

EDM1-FAIRY REV:A2

L=6, 147 x 102 mm(5.8" x 4")

PAGE TITLE

P01 Index

P02 Expansion CONN.

P03 DC-DC& M-SD & BatterySocket

P04 USB Host

P05 USB Ports & CAN bus

P06 HDMI & Others

P07 RS232/422/485

P08 Others

P09 Audio_1/Audio_2

P10 RJ45 & EEPROM/ SPDIF

P11 LVDS & CONNs

P12 Touch & 3G & MNF

DESIGN AND DISCLAIMER

These design materials referred to in this document are *NOT SUPPORTED* and DO NOT constitute a reference design.

THERE IS NO WARRANTY FOR THE DESIGN MATERIALS, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE DESIGN MATERIALS "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE DESIGN MATERIALS IS WITH YOU. SHOULD THE DESIGN MATERIALS PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

This board was designed as an evaluation and development tool. It was not designed with any other application in mind. As such, these design materials may or may not be suitable for any other purposes. If used, the design material becomes your responsibility as to whether or not it meets your specific needs or your specific applications and may require changes to meet your requirements.



FM1 FM40S-X
FM2 FM40S-X
FM3 FM40S-X
FM4 FM40S-X
FM5 FM40S-X
FM6 FM40S-X
FM7 FM40S-X
FM8 FM40S-X

HOLE4 HOLE5 HOLE6 HOLE7 HOLE8 HOLE11
HOLE-X HOLE-X HOLE-X HOLE-X HOLE-X HOLE-X

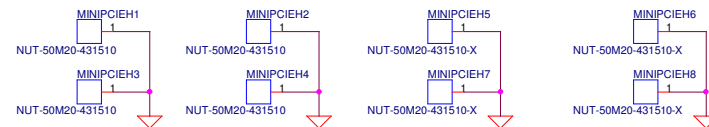
HOLE1 HOLE2
NUT-50M30-501419D4BM NUT-50M30-501419D4BM
HOLE9 HOLE10
NUT-50M30-501419D4BM NUT-50M30-501419D4BM

GND

PCB

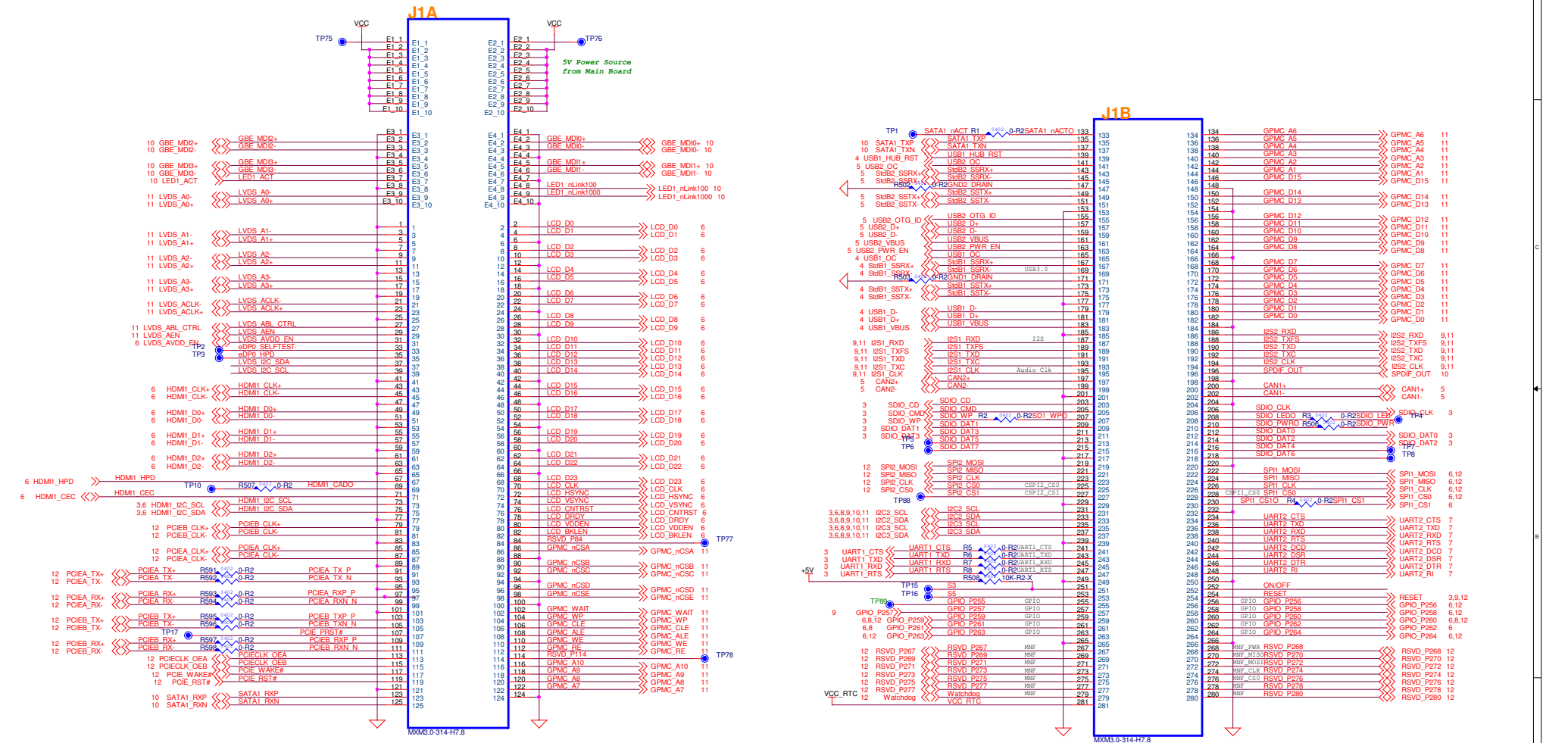


PCB1
PCB06TN51R12

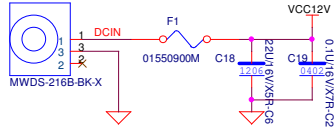


TechNexion

Title		
INDEX		
Size	Document Number	Rev
Custom	EDM1-FAIRY	A2
Date:	Monday, July 28, 2014	Sheet 1 of 12



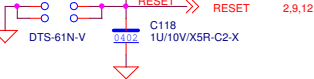
DCIN1



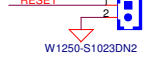
DCIN2



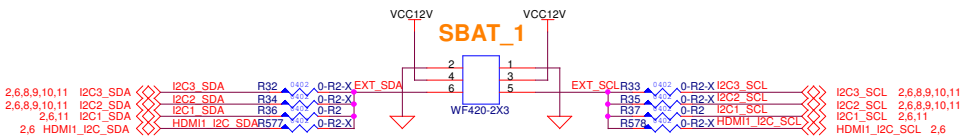
RESET1



J9



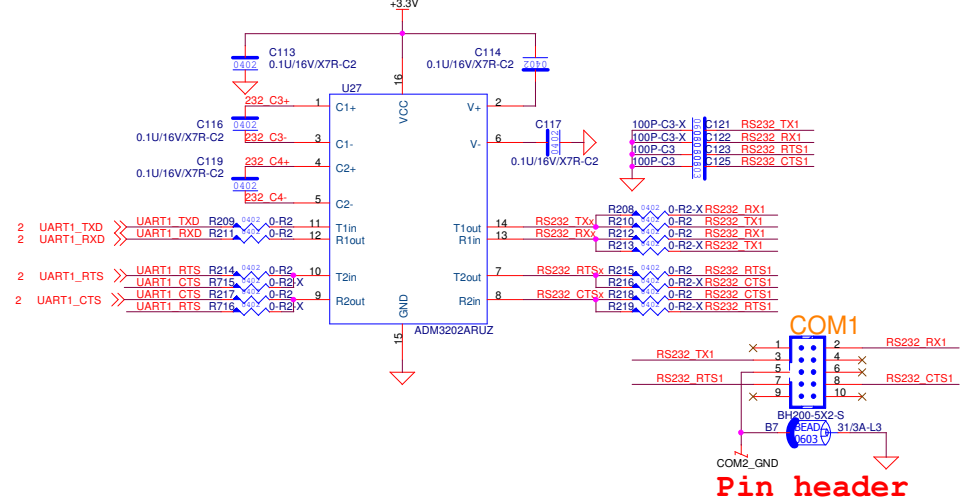
Battery Module Socket



Use: I2C1 Prepare: I2C1 I2C2 I2C3

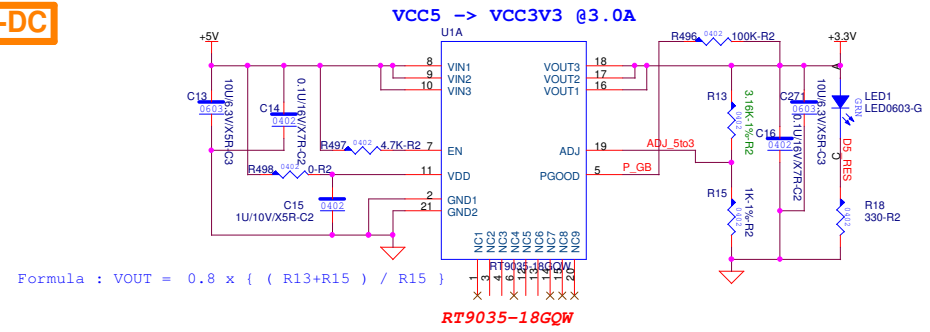
COM1

UART1 for Console

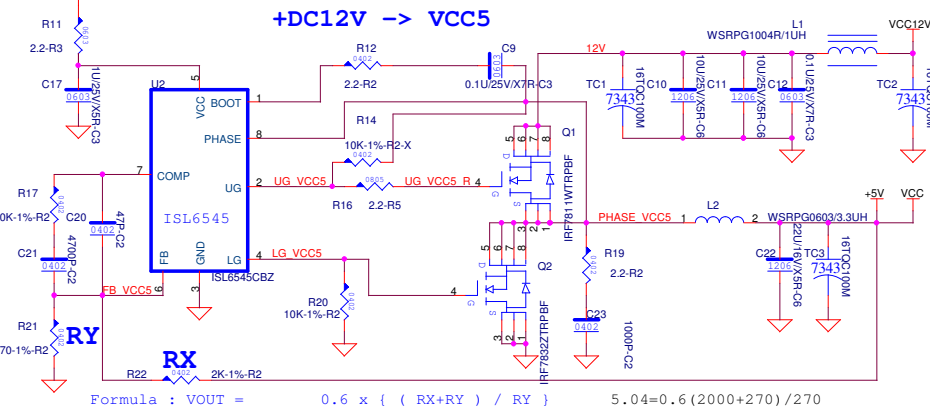


Pin header

DC-DC

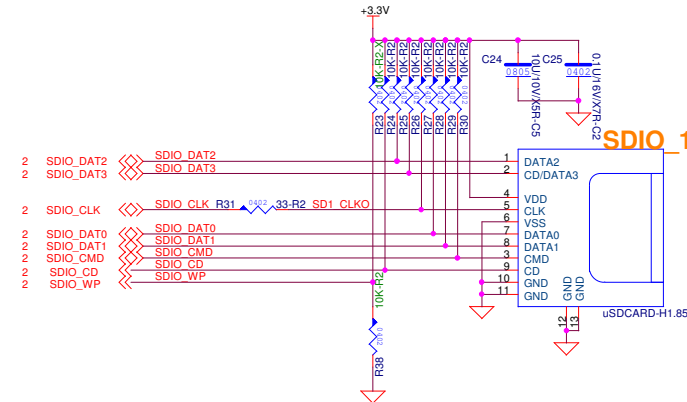


$$\text{Formula : } V_{\text{OUT}} = 0.8 \times \left(\frac{R_{13} + R_{15}}{R_{15}} \right)$$



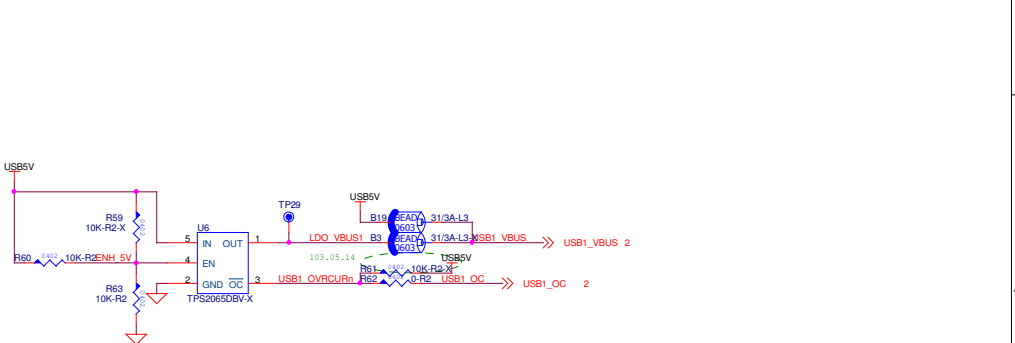
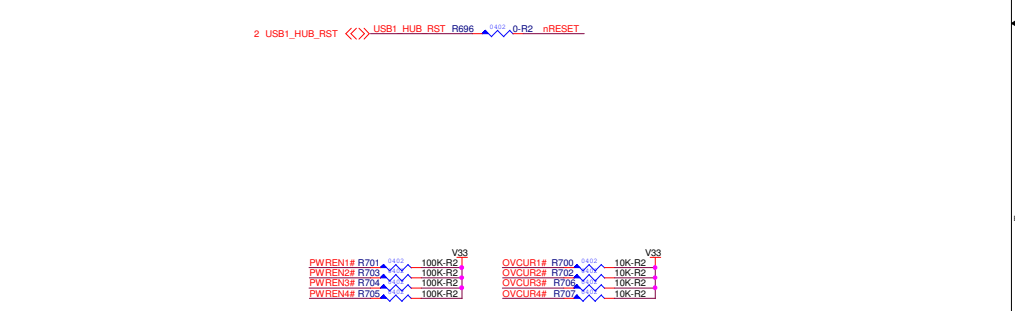
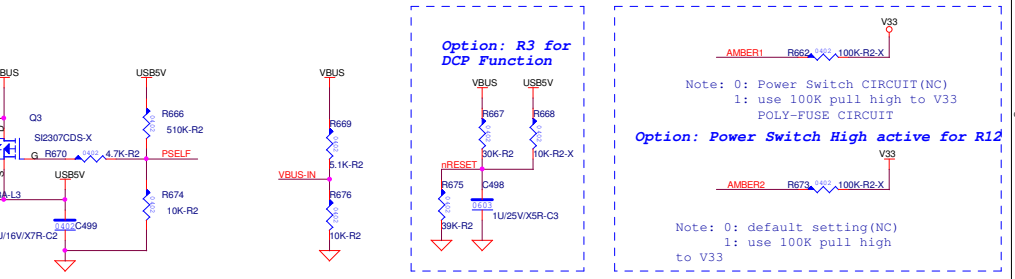
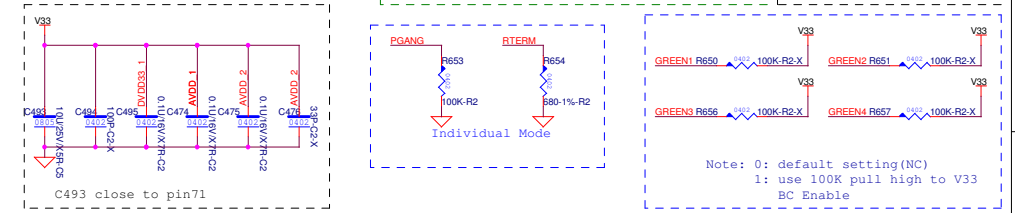
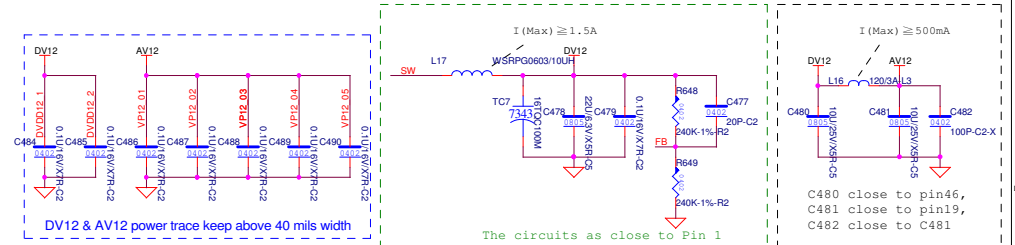
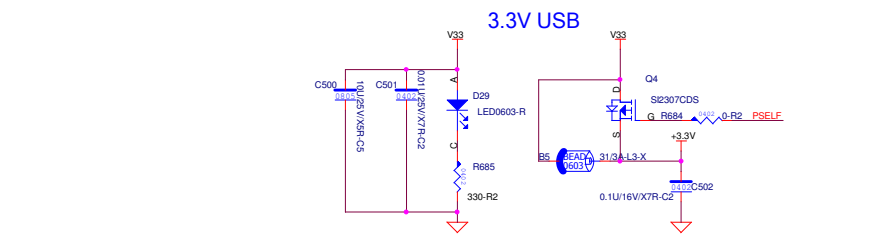
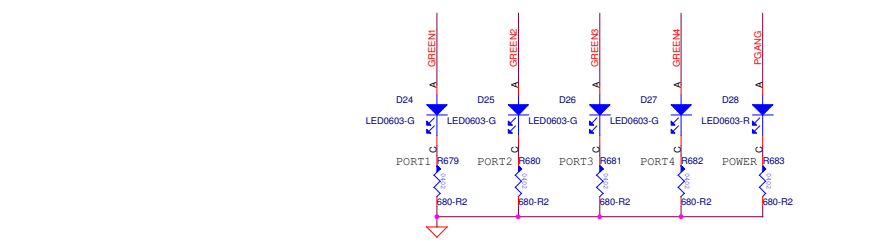
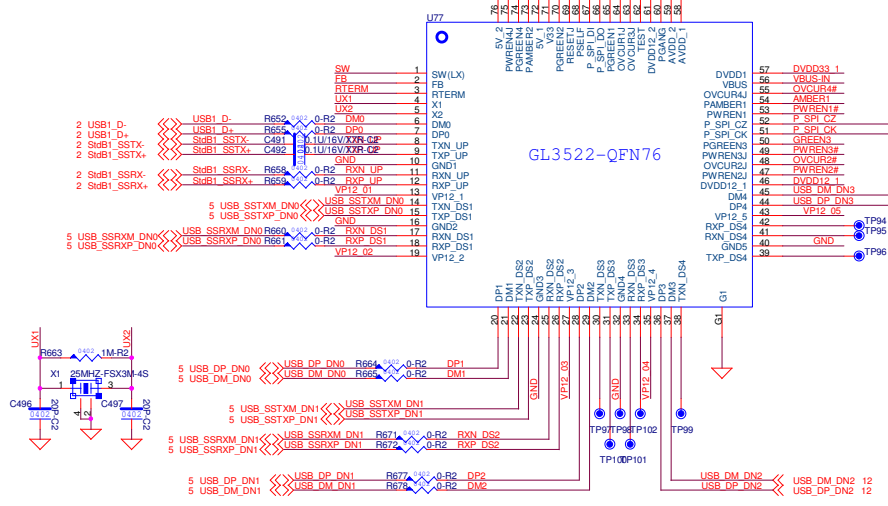
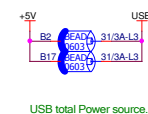
$$\text{Formula : } V_{\text{OUT}} = 0.6 \times \left(\frac{R_X + R_Y}{R_Y} \right) \quad 5.04 = 0.6 \times (2000 + 270) / 270$$

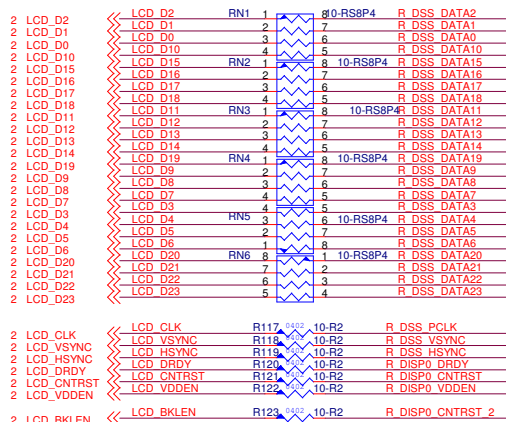
Micro-SD



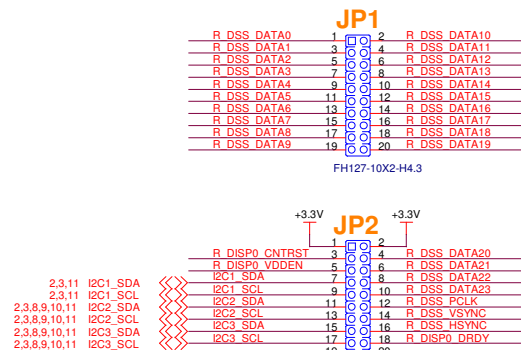
TechNexion			
Title	DC-DC & M-SD & BatterySocket		
Size	Document Number	EDM1-FAIRY	
Custom	Monday, July 28, 2014	Sheet	3 of 12

USB Host

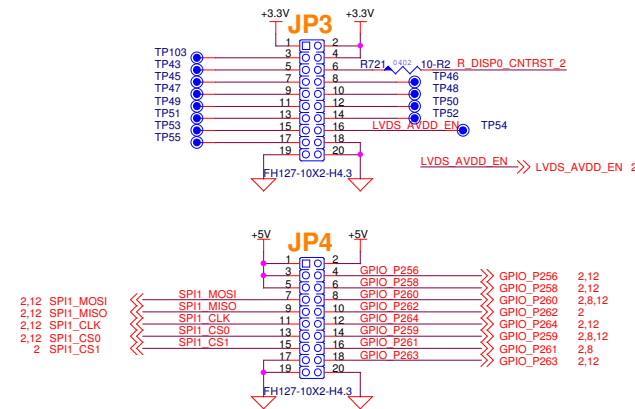




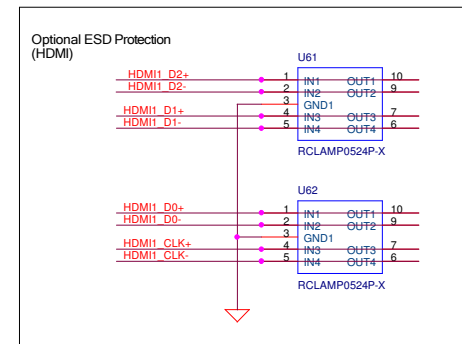
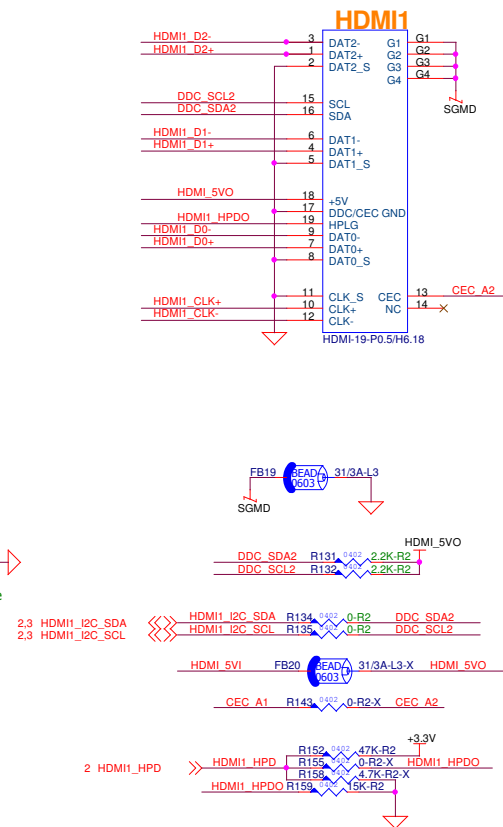
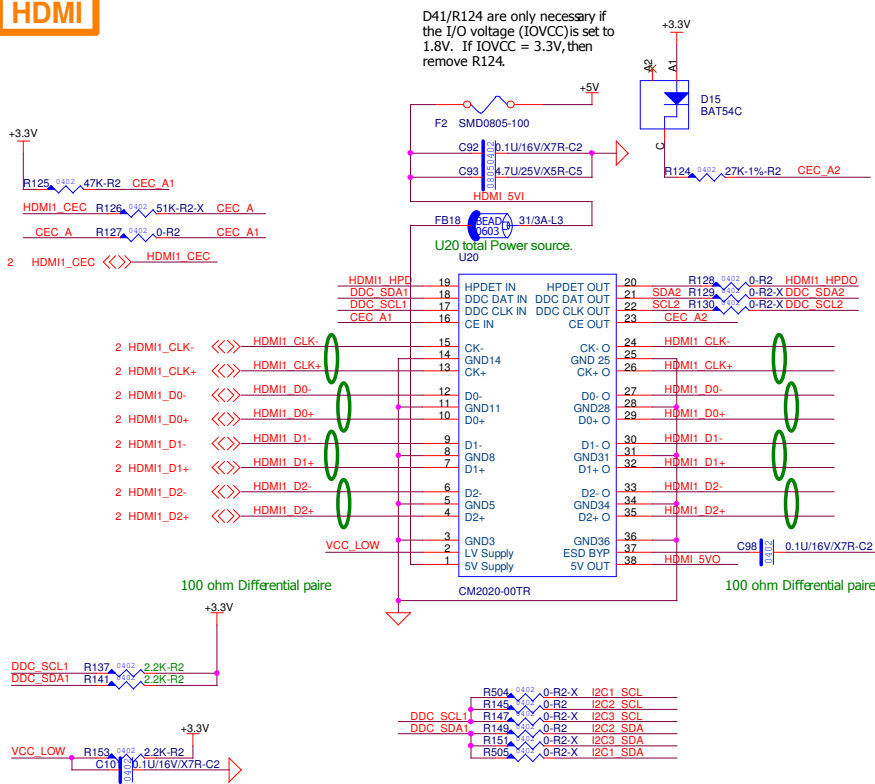
Headers JP1~4



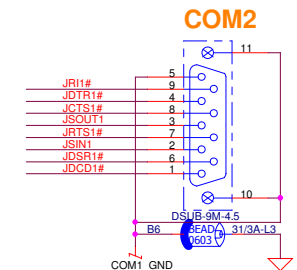
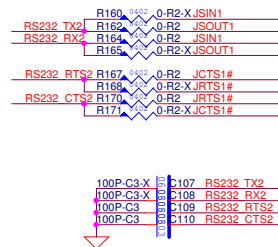
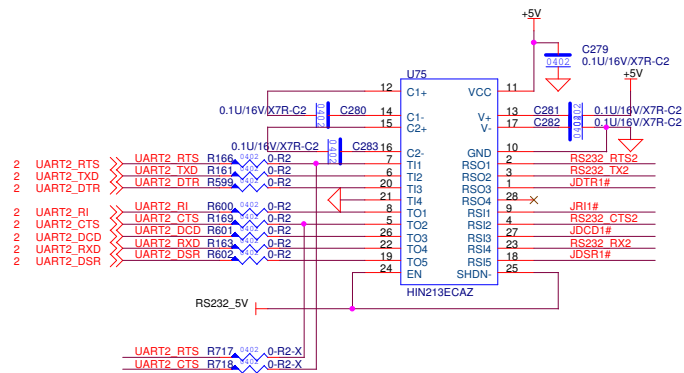
I2C1 I2C2 I2C3 to Expansion



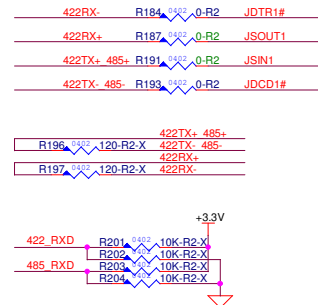
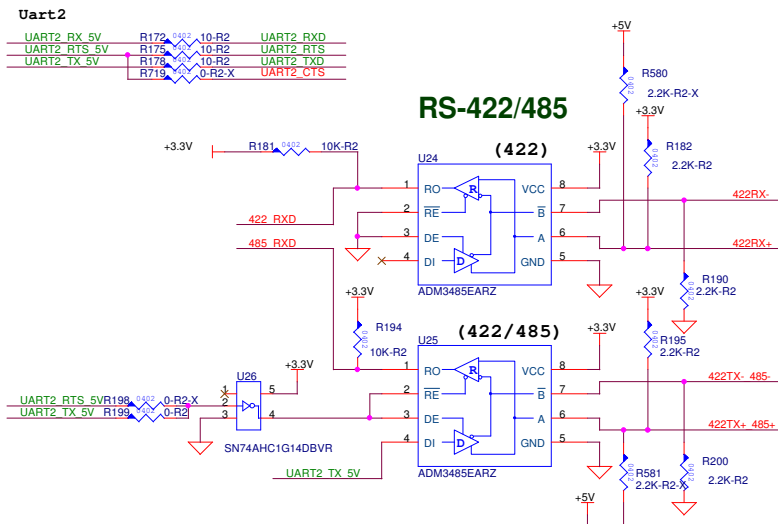
HDMI



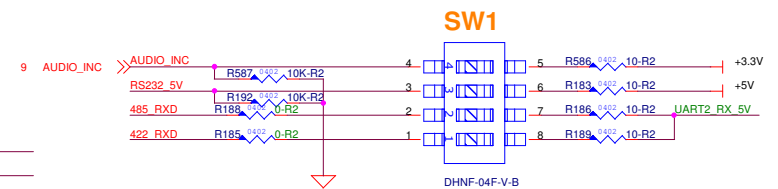
Uart2



Uart2

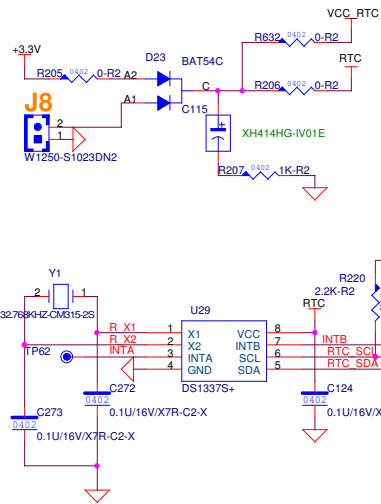


SW1	SGTL5000	TLV320
4-5	OFF	ON



SW1	RS-422	RS-485	RS-232
1-8	ON	OFF	OFF
2-7	OFF	ON	OFF
3-6	OFF	OFF	ON

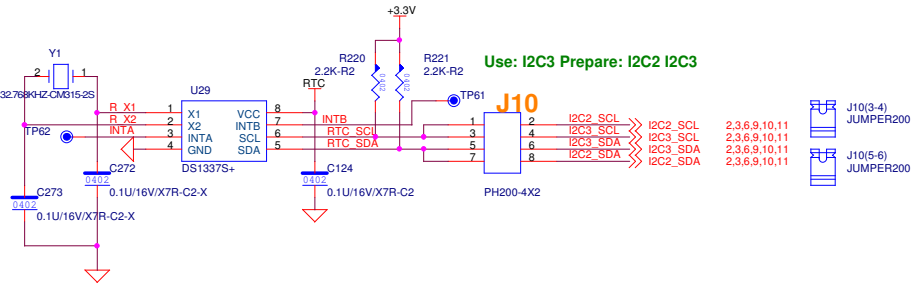
RTC



I2C SEL @ RTC

J10	I2C2	I2C3
1-2	ON	OFF
3-4	OFF	ON
5-6	OFF	ON
7-8	ON	OFF

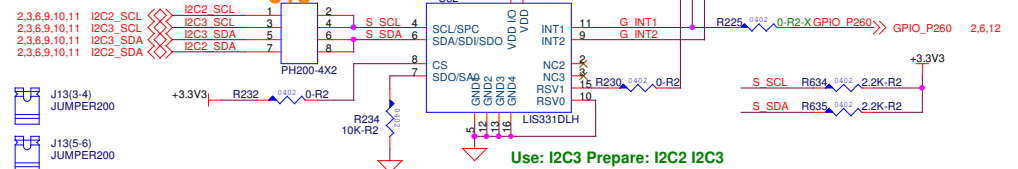
Use: I2C3 Prepare: I2C2 I2C3



3 axis sensor

I2C SEL @ 3 axis sensor

J13	I2C2	I2C3
1-2	ON	OFF
3-4	OFF	ON
5-6	OFF	ON
7-8	ON	OFF

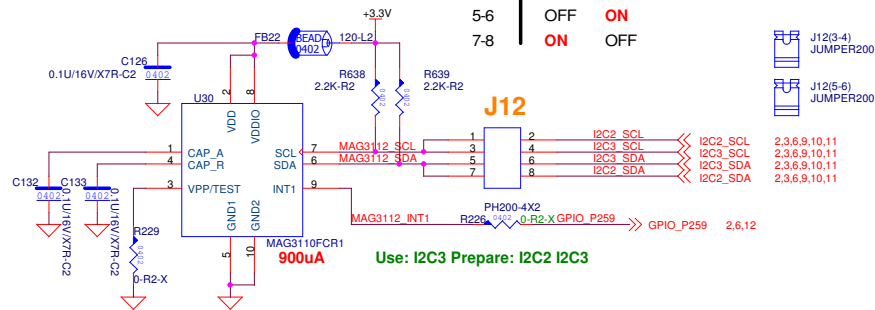


Use: I2C3 Prepare: I2C2 I2C3

eCOMPASS

I2C SEL @ eCOMPASS

J12	I2C2	I2C3
1-2	ON	OFF
3-4	OFF	ON
5-6	OFF	ON
7-8	ON	OFF

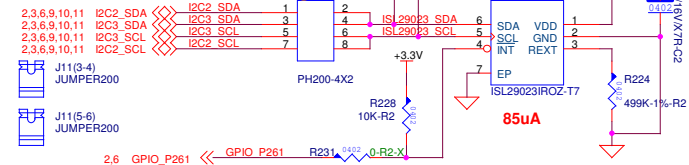


Use: I2C3 Prepare: I2C2 I2C3

LIGHT-SENSOR

I2C SEL @ Light-Sensor

J11	I2C2	I2C3
1-2	ON	OFF
3-4	OFF	ON
5-6	OFF	ON
7-8	ON	OFF

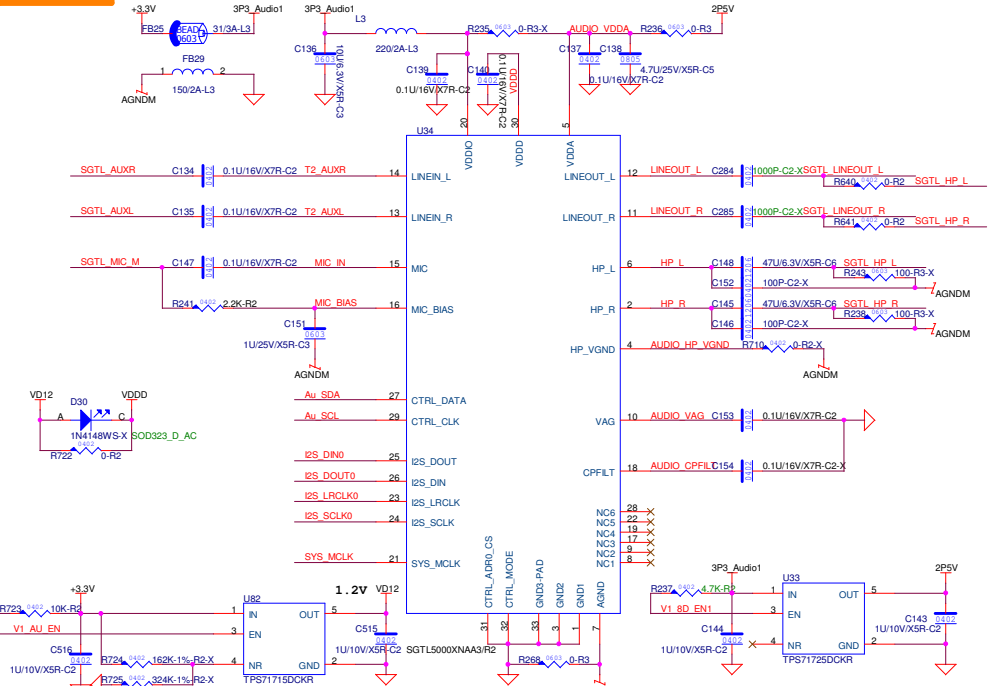


Use: I2C3 Prepare: I2C2 I2C3

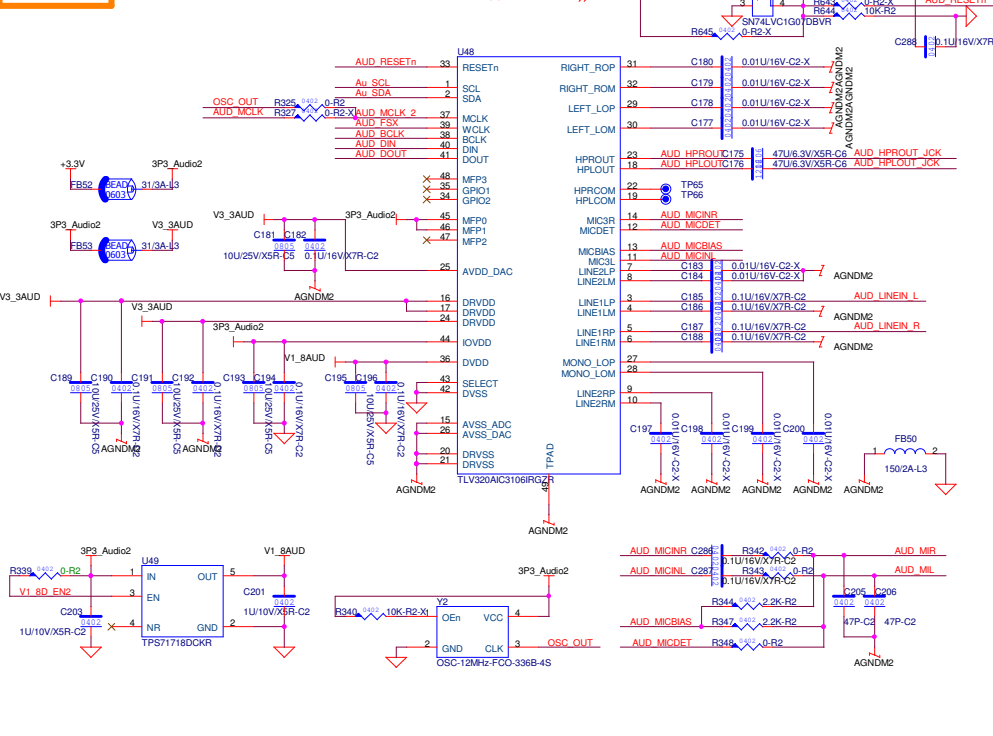
TechNexion
Others

Title	Document Number	Rev
Size Custom	EDM1-FAIRY	A2
Date: Monday, July 28, 2014	Sheet 8 of 12	

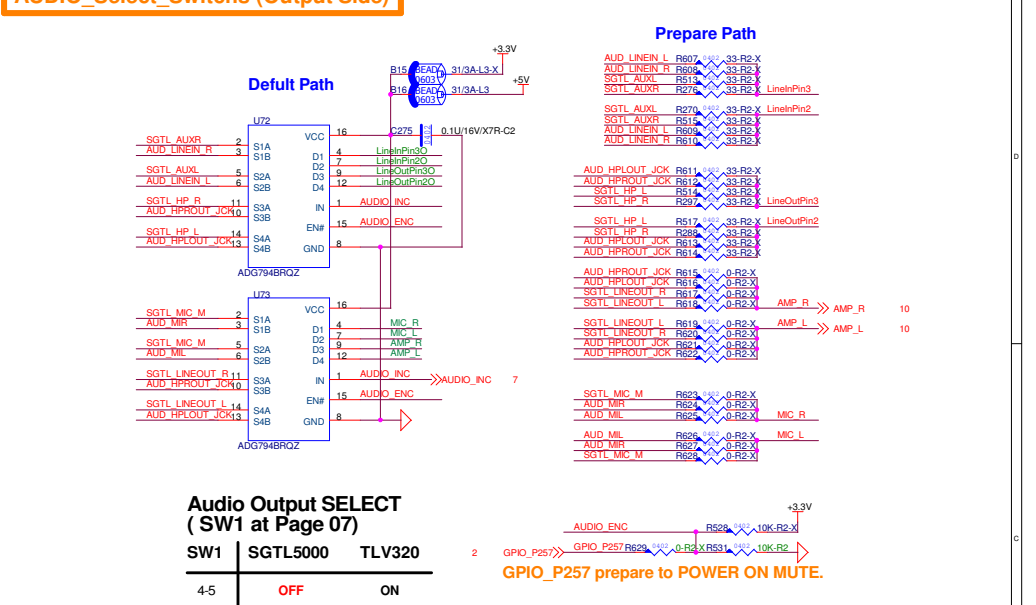
AUDIO_1



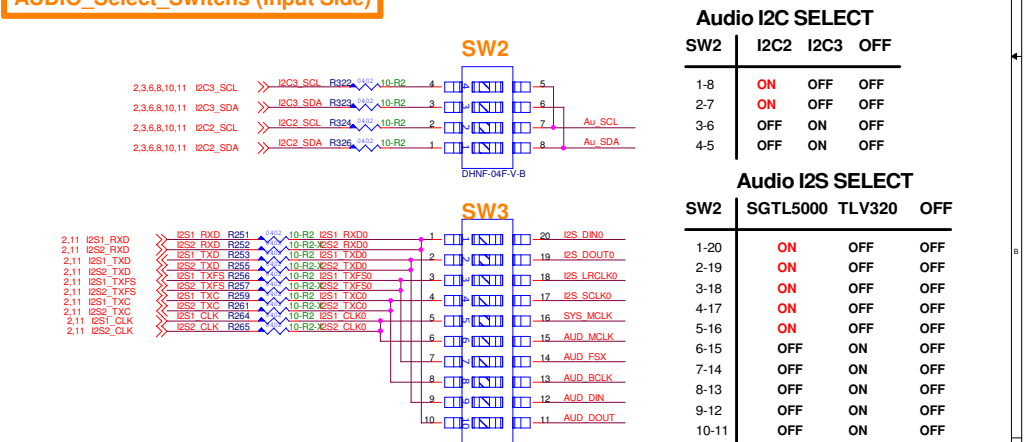
AUDIO_2



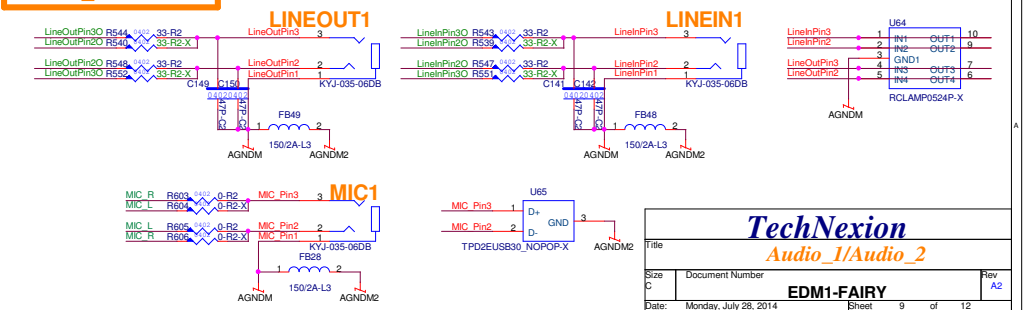
AUDIO_Select_Switchs (Output Side)



AUDIO_Select_Switchs (Input Side)



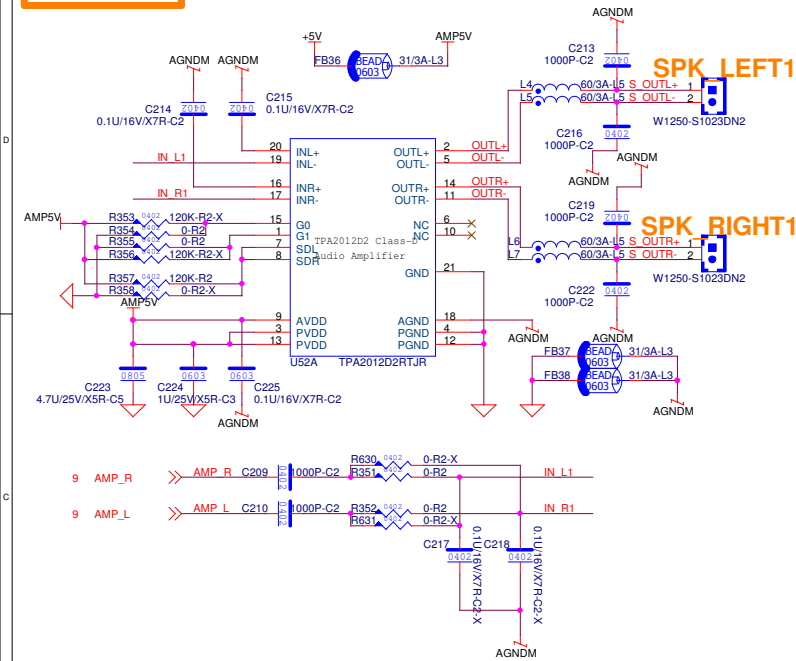
AUDIO_Connectors



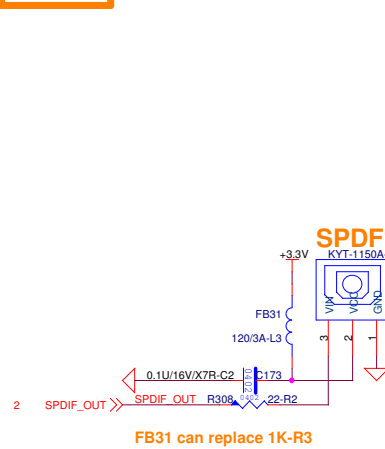
Audio I2C SELECT			
SW2	I2C2	I2C3	OFF
1-8	ON	OFF	OFF
2-7	ON	OFF	OFF
3-6	OFF	ON	OFF
4-5	OFF	ON	OFF

Audio I2S SELECT			
SW2	SGTL5000	TLV320	OFF
1-20	ON	OFF	OFF
2-19	ON	OFF	OFF
3-18	ON	OFF	OFF
4-17	ON	OFF	OFF
5-16	ON	OFF	OFF
6-15	OFF	ON	OFF
7-14	OFF	ON	OFF
8-13	OFF	ON	OFF
9-12	OFF	ON	OFF
10-11	OFF	ON	OFF

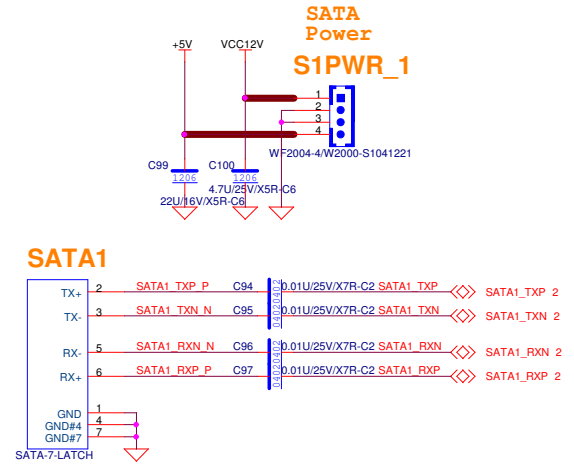
AUDIO AMP



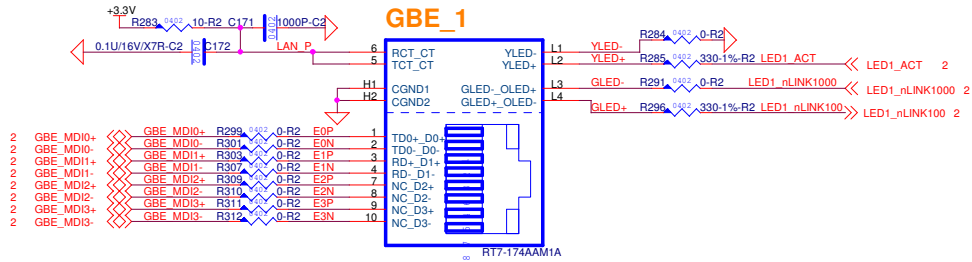
SPDIF



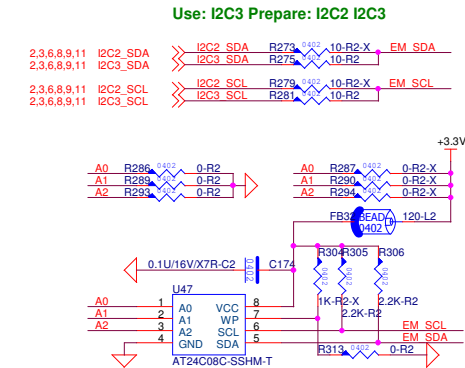
SATA



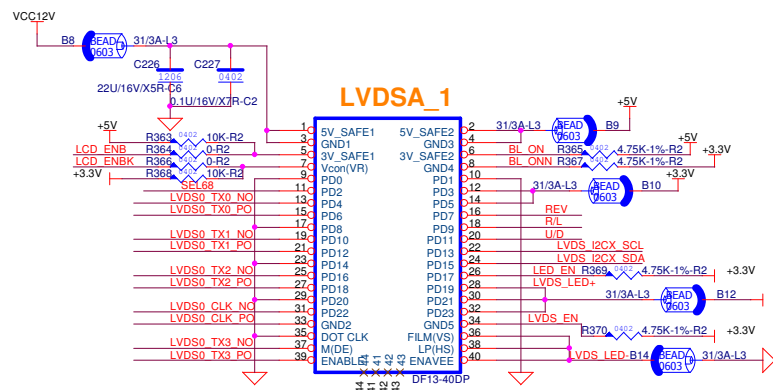
RJ45



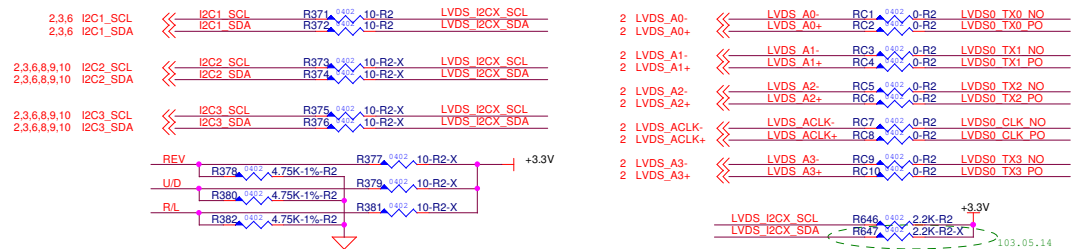
EEPROM



LVDS

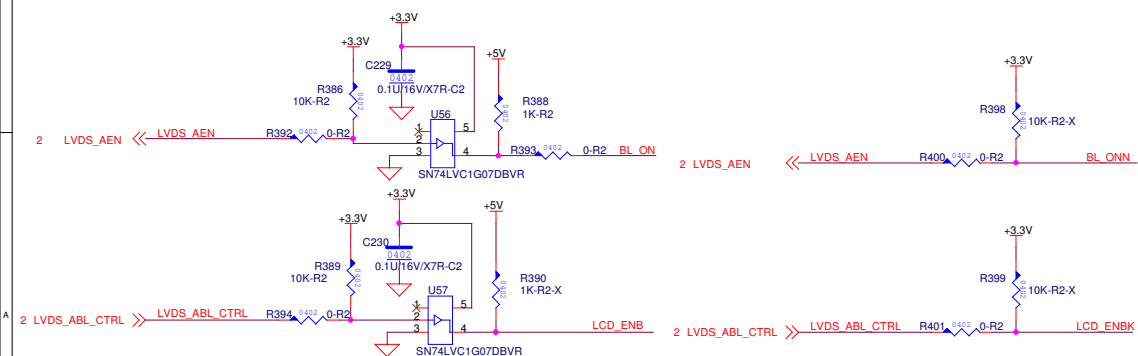


Use: I2C3 Prepare: I2C1 I2C2 I2C3

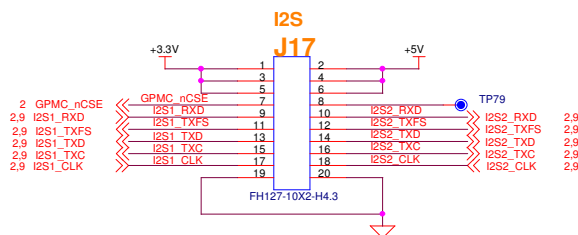
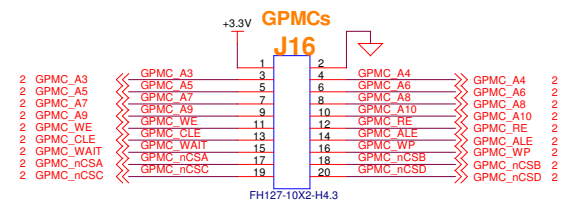
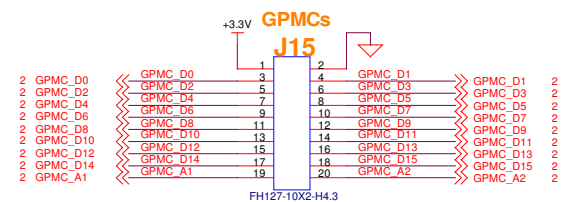


Pull H/L	SEL68
High	1-2
Low	2-3

default



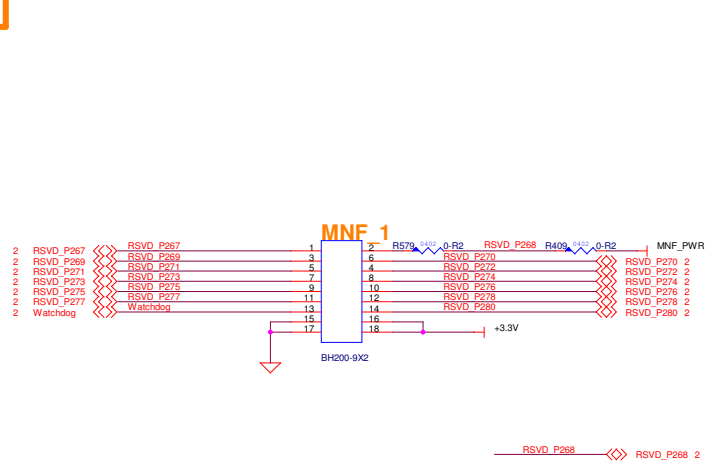
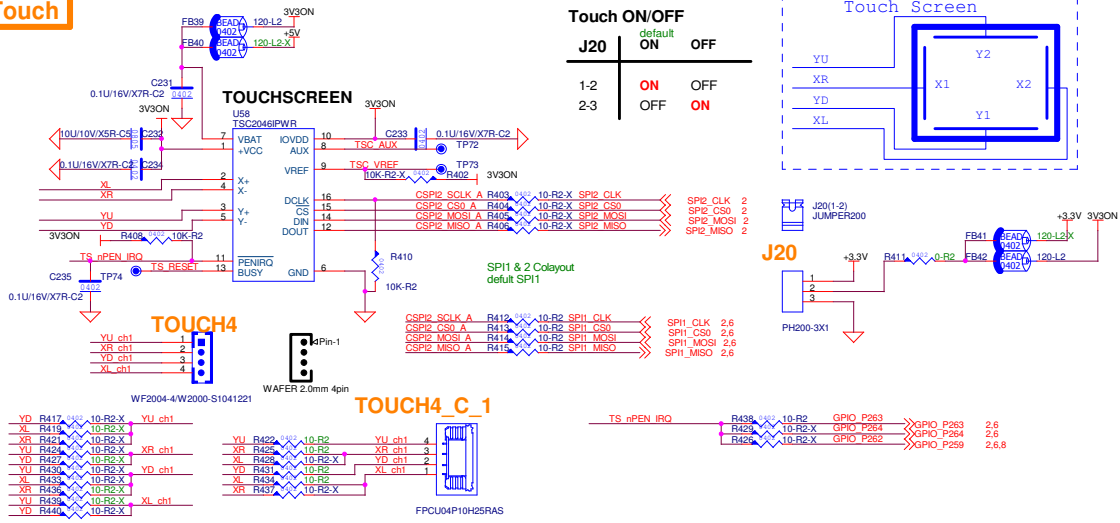
CONNs



TechNexion
LVDS & CONNs

Title			
<p align="center">LVDS & CONNs</p>			
Size Custom	Document Number		Rev
	EDM1-FAIRY		A2
Date:	Monday, July 28, 2014	Sheet 11 of 12	

Touch



Mini PCIE

