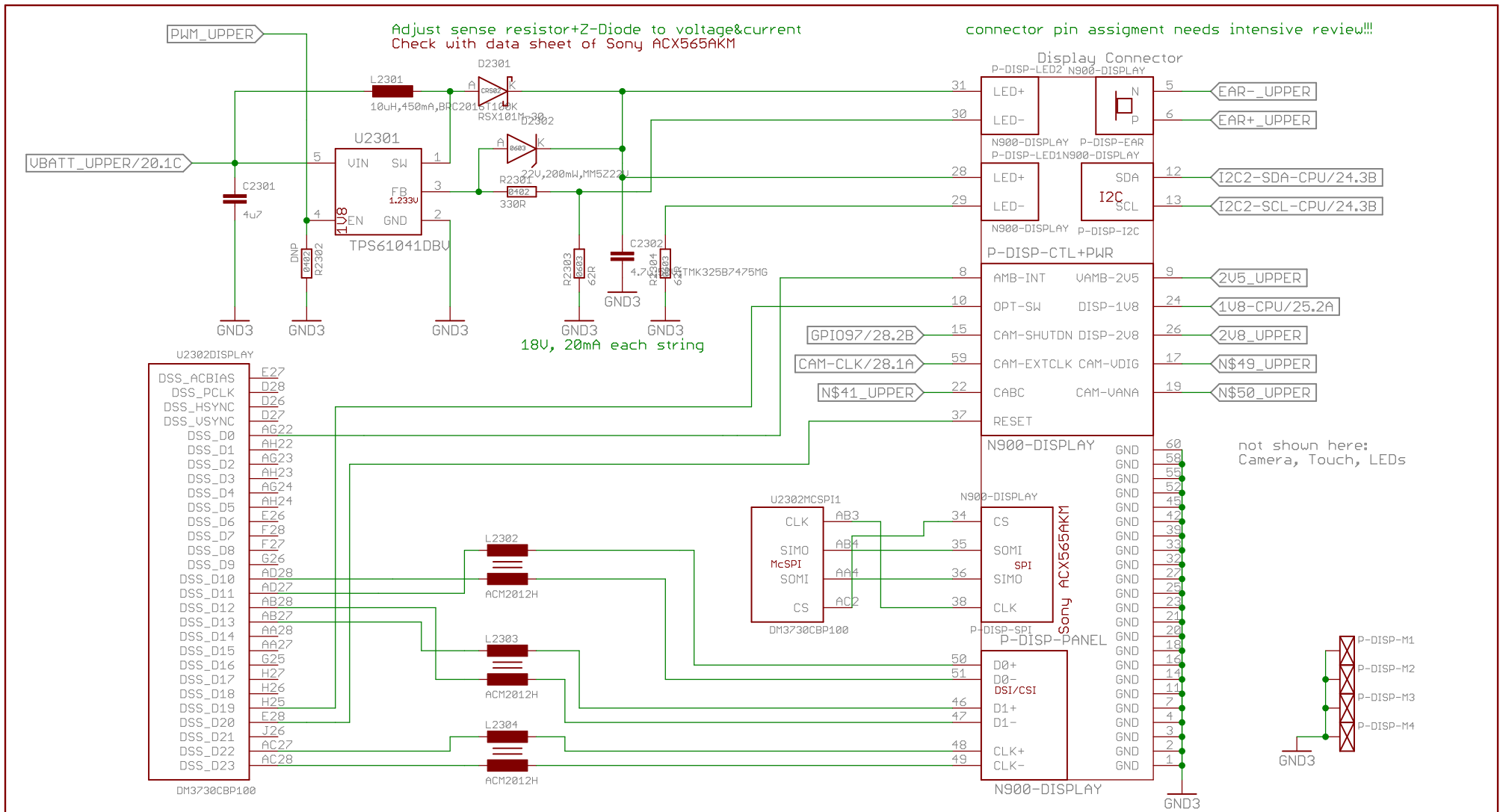
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# Display-Panel&Power

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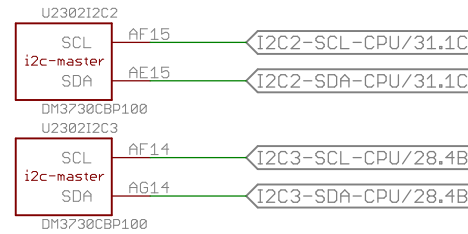
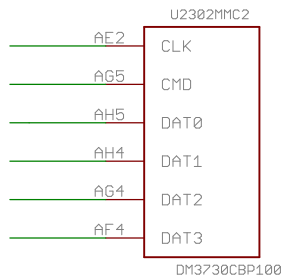
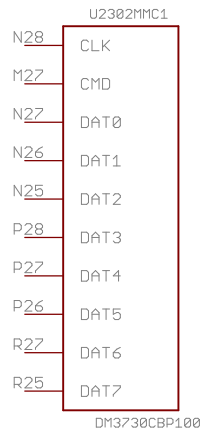
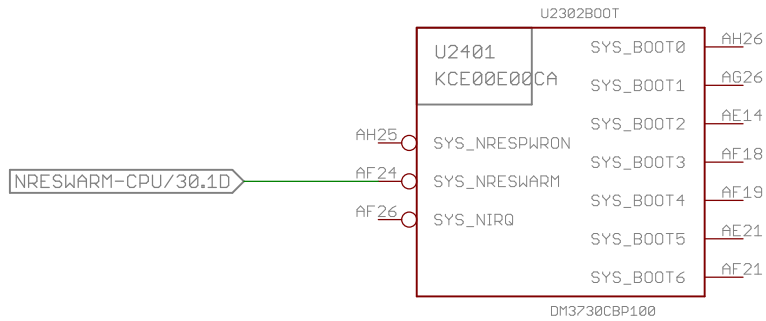
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v2b

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INCOMPLETE in U2



# CPU + PoP RAM/NAND

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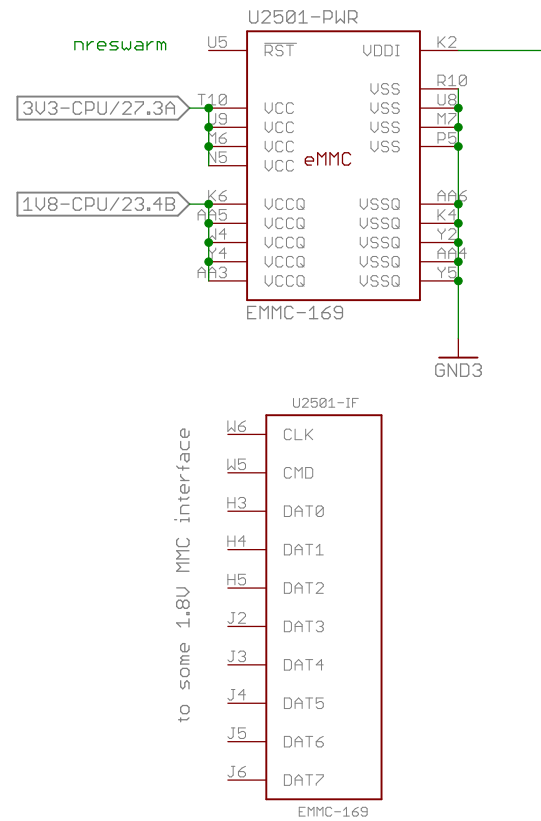
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INCOMPLETE in U2



## eMMC

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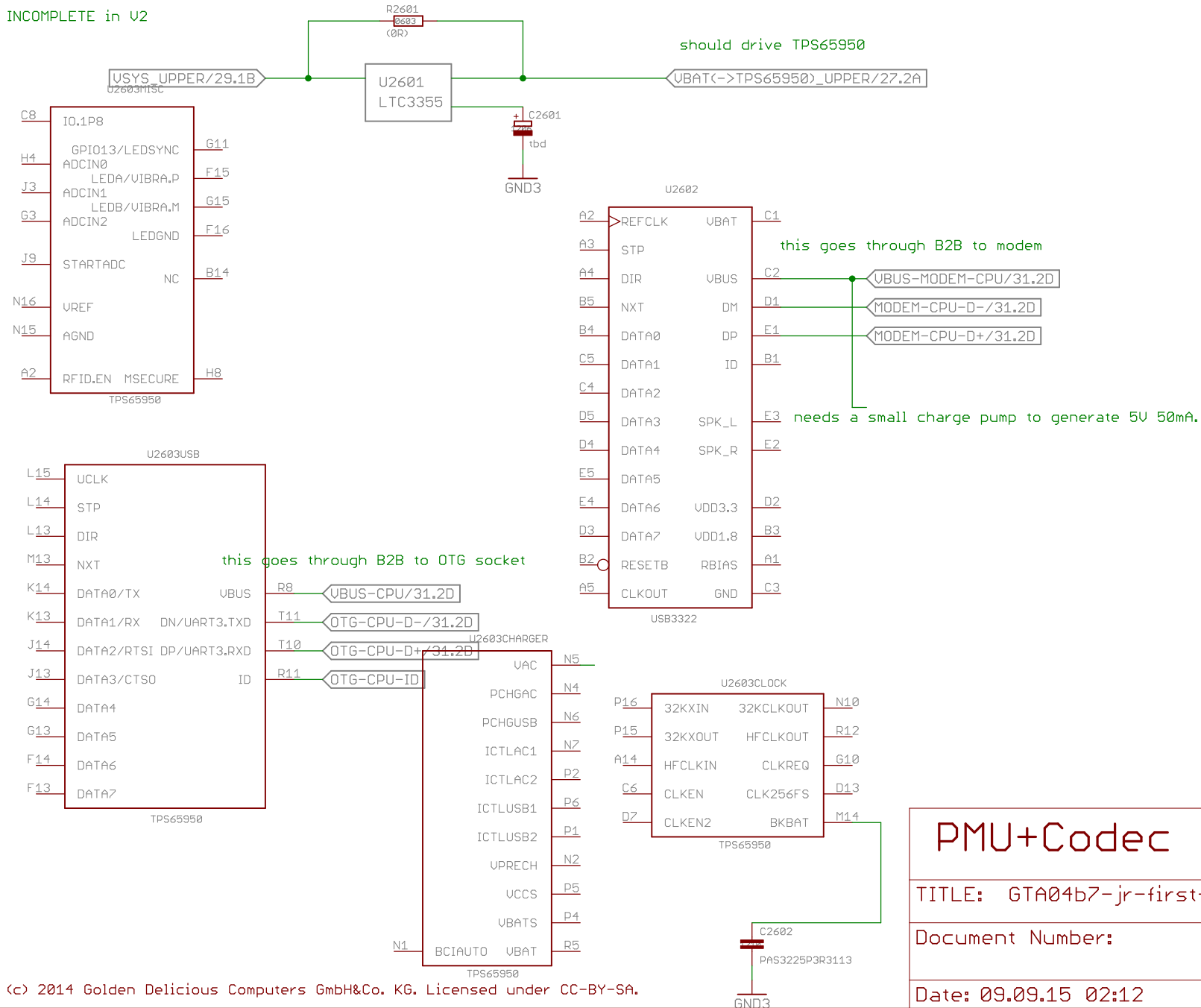
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REU:  
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INCOMPLETE in U2



## PMU+Codec

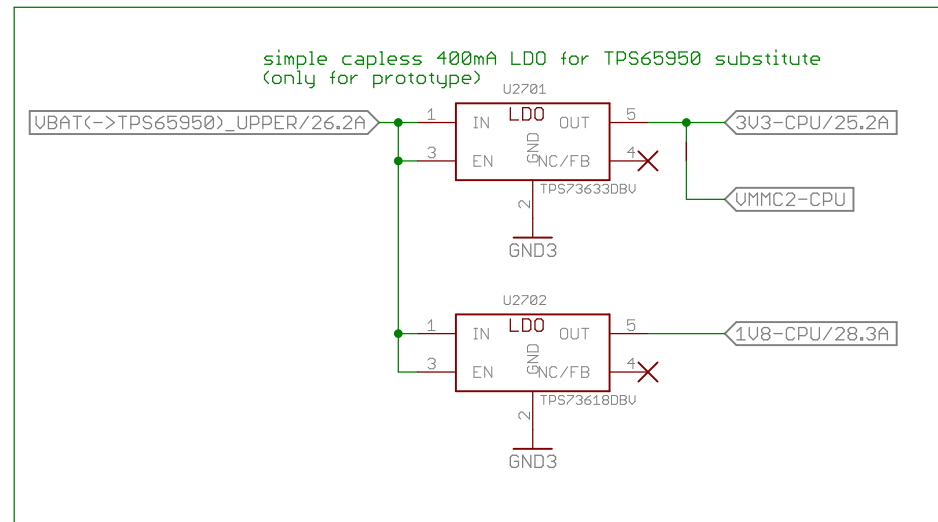
TITLE: GTA04b7-jr-first-beautify

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## BB-XM Dummy (TWL4030)

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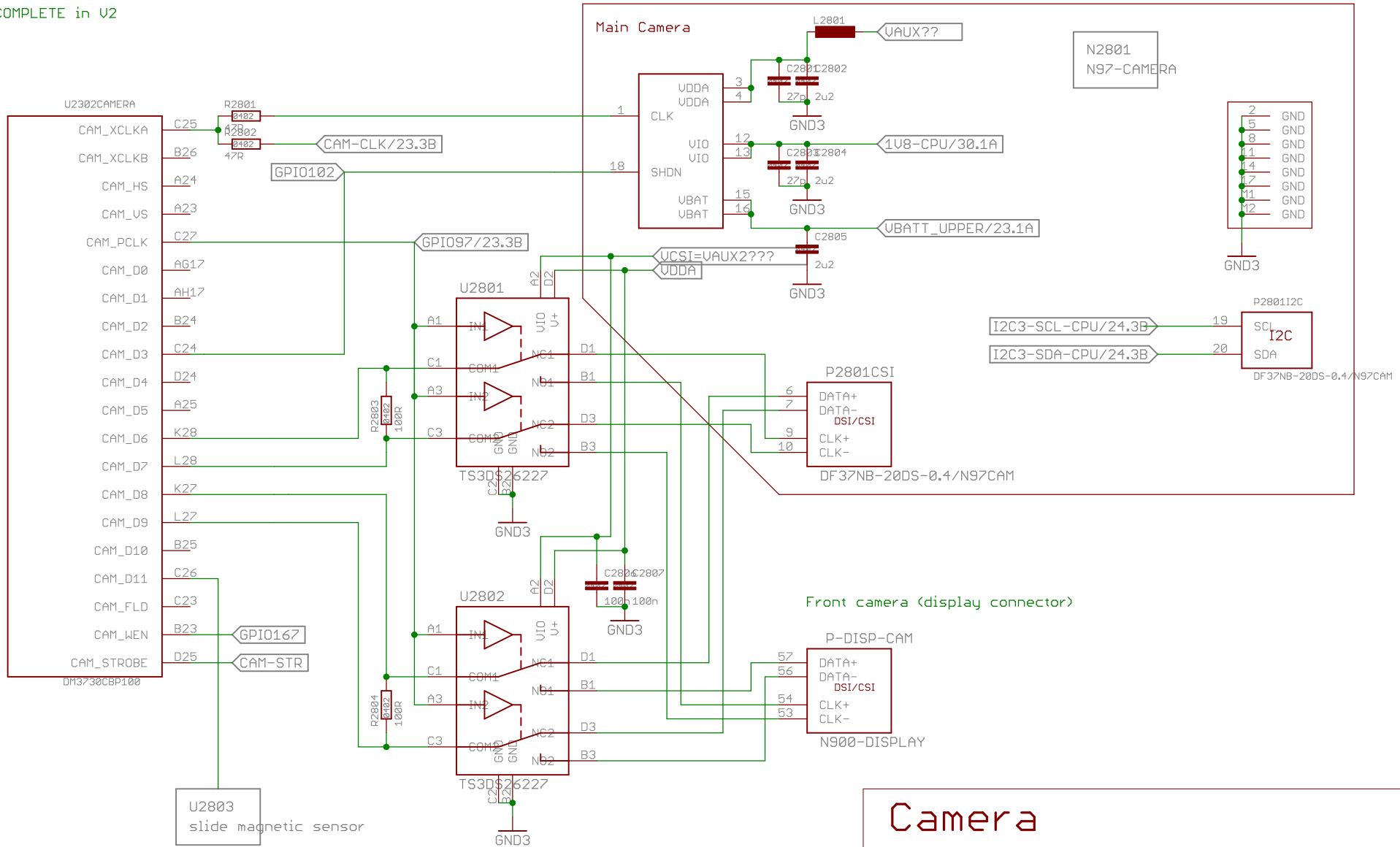
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INCOMPLETE in V2



# Camera

TITLE: GTA04b7-jr-first-beautify

Document Number:

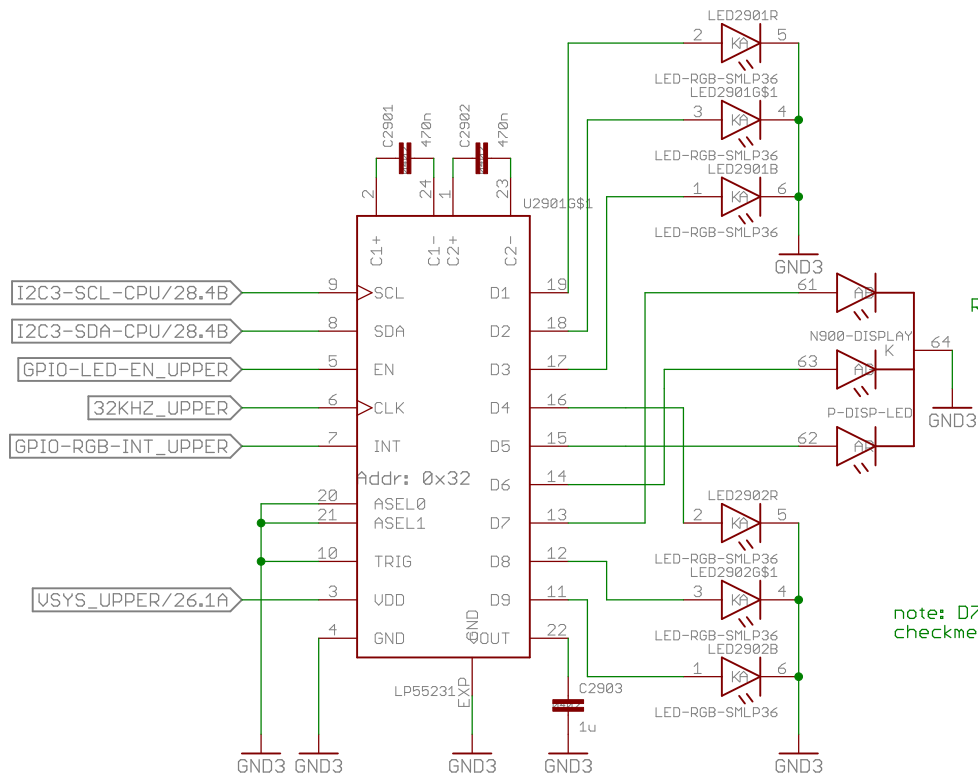
REV:  
v2b

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### AUX and Display LEDs



RGB LEDs (display connector)

note: D7, D8, D9 are powered differently!  
checkme: assignment of LED location to output number

## LEDs

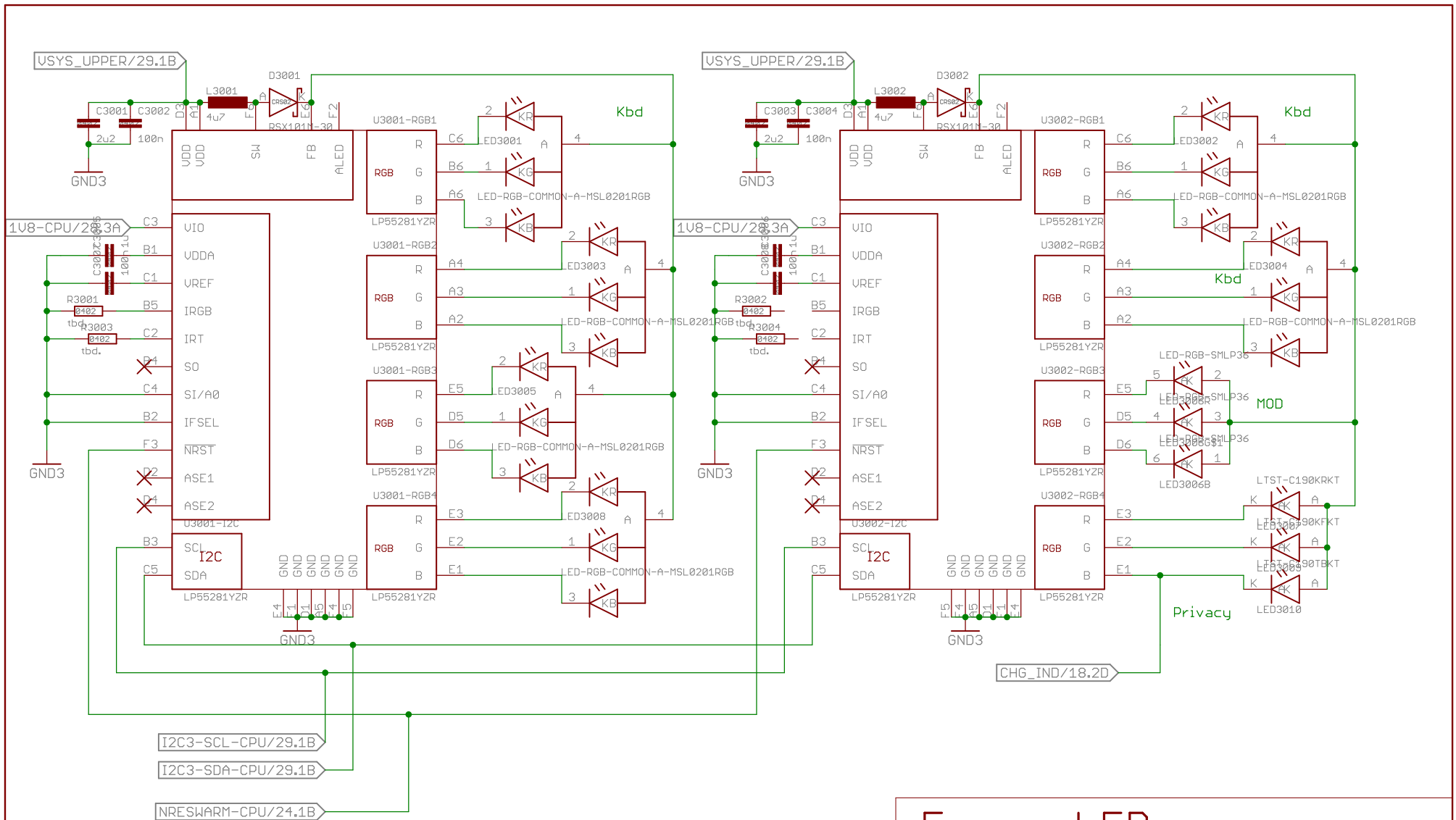
TITLE: GTA04b7-jr-first-beautify

Document Number:

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# Fancy LEDs

TITLE: GTA04b7-jr-first-beautify

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v2b

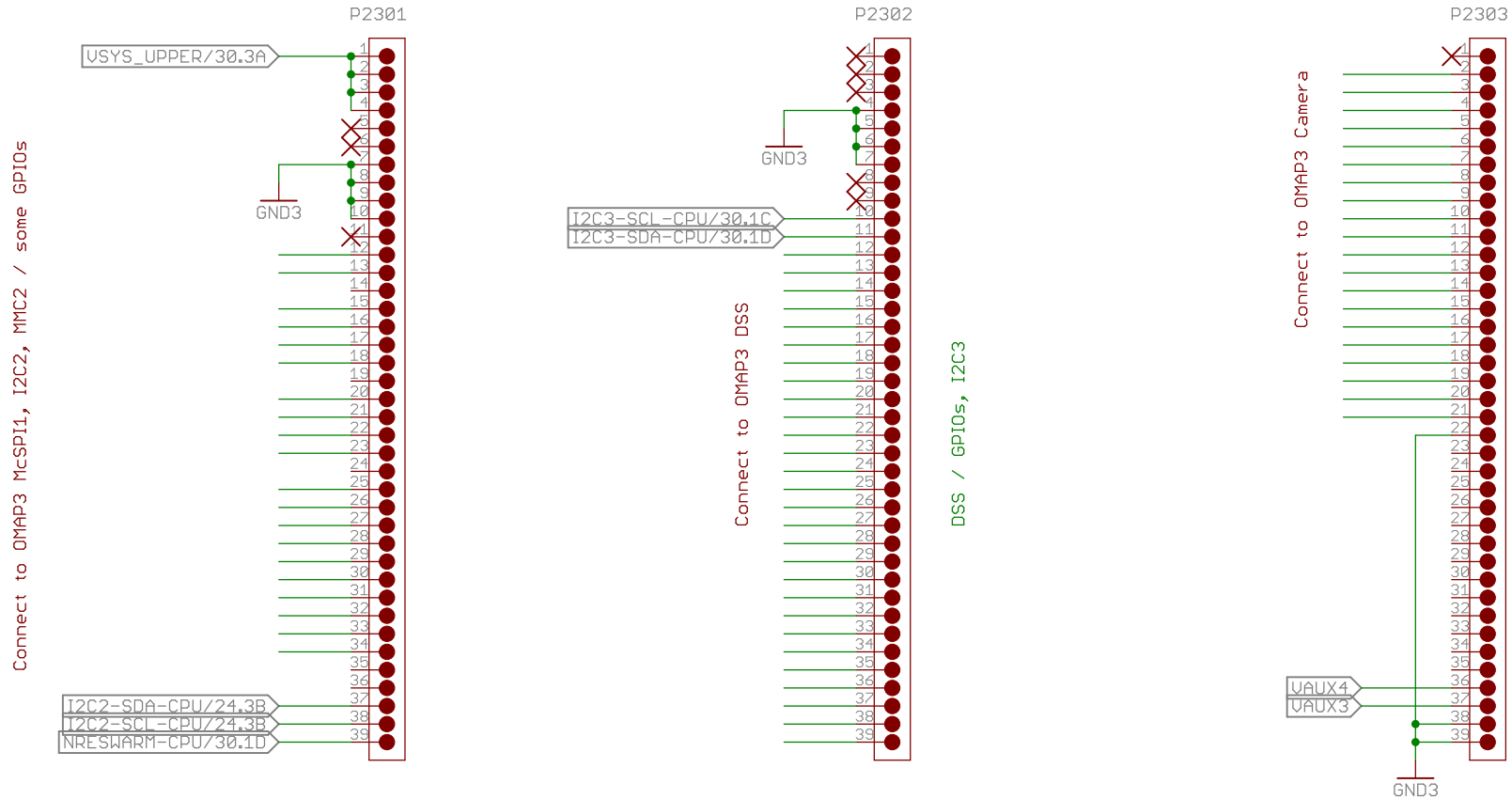
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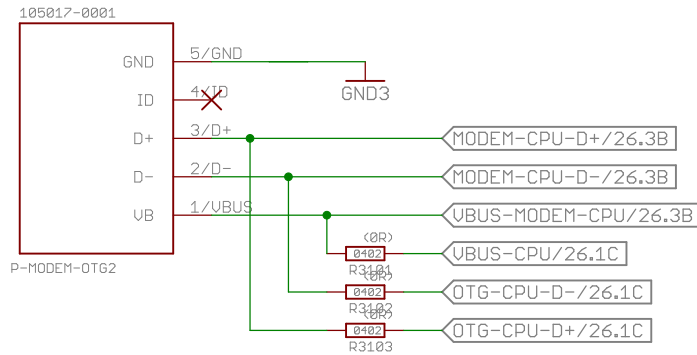
These connectors allow to "emulate" the DM3730 by connecting a BB-XM

INCOMPLETE  
prototype only

connect to respective CPU-pads



connect to BB  
by some Micro-USB cable



# Connector to BB

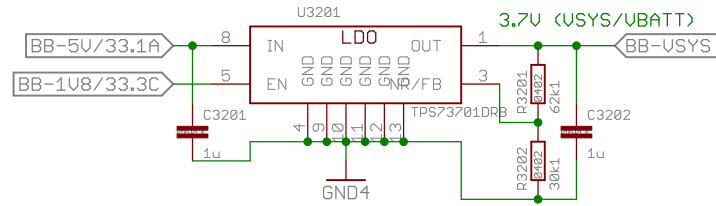
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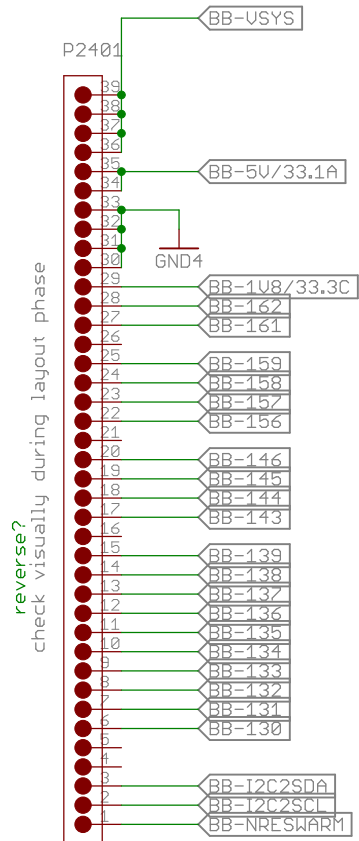
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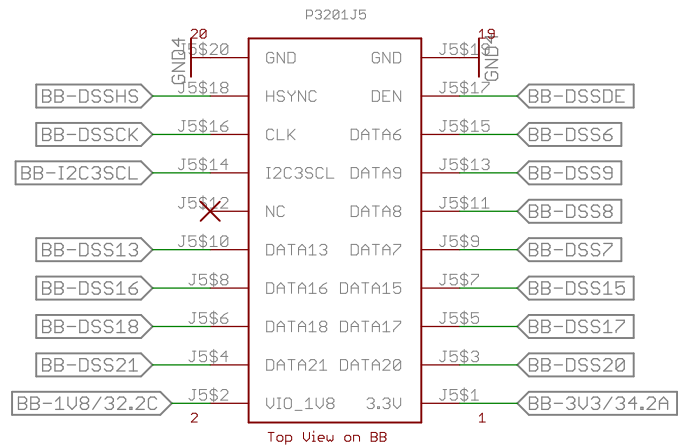
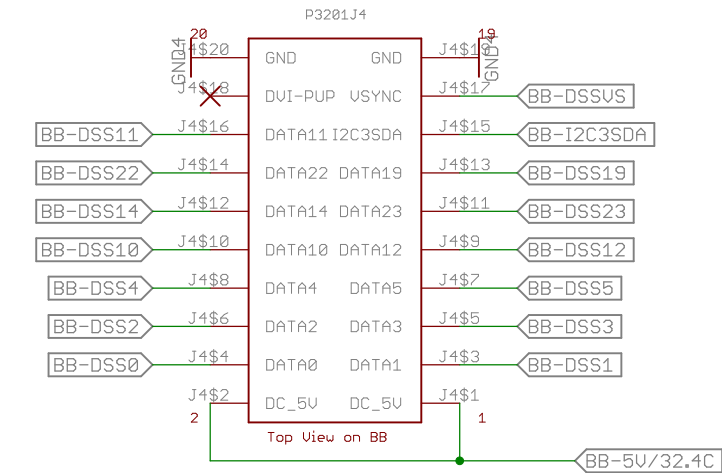
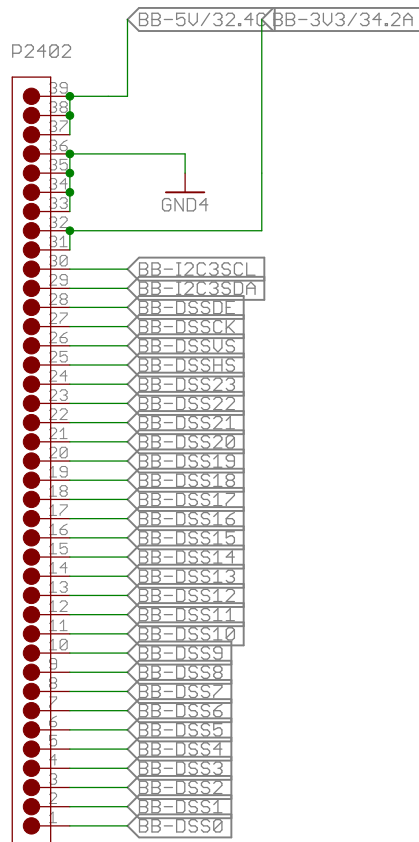


Ersetzen durch 2A buck converter



<h1>BB-XM Adapter (CPU)</h1>	
TITLE: GTA04b7-jr-first-beautify	
Document Number:	REV: v2b
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reverse?  
check visually during layout phase



# BB-XM Adapter (DISP)

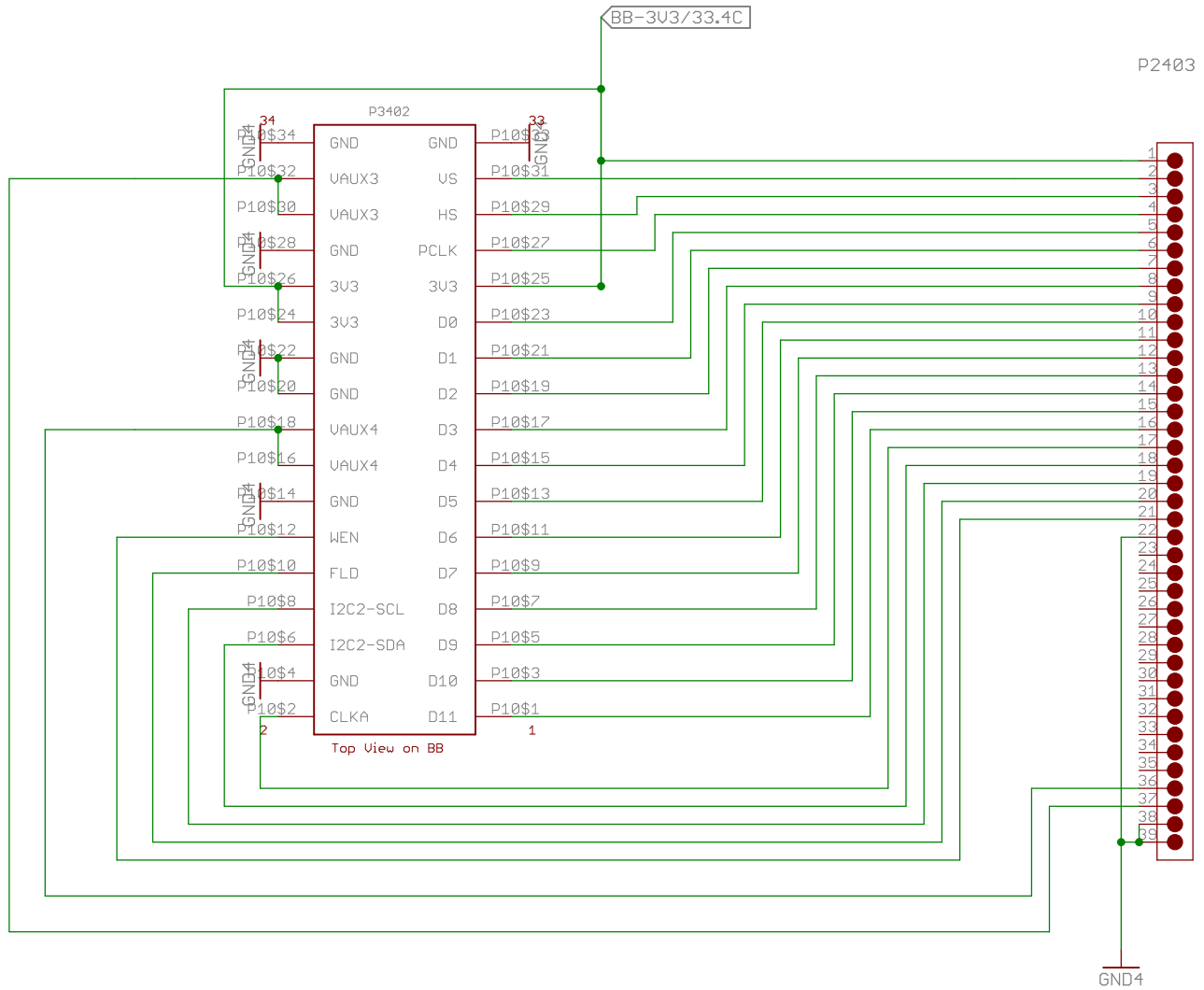
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reverse?  
check visually during layout phase

# BB-XM Adapter (CAM)

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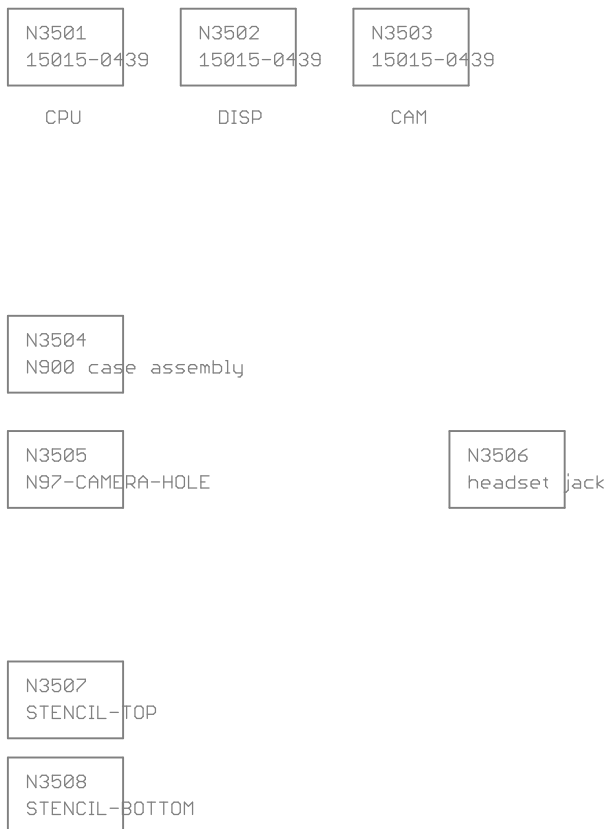
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Molex Jumper cables to connect BB-XM-Adapter to Uppwer board



## No-Solder Components

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