

4
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D
C
B
A

WB_ANT_ONYX
V2_8_SWITCH
V2_STXVR_TX
V2_8SDIG
WB_PA_VMODE
WB_PA_VCC
WB_PA_VMC
GPS_RX
WLAN_ANT_2G4
WB_PA_IMT_ON
WB_PA_PCS_ON
WB_PA_CELL_ON
WB_DET
WB_TX_CELL
WB_TX_PCS
WB_TX_IMT
WB_RX_CELL
WB_RX_PCS
WB_RX_IMT

WB_AFE_MAG
V2_8_SWITCH
V2_STXVR_TX
WB_RX_IMT
WB_RX_PCS
WB_RX_CELL
WB_TX_CELL
WB_TX_PCS
WB_TX_IMT
WB_PA_CELL_ON
WB_PA_PCS_ON
WB_PA_IMT_ON
WB_PA_VCC
WB_PA_VMC
WB_DET
WB_TX_CELL
WB_TX_PCS
WB_TX_IMT

GPS1
LDO4_PG
GPS_TEMP
GPS_WAKE
GPS_INT
GPS_BLANK
GPS_ONOFF
GPS_TSYNC
GPS_RST_N
GPS_TX_DIG_RX
GPS_RX_DIG_TX
GPS_2M_CLK
SYS_3K_CLK
BT_WLAN_XCVR
WLAN_ANT_2G4
WLAN_ANT_2G4
WLAN_SDD(3)
WLAN_INT_N
WLAN_S0_CMD
WLAN_S0_CLK
HFCLK_EN
WLAN_EN
BT_UART_P_RX_B_TX
BT_RX_DIG_RX
BT_UART_P_TX_B_RX
BT_UART_P_TX_B_RX
BT_PCM_MOSI
BT_PCM_MISO
BT_PCM_FRM
BT_PCM_SYNC
BT_PCM_CLK
BT_PWR_EN
BT_PWR_EN
BT_RTS_DIG_CTS
BT_UART_P_RTS_B_CTS
BT_UART_P_RTS_B_CTS

PROCESSOR
CNRTRLEN
CNRTRCLK
RXTXEN
RXTXDATA
LD04_PG
STROBE
CLK_ON
WLAN_CLK_EN
SYSCLK
FORCE_PWM
V1_BDIG
V2_BDIG
V3_1RTC
V_SIM
V3_1USB
VBAT_F
VCC_MAIN
V2_BSEMMC
GND

AUDIO
CODEC_MCLK
CODEC_WCLK
CODEC_BCLK
CODEC_SDN
CODEC_SDO
CODEC_INT_N
CODEC_RST_N
CODEC_SCL
CODEC_SDA
VBAT_F
V2_SAUD
V1_BDIG
GND

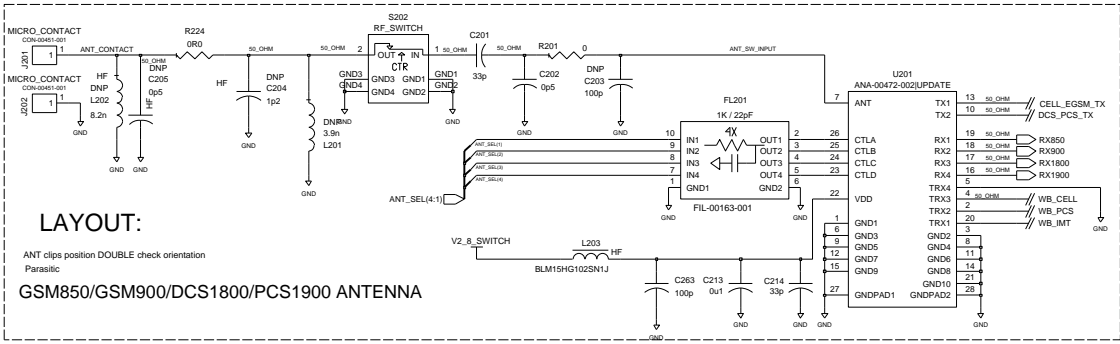
INTERFACE
HD_MIC_P
HD_MIC_N
HD_SPKR_L
HD_SPKR_R
HD_HOOK
AUDHSND
REC_SPKR_P
HAC_COIL_P
HAC_COIL_N
HF_SPKR_LP
HF_SPKR_LN
AUD_MIC2_P
AUD_MIC2_N
SD_DATA(3:0)
SD_CLK
SD_CMD
SD_DETECT_N
SIM_RST_N
SIM_DATA_IO
SIM_CLK
SLIDE_CLSD_N
SLIDE_OPEN_N
VOL_UP
VOL_DN
KEYOUT(6:0)
KEYIN(6:0)
KBLED_EN
KBLED_PWM_BB
JB_SHDN
JB_RST_N
JB_INT_N
TSCRN_RST_N
TSCRN_INT_N
IR_INT_N
CAM_CE
CAM_PWR_EN
CAM_HSYNC
CAM_PCLK
CAM_VSYNC
CAM_INT
CAM_DATA(7:0)
CAM_MCLK
CAM_RST_N
CAM_LDO_EN
CAM_SHDN_N
ACCEL_INT1
ACCEL_INT2
VIBUS
USB_P
USB_N
USB_ID
LCD_RST_N
LCD_CS_N
LCD_DATA(7:0)
LCD_RD_N
LCD_WR_N
LCD_AD
LCD_VSYNC
LCD_CBABC_PWM
LCD_CBABC_PWM
KBLED_PWM
NAVLED_SINK
LED_RED
LED_GREEN
LED_BLUE
LED_BQ
V1_BDIG
VBAT_F
V1_8CAM
VIBUS
VCC_MAIN
WHT_LED_P
WHT_LED_N
VIB_PWM
V1_BDIG
V2_5
V1_BDIG
V2_85CAM
V2_SAUD
V2_5
VCC_BG_TS
VCC_AND
V1_BDDR
V3_1USB
V2_85SDIG
V2_85USD
V3_1RTC
V2_BSEMMC
GND

POWER
LDO4_PG
GPS_TEMP
GPS_WAKE
GPS_INT
GPS_BLANK
GPS_ONOFF
GPS_TSYNC
GPS_RST_N
GPS_TX_DIG_RX
GPS_RX_DIG_TX
GPS_2M_CLK
SYS_3K_CLK
BT_WLAN_XCVR
WLAN_ANT_2G4
WLAN_ANT_2G4
WLAN_SDD(3)
WLAN_INT_N
WLAN_S0_CMD
WLAN_S0_CLK
HFCLK_EN
WLAN_EN
BT_UART_P_RX_B_TX
BT_RX_DIG_RX
BT_UART_P_TX_B_RX
BT_UART_P_TX_B_RX
BT_PCM_MOSI
BT_PCM_MISO
BT_PCM_FRM
BT_PCM_SYNC
BT_PCM_CLK
BT_PWR_EN
BT_PWR_EN
BT_RTS_DIG_CTS
BT_UART_P_RTS_B_CTS
BT_UART_P_RTS_B_CTS

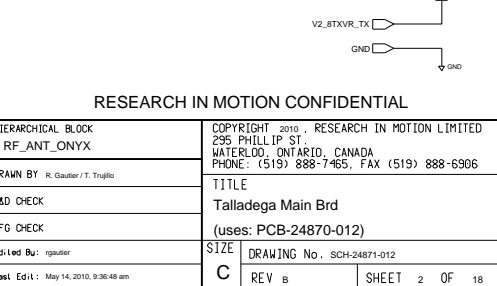
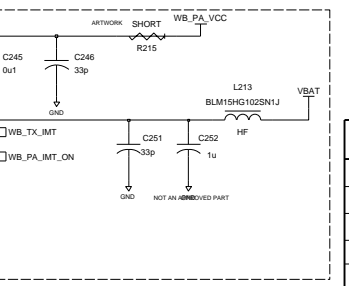
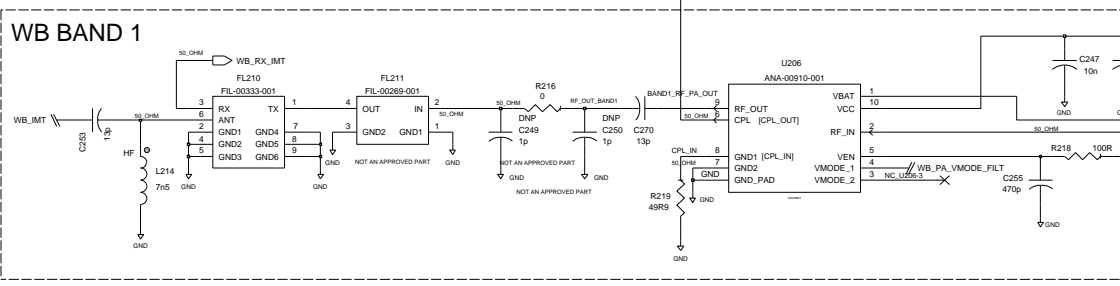
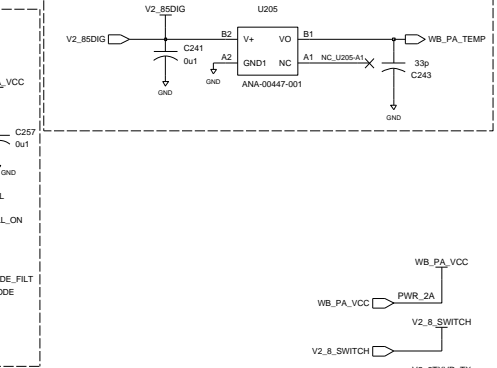
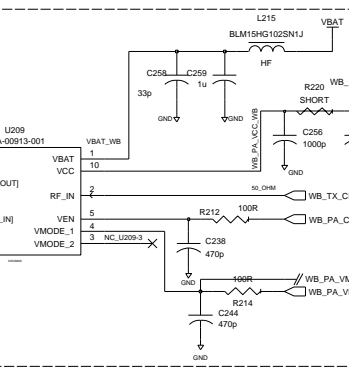
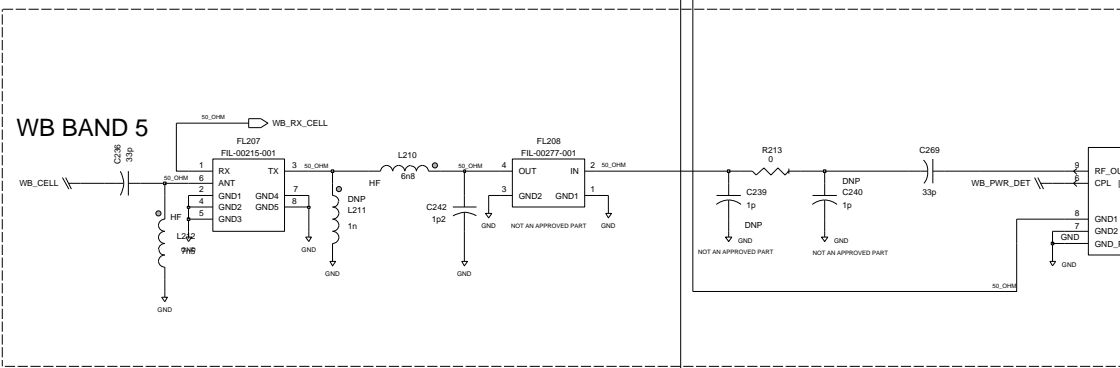
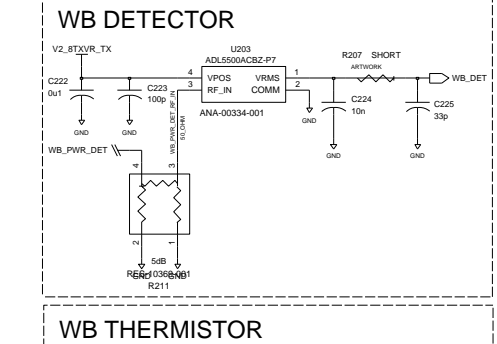
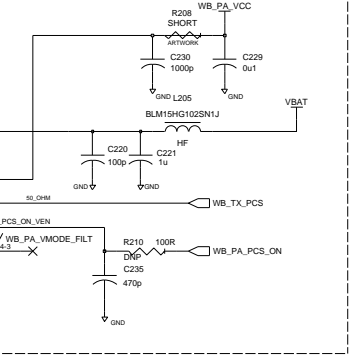
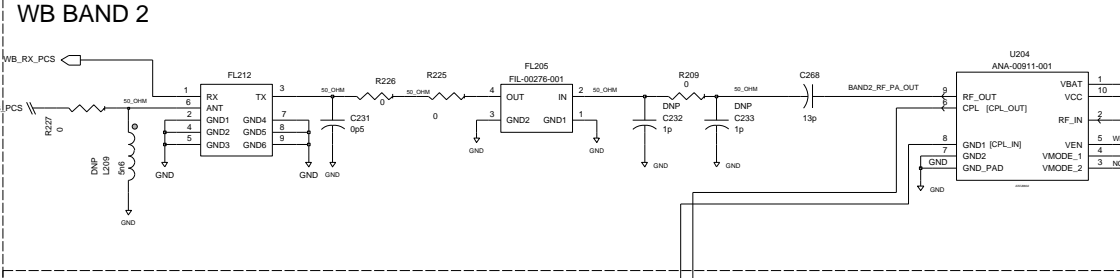
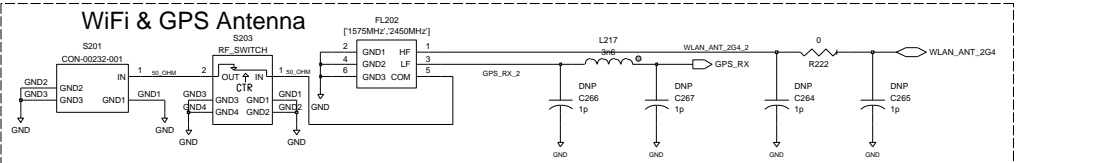
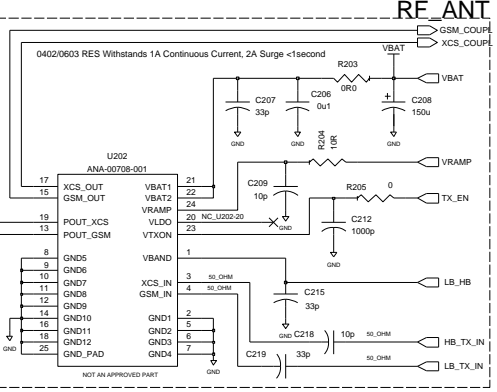
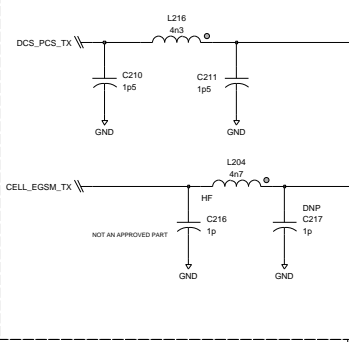
SHEET(S) 13 / 14 / 15

HIERARCHICAL BLOCK		COPYRIGHT 2010, RESEARCH IN MOTION LIMITED	
MAIN		295 PHILLIP ST.	
DRAWN BY: R. Gaudier / T. Trujillo		WATERLOO, ONTARIO, CANADA	
R&D CHECK		PHONE: (519) 888-7465, FAX: (519) 888-6306	
IFG CHECK		TITLE	
Edi Led Bu: rgauder		Talladega Main Brd	
Last Ed: 1 May 14, 2010, 9:38:58 am		(Uses: PCB-24870-012)	
SIZE		DRAWING No. SCH-24871-012	
C		REV B SHEET 1 OF 18	

COPIED FROM POP-21534-001 ON OCT 29, 2008



QUAD BAND GSM PA

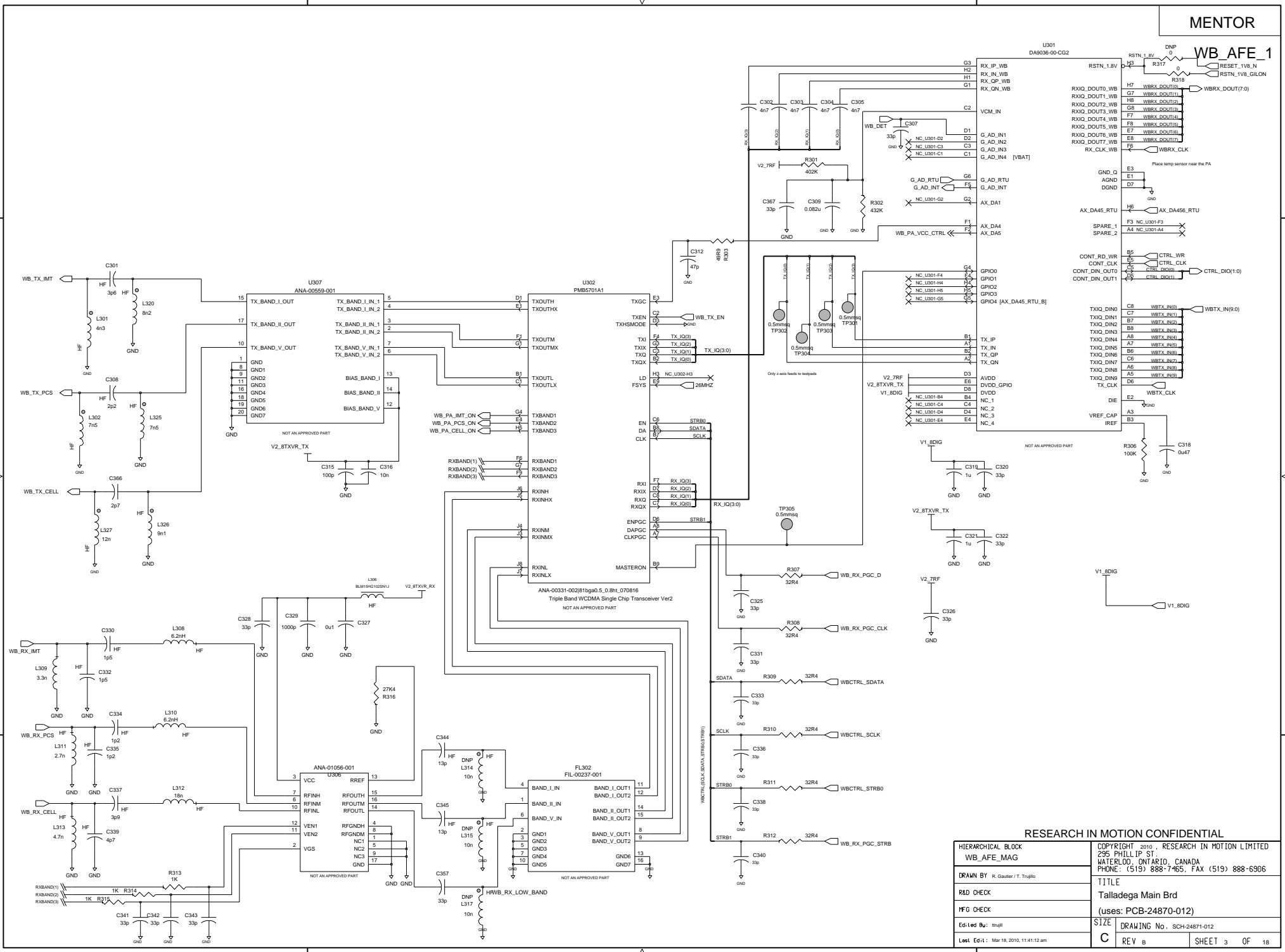


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HIERARCHICAL BLOCK RF_ANT_ONYX	COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY: R. Gaudier / T. Trujillo	TITLE Talladega Main Bnd (uses: PCB-24870-012)
R&D CHECK	SIZE DRAWING No. SCH-24871-012
IFG CHECK	C REV B SHEET 2 OF 18
Edi Led Bu: rgaudier	Last Ed1: May 14, 2010, 9:36:48 am

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HIERARCHICAL BLOCK WB_AFE_MAG		COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY: R. Gaudier / T. Trujillo		TITLE Talladega Main Bnd (uses: PCB-24870-012)	
R&D CHECK		SIZE	
MFG CHECK		DRAWING No. SCH-24871-012	
Edi Led Bu: tmjll		C REV B	
Last Ed: Mar 18, 2010, 11:41:12 am		SHEET 3 OF 18	



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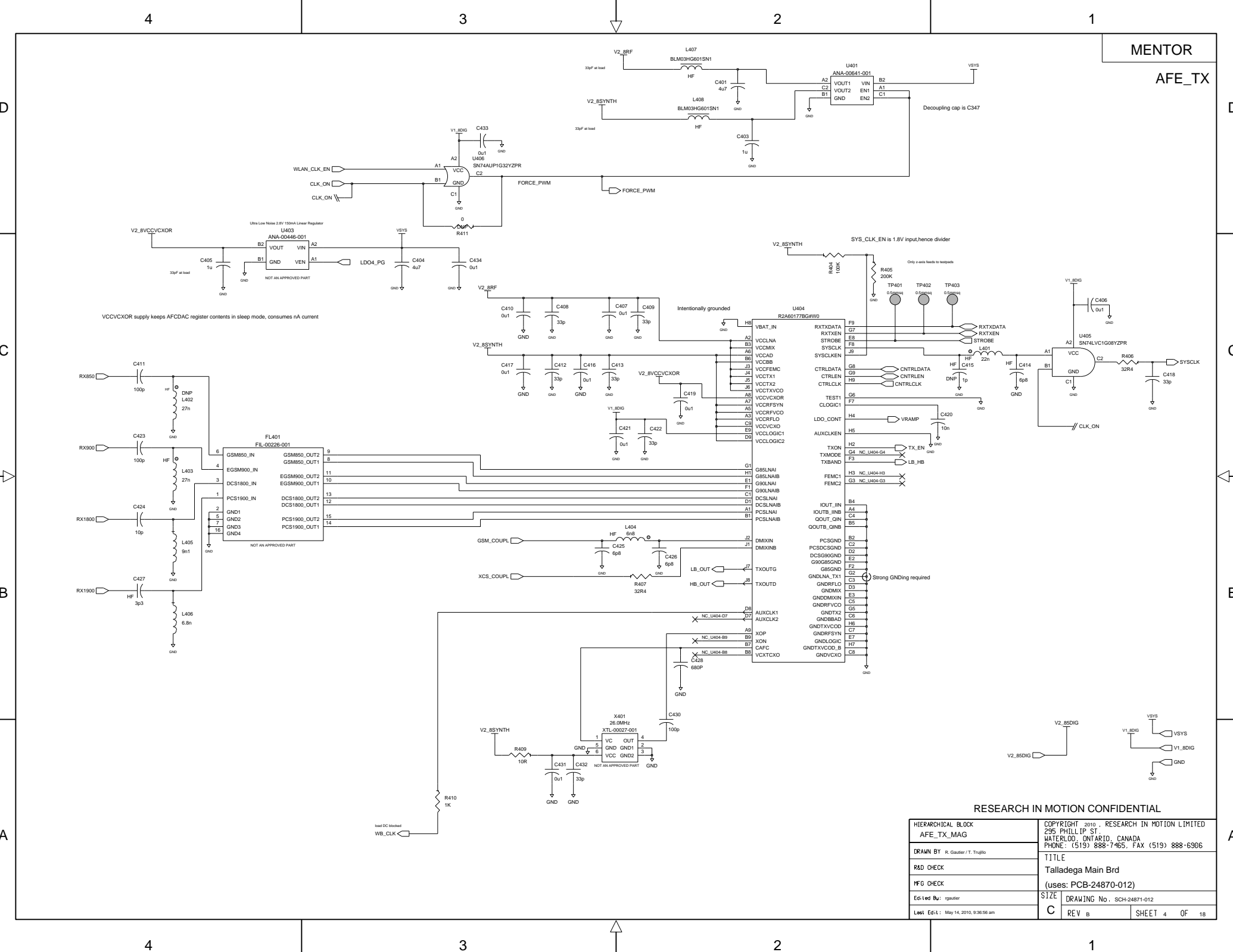
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RESEARCH IN MOTION CONFIDENTIAL

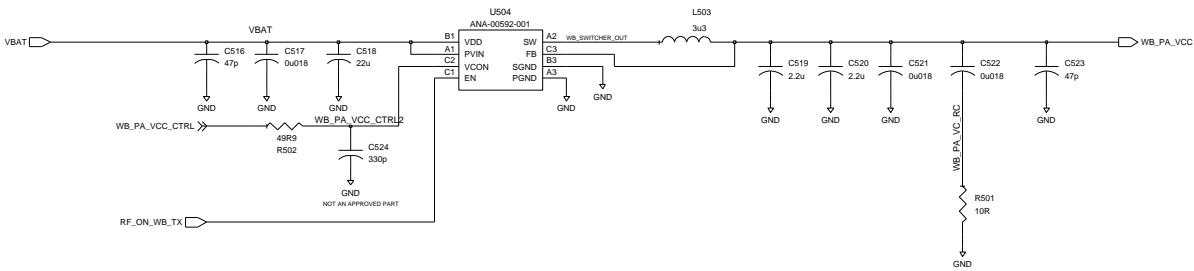
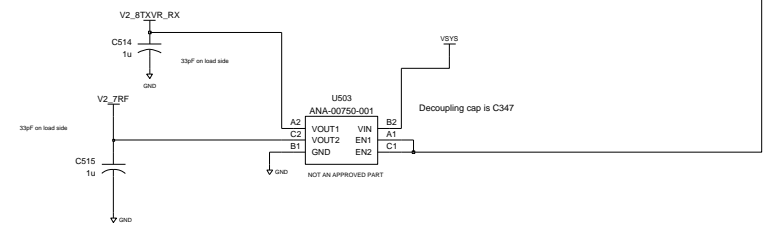
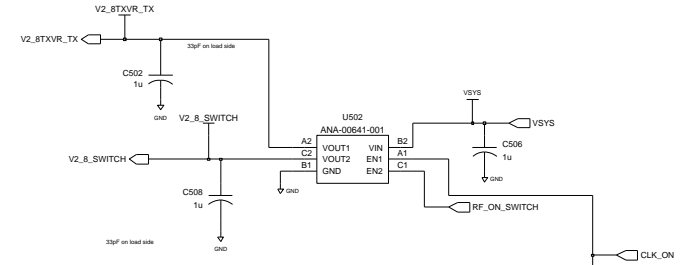
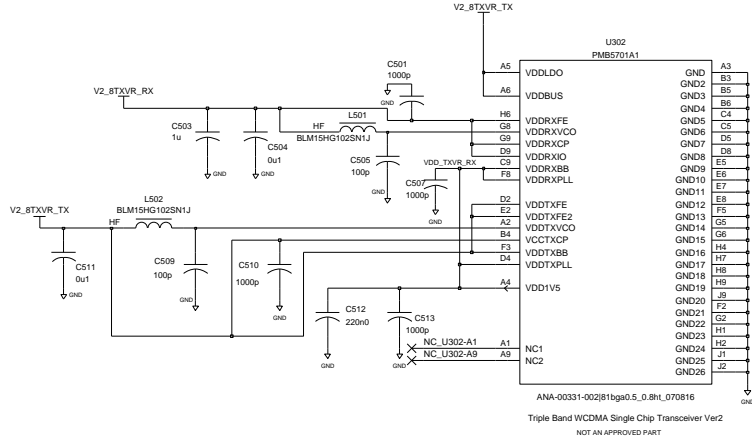
HIERARCHICAL BLOCK AFE_TX_MAG	COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY R. Gaudier / T. Trujillo	TITLE Talladega Main Bnd
R&D CHECK	(uses: PCB-24870-012)
MFG CHECK	SIZE DRAWING No. SCH-24871-012
Edi Led Bu: rgaudier	C REV B SHEET 4 OF 18
Level: Ed1:1 May 14, 2010, 9:36:56 am	

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RESEARCH IN MOTION CONFIDENTIAL

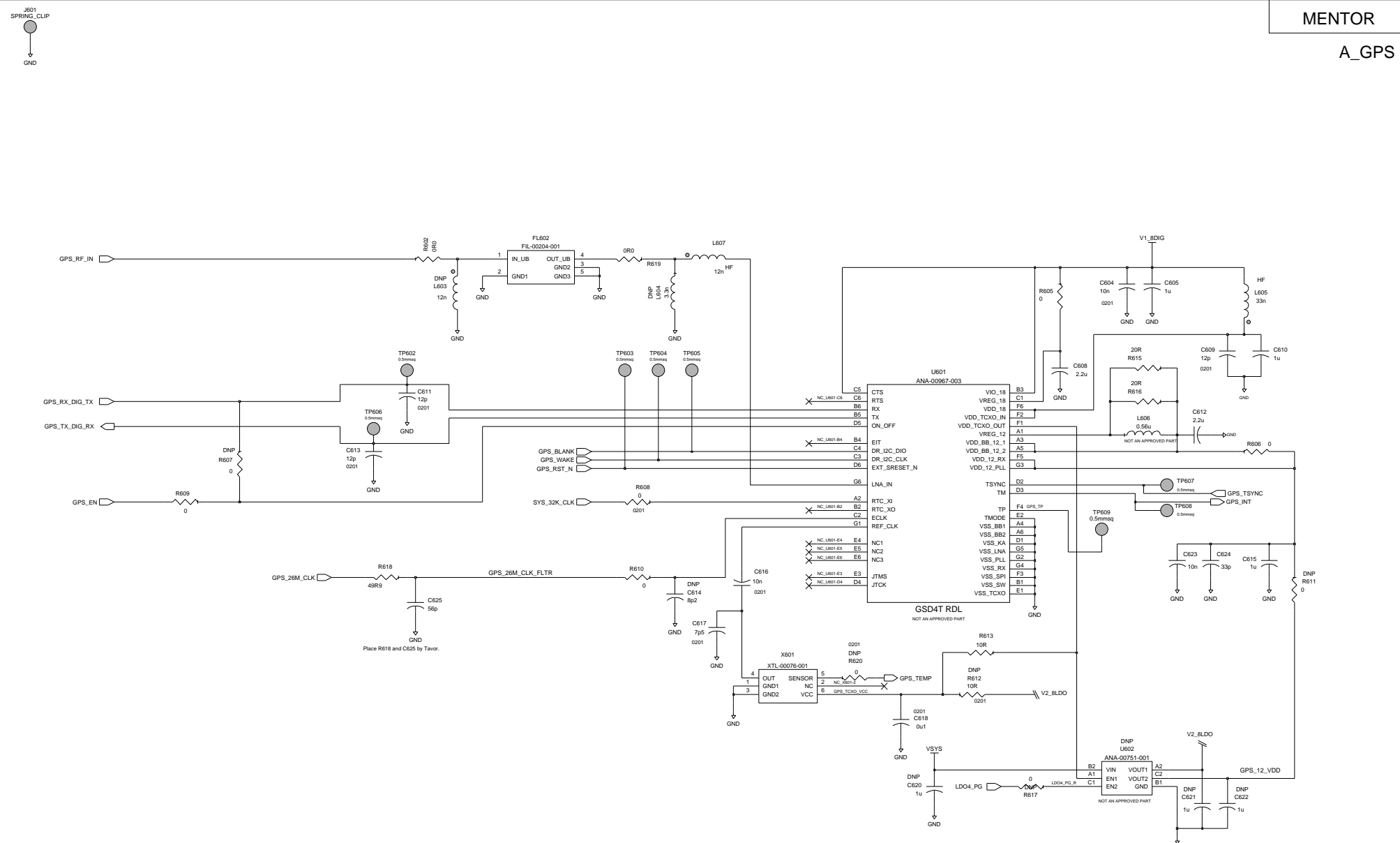
HIERARCHICAL BLOCK WB_AFE2	COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY R. Gaudier / T. Trujillo	TITLE Talladega Main Brd (uses: PCB-24870-012)
R&D CHECK	SIZE DRAWING No. SCH-24871-012
MFG CHECK	C REV B SHEET 5 OF 18
Edi Led Bu: rgaudier	
Levl Ed14: May 14, 2010, 9:37:13 am	

4

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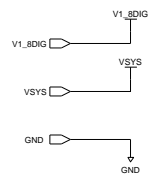
2

1



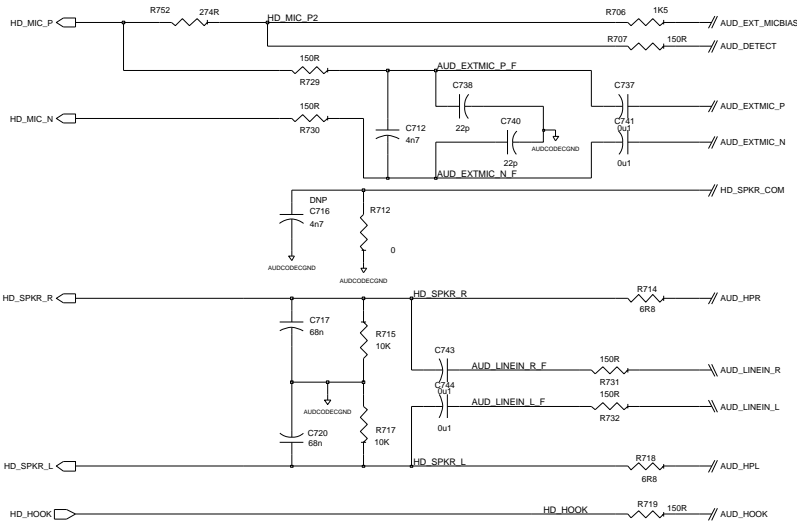
Place R618 and C625 by Tavor.

	L610	C656	R632	C650	R631	R633			
INTERNAL SWITCHER / LDO RF	PLACE	PLACE	DNP	2.2uF	PLACE	PLACE			
LDO ONLY	DNP	DNP	PLACE	OR	DNP	PLACE			
SWITCHER ONLY	PLACE	PLACE	PLACE	2.2uF	PLACE	DNP			

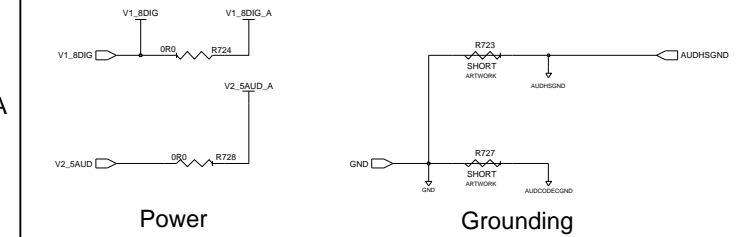
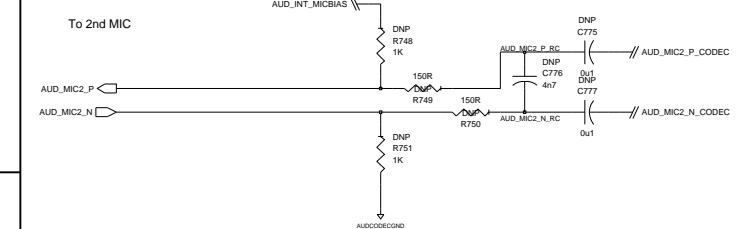
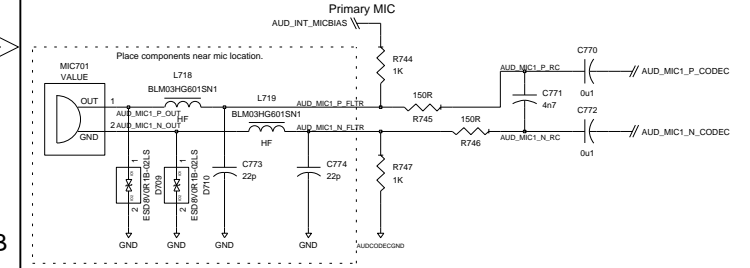


RESEARCH IN MOTION CONFIDENTIAL

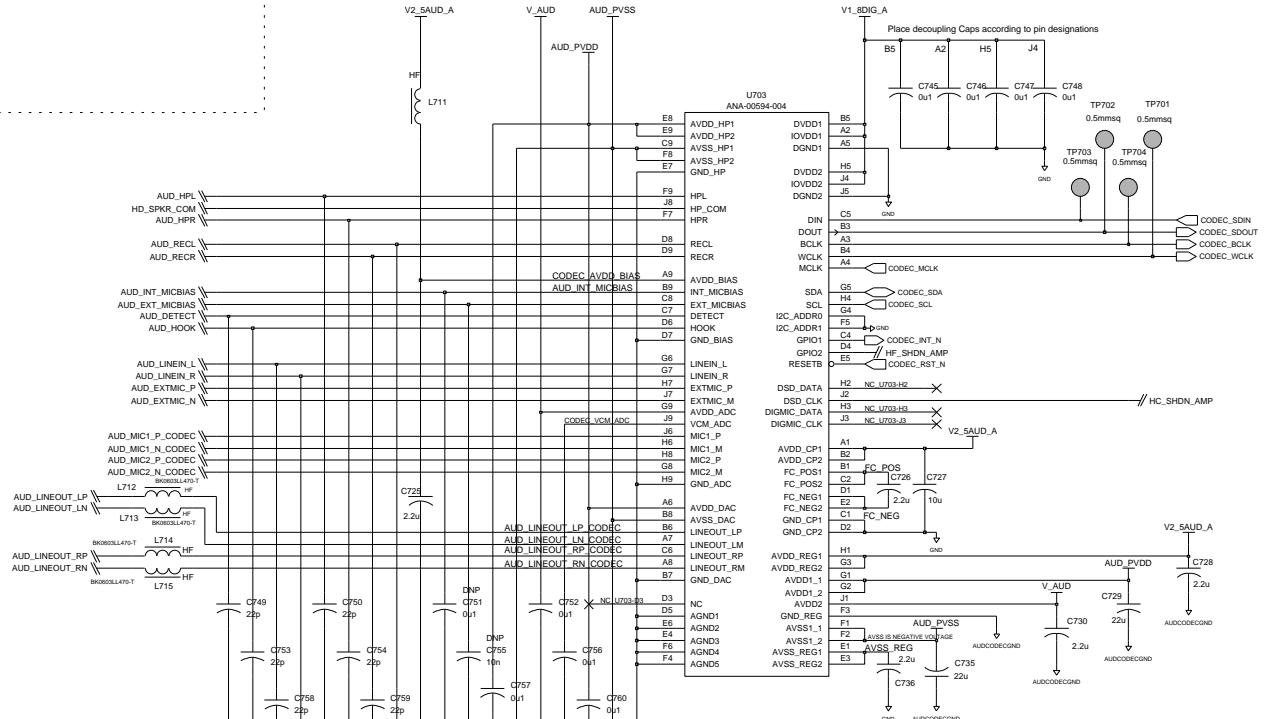
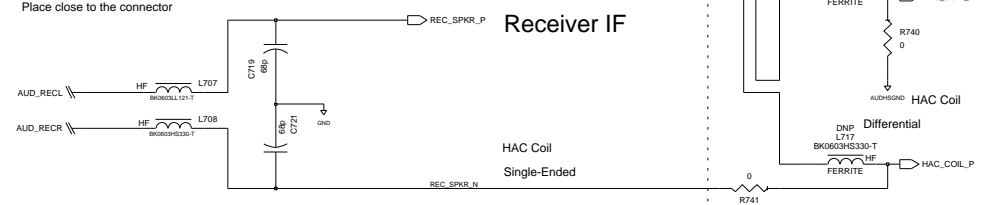
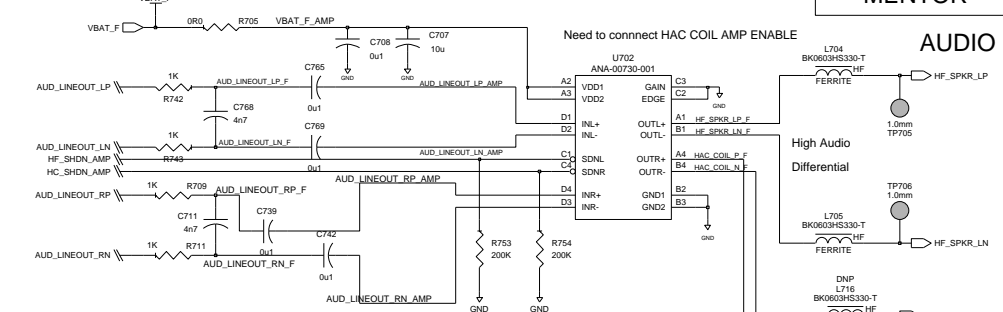
HIERARCHICAL BLOCK A_GPS_1		COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY: R. Gaudier / T. Trujillo		TITLE Talladega Main Bnd	
R&D CHECK		(uses: PCB-24870-012)	
MFG CHECK		SIZE DRAWING No.: SCH-24871-012	
Ed: Led Bu: rgaudier		C	
Level: Ed1: May 14, 2010, 9:37:21 am		REV B SHEET 6 OF 18	



Headset IF



Hands-free Speaker (L), HAC Coil (R)

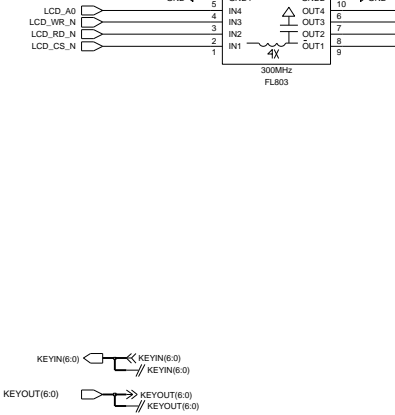
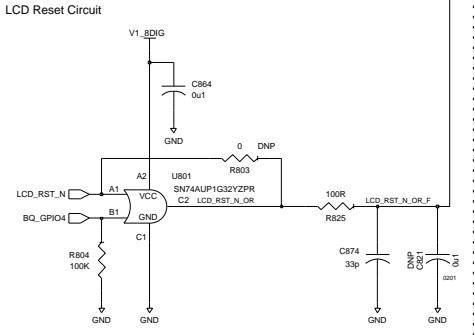
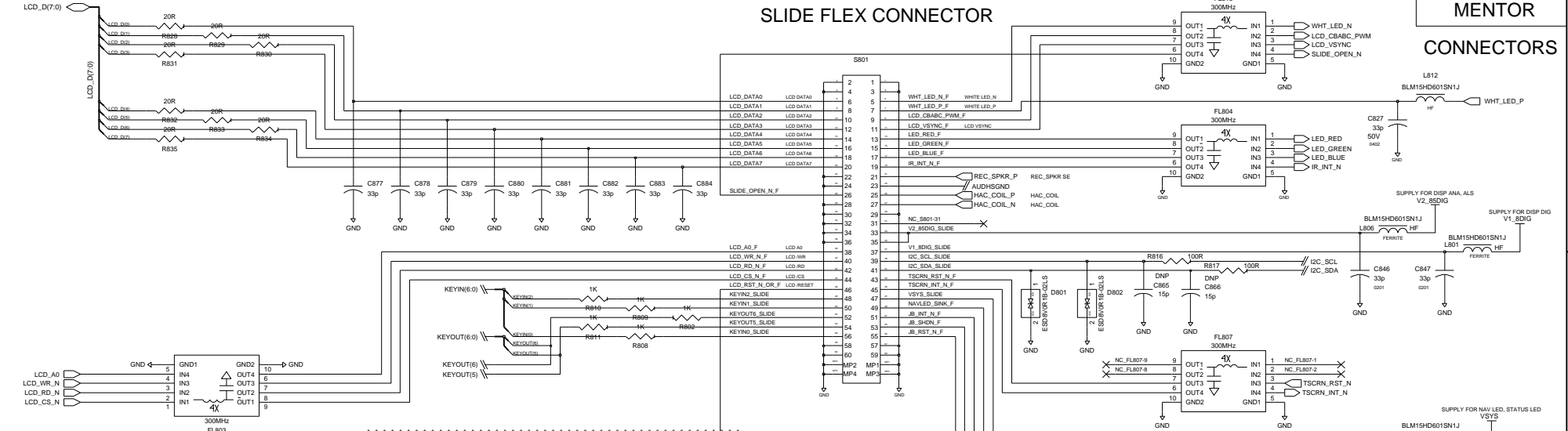


RESEARCH IN MOTION CONFIDENTIAL

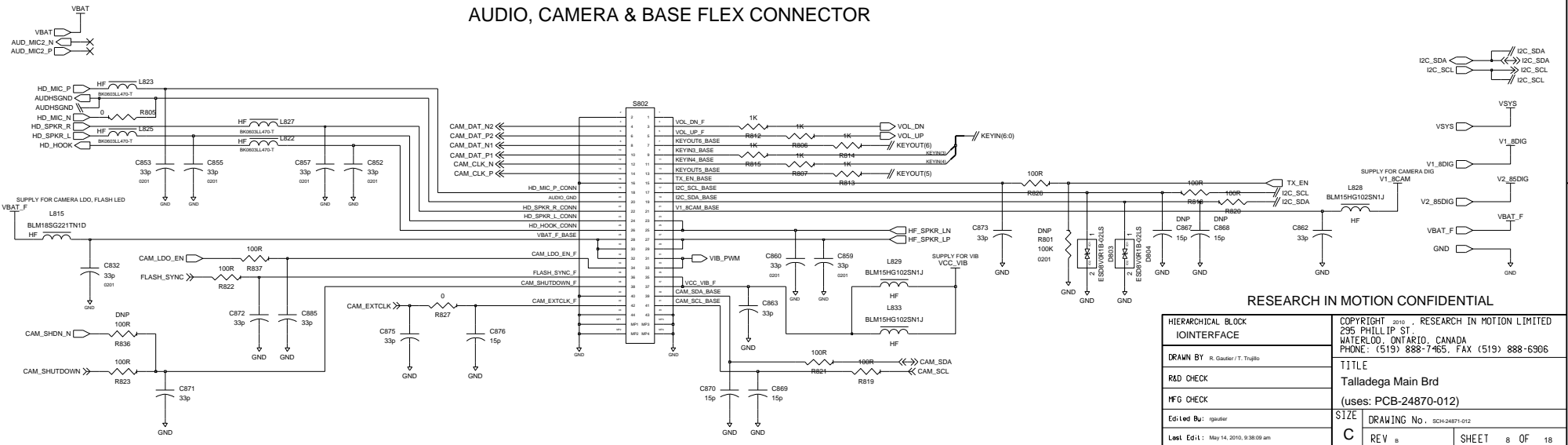
HIERARCHICAL BLOCK AUDIO	COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY: R. Gaudier / T. Trujillo	TITLE Talladega Main Brd (uses: PCB-24870-012)
R&D CHECK	SIZE DRAWING No. SCH-24871-012
HFG CHECK	C REV B SHEET 7 OF 18
Edi Led Bu: rgaudier	
Level: Ed1: May 14, 2010, 9:37:49 am	

SLIDE FLEX CONNECTOR

MENTOR CONNECTORS

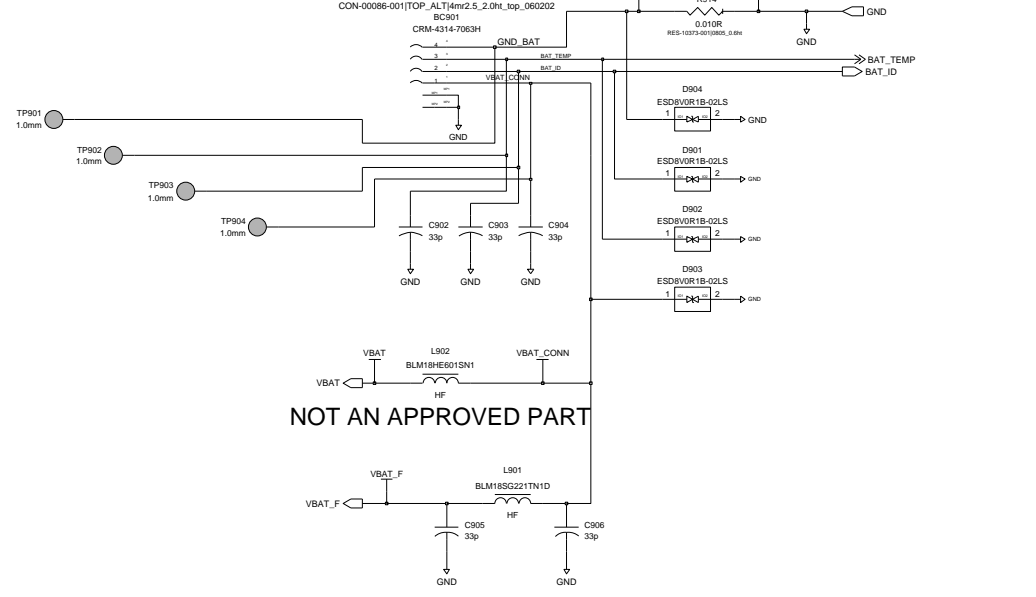
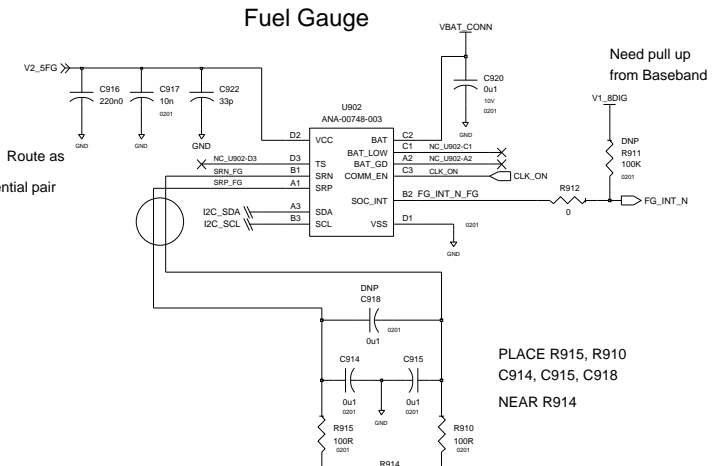
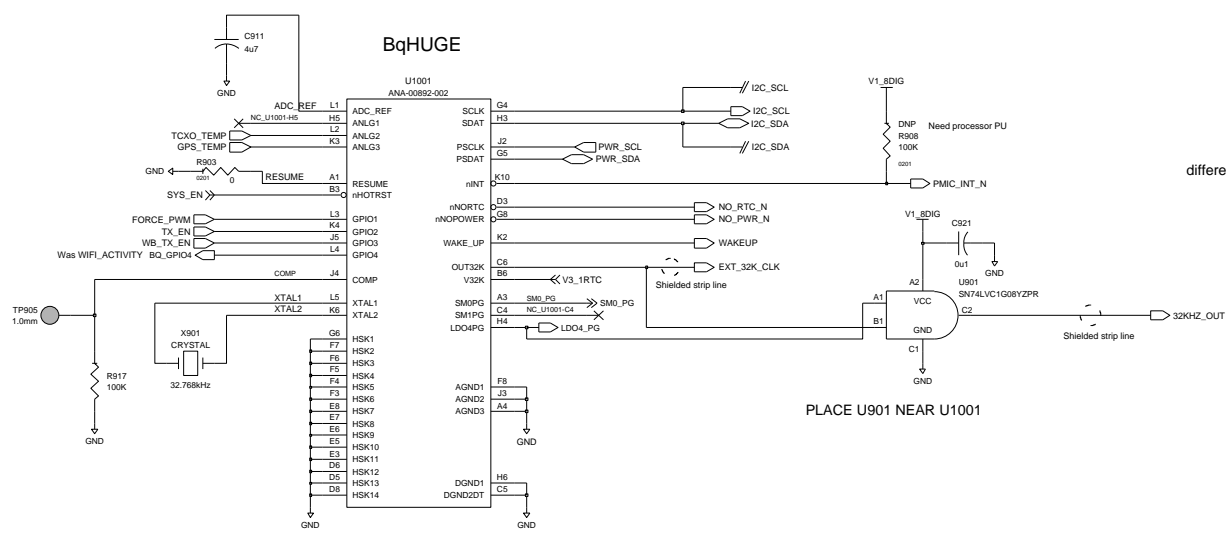


AUDIO, CAMERA & BASE FLEX CONNECTOR



RESEARCH IN MOTION CONFIDENTIAL

HIERARCHICAL BLOCK INTERFACE		COPYRIGHT © 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY: R. Gaudin / T. Trigg		TITLE Talladega Main Brd (uses: PCB-24870-012)	
R&D CHECK		SIZE DRAWING No. BCH24871-012	
HFG CHECK		REV B SHEET 8 OF 18	
Edi Led Bu: rgaudin		Lobl Ed1: May 14, 2010, 9:38:09 am	



PLACE R915, R910
C914, C915, C918
NEAR R914

RESEARCH IN MOTION CONFIDENTIAL

HIERARCHICAL BLOCK POWER2		COPYRIGHT 2009, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY R. Gaudier / T. Trujillo		TITLE Talladega Main Brd	
R&D CHECK		(uses: PCB-24870-012)	
MFG CHECK		SIZE DRAWING No. SCH-24871-012	
Ed: Led Bu: tmjll		C	
Last Ed: 11 Nov 18, 2009, 1:47:15 pm		REV B SHEET 9 OF 18	

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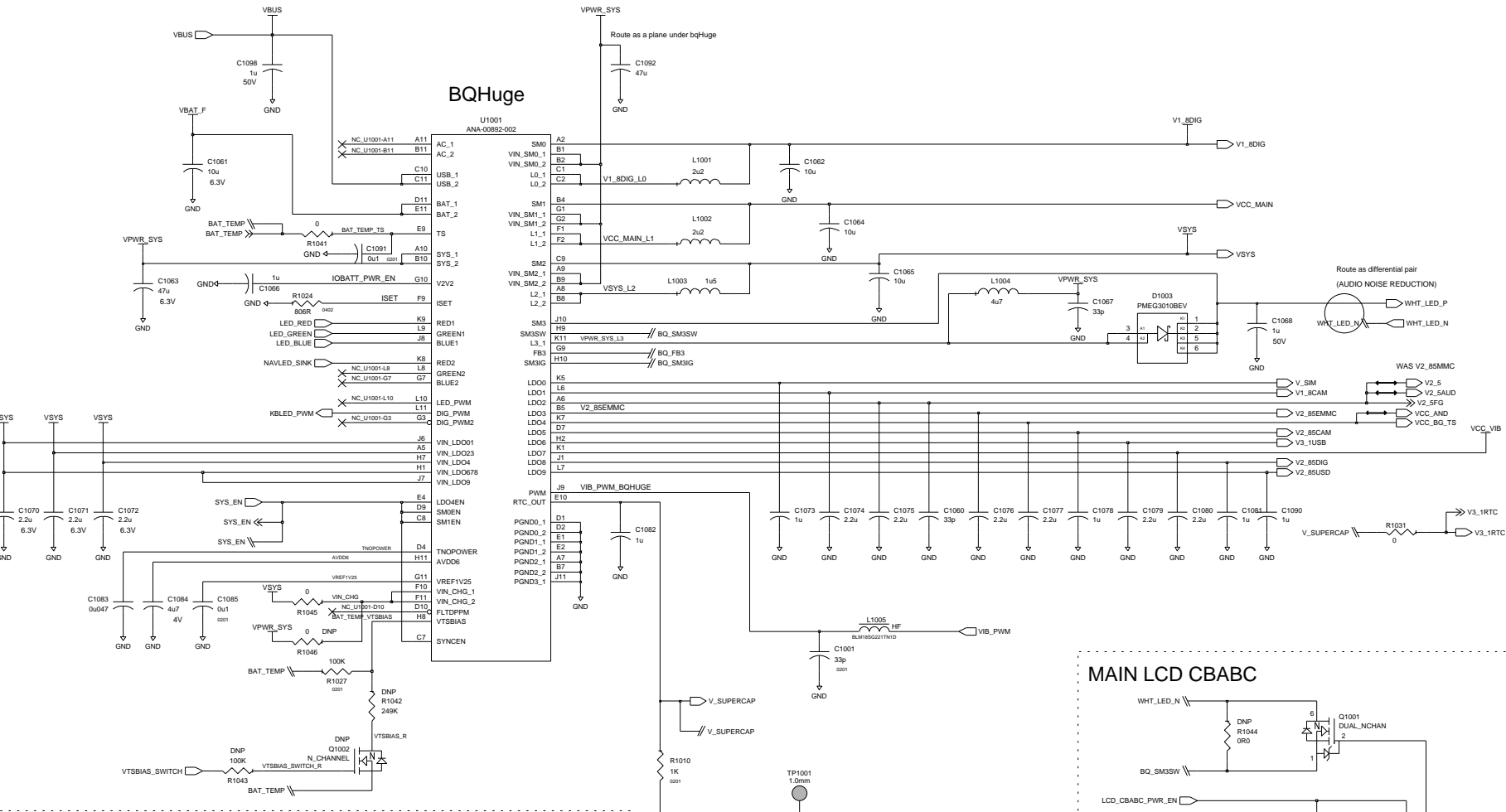
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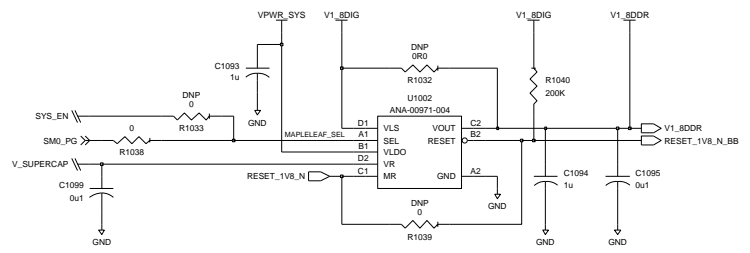
2

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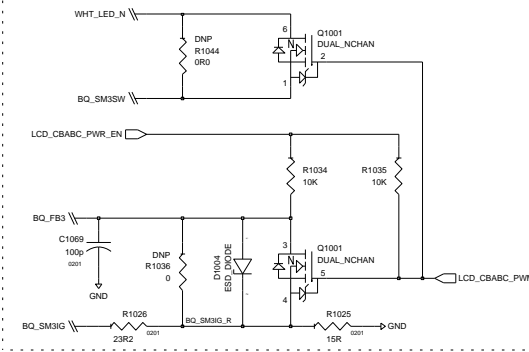
BQhuge



MEMORY RETENTION, SUPPLY SWITCH, LDO & RESET



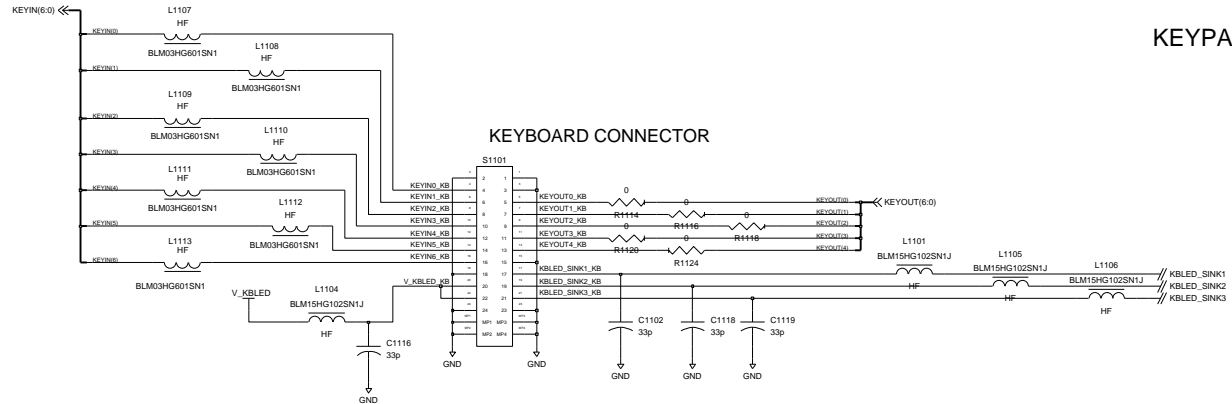
MAIN LCD CBABC



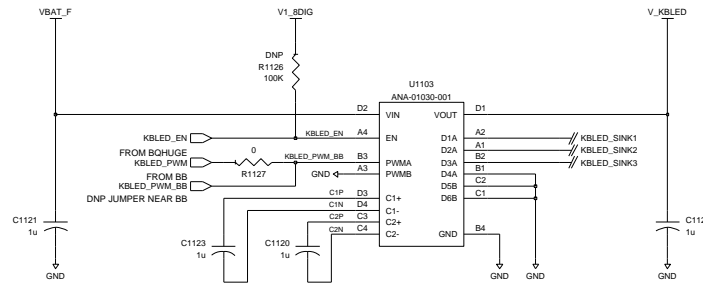
WARNING EXPLOSIVE*
FOLLOW MANUFACTURERS
ASSEMBLY/REWORK INSTRUCTIONS
DISCHARGE BEFORE REWORK
DO NOT OVERHEAT

RESEARCH IN MOTION CONFIDENTIAL

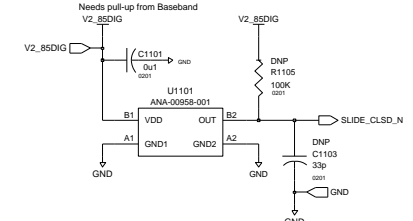
HIERARCHICAL BLOCK POWER	COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY R. Gaudier / T. Trujillo	TITLE Talladega Main Brd
R&D CHECK	(uses: PCB-24870-012)
IFG CHECK	SIZE DRAWING No. SCH-24871-012
Edi Led Bu: rgaudier	C REV B SHEET 10 OF 18
Level: Ed1:1 May 14, 2010, 9:37:57 am	



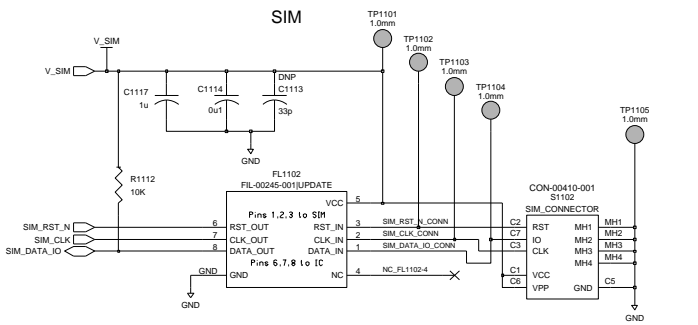
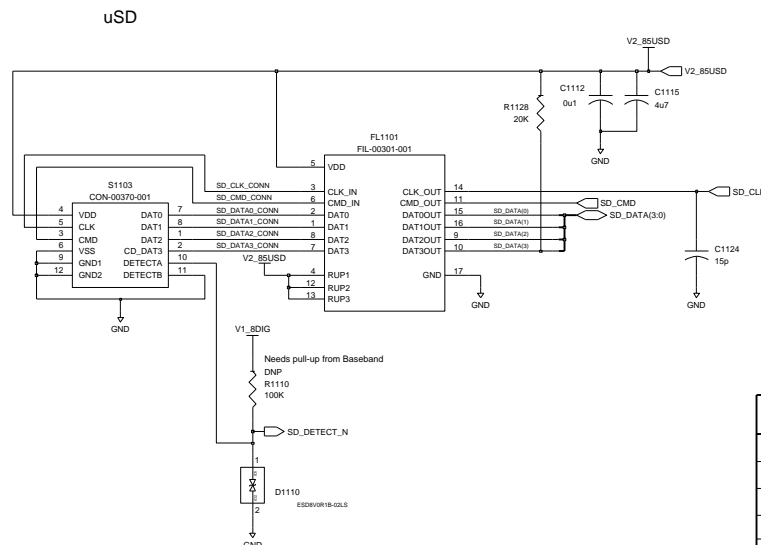
KEYPAD LED DRIVER



Slide-Closed Sensor



Slide-Open/Holster Sensor Located on Engine Flex



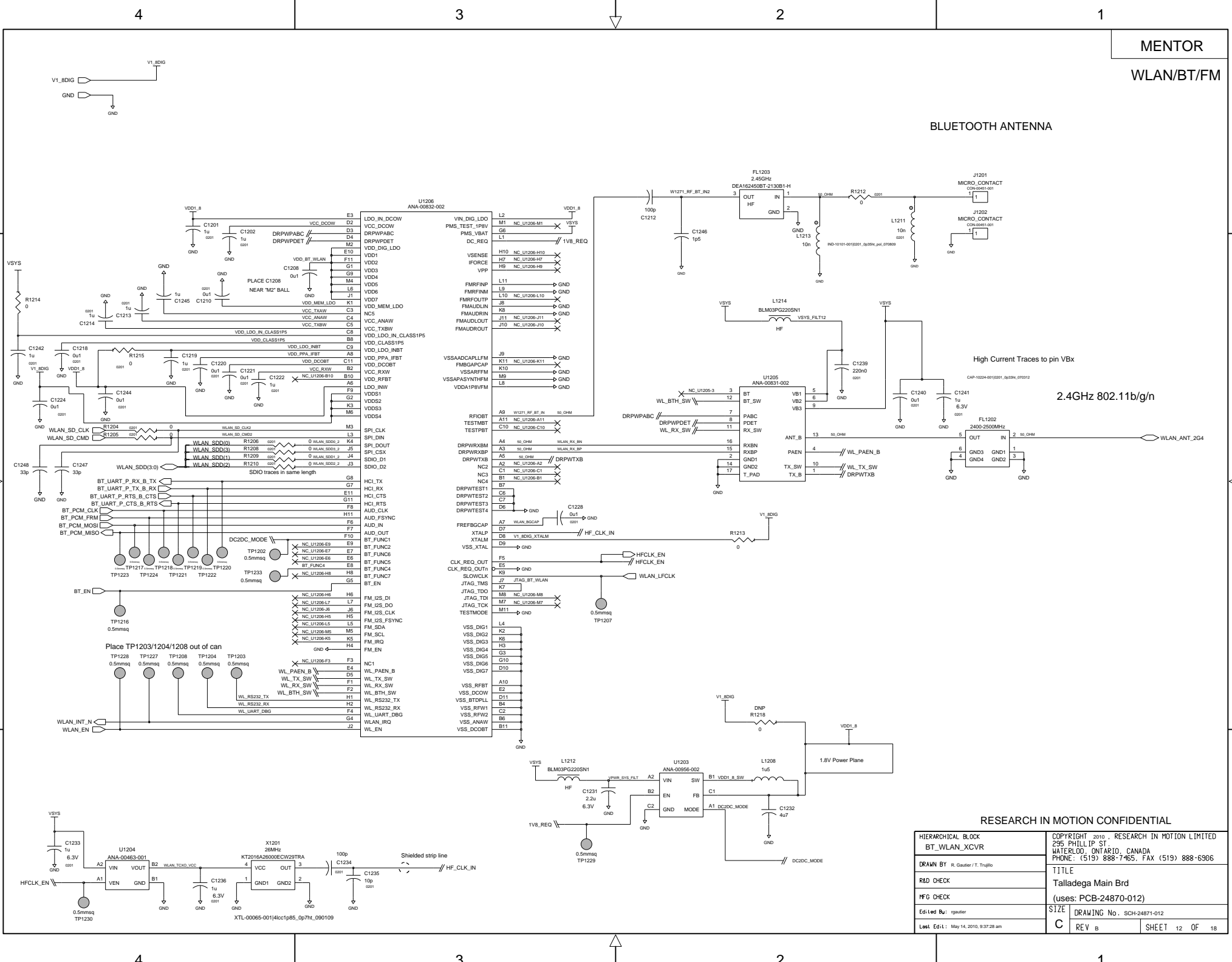
RESEARCH IN MOTION CONFIDENTIAL

HIERARCHICAL BLOCK JOINTERFACES	COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY R. Gaudier / T. Trujillo	TITLE Talladega Main Brd
R&D CHECK	(uses: PCB-24870-012)
HFG CHECK	SIZE DRAWING No. SCH-24871-012
Edi Led Bu: rgaudier	C REV B SHEET 11 OF 18
Level Ed1: Apr 26, 2010, 5:24:43 pm	

BLUETOOTH ANTENNA

High Current Traces to pin VBx
2.4GHz 802.11b/g/n

RESEARCH IN MOTION CONFIDENTIAL	
HIERARCHICAL BLOCK BT_WLAN_XCVR	COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY R. Gaudier / T. Trujillo	TITLE Talladega Main Brd (uses: PCB-24870-012)
R&D CHECK	SIZE
HFG CHECK	DRAWING No. SCH-24871-012
Edi Led Bu: rgaudier	REV B
Level: Ed1: May 14, 2010, 9:37:28 am	SHEET 12 OF 18



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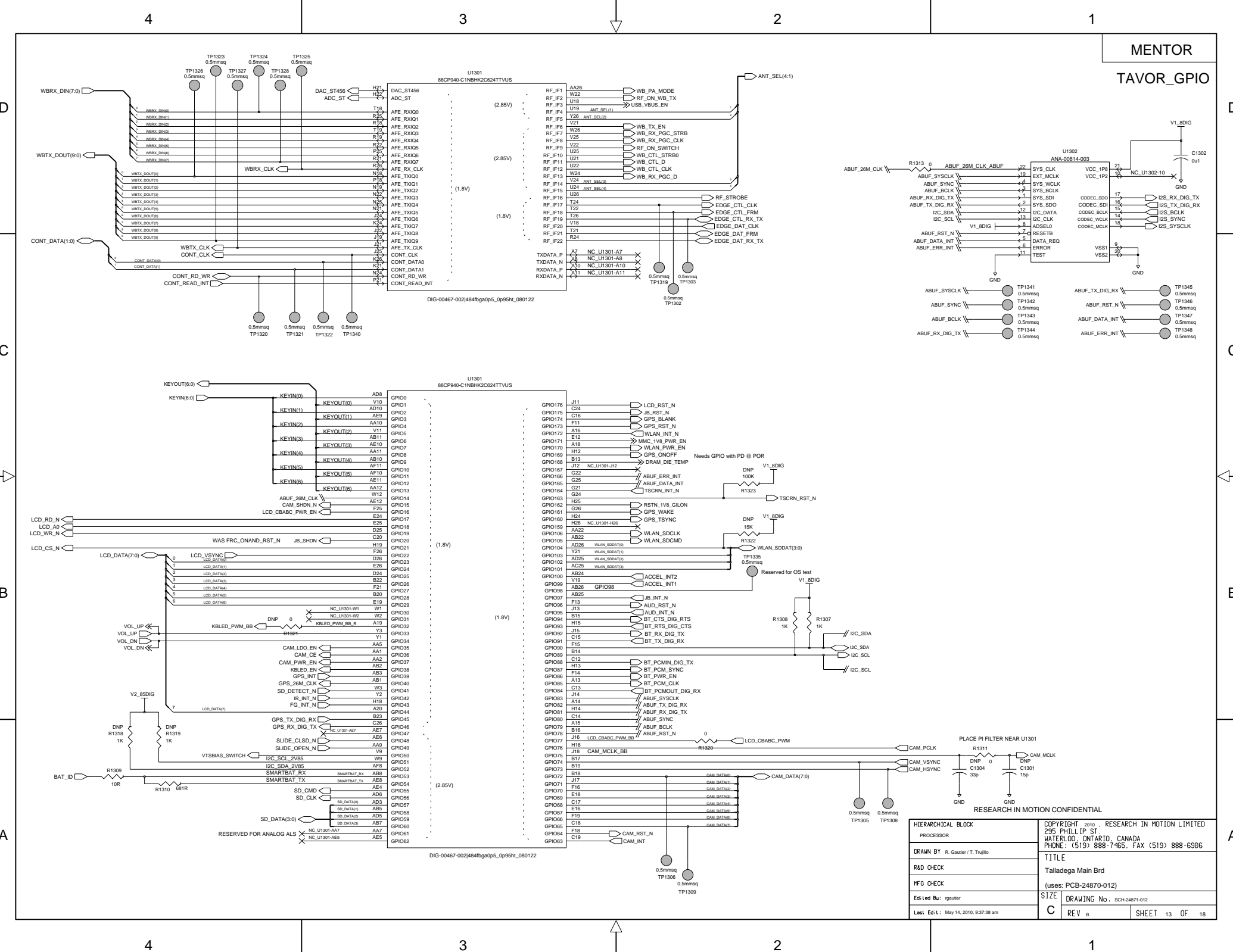
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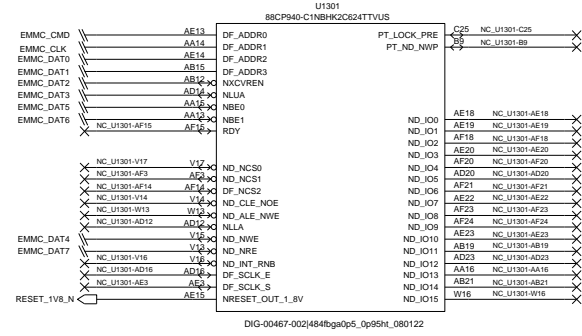
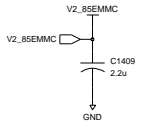
HIERARCHICAL BLOCK		COPYRIGHT 2010, RESEARCH IN MOTION LIMITED	
PROCESSOR		295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY	R. Gaudier / T. Tajiilo	TITLE Talladega Main Brd	
R&D CHECK		(uses: PCB-24870-012)	
HFG CHECK		SIZE	DRAWING No. SCH-24871-012
Edi Led Bu: rgauder		C	REV B
Last Edt: May 14, 2010, 9:37:38 am			SHEET 13 OF 18

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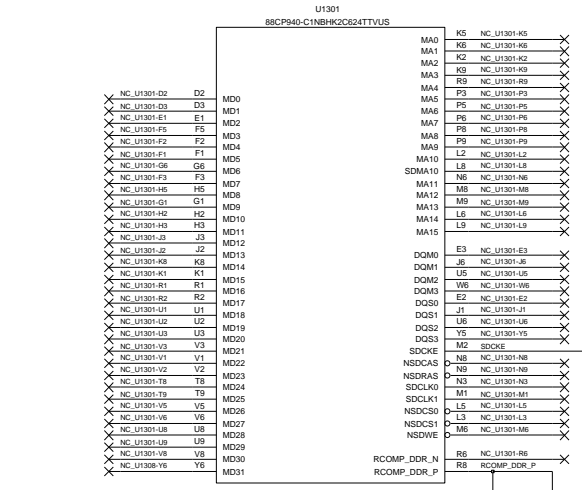
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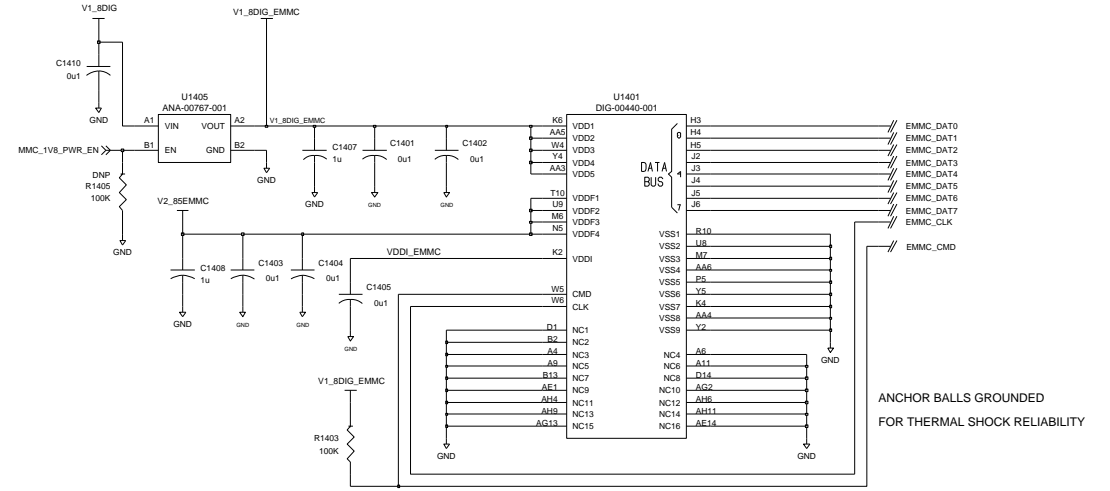
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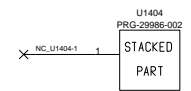
DIG-00467-002\484bga0p5_0p95ht_080122



DIG-00467-002\484bga0p5_0p95ht_080122



Check if Tavor has an internal pull up on CMD.



RIM part number STK-00004-002

ANCHOR BALLS GROUNDED
FOR THERMAL SHOCK RELIABILITY

4

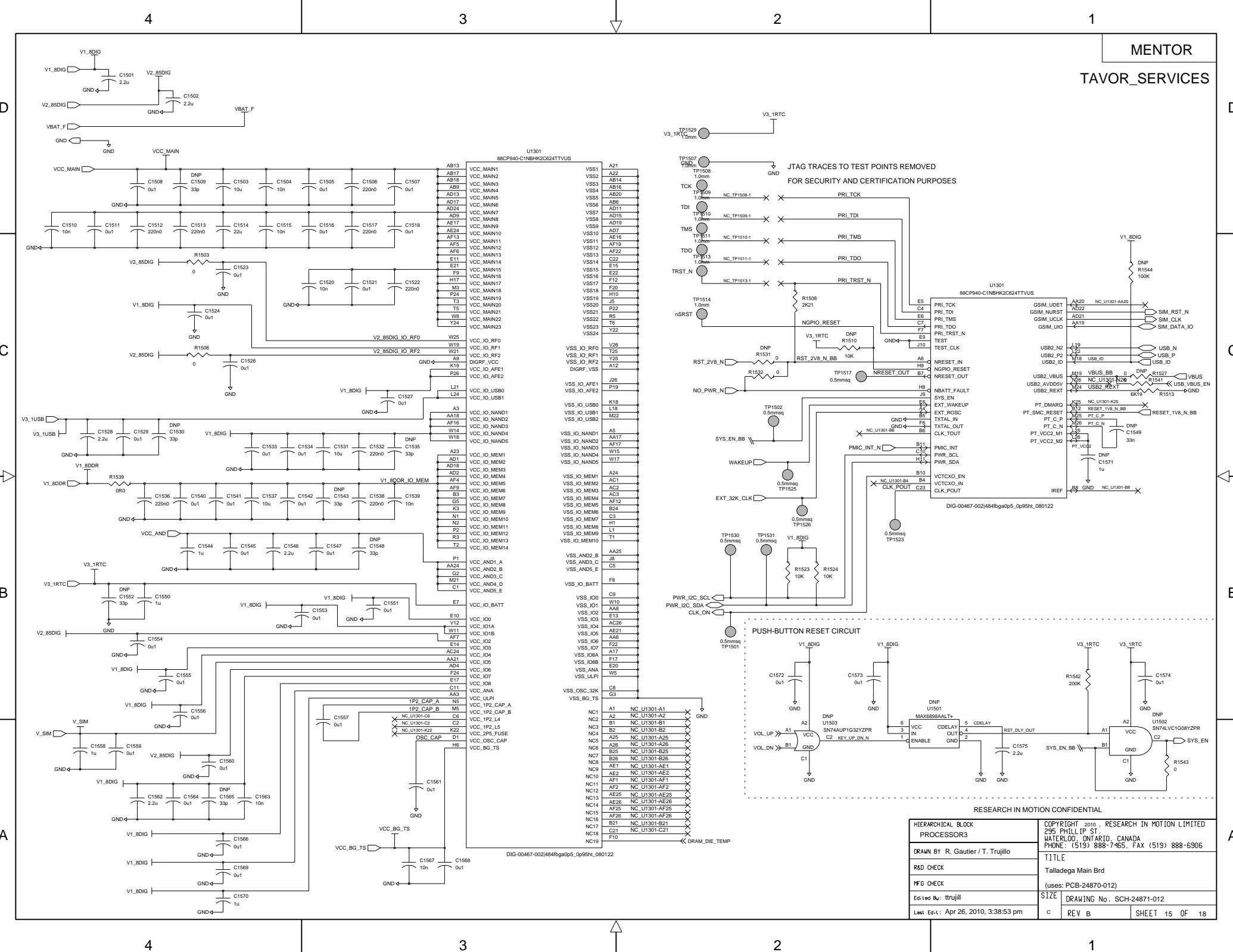
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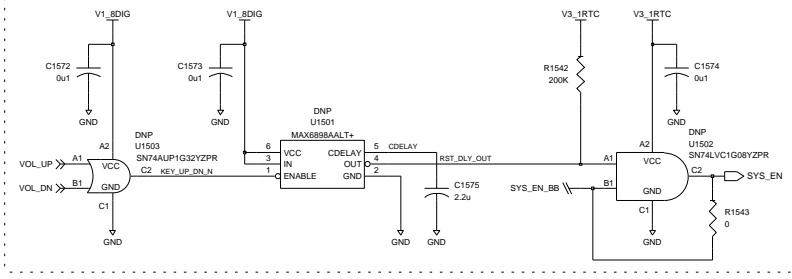
HIERARCHICAL BLOCK PROCESSOR2		COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY R. Gautier / T. Trujillo		TITLE Talladega Main Brd	
R&D CHECK		(uses: PCB-24870-012)	
F&G CHECK		SIZE DRAWING No. SCH-24871-012	
Edi Led Bu: ttrujill		C	
Last Edit: Mar 12, 2010, 3:06:24 pm		REV B SHEET 14 OF 18	



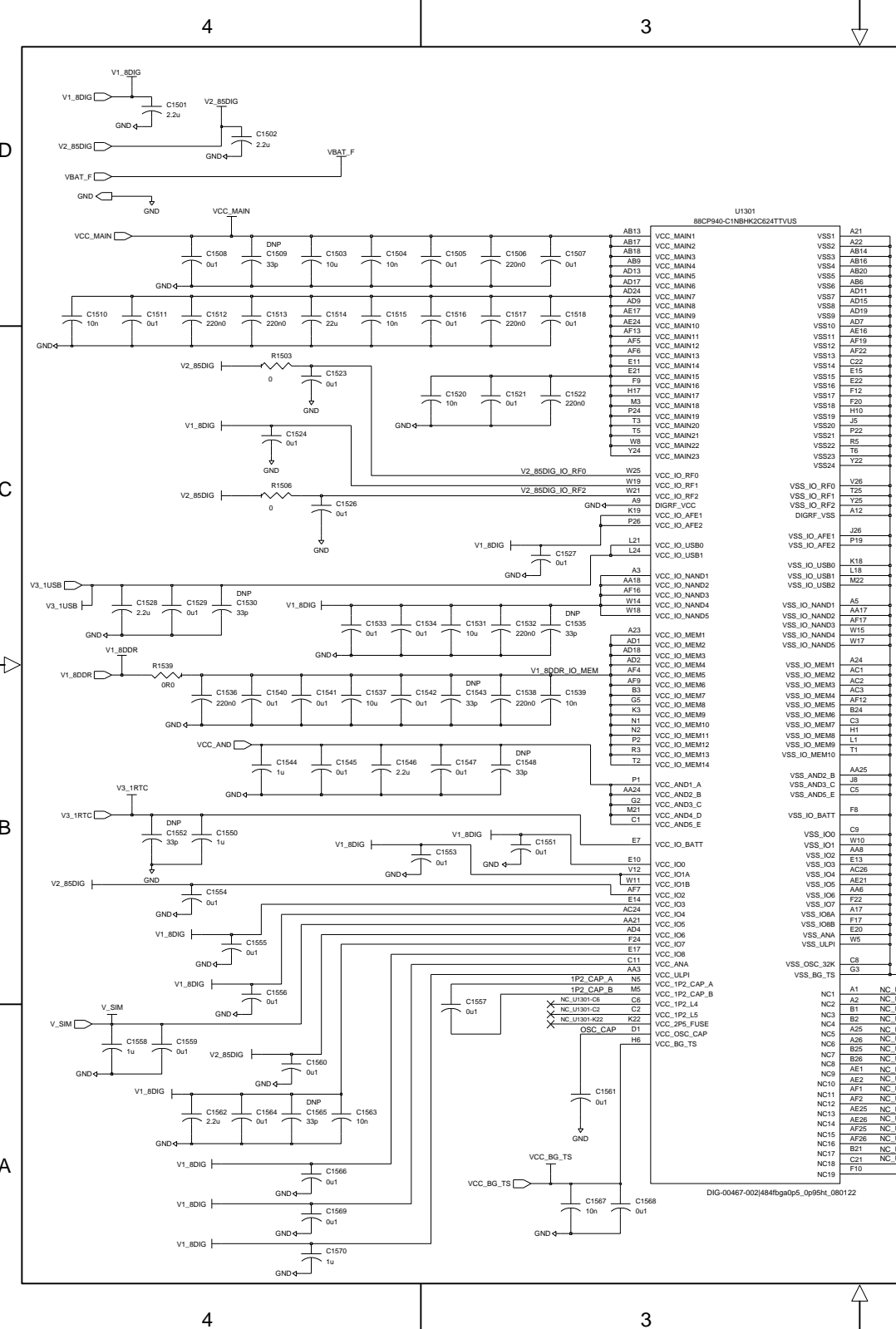
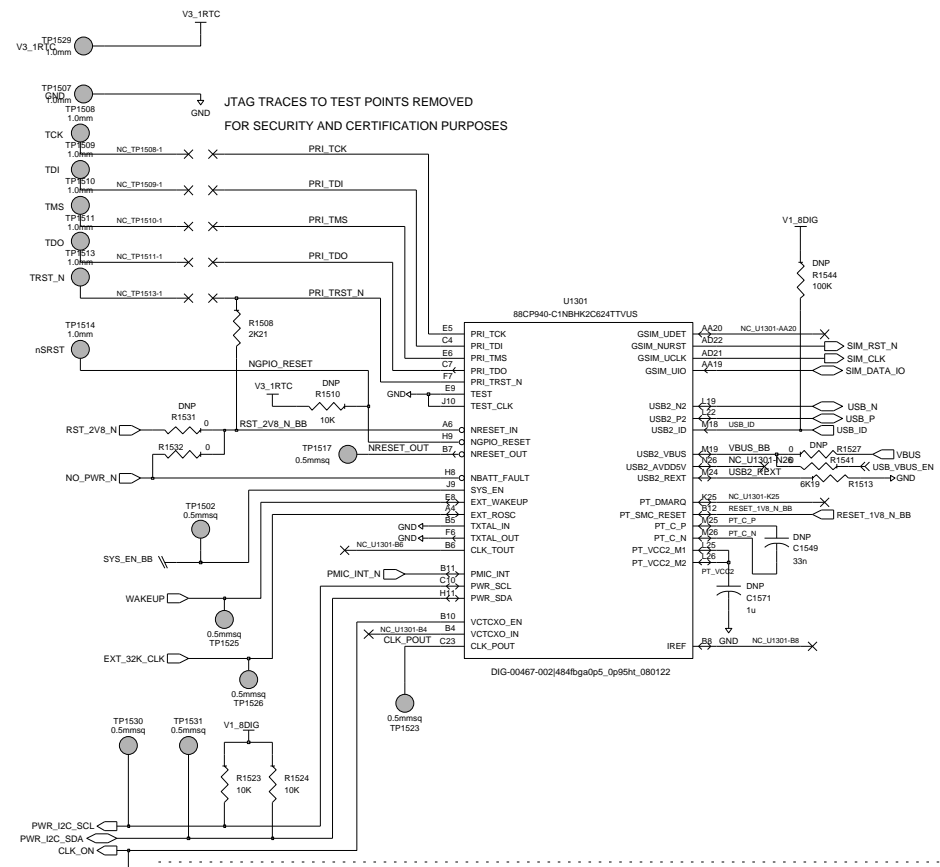
HIERARCHICAL BLOCK PROCESSOR3	COPYRIGHT 2010, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY: R. Gautier / T. Trujillo	TITLE Talladega Main Brd
R&D CHECK	(uses: PCB-24870-012)
HFQ CHECK	SIZE DRAWING No. SCH-24871-012
Edi Led By: ttrujill	REV B
Last Edit: Apr 26, 2010, 3:38:53 pm	SHEET 15 OF 18

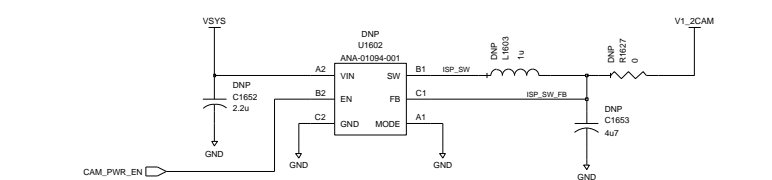
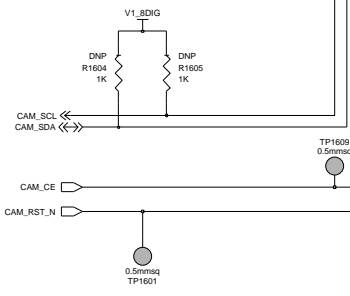
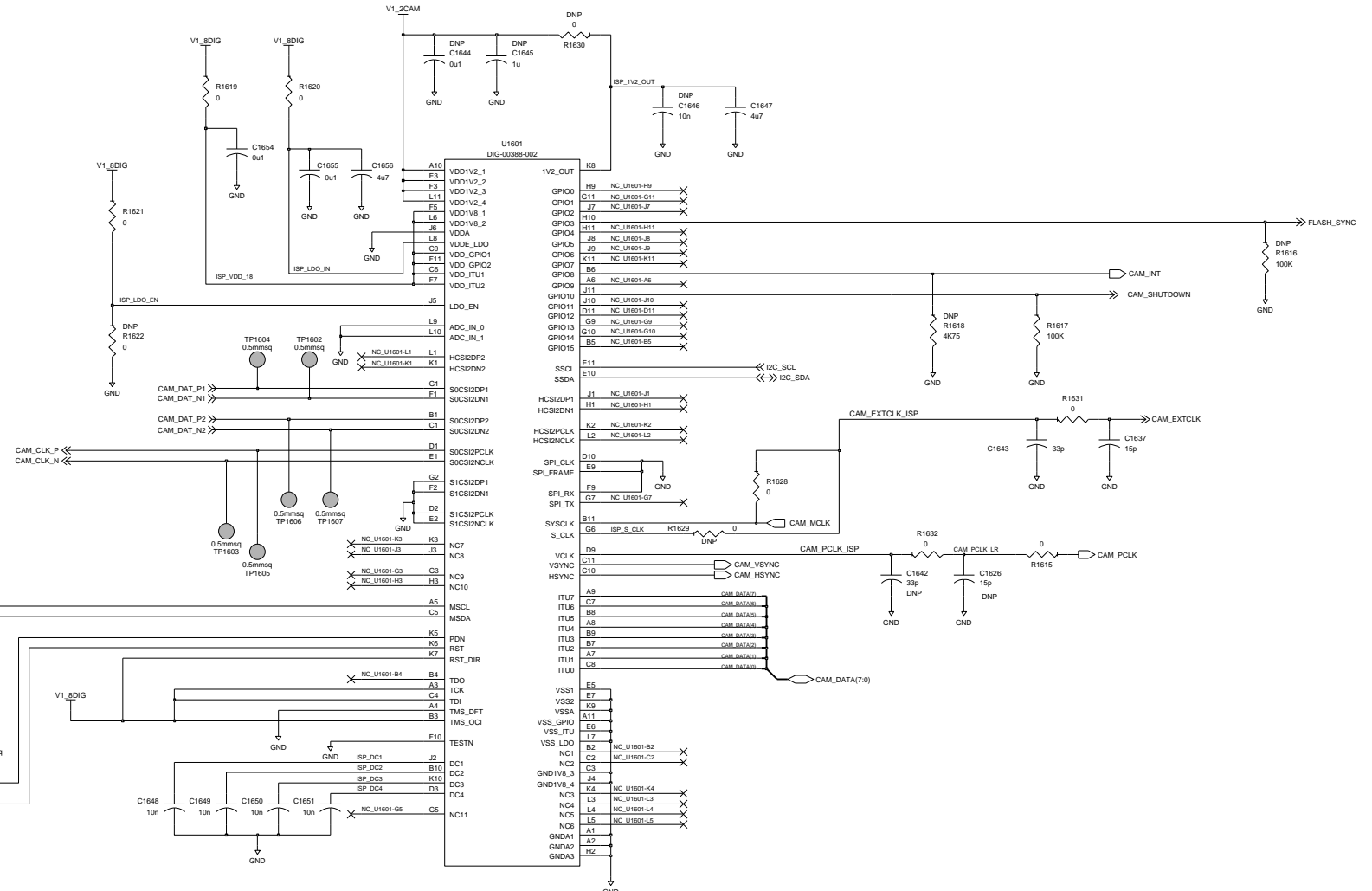
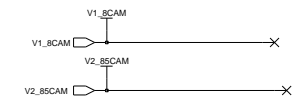
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PUSH-BUTTON RESET CIRCUIT



JTAG TRACES TO TEST POINTS REMOVED
FOR SECURITY AND CERTIFICATION PURPOSES





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DRAWN BY R. Gaudier / T. Trujillo		TITLE Talladega Main Brd	
R&D CHECK		(uses: PCB-24870-012)	
MFG CHECK		DRAWING No. SCH-24871-012	
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HIERARCHICAL BLOCK JOINTERFACE4		COPYRIGHT 2009, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY: R. Gaudier / T. Trujillo		TITLE Talladega Main Brd	
R&D CHECK		(uses: PCB-24870-012)	
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Edi Led Bu: tmjll		SIZE C	REV B SHEET 17 OF 18
Last Edt: May 27, 2009, 1:06:21 pm			

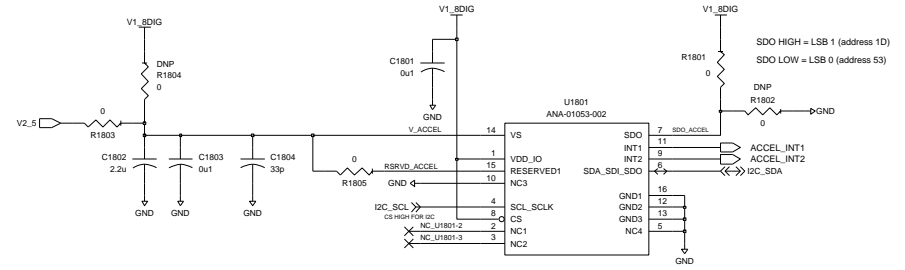
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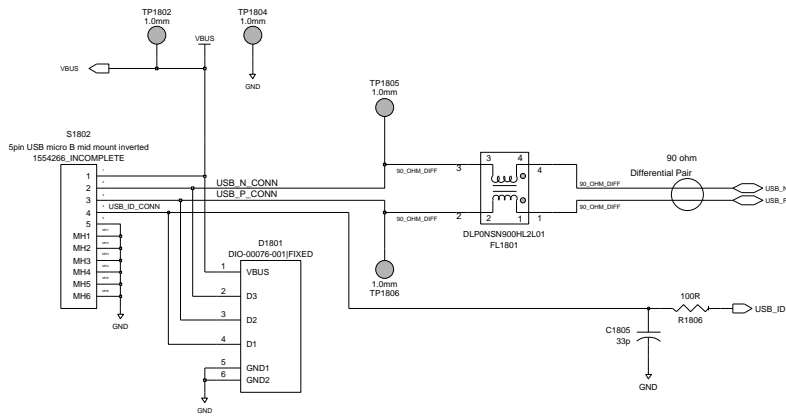
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Accelerometer Circuit



CHARGE/USB CONNECTOR



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DRAWN BY: R. Gaudier / T. Trujillo		TITLE Talladega Main Brd	
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Ed: Led Bu: tmjll		SIZE C	
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