place in scan matrix? would need 3-4 wires to UPPer board instead of 2!
No, VOL+ or VOL− 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

Document Number:  

© 2014 Golden Delicious Computers GmbH&Co. KG. Licensed under CC-BY-SA.

Date: 21.12.14 10:39  

Sheet: 1/29
can be used to test operate the modem through the OTG port (w/o UPPER PCB).

OTG

TITL: GTA04b?
Document Number:               REV: u2b
battery cage to GND?

(populate alternatively to BQ27200)

bq27421? bq27441? bq27621? bq27200?
problem; this is a 0.5m BGA making lower board expensive!

But it appears to be not extremely critical (only 3 rows and inner ring is GND)

problem; analog mic is on upper board!

alternatives: place on upper board (to be evaluated)

conflict with bcc159?

address: 0x18-0x1b

Audio Codec

TITLE: GTA04b7

Document Number: 

REV: U2b

Date: 21.12.14 10:39 

Sheet: 9/29
Audio Handsfree

TITLE: GTA04b7

(c) 2014 Golden Delicious Computers GmbH&Co. KG. Licensed under CC-BY-SA.
not needed if we can interrupt the ANT
not needed if we use 802416c1B charger which has 2 separate power inputs

Charging bypass:
do we need to control D+/D- of USB3 to enable high charging current?
latchup risk by reverse current? (limited to 2.1 μA)

may need controller!
make threshold@4.5V

CBUS can't be easily used as GPIOs

Charger/Console

TITLE: GTA04b7

Document Number:

REV: v2b

Date: 21.12.14 10:39

Sheet: 13/29
to be adjusted to lower board connector
needs final tuning (which button on which position)
VOL+ and VOL- could drive FETs sitting in the matrix

replace by 2x RB5212SBA330 for space constraints

(c) 2014 Golden Delicious Computers GmbH&Co. KG. Licensed under CC-BY-5A.
Adjust sense resistor+Z-Diode to voltage/current
Check with data sheet of Sony ACX565KHM

connector pin assignment needs intensive review!!!

Display Connector
P-DISP-LED12C-SCL
P-DISP-LED12C-SDA

12C-SDA-CPU/21,3B
12C-SCL-CPU/21,3B

2V5_UPPER
1V8-CPU/22,2A
2V6_UPPER

not shown here:
Camera, Touch, LEDs

Display-Panel&Power

TITLE: GTA04b7
Document Number:

(c) 2014 Golden Delicious Computers GmbH&Co. KG. Licensed under CC-BY-SA.

Date: 21.12.14 10:39 Sheet: 20/29
These connectors allow to "emulate" the DM3730 by connecting a BB-X11

INCOMPLETE
prototype only

Connect to respective CPU-pads

Connect to OMAP3 DSS

Connect to OMAP3 Camera

Connect to OMAP3 GPIOs, I2C3

I2C2-SEL-CPU/26.1C
I2C3-SEL-CPU/26.3A

Connect to OMAP3 GPIOs, I2C3

Connect to OMAP3 Camera

I2C2-SEL-CPU/21.3B
I2C2-SEL-CPU/21.1B
I2C3-SEL-CPU/26.3A

Connect to BB
by some Micro-USB cable

© 2014 Golden Delicious Computers GmbH&Co. KG. Licensed under CC-BY-SA.
Molex Jumper cables to connect BB-XM-Adapter to Upper board

- N2401 15015-0439 CPU
- N2402 15015-0439 DISP
- N2403 15015-0439 CAM

- N2503 N900 case assembly
- N2301 N97-CAMERA-HOLE
- N2502 headset jack
- N2504 STENCIL-TOP
- N2505 STENCIL-BOTTOM

No-Solder Components

<table>
<thead>
<tr>
<th>TITLE:</th>
<th>GTA04b7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Number:</td>
<td></td>
</tr>
<tr>
<td>REV:</td>
<td>v2b</td>
</tr>
</tbody>
</table>