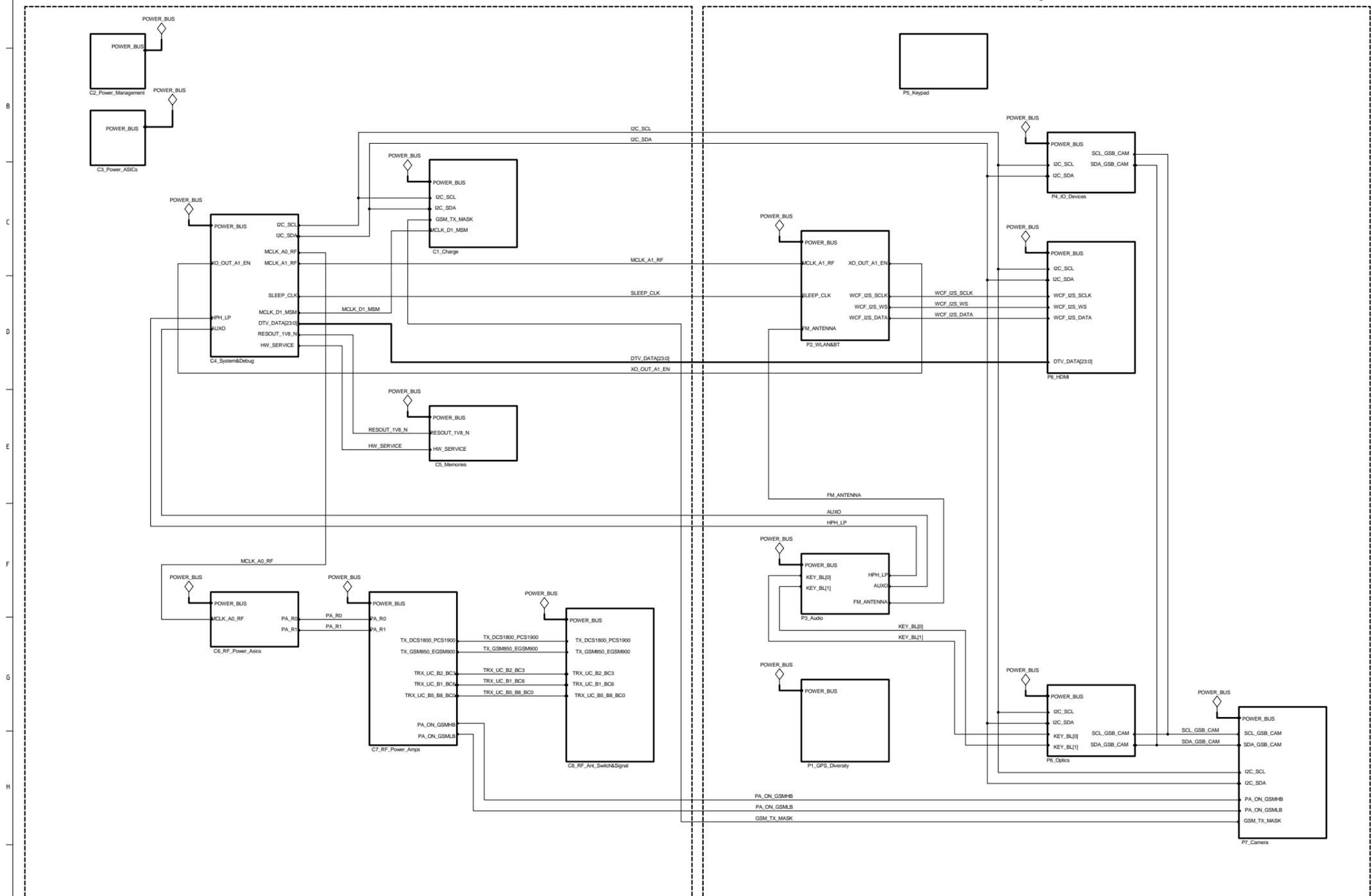
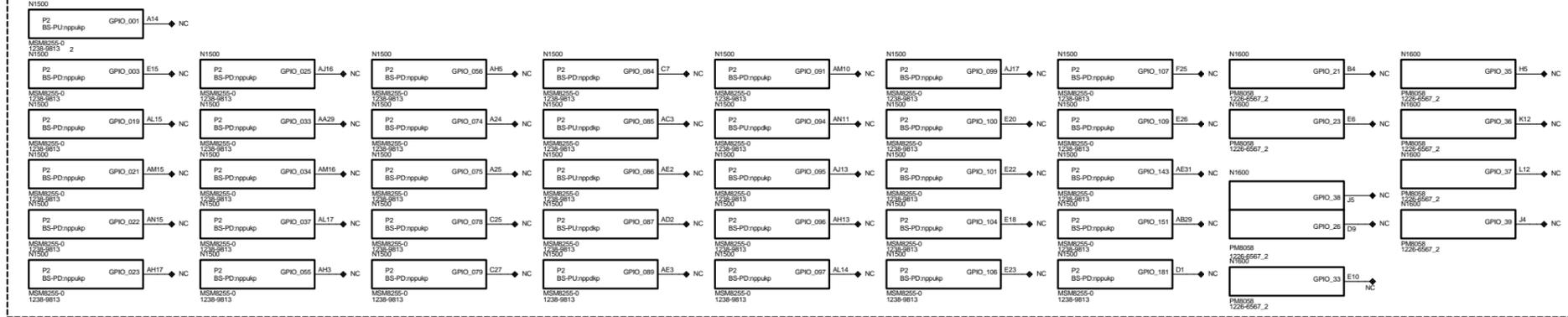


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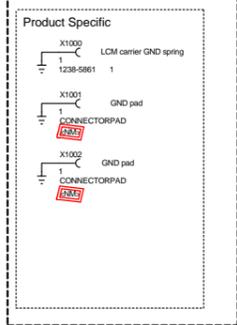
Peripheral



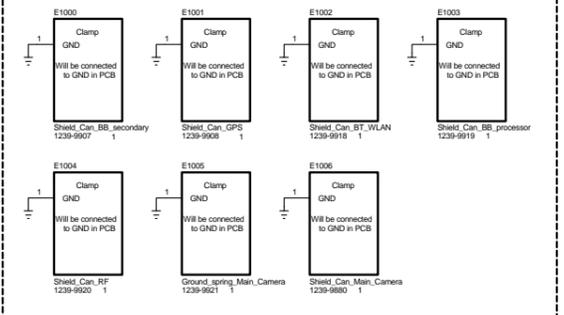
Unused GPIOs



GND pins & pads



Shield cans

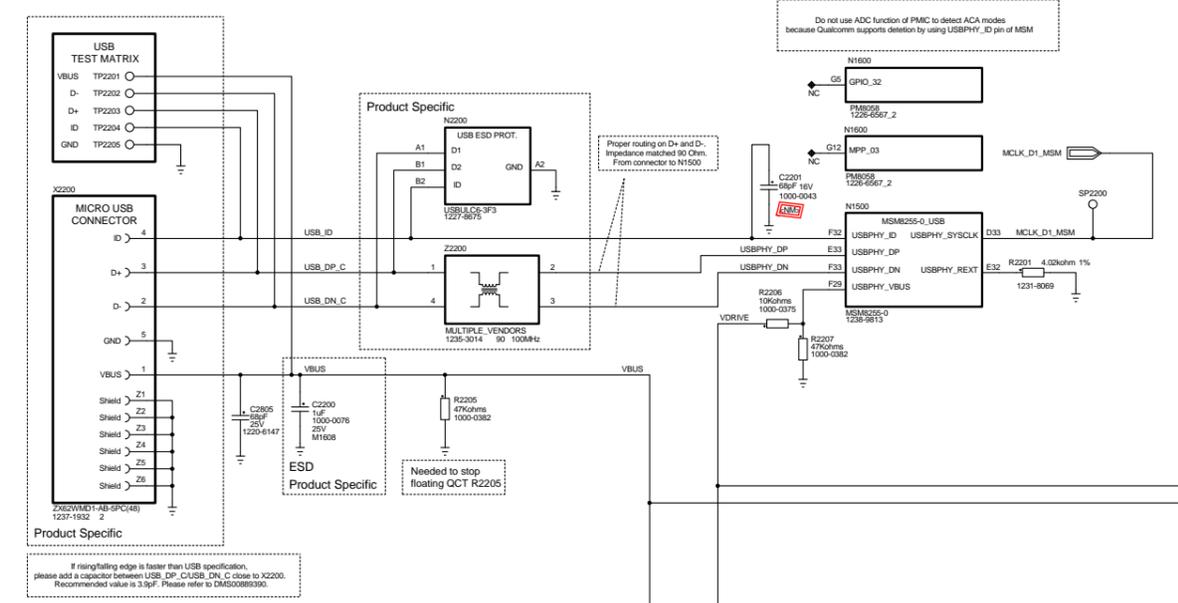


Confidential		CIRCUIT DIAGRAM	
Sony Ericsson		SELD/CVLEDA Martin Hjerstedt	
Hollon R1 Band1/2/5 Schematic Build: AP1.2		SELD/CVLERD Zsolt Gyurko	
Hollon Top		SELD/CVLERD Johan Mercke	
Project/Commercial name Hollon 1-2-5		Type nbr/FCC/IC number AAD-3880101-BV	
PBA nbr 1238-3221 1		PY7A3880101	
Document nr 1239-9828		4170B-A3880101	
Date 2010-11-24		Rev 8	
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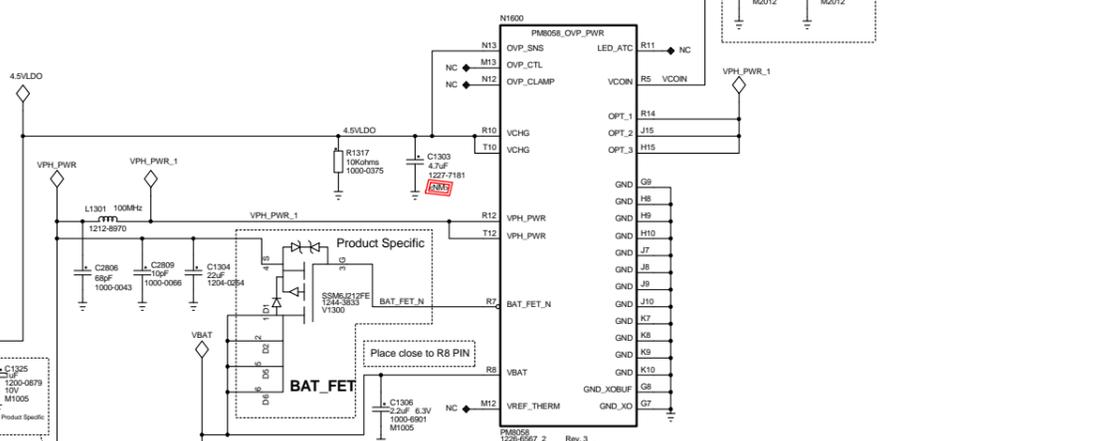
LZF 030 101/F RB1

Charging and Battery Management - 1300

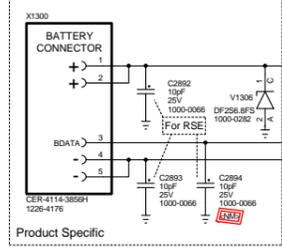
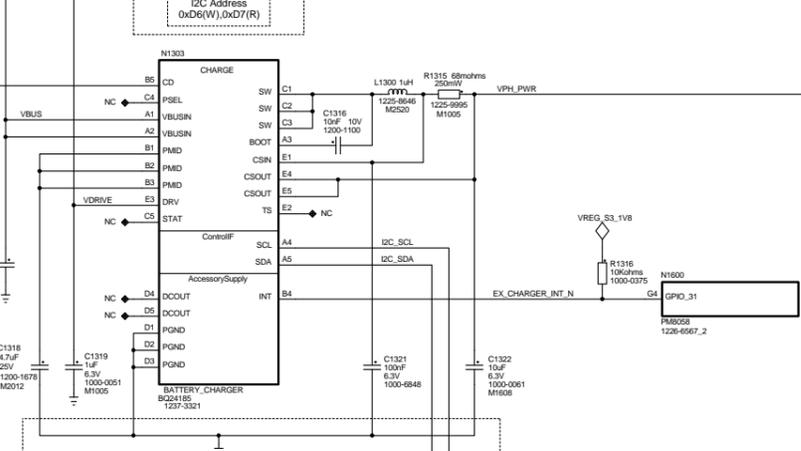
USB - 2200



PM8058 OVP, Charger



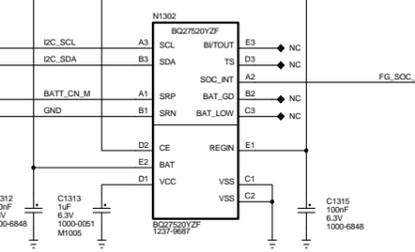
EXT Charger(TI BQ24185)



These line should be placed close to each other. Maintain the symmetrical placement pattern.

Product Specific C1311 100nF 16V 1200-8856 M1002
When C1314 is mounted, C1311 can be removed or adjusted.

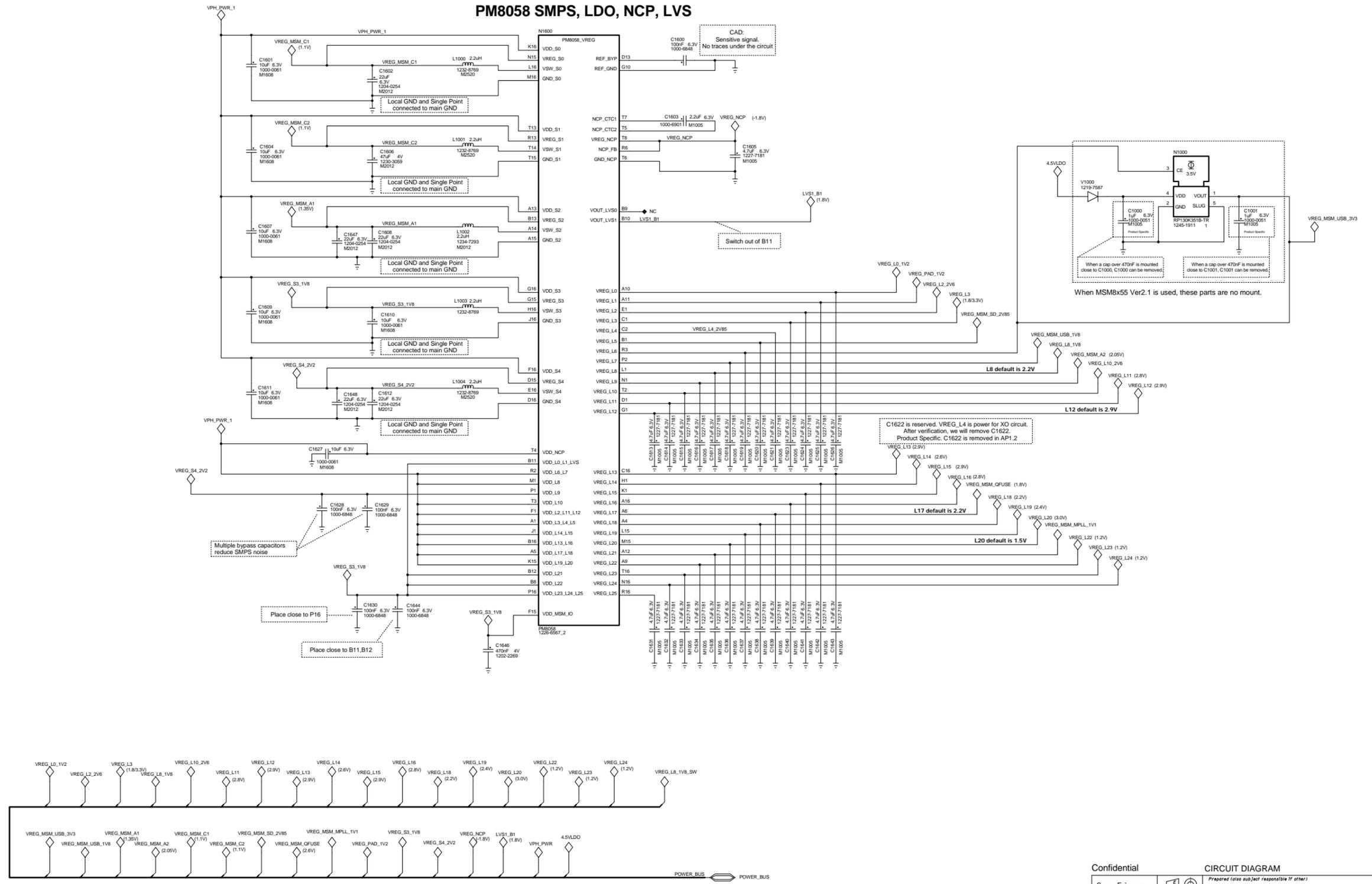
Fuel Gauge(TI BQ27520)



Confidential		CIRCUIT DIAGRAM	
Sony Ericsson		Presented (also subject) responsible (if other) SELDI/CVLEDA Martin Hjertstedt	
Block		Document responsible SELDI/CVLEDA Zsolt Gyurko	
Core		Document responsible/Approved SELDI/CVLERD Johan Merckce	
Build: AP1.2		Project/Commercial name Hallon 1-2-5	
Page		Type nbr/FC/IC number AAD-3880101-BV	
Charge		PBA nbr PY7A3880101	
1239-9828		4170B-A3880101	
8		Date 2010-11-24	
8		Sheet C1	

Power Management - 1000

PM8058 SMPS, LDO, NCP, LVS



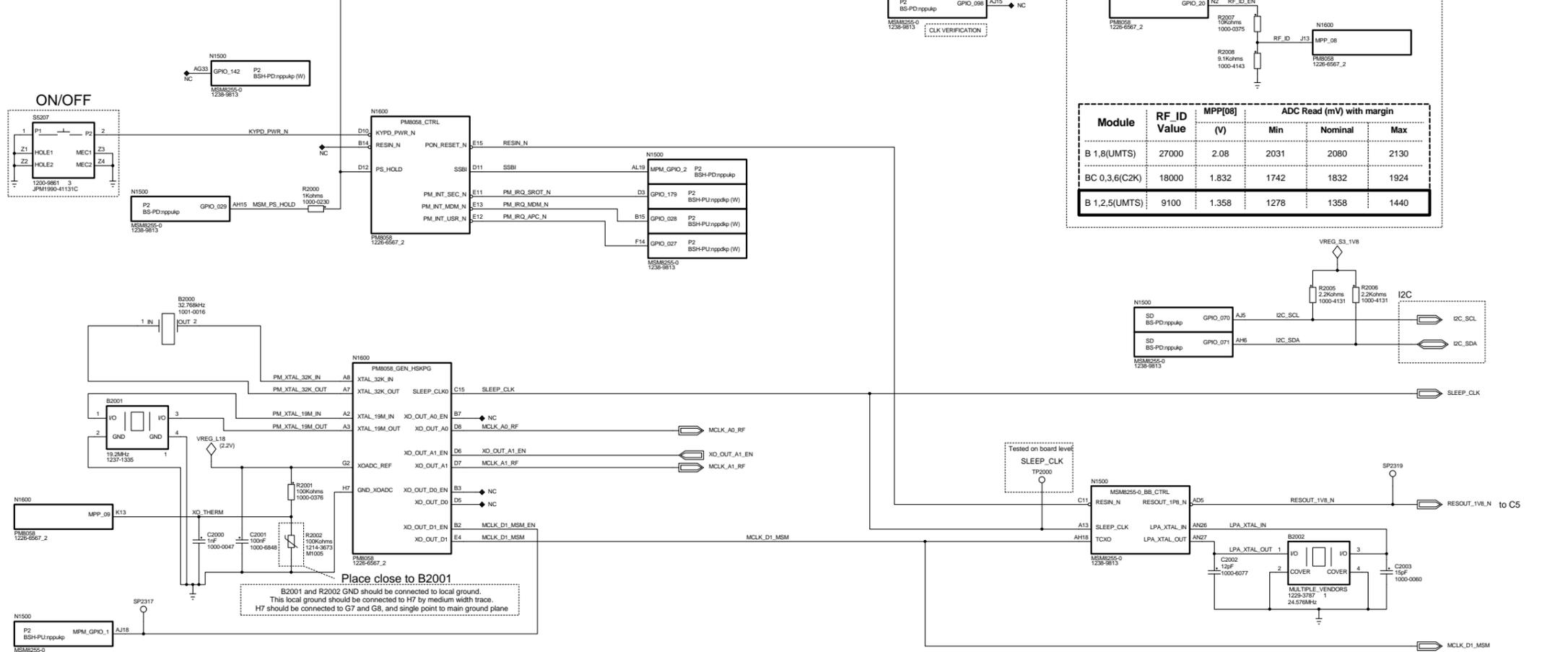
Confidential		CIRCUIT DIAGRAM	
Sony Ericsson		Preserved (also subject responsible if other) SELD/CVLEDA Martin Hjerstedt	
Block		Document responsible SELD/CVLEDA Zsolt Gyurko	
Core		Document responsible/Approved SELD/CVLERD Johan Mercke	
Build: AP1.2		Project/Commercial name Hallon 1-2-5	
Page		Type nbr/FCC/IC number AAD-3880101-BV	
Power Management		PBA nbr PY7A3880101	
Document nr 1239-9828		Rev 8	
Date 2010-11-24		Sheet C2	

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Debug - 2300



System Core - 2000



Product Specific

B2001 and R2002 GND should be connected to local ground. This local ground should be connected to H7 by medium width trace. H7 should be connected to G7 and G8, and single point to main ground plane.

	HW_ID[3] GPIO_043	HW_ID[2] GPIO_148	HW_ID[1] GPIO_149	HW_ID[0] GPIO_150
Production Release	1	1	1	1
API.2	1	1	0	1
API.1	1	1	0	0
SP2	1	0	1	1
SP1 with WVEF change	1	0	1	1
SP1	1	0	0	1
Handmade	1	0	0	0
CDB	0	0	0	0

HW_ID assign depend on product configuration.

Confidential

Sony Ericsson

Block
Core

Build: AP1.2

Page
System & Debug

CIRCUIT DIAGRAM

SELD/CVLEDA Martin Hjerstedt

Document responsible
SELD/CVLEDA Zsolt Gyurko

Document responsible/Approved
SELD/CVLERD Johan Mercke

Project/Commercial name
Hallon 1-2-5

Type nbr/FCO/IC number
AAD-3880101-BV

PBA nbr
PY7A3880101

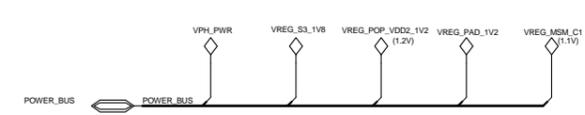
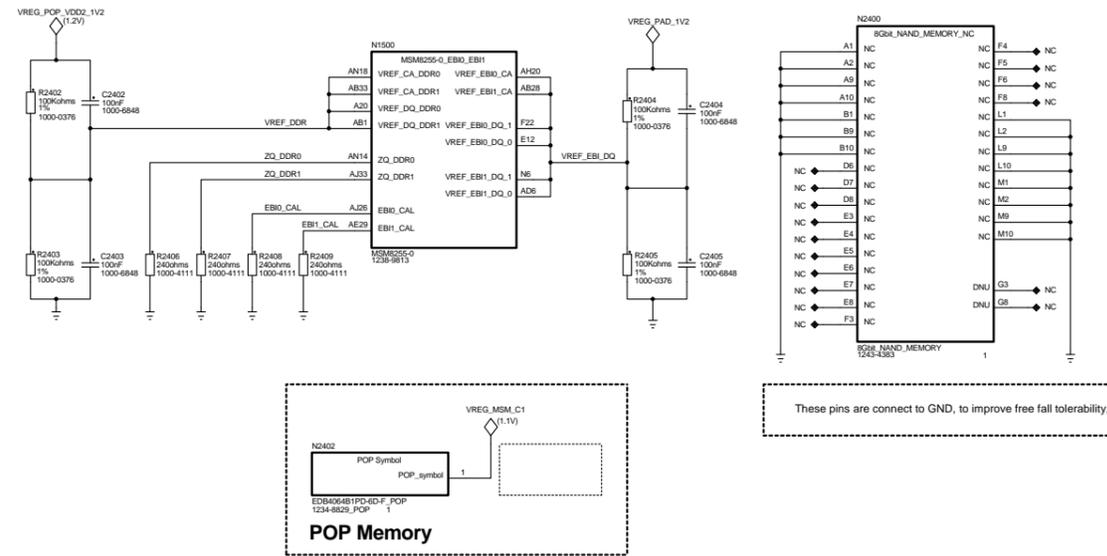
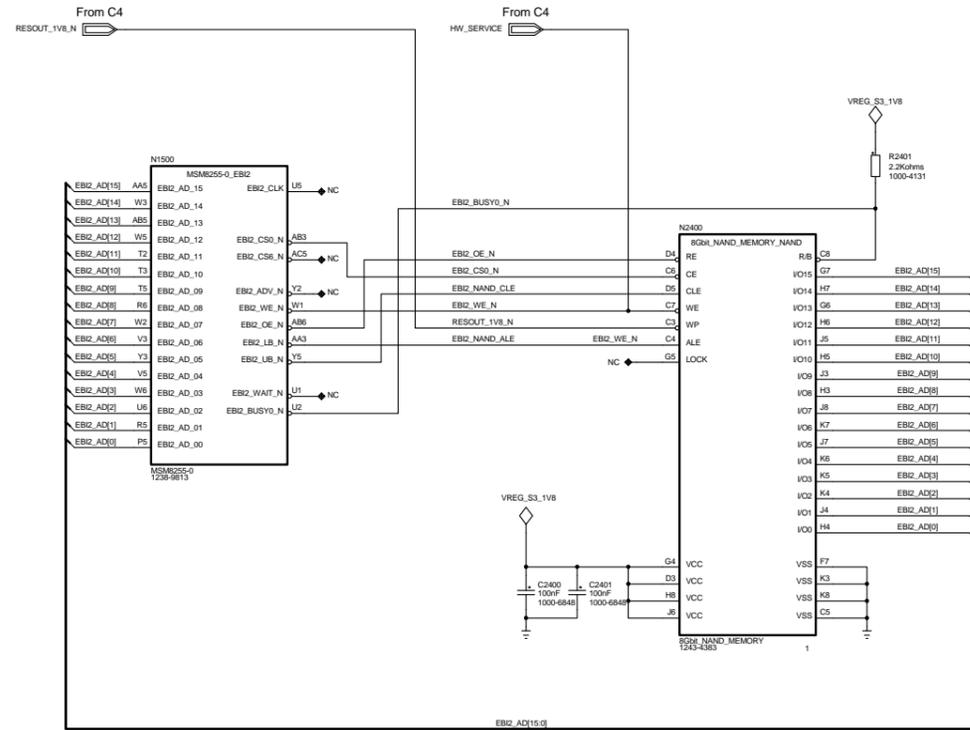
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1239-9828

Rev
8

Date
2010-11-24

Sheet
C4

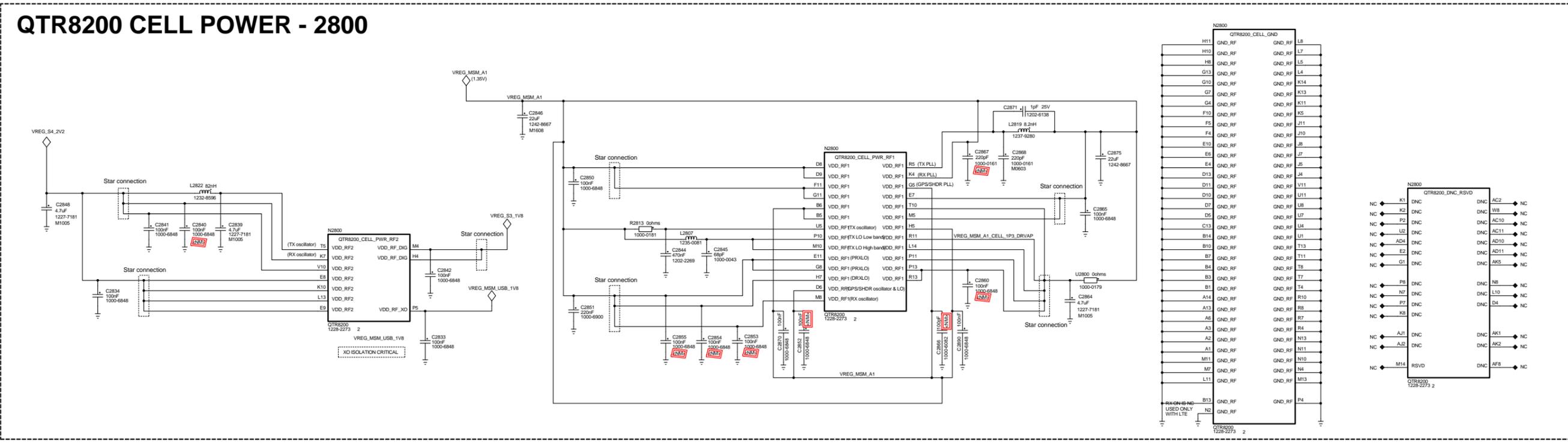
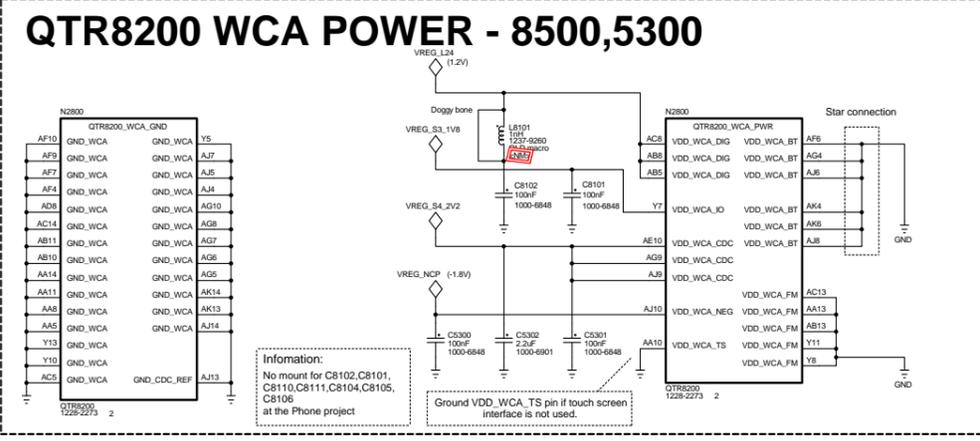
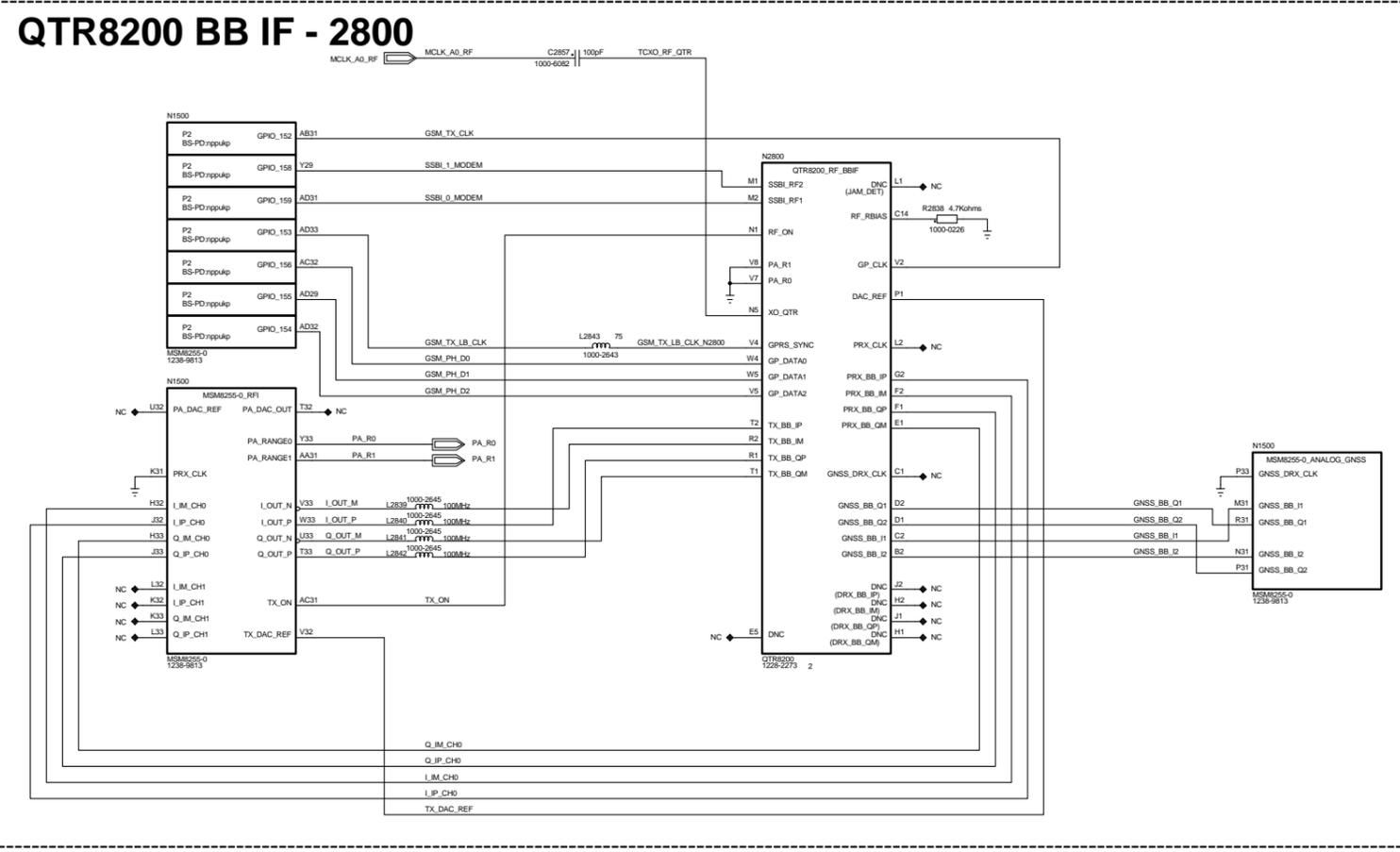
Memory - 2400



Confidential		CIRCUIT DIAGRAM			
Sony Ericsson		Prepared (also sub/inst responsible if other) SELD/CVLEDA Martin Hjertstedt			
Block		Document responsible SELD/CVLEDA Zsolt Gyurko			
Core		Document responsible/Approved SELD/CVLERD Johan Mercke			
Build: AP1.2		Project/Commercial name Hallon 1-2-5		Type nbr/FCC/IC number AAD-3880101-BV	
Page		PBA nbr 1238-3221 1		PYA3880101	
Memories		Document nr 1239-9828		Rev Date Sheet 8 2010-11-24 C5	

LZF 030 101/F BR1

Sensitive RF Supply Pins				
Description	Pin #	Noise Generator	Noise Sensitive	Decoupling Purpose
TX Oscillator	T5,U5	Yes(RF Harmonics)	Yes	Noise Suppression
RX Oscillator	K7,M8	Yes(RF Harmonics)	Yes	Noise Suppression
GPS/SHDR Oscillator & LO	D6	Yes(RF Harmonics)	Yes	Noise Suppression
RX PLL	K4	Yes	Yes	Noise Suppression
TX PLL	R5	Yes	Yes	Noise Suppression
GPS / SHDR PLL	G5	Yes	Yes	Noise Suppression
RX / TX / SBI Digital	M5	Yes (Hight)	Yes	Noise Suppression
SHDR / Digital GPS	H5	Yes (Hight)	Yes	Noise Suppression
TCXO Supply	P5	Yes (Harmonics)	Yes (Very Sensitive)	TCXO Harmonic Suppression, improves PLL ref clock noise
Driver Amplifier	P13,R13	Yes(RF Harmonics)	Yes	Improves TX fundamental / harmonic, RX band noise / emissions
Pre Driver Amplifier	L14,R11	Yes(RF Harmonics)	Yes	Improves TX Path Stability, fundamental / harmonic, RX band noise / emissions
PRX LO	E11,G8	No	Yes	Improves RX blocking integrated phase noise, TX IM2
DRX LO	H7	No	Yes	Improves RX blocking integrated phase noise, TX IM2
TX LO	P10,M10	No	Yes	Improves RX band noise / emissions
LNA Supply	D8,D9, F11/G11, B6/B5	No	Yes	

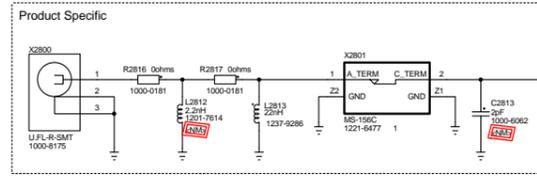


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Sony Ericsson		Prepared (also subject responsible if other) SELDI/CVLEDA Martin Hjerstedt	
Block		Document responsible SELDI/CVLEDA Zsolt Gyurko	
Core		Document responsible/Approved SELDI/CVLERD Johan Mercke	
Build: AP1.2		Project/Commercial name Type nbr/FCC/IC number	
RF_Power_Asics		Hallon 1-2-5 AAD-3880101-BV	
Page		PBA nbr PY7A3880101	
1239-9828		4170B-A3880101	
Document nr		Rev Date Sheet	
1239-9828		8 2010-11-24 C6	

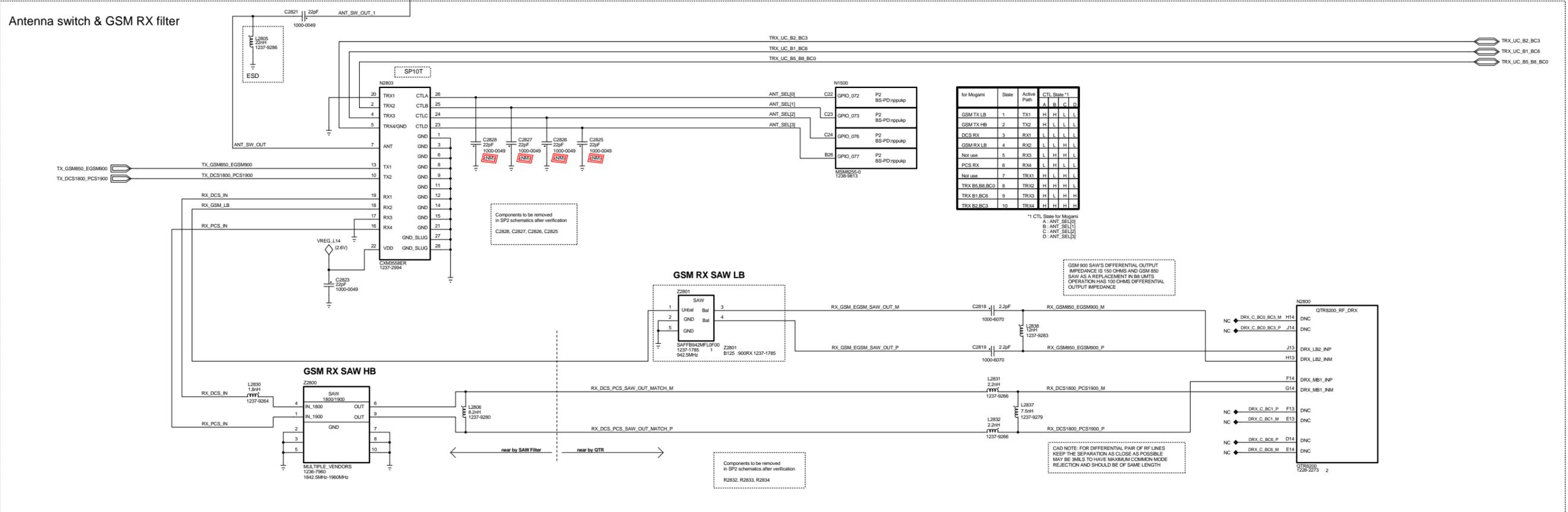
LZF 030 101/F RB1

GSM/EDGE/Common - 2800

Antenna matching

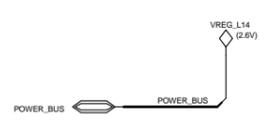
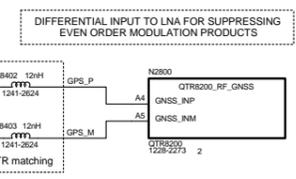
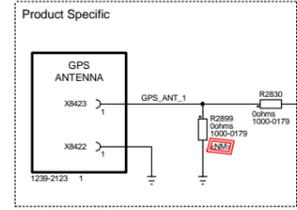
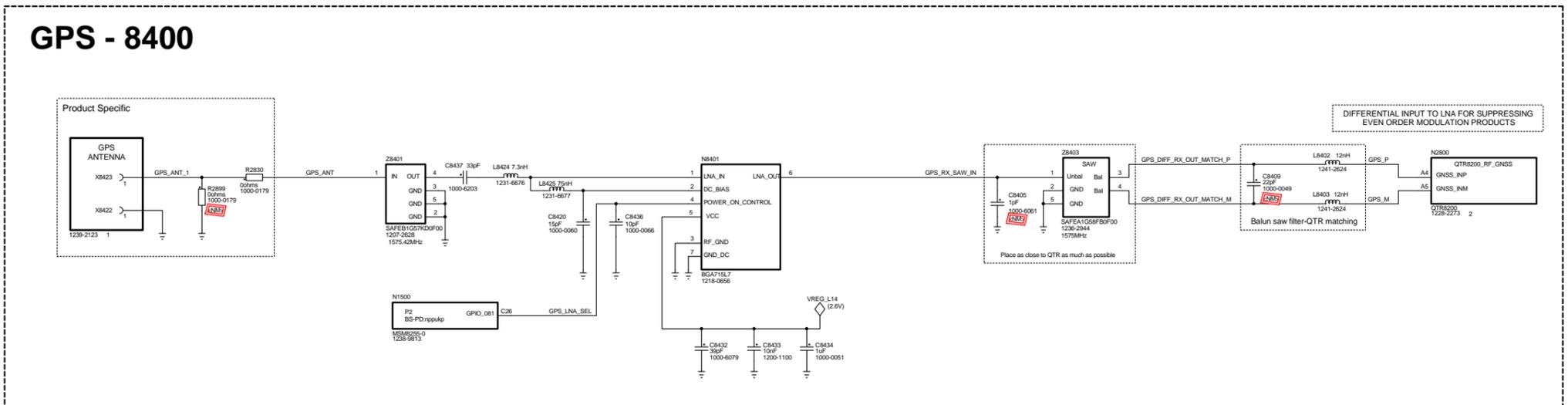


Antenna switch & GSM RX filter



Confidential		CIRCUIT DIAGRAM	
Sony Ericsson		Preserved (also subject responsible if other)	
Block	Core	SELD/CVLEDA Martin Hjertstedt	
Build: AP1.2	RF_Ant_Switch&Signal	Document responsible SELD/CVLEDA Zsolt Gyurko	
		Document responsible/Approved SELD/CVLERD Johan Mercke	
		Project/Commercial name Hallon 1-2-5	Type nbr/FCC/IC number AAD-3880101-BV
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		Document nr 1239-9828	Rev 8
		Date 2010-11-24	Sheet C8

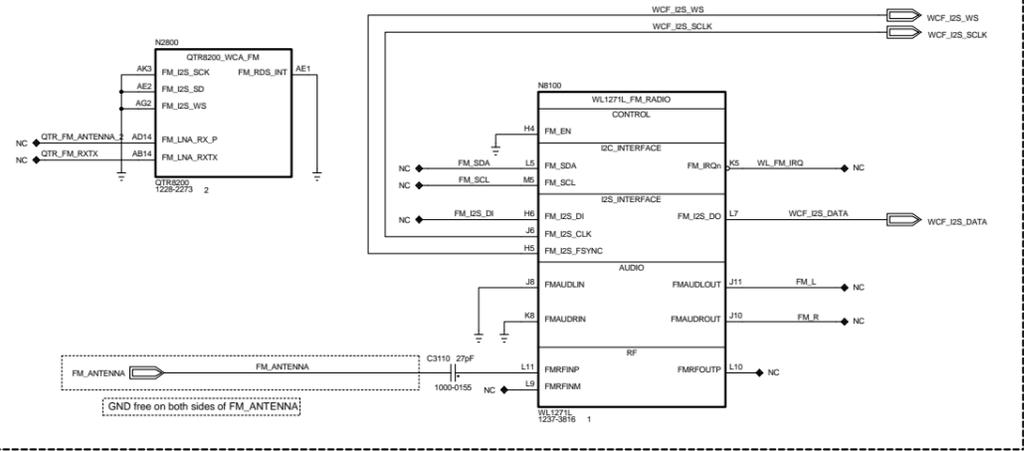
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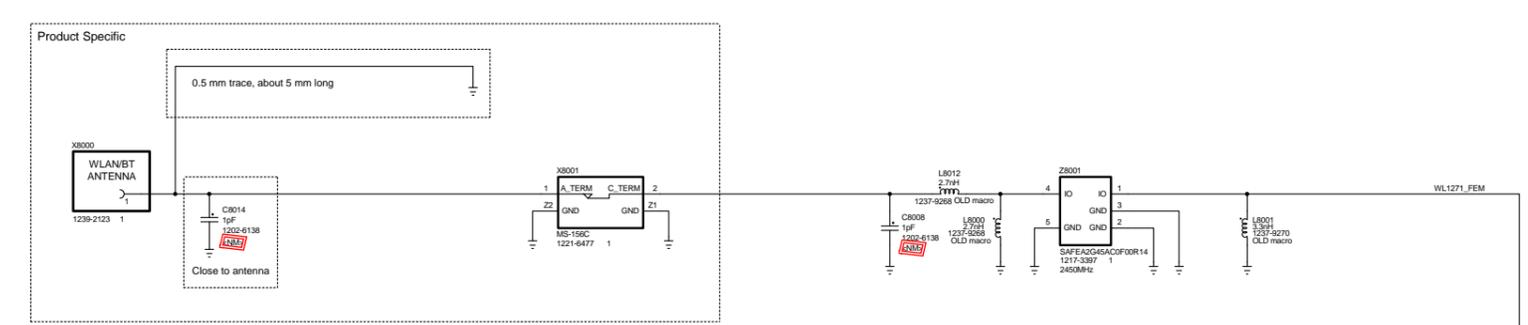
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Block		Document responsible SELD/CVLEDA Zsolt Gyurko			
Peripheral		Document responsible/Approved SELD/CVLERD Johan Mercke			
Build: AP1.2		Project/Commercial name Hallon 1-2-5		Type nbr/FCC/IC number AAD-3880101-BV	
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LZF 030 101/F RB1

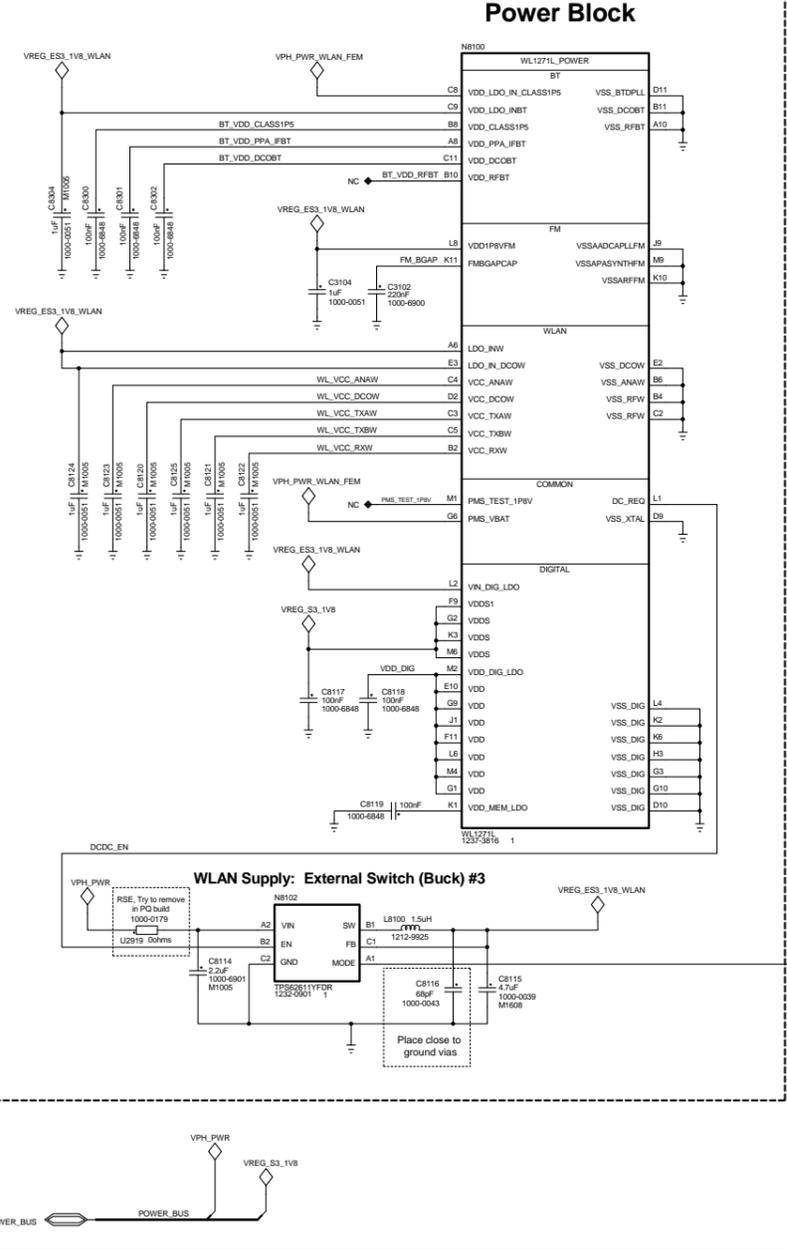
FM Radio - 3100



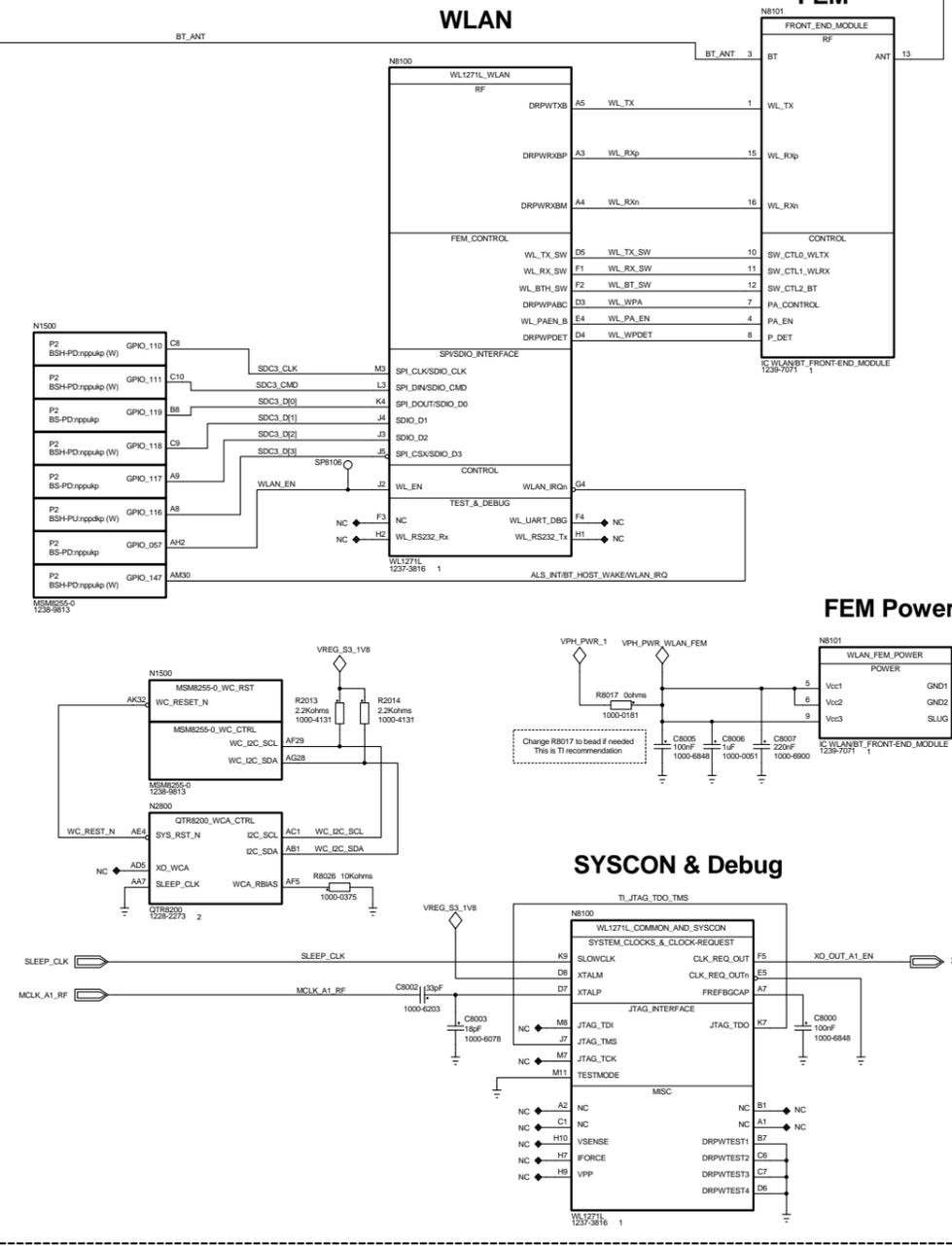
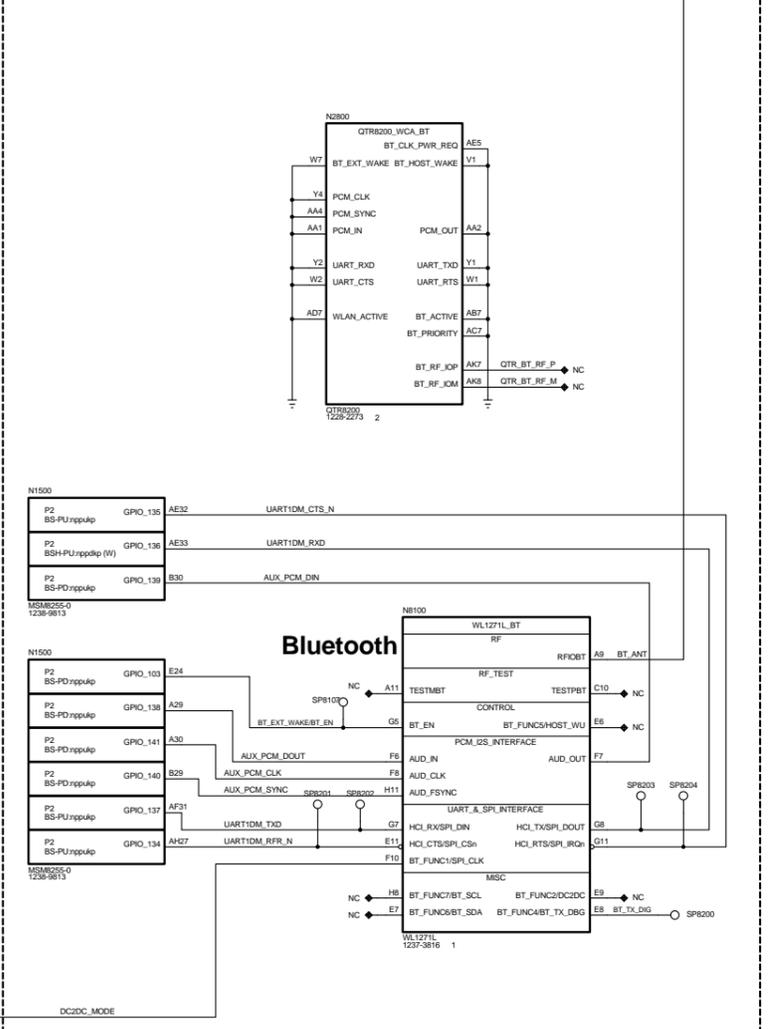
WLAN Radio - 8000



WLAN/BT/FM power - 8100/8300/3100



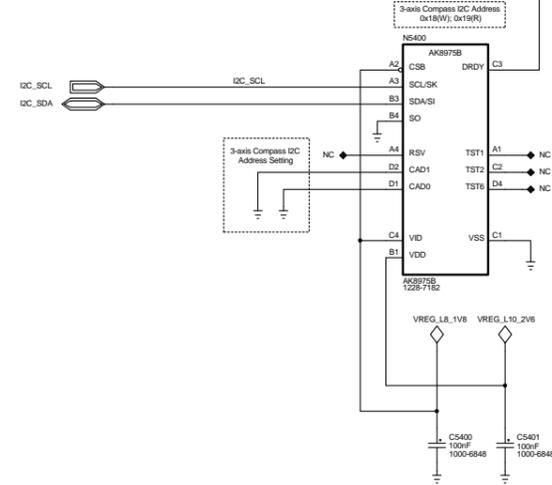
BT Radio - 8200



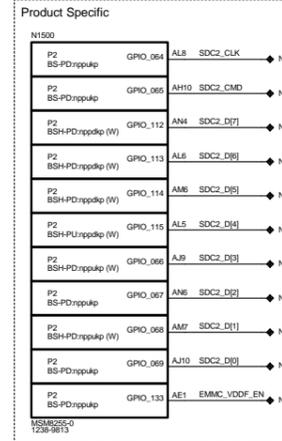
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Peripheral		Document responsible	
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Page		PBA nbr	PY7A3880101
WLAN&BT		1238-3221 1	4170B-A3880101
		Document nr	Rev
		1239-9828	8
		Date	2010-11-24
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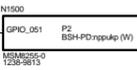
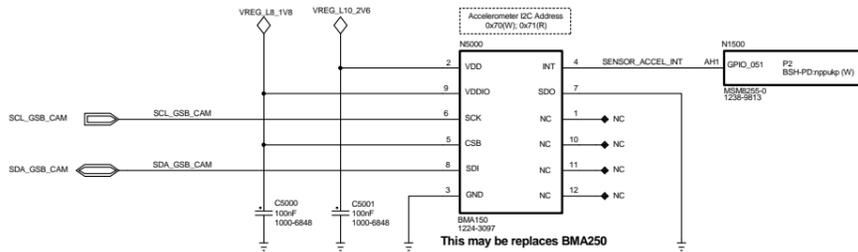
E-Compass - 5400



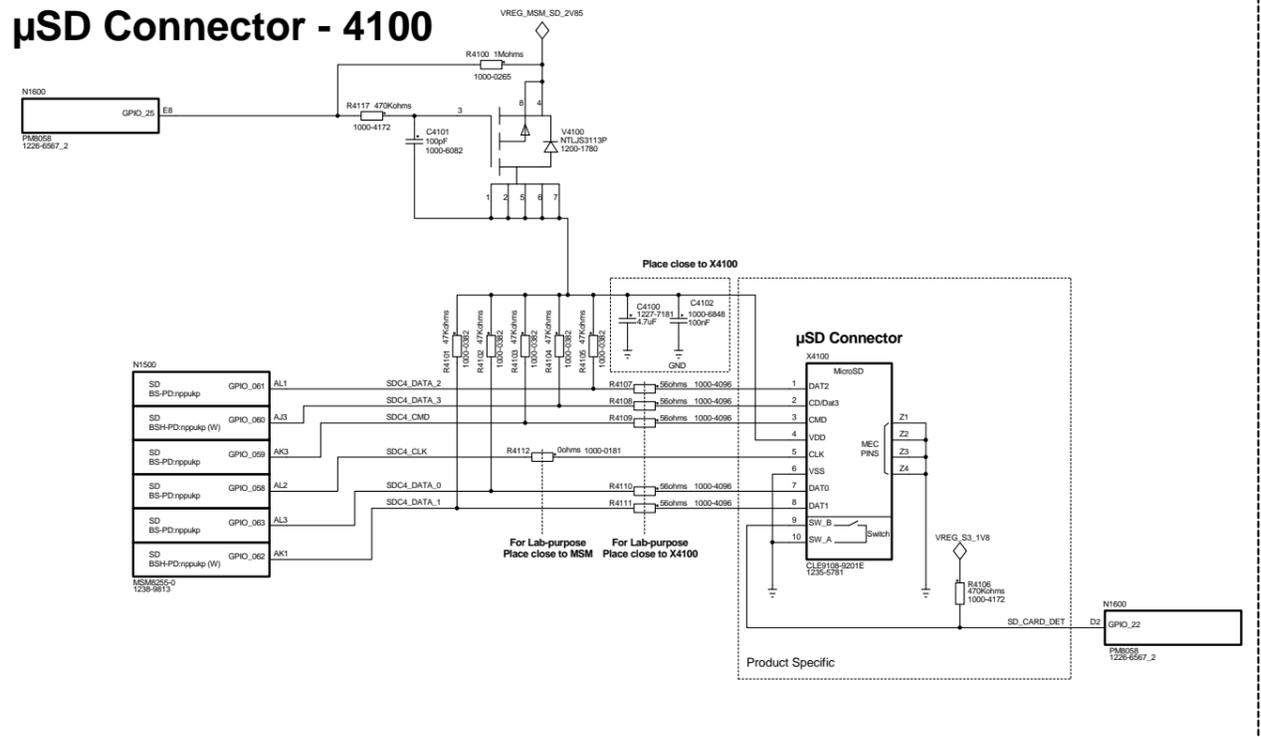
eMMC - 4200



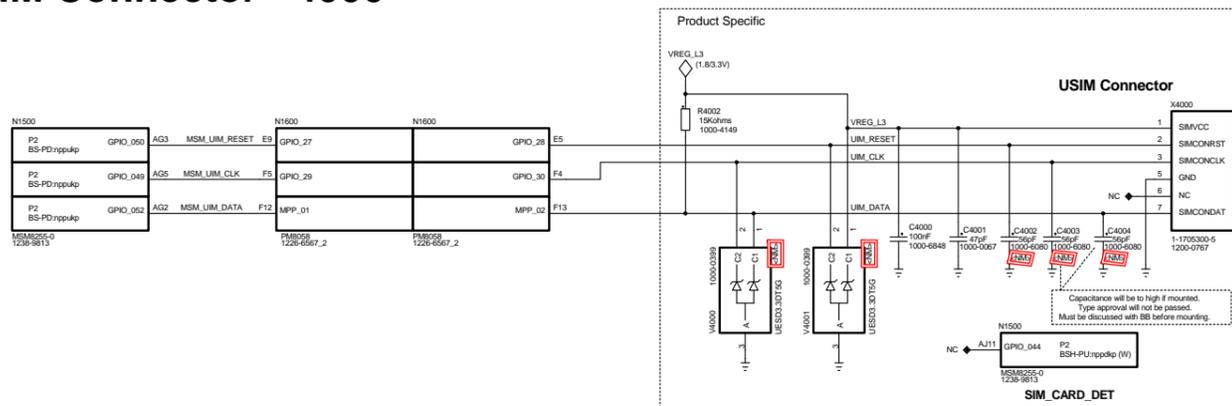
Accelerometer - 5000



µSD Connector - 4100



USIM Connector - 4000

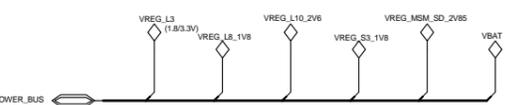
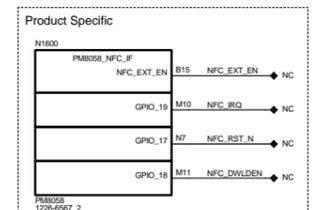


USIM Connector

SIM_CARD_DET

MR_DET

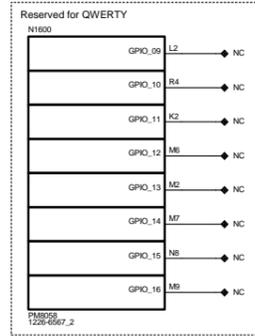
NFC Board - 8600



Confidential		CIRCUIT DIAGRAM	
Sony Ericsson		Prepared (also subject responsible if other) SELD/CVLEDA Martin Hjerstedt	
Block	Peripheral	Document responsible SELD/CVLEDA Zsolt Gyurko	
Build: AP1.2	Hallon 1-2-5	Document responsible/Approved SELD/CVLERD Johan Mercke	
Page	IO_Devices	Project/Commercial name Hallon 1-2-5	Type nbr/FCC/IC number AAD-3880101-BV
		PBA nbr 1238-3221 1	PYA3880101
		Document nr 1239-9828	4170B-A3880101
		Rev 8	Date 2010-11-24
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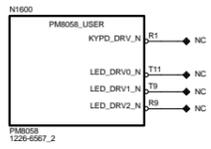
LZF 030 101/F RB1

Keyboard - 5200

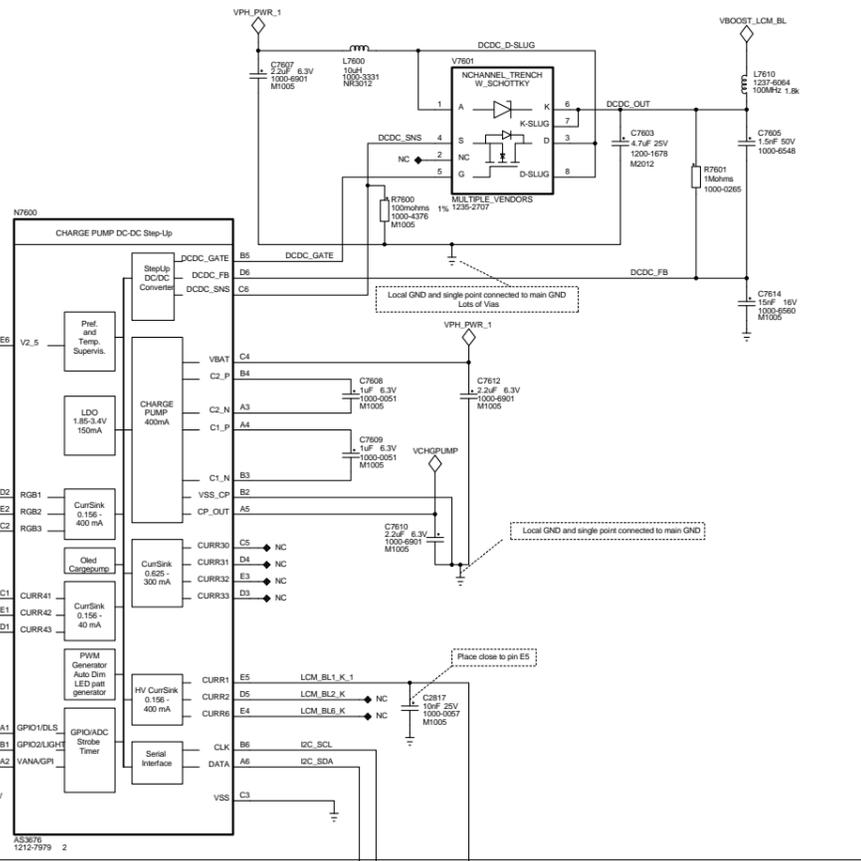


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Block		<small>Document responsible</small> SELD/CVLEDA Zsolt Gyurko			
Peripheral		<small>Document responsible/Approved</small> SELD/CVLERD Johan Merckce			
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		<small>Date</small> 2010-11-24		<small>Sheet</small> P5	

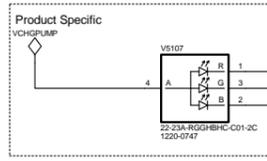
Keyboard(Back Light) - 5200



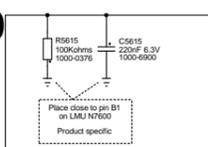
LMU - 7600



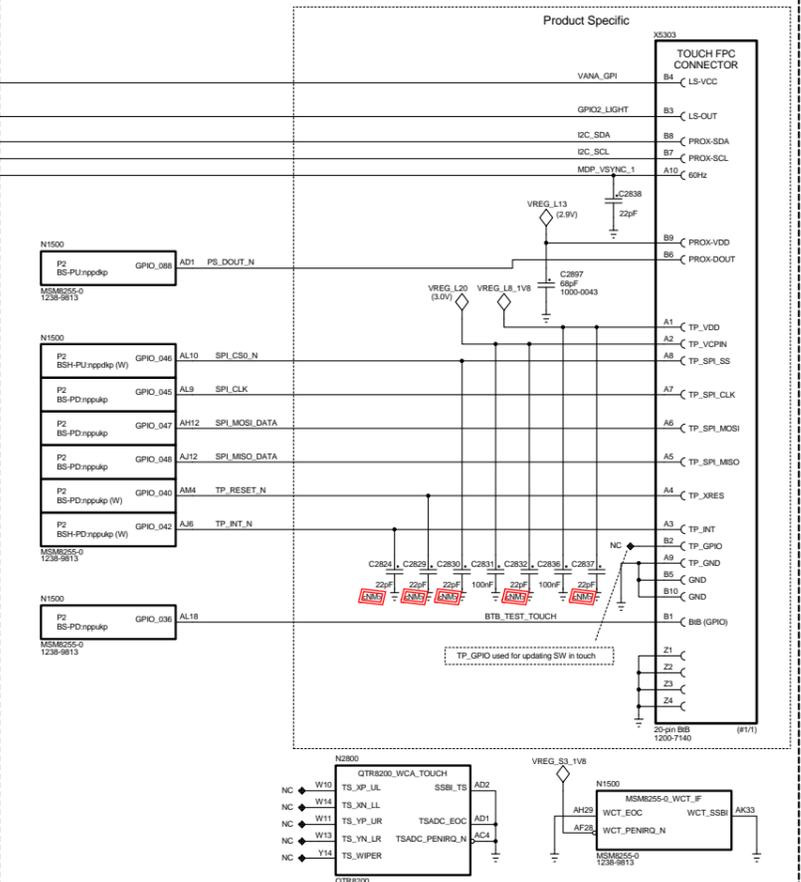
MMI LED - 5100



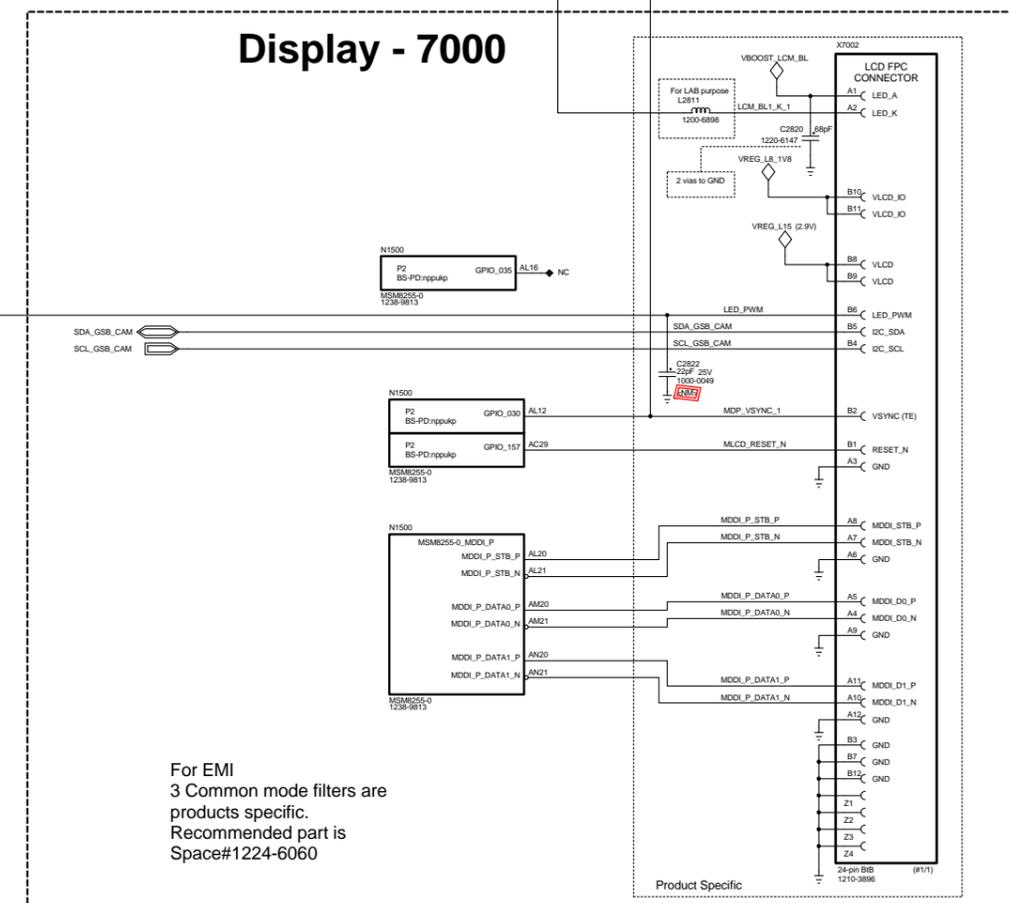
Light sensor - 5600



Touch sensor - 5300



Display - 7000



Proximity sensor - 5500

MOVED TO TOUCH FPC

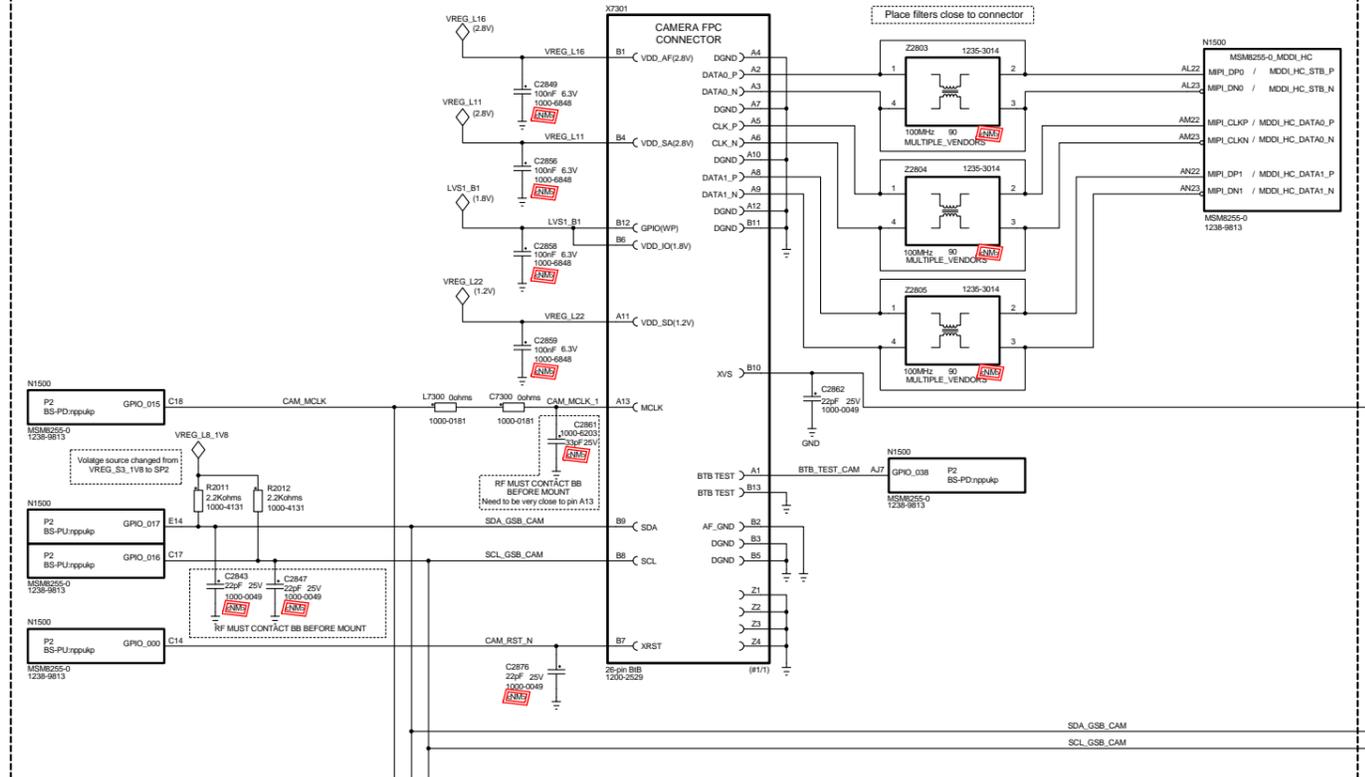
Torch LED - 7800

REMOVED IN HALLON

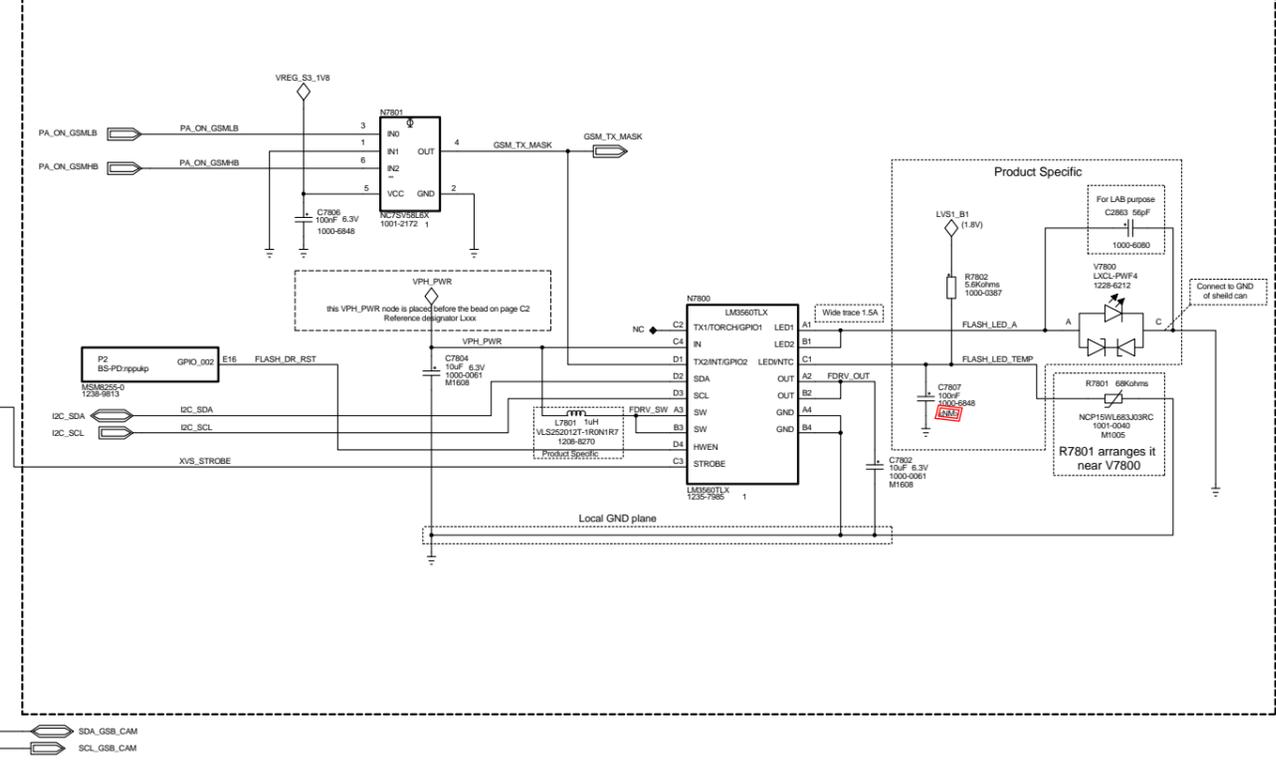
For EMI
3 Common mode filters are
products specific.
Recommended part is
Space#1224-6060

Confidential		CIRCUIT DIAGRAM	
Prepared (also subject responsible if other)		SELD/CVLEDA Martin Hjertstedt	
Document responsible		SELD/CVLEDA Zsolt Gyurko	
Document responsible/Approved		SELD/CVLERD Johan Mercke	
Project/Commercial name		Hallon 1-2-5	
Type nr/FC/IC number		AAD-3880101-BV	
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		2010-11-24	
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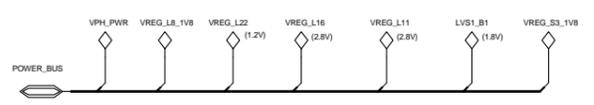
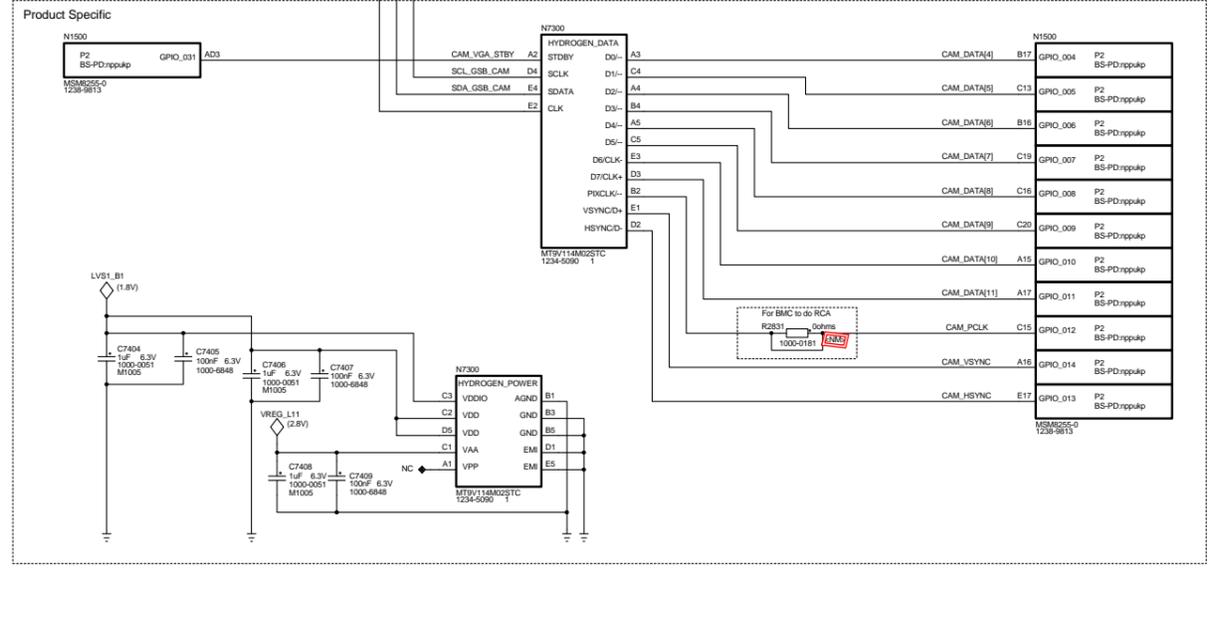
Main Camera - 7300



Flash LED Driver - 7800



Sub Camera - 7300

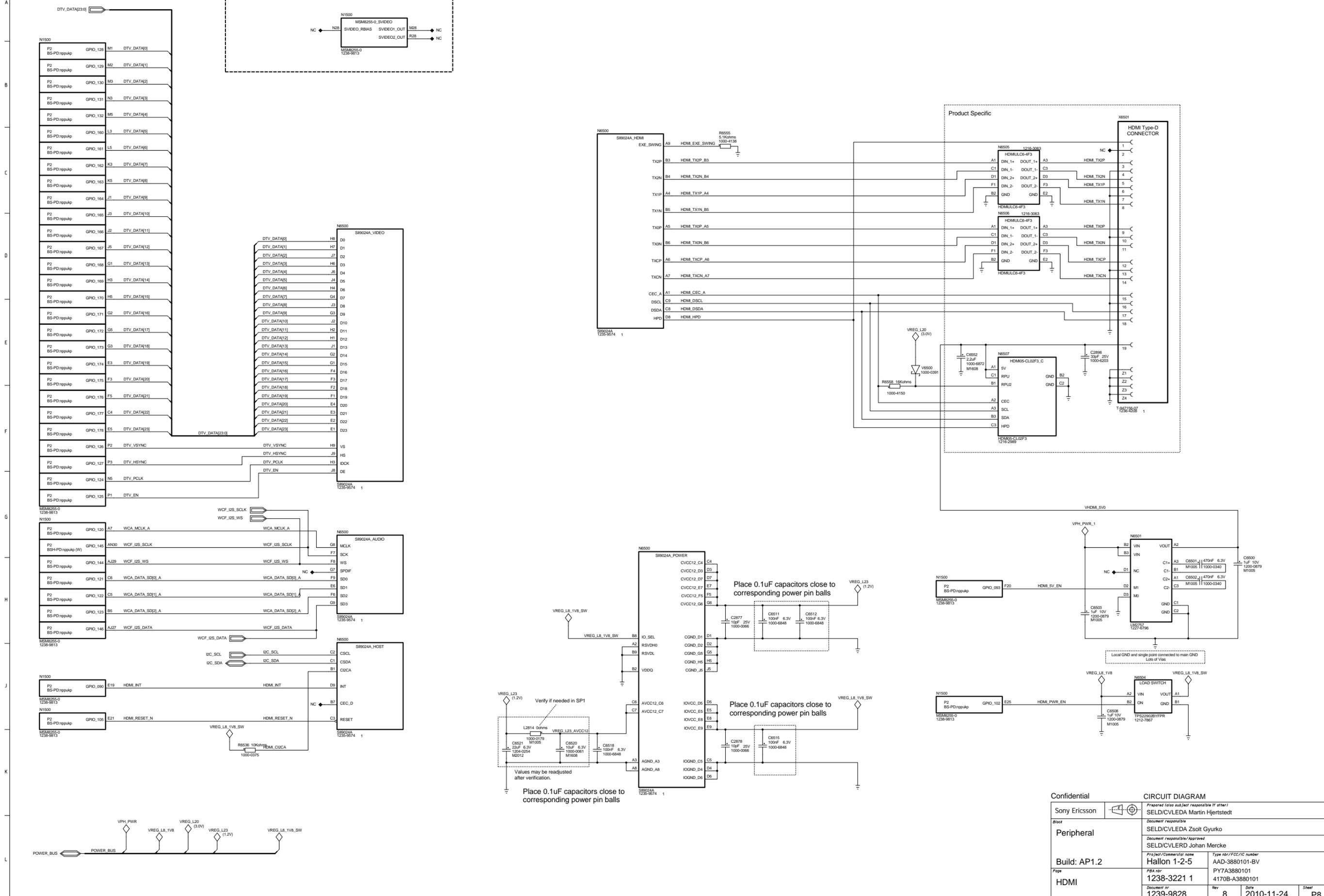


Confidential		CIRCUIT DIAGRAM	
Sony Ericsson		Preserved (also subject responsible if other)	
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Peripheral		Document responsible SELD/CVLEDA Zsolt Gyurko	
Build: AP1.2		Document responsible/Approved SELD/CVLERD Johon Mercke	
Camera		Project/Commercial name Hallon 1-2-5	Type nbr/FCO/IC number AAD-3880101-BV
		PBA nbr 1238-3221 1	PYA3880101 4170B-A3880101
		Document nr 1239-9828	Rev 8
		Date 2010-11-24	Sheet P7

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HDMI - 6500

Analog TV_Out - 6400



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