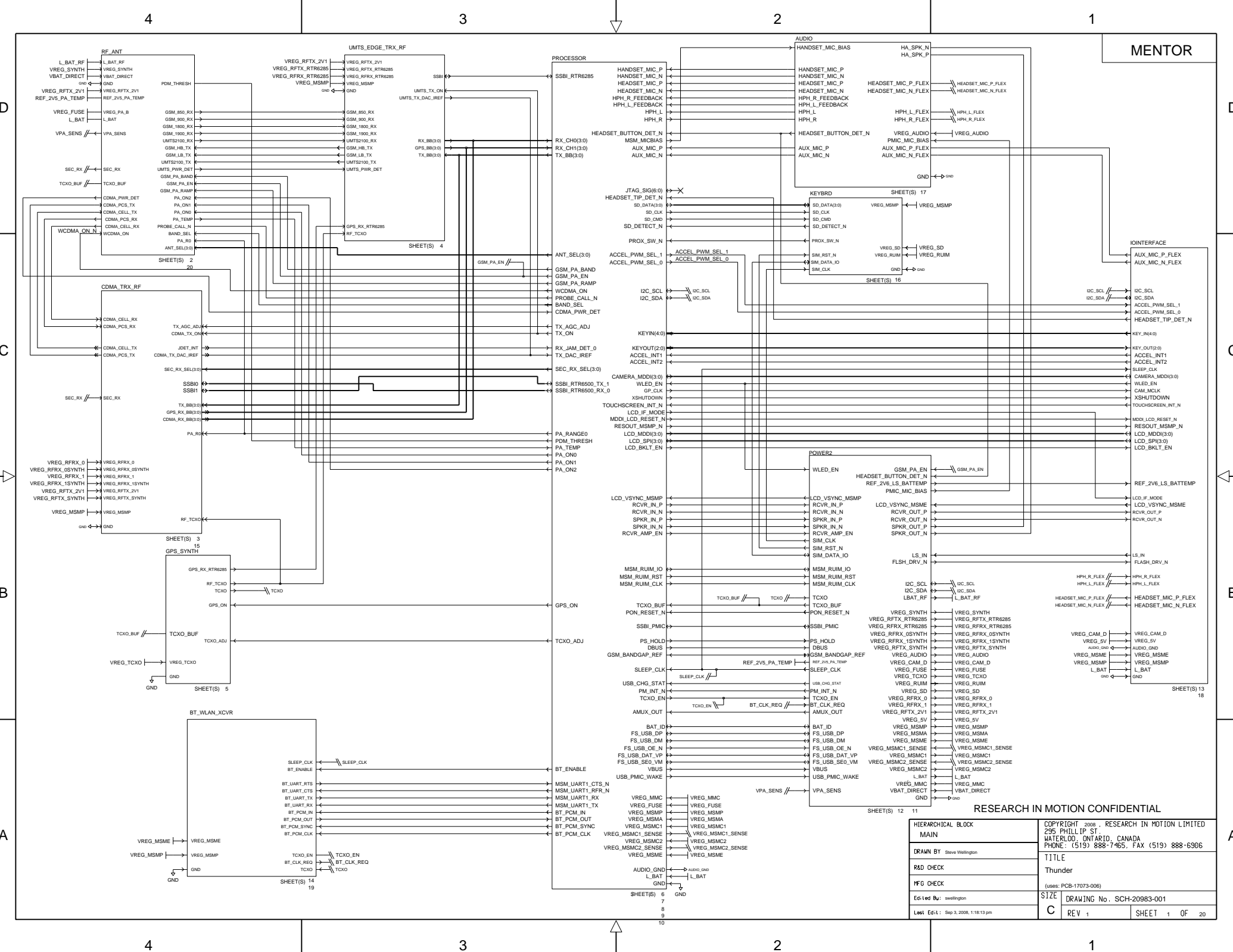


MENTOR

RESEARCH IN MOTION CONFIDENTIAL

HIERARCHICAL BLOCK		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED	
MAIN		295 PHILLIP ST.	
DRAWN BY Steve Wellington		WATERLOO, ONTARIO, CANADA	
R&D CHECK		PHONE: (519) 888-7465, FAX (519) 888-6306	
RFG CHECK		TITLE	
Edi Led Bu: swellington		Thunder	
Last Ed: 1 Sep 3, 2008, 1:18:13 pm		(Uses: PCB-17073-006)	
SIZE		DRAWING No. SCH-20983-001	
C		REV 1 SHEET 1 OF 20	



D

D

C

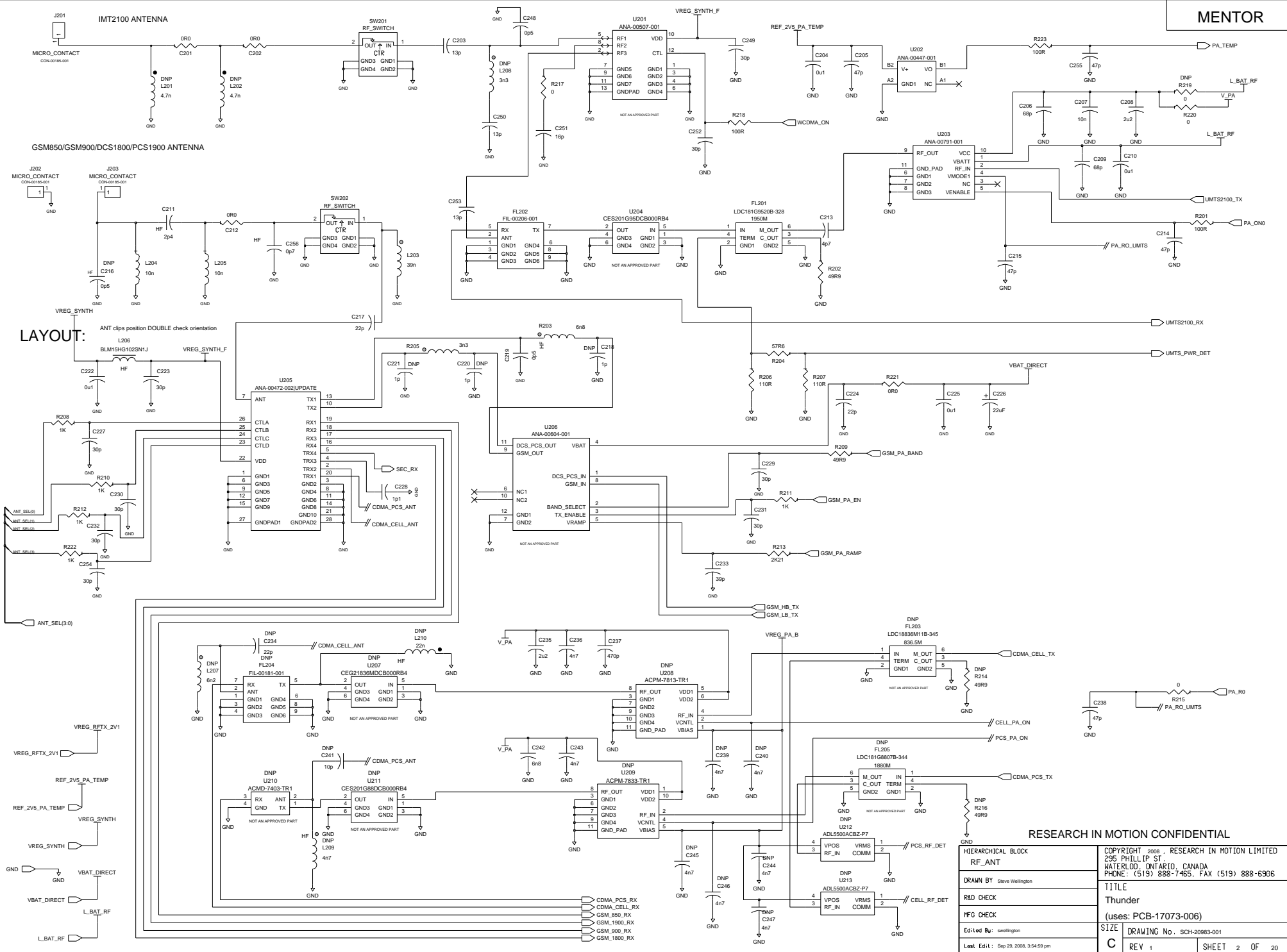
C

B

B

A

A



LAYOUT: ANT clips position DOUBLE check orientation

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HIERARCHICAL BLOCK		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY Steve Wellington		TITLE Thunder	
R&D CHECK		IFG CHECK	
Edi Led Bu: swellington		SIZE DRAWING No. SCH-20983-001	
Last Ed: 1 Sep 29, 2008, 3:54:59 pm		C REV 1 SHEET 2 OF 20	

D

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C

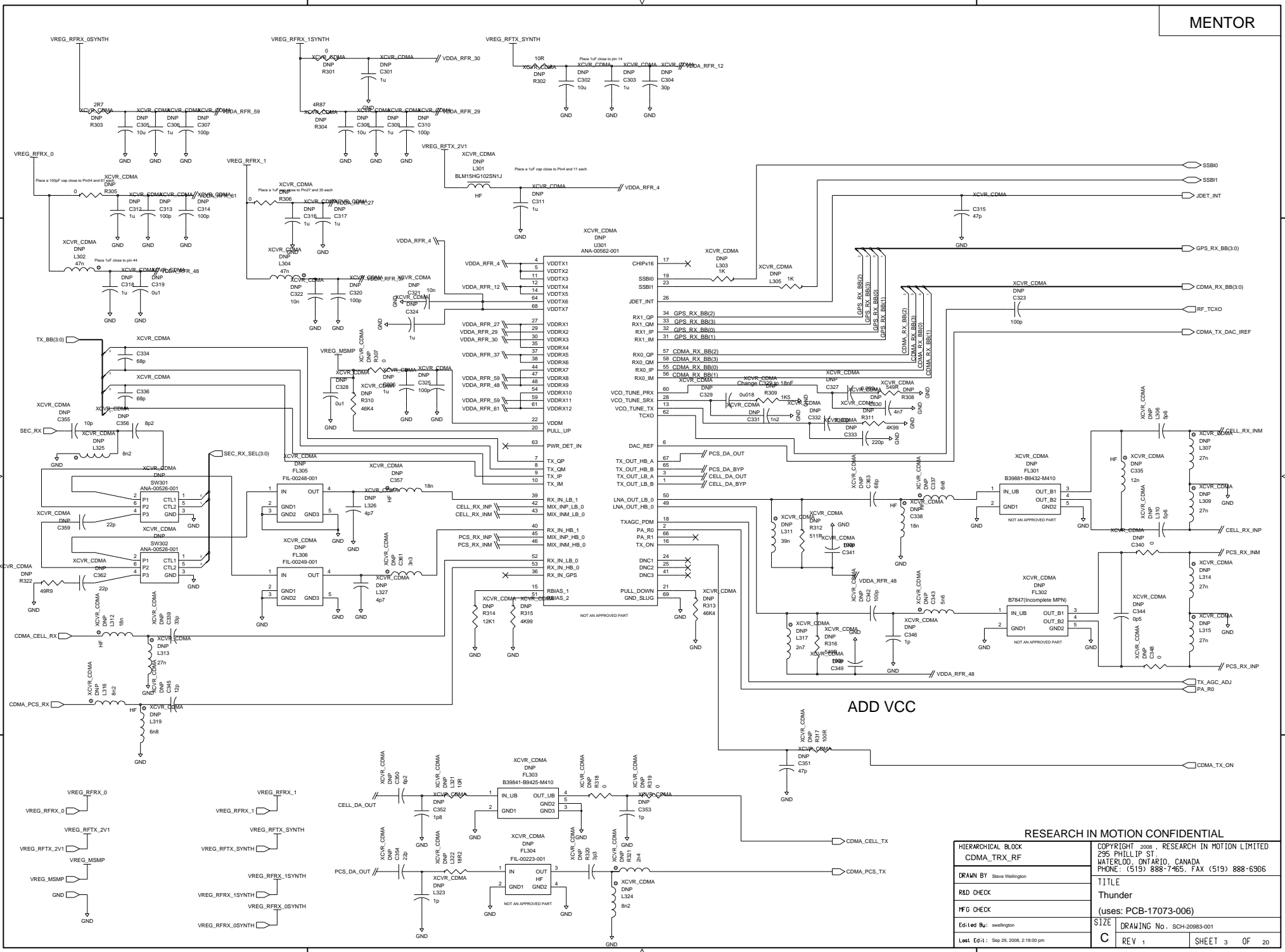
C

B

B

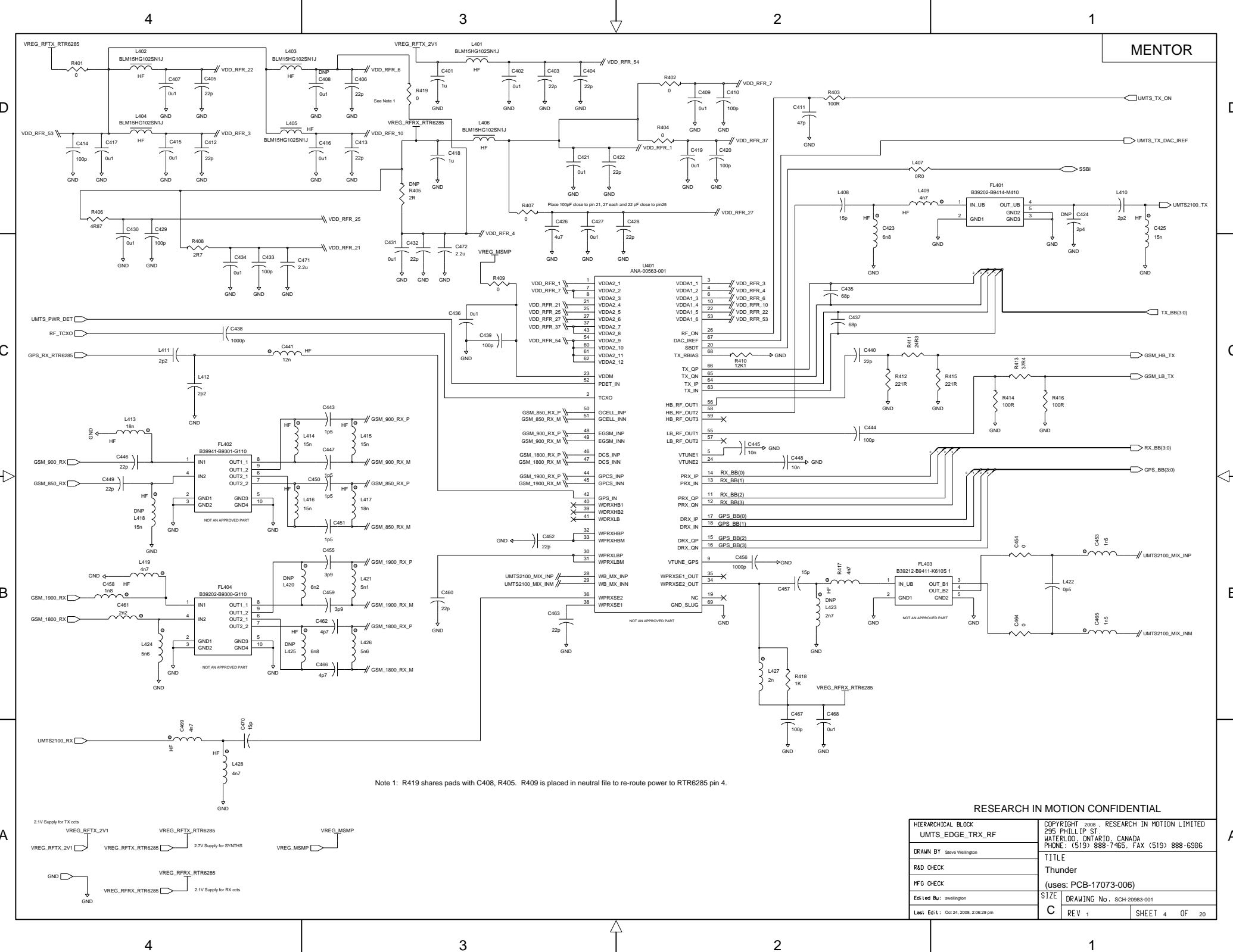
A

A



ADD VCC

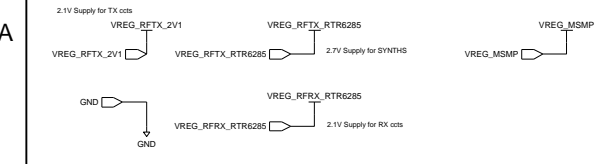
HIERARCHICAL BLOCK CDMA_TRX_RF		RESEARCH IN MOTION CONFIDENTIAL	
DRAWN BY: Steve Wellington		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
R&D CHECK		TITLE Thunder	
MFG CHECK		(uses: PCB-17073-006)	
Edi Led By: swellington		SIZE DRAWING No. SCH-20983-001	
Last Ed: 1 Sep 29, 2008, 2:18:00 pm		C REV 1 SHEET 3 OF 20	



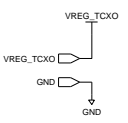
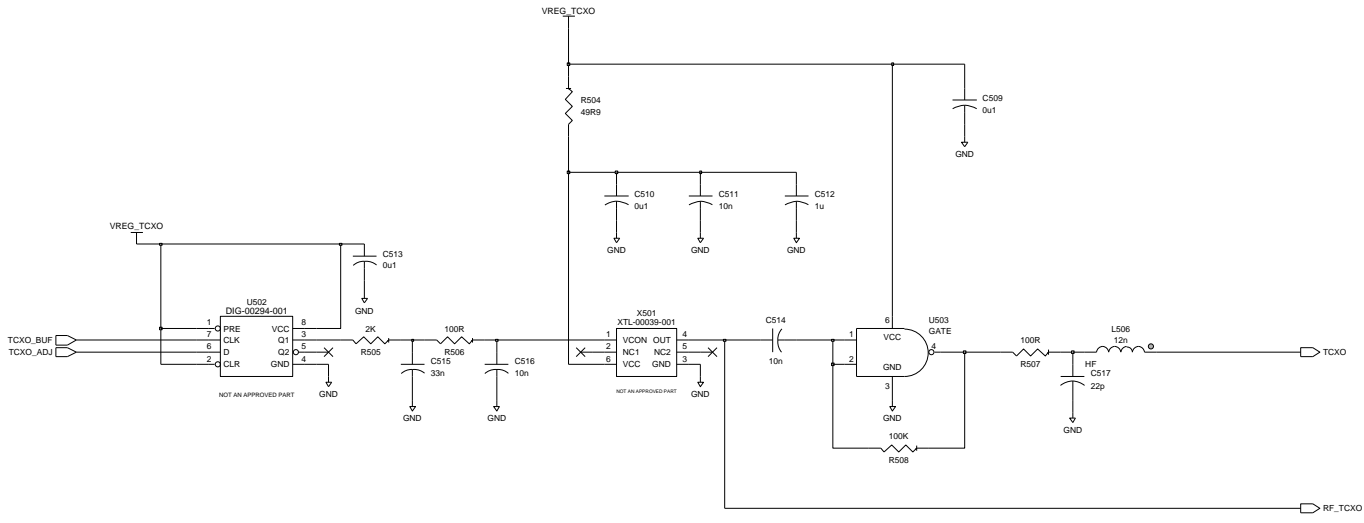
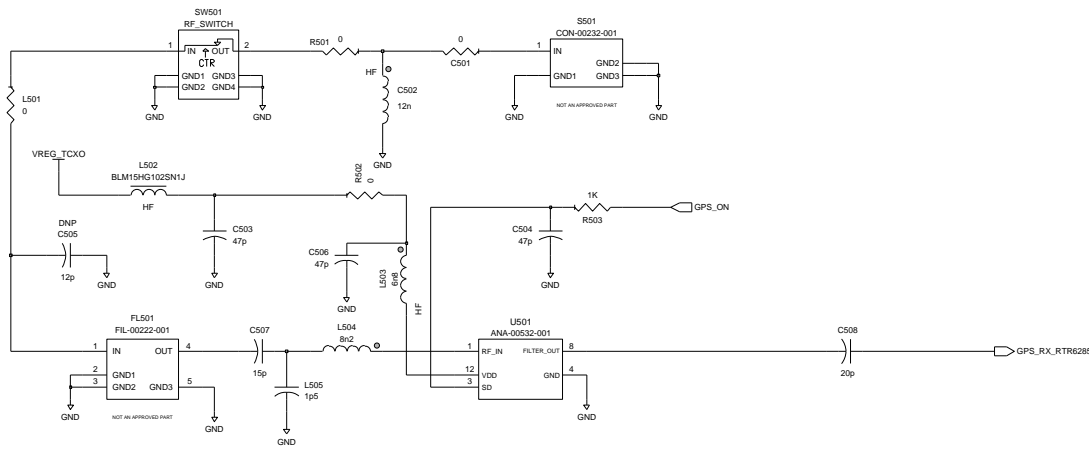
Note 1: R419 shares pads with C408, R405. R409 is placed in neutral file to re-route power to RTR6285 pin 4.

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HIERARCHICAL BLOCK UMTS_EDGE_TRX_RF		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY Steve Wellington		TITLE Thunder	
R&D CHECK		(uses: PCB-17073-006)	
MFG CHECK		SIZE DRAWING No. SCH-20983-001	
Edi Led By: swellington		C REV 1 SHEET 4 OF 20	
Last Ed: Oct 24, 2008, 2:06:29 pm			

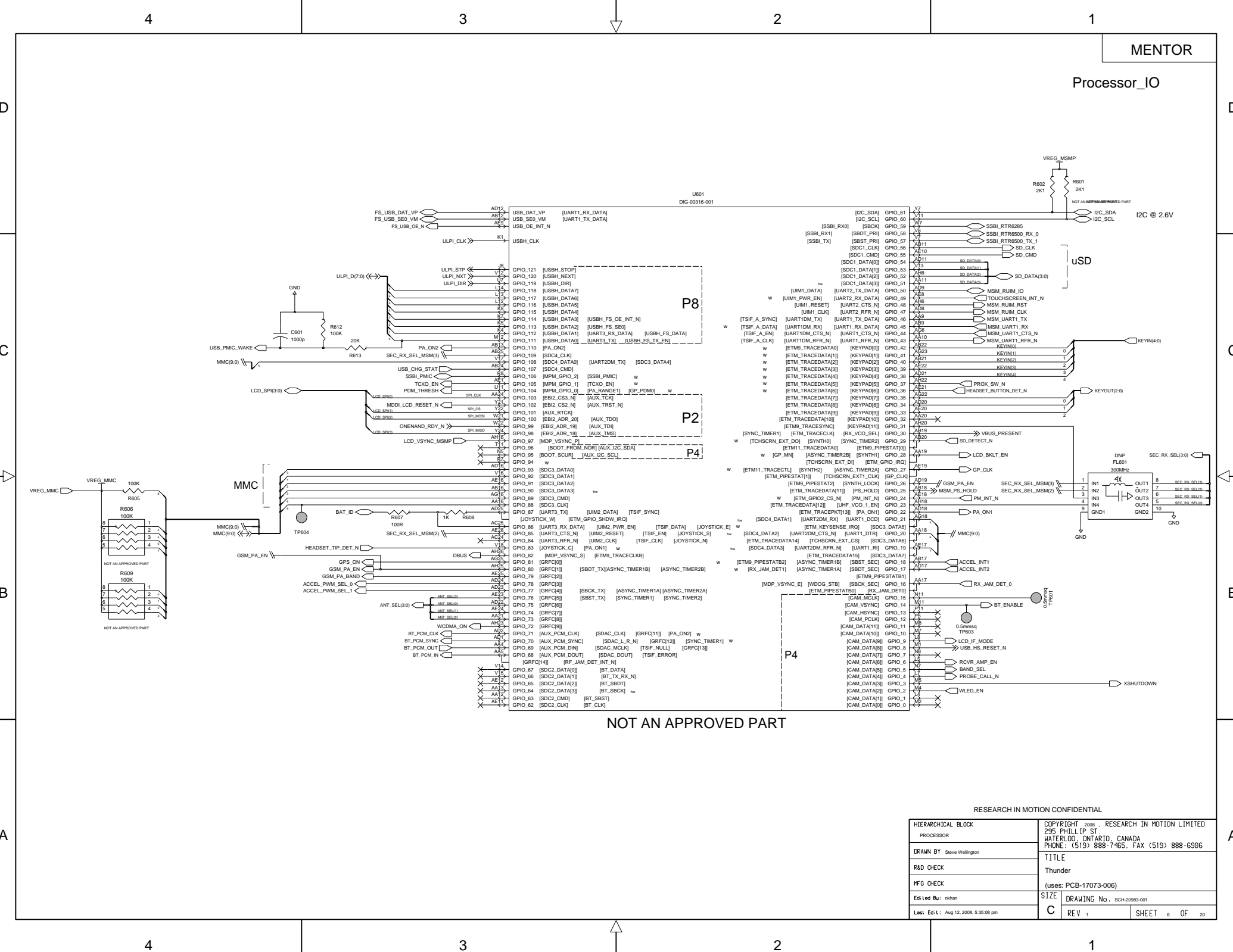


GPS ANTENNA CONNECTOR



RESEARCH IN MOTION CONFIDENTIAL

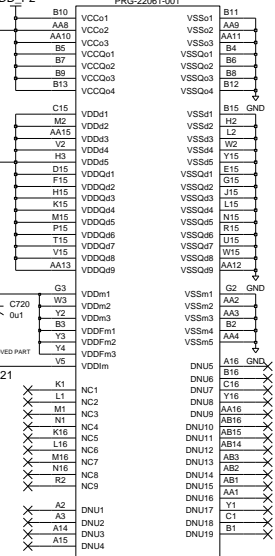
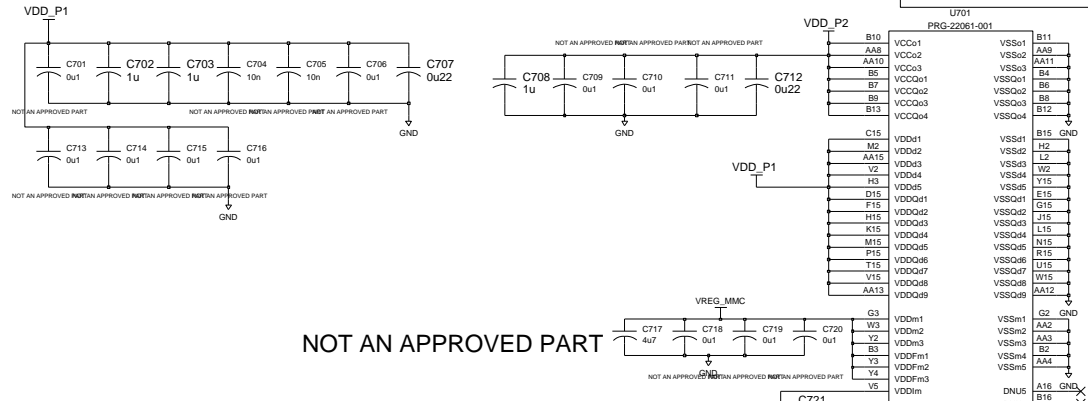
HIERARCHICAL BLOCK GPS_SYNTH		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY Steve Wellington		TITLE Thunder (uses: PCB-17073-006)	
R&D CHECK		SIZE DRAWING No. SCH-20983-001	
MFG CHECK		C REV 1 SHEET 5 OF 20	
Edi Led By: swellington			
Last Edt: Sep 29, 2008, 2:16:53 pm			



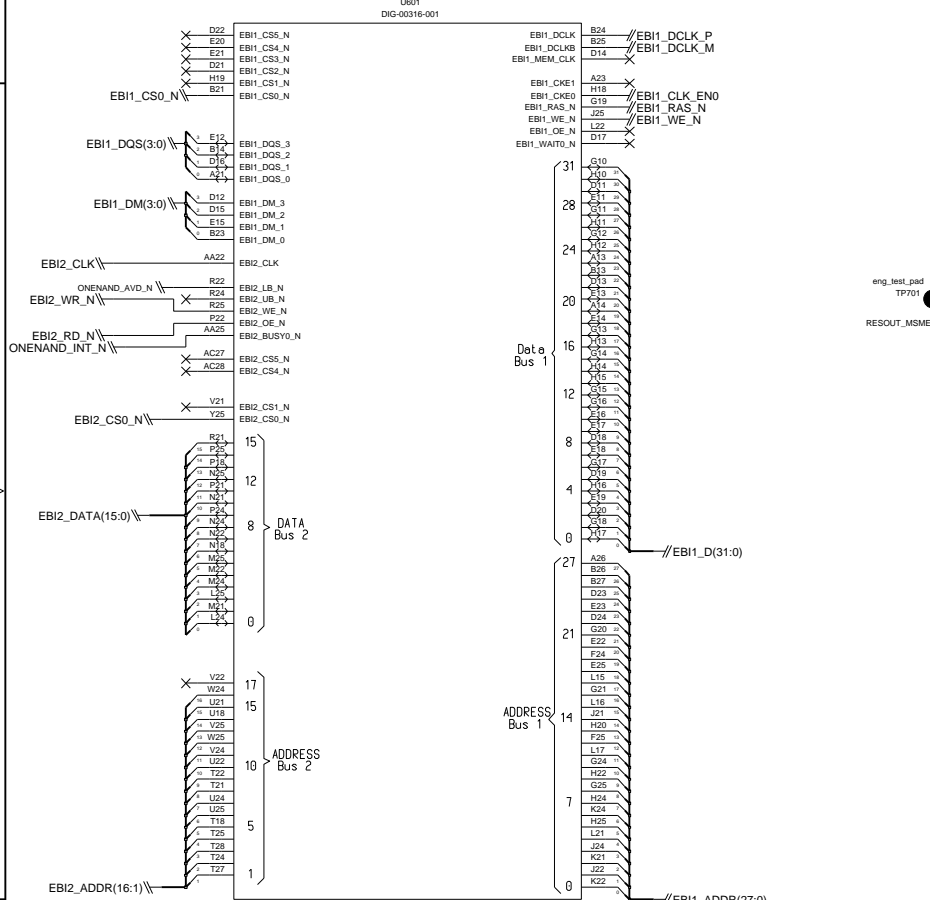
NOT AN APPROVED PART

RESEARCH IN MOTION CONFIDENTIAL

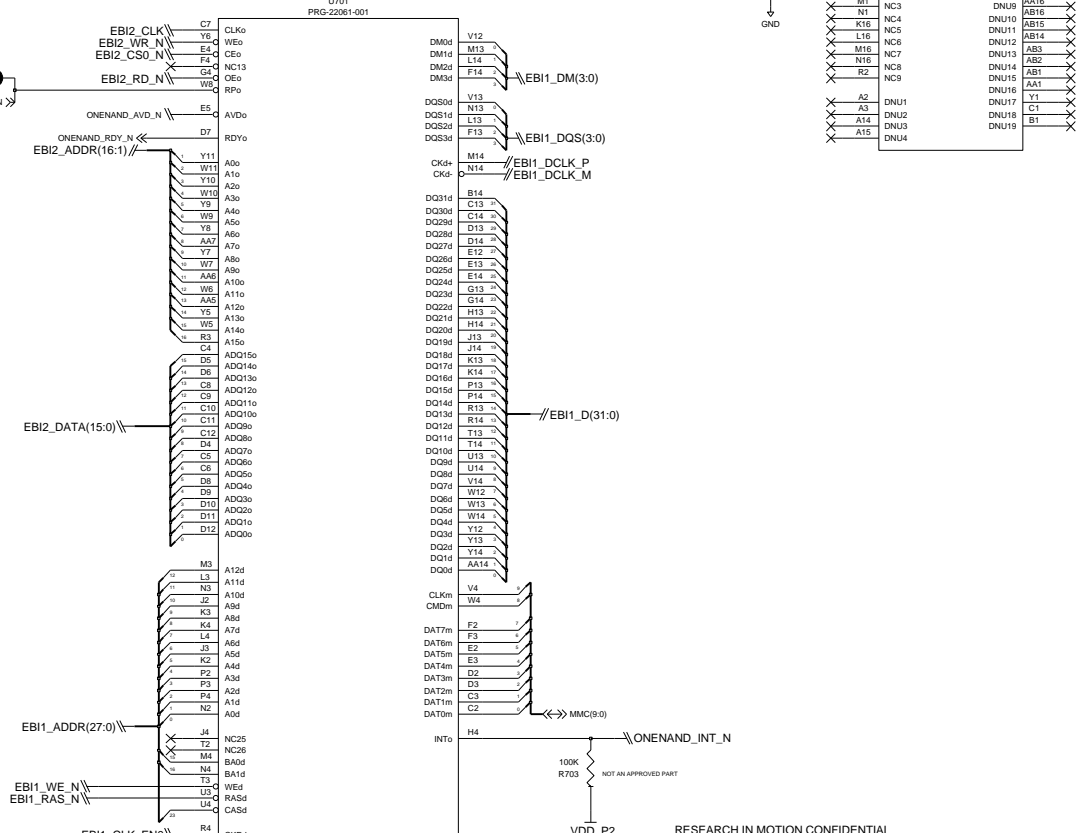
HIERARCHICAL BLOCK PROCESSOR		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY Steve Wallington		TITLE Thunder	
R&D CHECK		(uses: PCB-17073-006)	
MFG CHECK		SIZE DRAWING No. SCH-20983-001	
Edi Led Bu: rkhani		C REV 1 SHEET 6 OF 20	
Last Edt: Aug 12, 2008, 5:36:08 pm			



NOT AN APPROVED PART

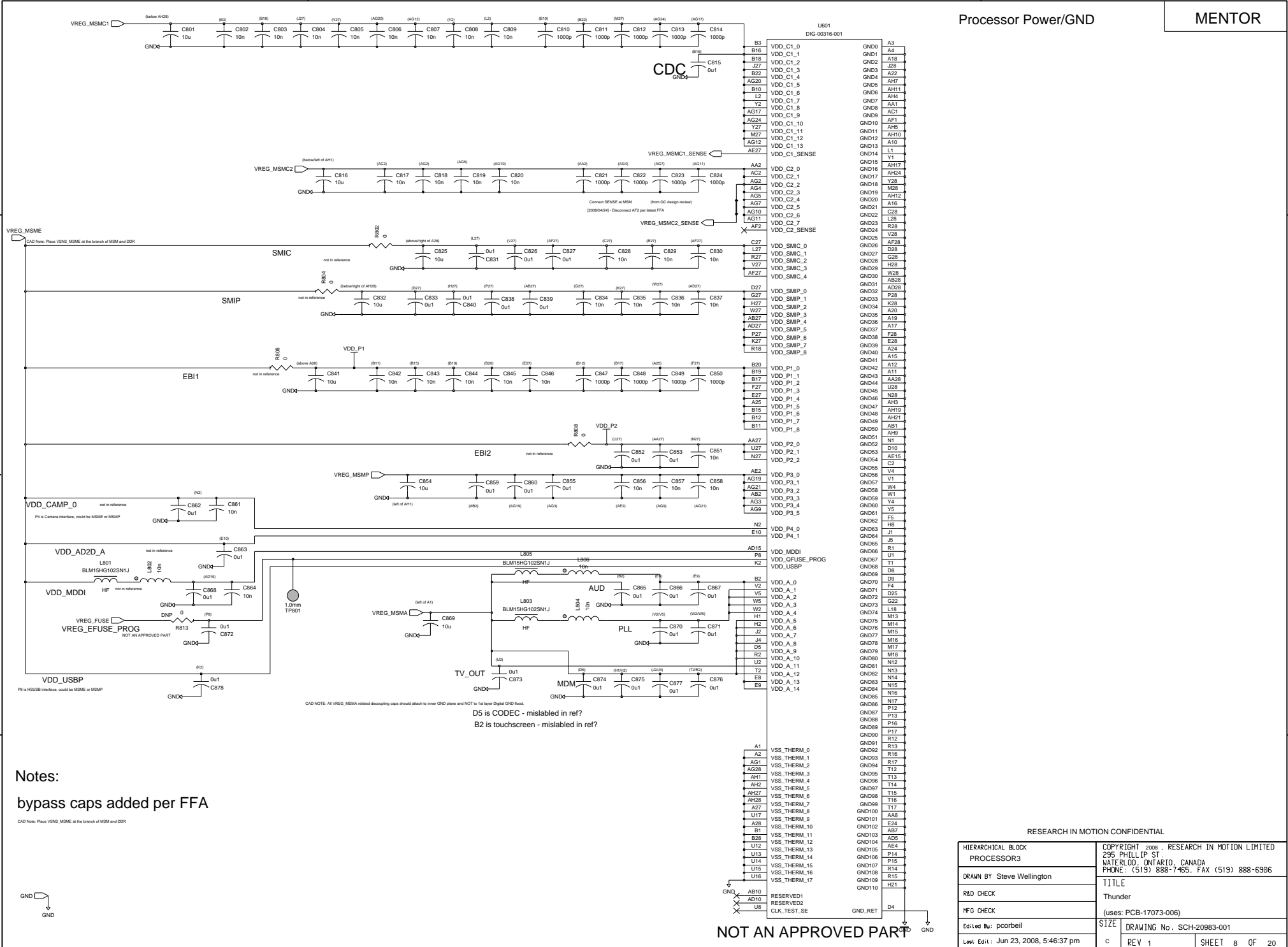


NOT AN APPROVED PART



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HIERARCHICAL BLOCK PROCESSOR2	COPYRIGHT 2008 RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY Steve Wellington	TITLE Thunder
R&D CHECK	(uses: PCB-17073-006)
FIG CHECK	SIZE DRAWING No. SCH-20983-001
Edi Led By: swellington	C REV 1 SHEET 7 OF 20
Last Ed1: Sep 24, 2008, 3:20:51 pm	



Notes:
bypass caps added per FFA

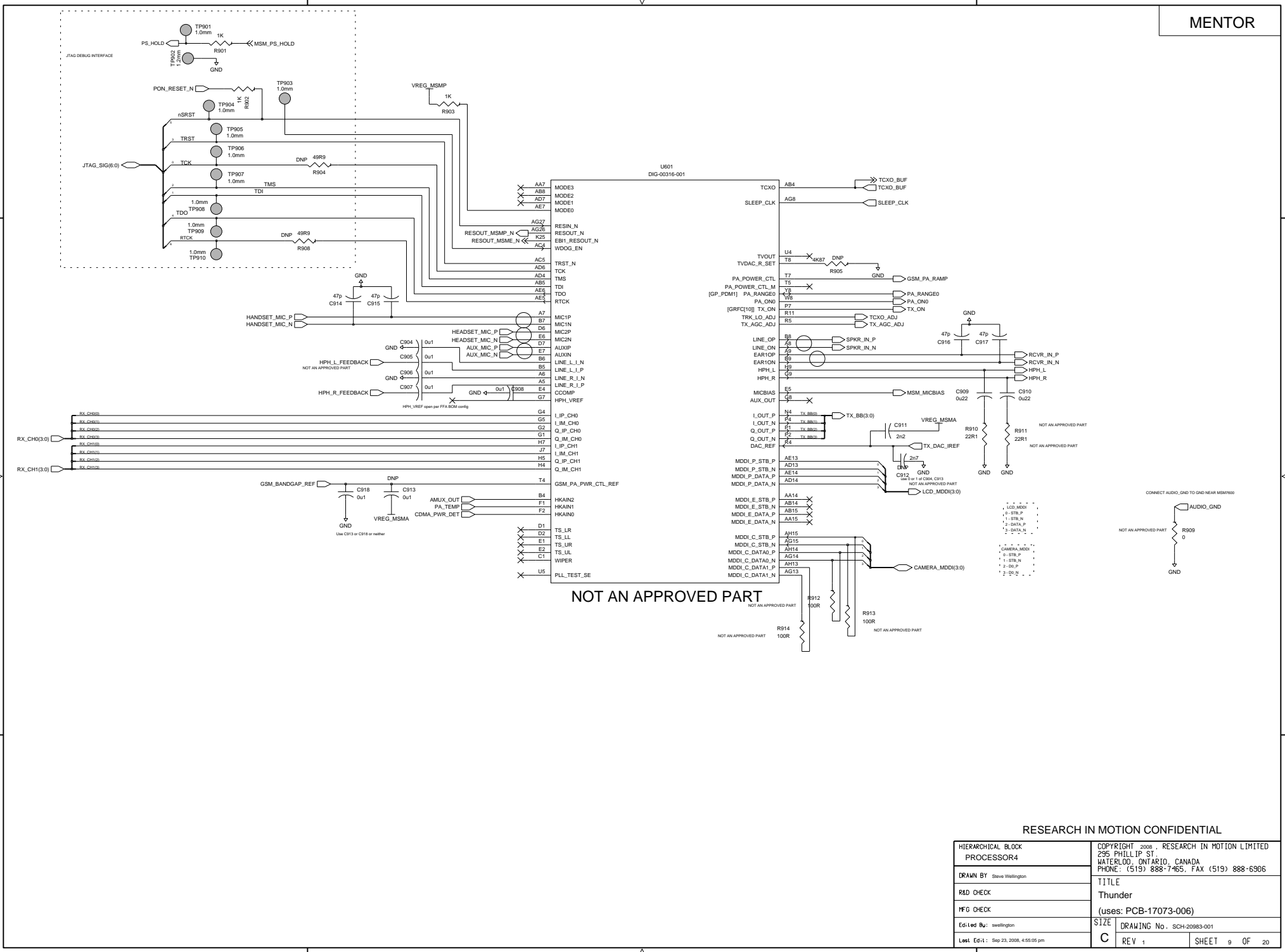
CAD Note: Place VSS_MSMC at the branch of MSM and DDR

D5 is CODEC - mislabeled in ref?
B2 is touchscreen - mislabeled in ref?

NOT AN APPROVED PART

RESEARCH IN MOTION CONFIDENTIAL

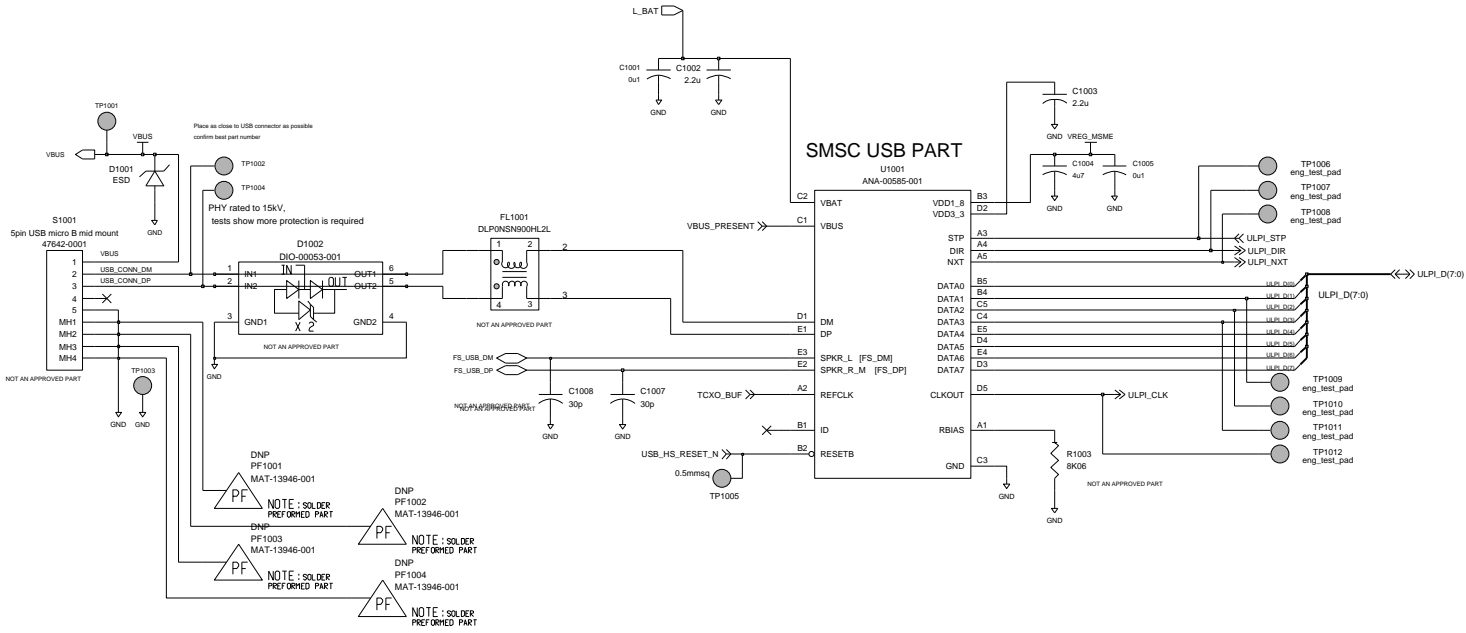
HIERARCHICAL BLOCK PROCESSOR3		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY Steve Wellington		TITLE Thunder	
R&D CHECK		(uses: PCB-17073-006)	
MFG CHECK		SIZE DRAWING No. SCH-20983-001	
Edi Led By: pcorbell		c	
Last Edit: Jun 23, 2008, 5:46:37 pm		REV 1 SHEET 8 OF 20	



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HIERARCHICAL BLOCK PROCESSOR4		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY Steve Wellington		TITLE Thunder	
R&D CHECK		(uses: PCB-17073-006)	
MFG CHECK		SIZE DRAWING No. SCH-20983-001	
Edi Led By: swellington		C REV 1 SHEET 9 OF 20	
Last Ed: Sep 23, 2008, 4:55:05 pm			

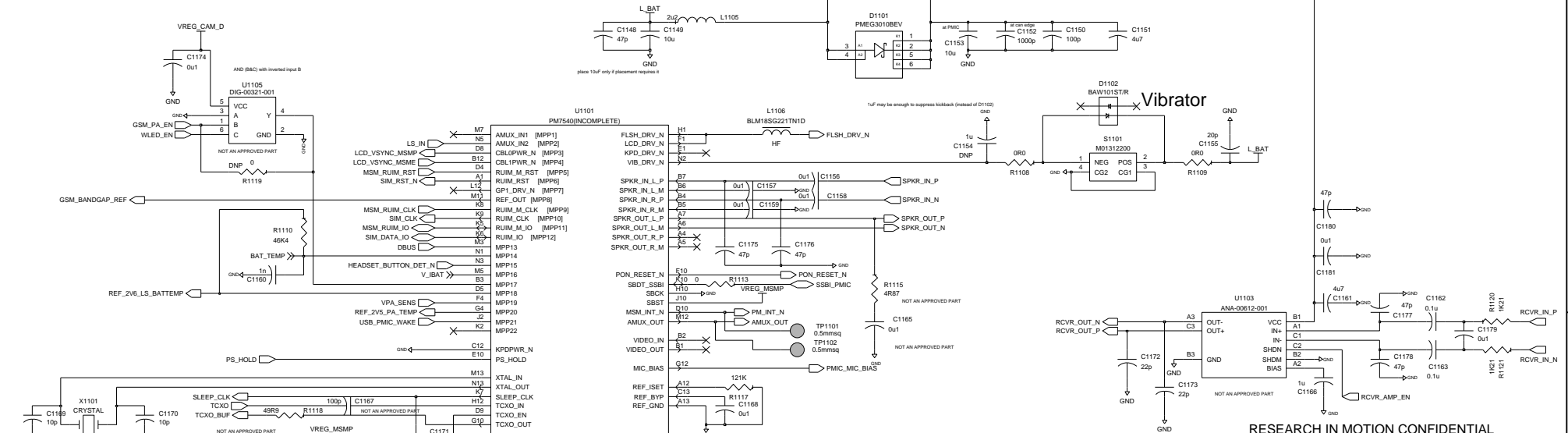
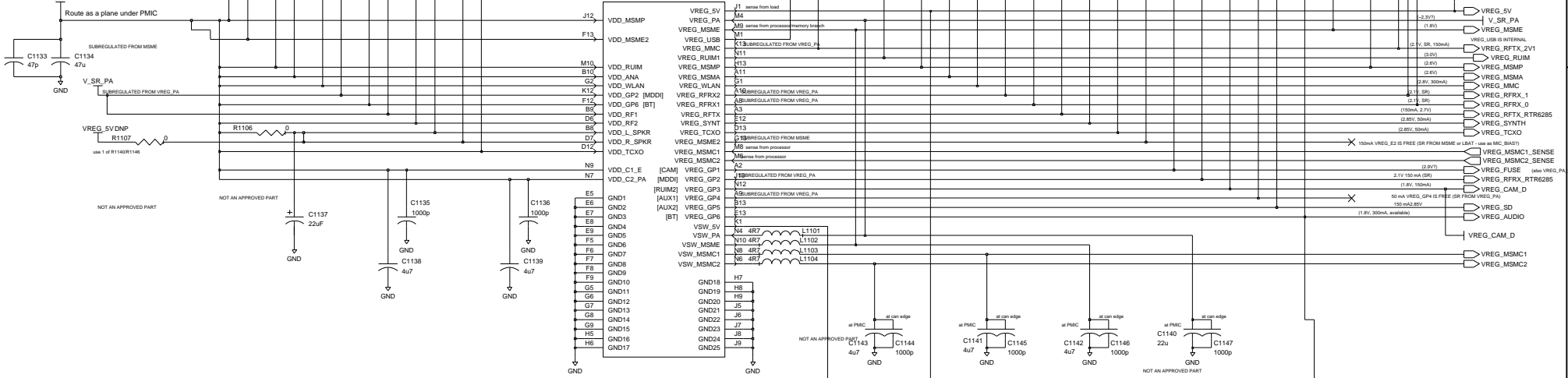
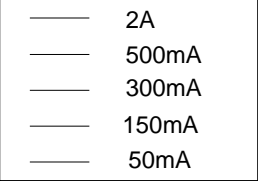
CHARGE/USB CONNECTOR



RESEARCH IN MOTION CONFIDENTIAL

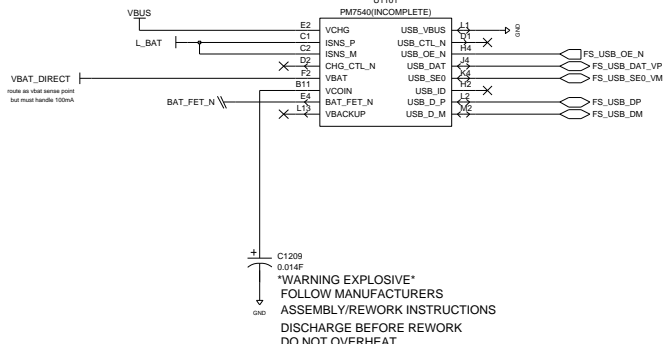
HIERARCHICAL BLOCK PROCESSORS		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY Steve Wellington		TITLE Thunder	
R&D CHECK		(uses: PCB-17073-006)	
MFG CHECK		DRAWING No. SCH-20983-001	
Ed: Led Bu: swellington		SIZE C	
Last Ed: 1 Oct 24, 2008, 2:12:26 pm		REV 1 SHEET 10 OF 20	

Route VREG_MSME as series from where trunk branches to processor and memory
recheck inductor current ratings based on MSM7600 loads

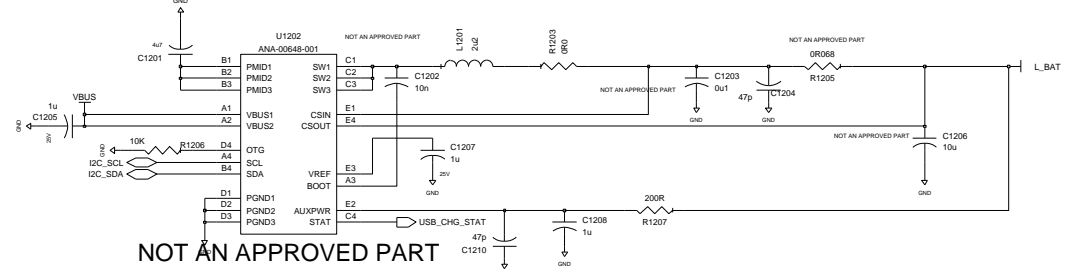
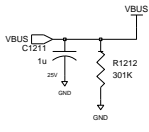


FC23 samples available in 12.5uF test cap
OK for PM7540 - could check

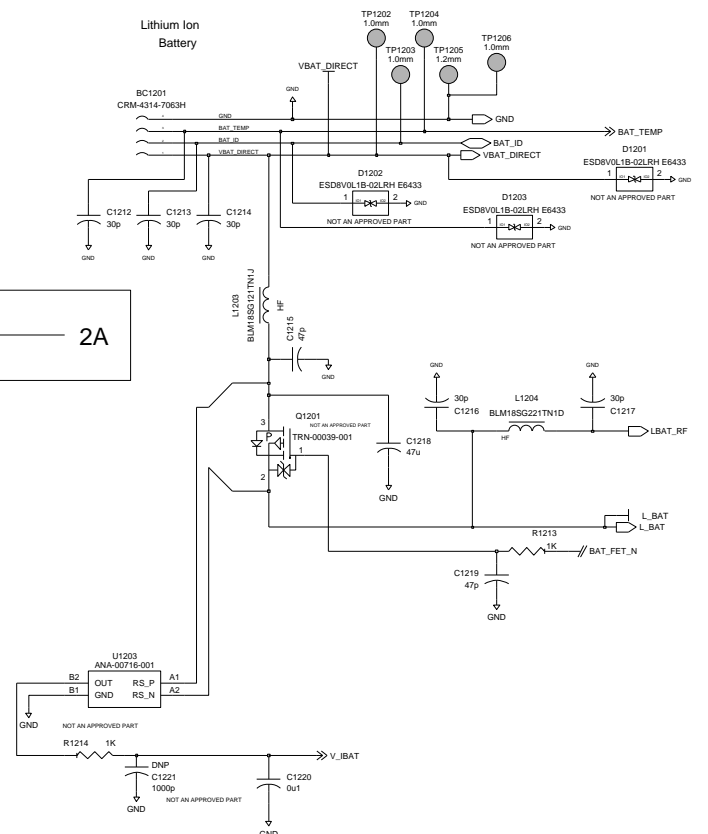
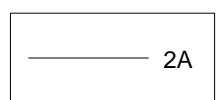
HIERARCHICAL BLOCK	POWER2
DRAWN BY	Steve Wellington
R&D CHECK	
IFG CHECK	
Edi Led Bu:	swellington
Level	Ed1: Sep 29, 2008, 1:07:20 pm
COPYRIGHT	© 2008, RESEARCH IN MOTION LIMITED
WATERLOO, ONTARIO, CANADA	PHONE: (519) 888-7465, FAX (519) 888-6306
TITLE	Thunder
(uses: PCB-17073-006)	
SIZE	DRAWING No. SCH-20983-001
REV 1	SHEET 11 OF 20



C1209
0.014F
WARNING EXPLOSIVE
FOLLOW MANUFACTURERS
ASSEMBLY/REWORK INSTRUCTIONS
DISCHARGE BEFORE REWORK
DO NOT OVERHEAT

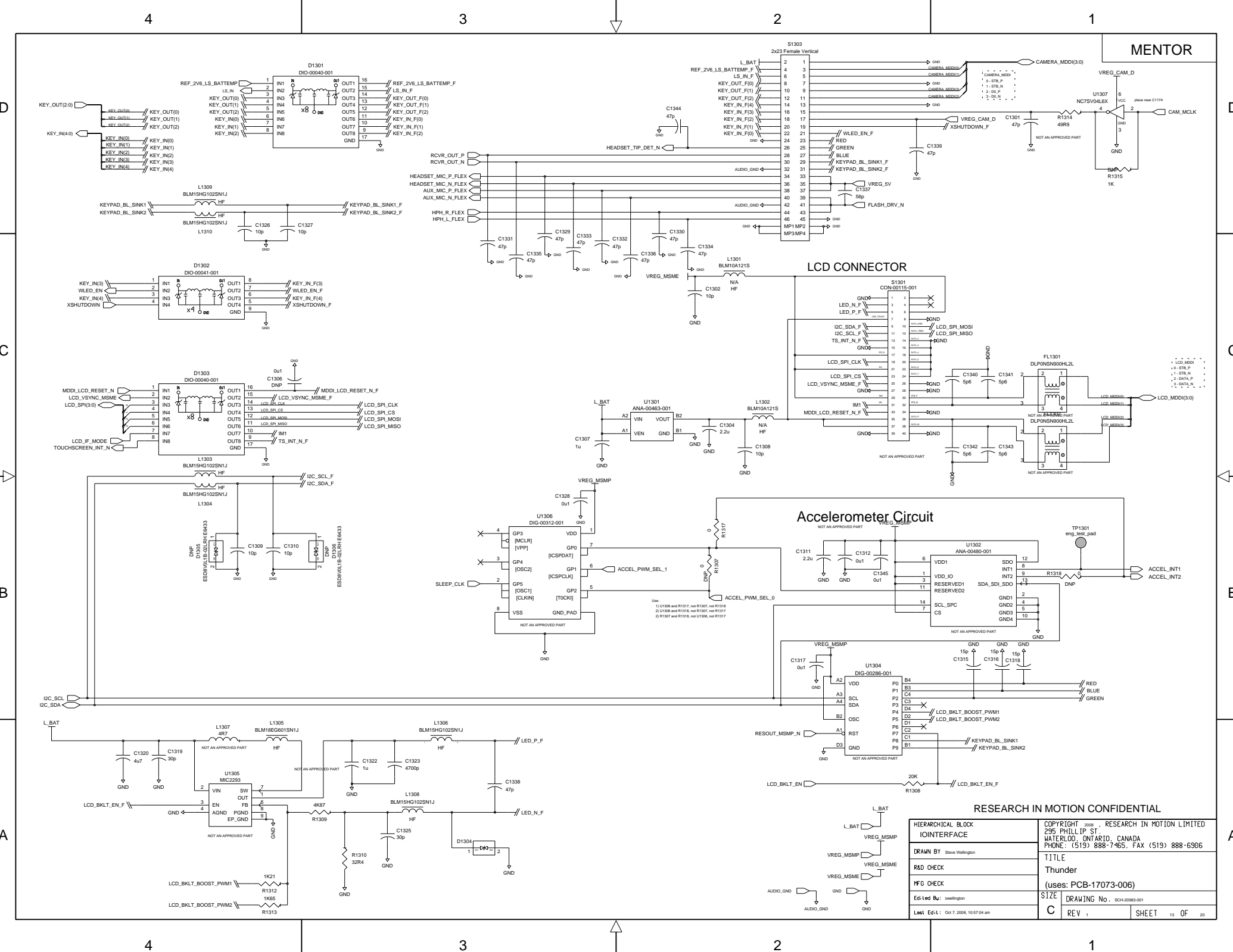


NOT AN APPROVED PART



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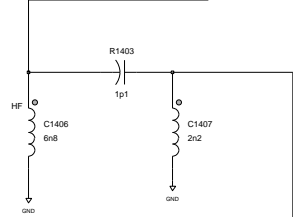
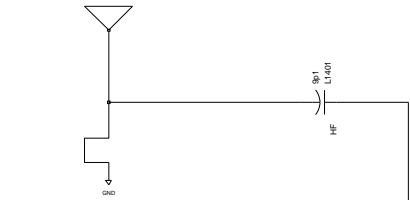
HIERARCHICAL BLOCK POWER22	COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY Steve Wellington	TITLE Thunder
R&D CHECK	(uses: PCB-17073-006)
MFG CHECK	SIZE DRAWING No. SCH-20983-001
Edi Led By: swellington	C REV 1 SHEET 12 OF 20
Level Edi L: Oct 24, 2008, 2:00:10 pm	



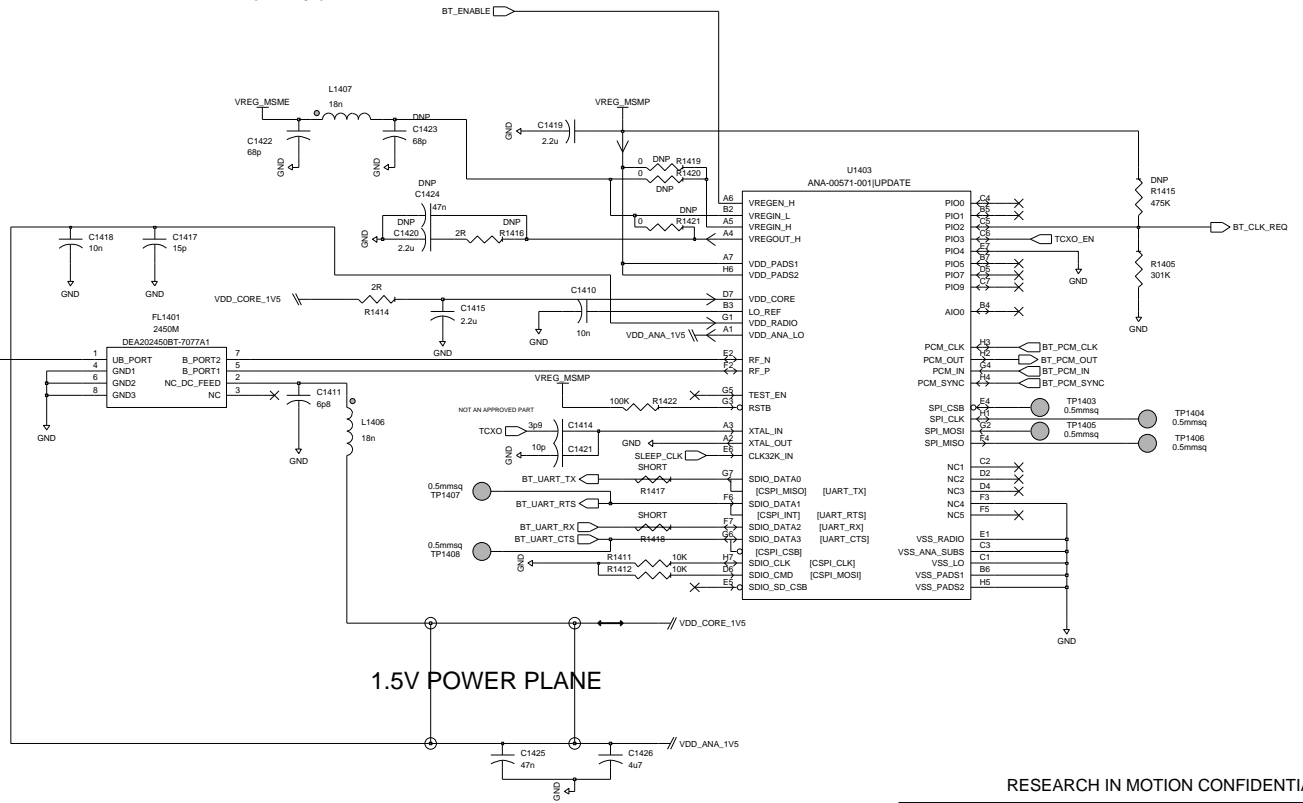
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HIERARCHICAL BLOCK	JOINTERFACE	COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306
DRAWN BY	Steve Wellington	TITLE Thunder
R&D CHECK		(uses: PCB-17073-006)
HFG CHECK		SIZE DRAWING No. BCH-20983-001
Edi Led Bu: swillington		C REV 1 SHEET 13 OF 20
Label Ed1: Oct 7, 2008, 10:57:54 am		

BLUETOOTH ANTENNA



1 of L1407/R1421



1.5V POWER PLANE

RESEARCH IN MOTION CONFIDENTIAL

HIERARCHICAL BLOCK BT_WLAN_XCVR		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY: Steve Wellington		TITLE Thunder (uses: PCB-17073-006)	
R&D CHECK		SIZE DRAWING No. SCH-20983-001	
MFG CHECK		REV 1 SHEET 14 OF 20	
Edi Led By: swellington		Last Ed1: Sep 29, 2008, 2:14:53 pm	

4

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MENTOR

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A

RESEARCH IN MOTION CONFIDENTIAL

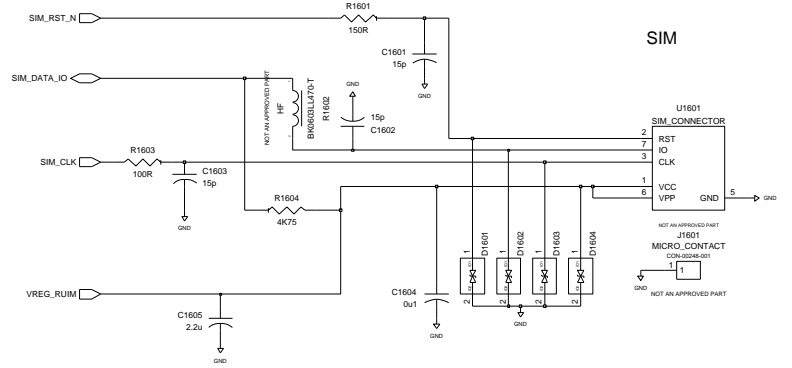
HIERARCHICAL BLOCK CDMA_TRX_RF2		COPYRIGHT 2007, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY: Steve Wellington		TITLE Thunder (uses: PCB-17073-006)	
R&D CHECK		SIZE	
MFG CHECK		C	
Ed: Led By: swellington		DRAWING No. SCH-20983-001	
Last Ed: 11 Nov 25, 2007, 2:07:14 am		REV 1	SHEET 15 OF 20

4

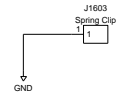
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2

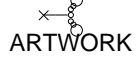
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GPS COAX CLIP



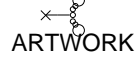
2.05_SINGLE_OFFSET_REDUCED



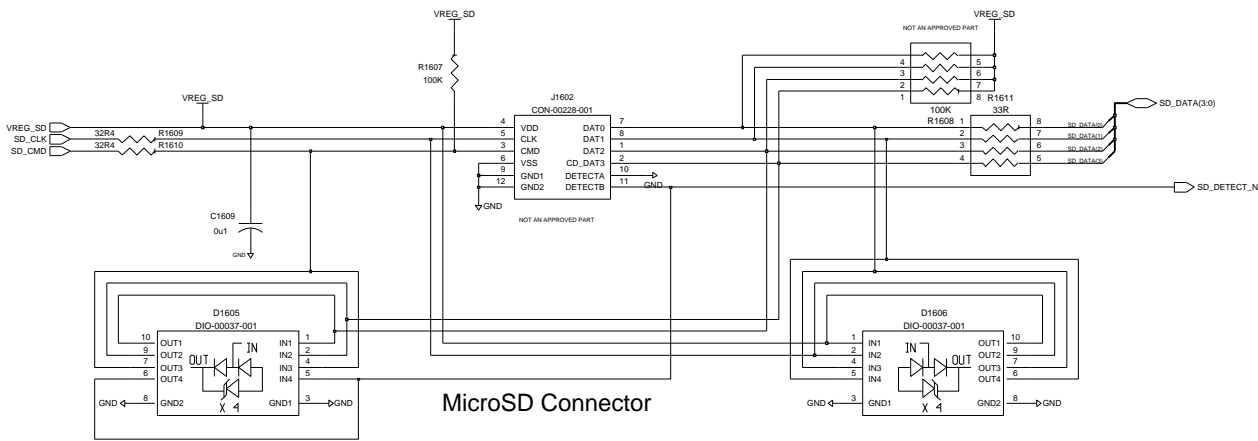
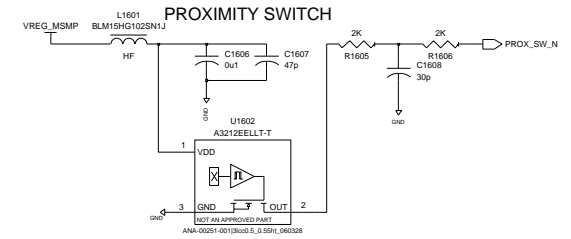
2.05_SINGLE_OFFSET_REDUCED



2.05_SINGLE_OFFSET_REDUCED



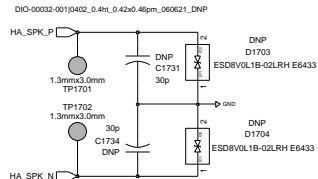
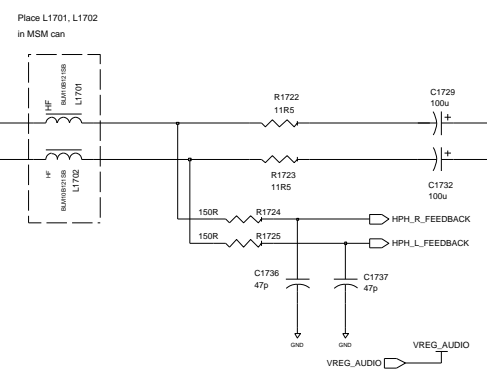
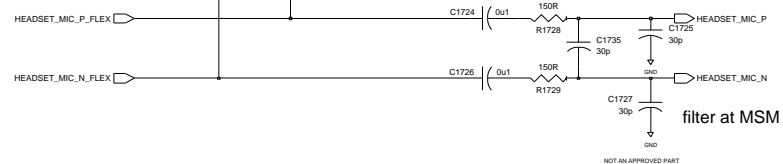
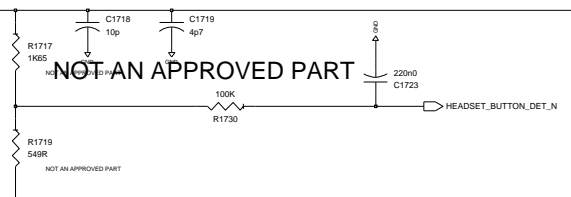
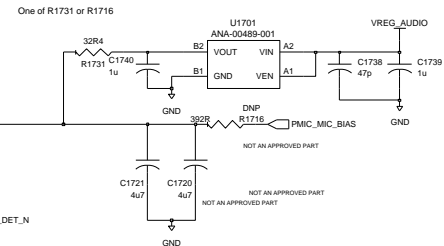
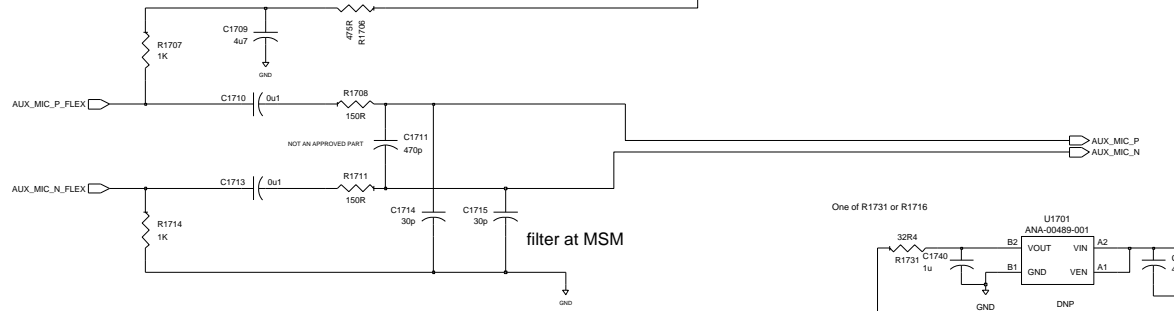
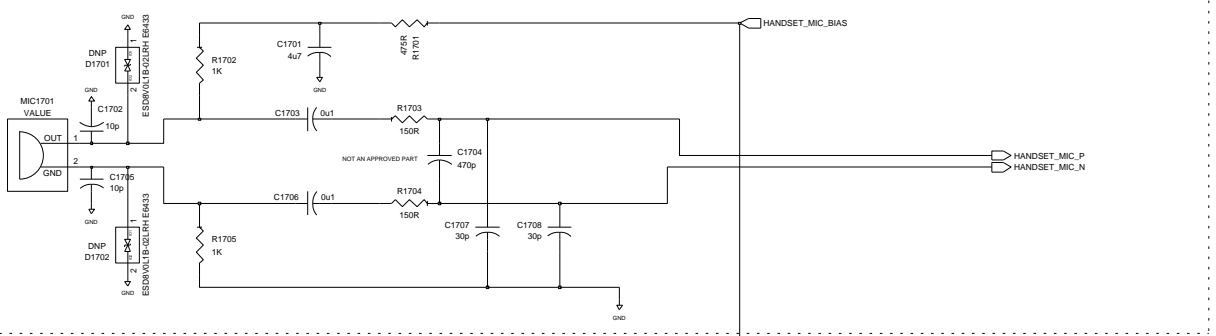
2.05_SINGLE_OFFSET_REDUCED



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HIERARCHICAL BLOCK KEYBRD		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY Steve Wellington		TITLE Thunder	
R&D CHECK		(uses: PCB-17073-006)	
MFG CHECK		SIZE DRAWING No. SCH-20983-001	
Edi Led Bu: swellington		C REV 1 SHEET 16 OF 20	
Last Ed1: Sep 29, 2008, 1:03:04 pm			

HANDSET MIC



RESEARCH IN MOTION CONFIDENTIAL

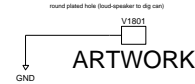
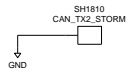
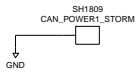
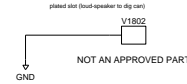
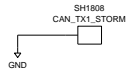
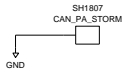
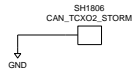
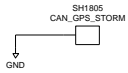
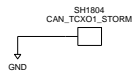
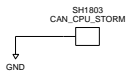
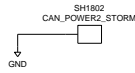
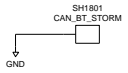
HIERARCHICAL BLOCK AUDIO		COPYRIGHT 2008, RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY: Steve Wellington		TITLE Thunder (uses: PCB-17073-006)	
R&D CHECK		SIZE DRAWING No. SCH-20983-001	
MFG CHECK		REV 1 SHEET 17 OF 20	
Edi Led Bu: swellington		Last Edt: Sep 29, 2008, 1:00:01 pm	

4

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2

1



RESEARCH IN MOTION CONFIDENTIAL

HIERARCHICAL BLOCK JOINTERFACE2		COPYRIGHT 2008 . RESEARCH IN MOTION LIMITED 295 PHILLIP ST. WATERLOO, ONTARIO, CANADA PHONE: (519) 888-7465, FAX (519) 888-6306	
DRAWN BY: Steve Wellington		TITLE Thunder	
R&D CHECK		(uses: PCB-17073-006)	
MFG CHECK		SIZE	
Edi Led By: swellington		DRAWING No. SCH-20983-001	
Last Edt: Sep 29, 2008, 12:57:16 pm		C	REV 1 SHEET 18 OF 20

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RESEARCH IN MOTION CONFIDENTIAL

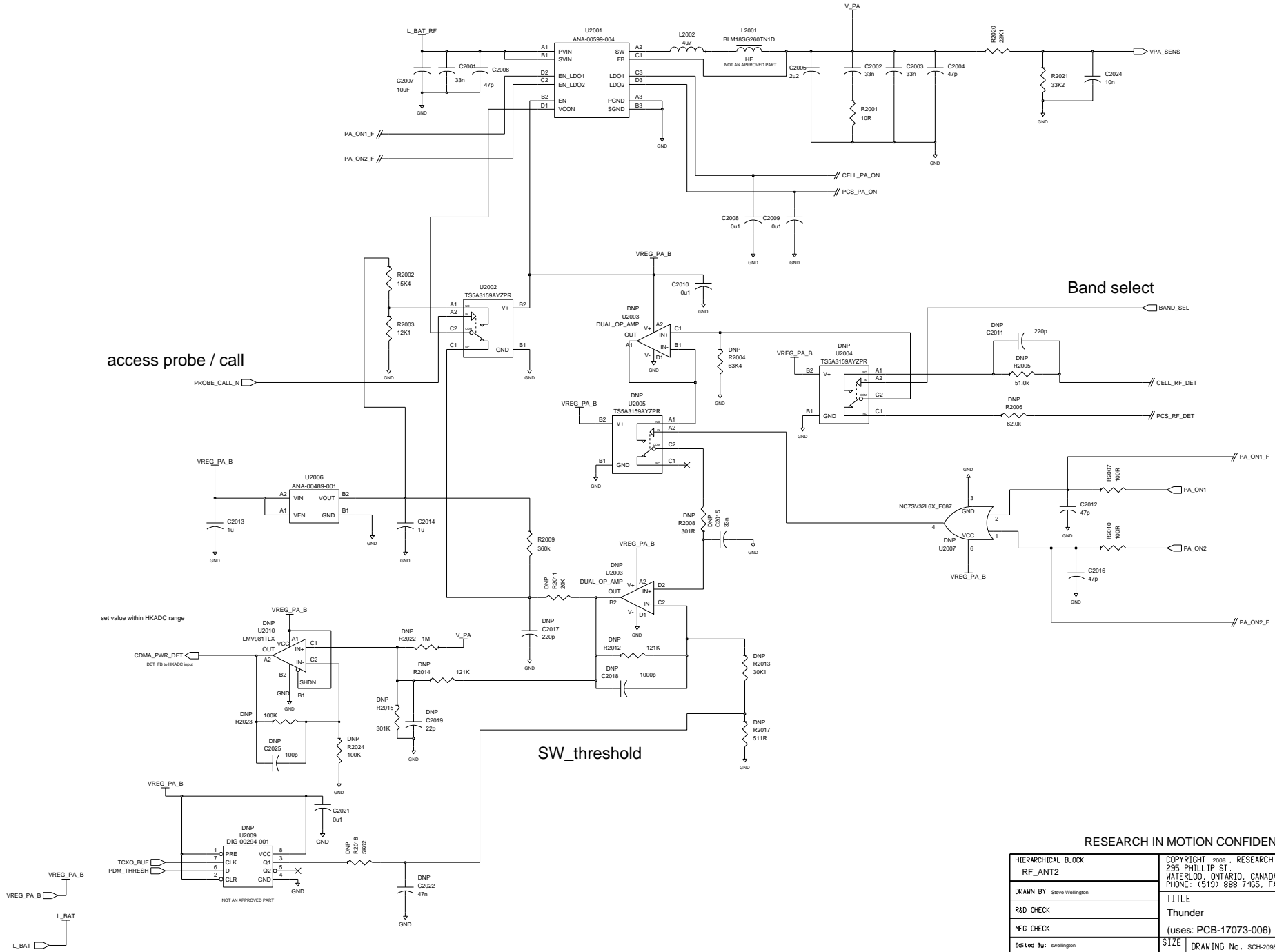
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DRAWN BY: Steve Wellington		TITLE Thunder (uses: PCB-17073-006)	
R&D CHECK		SIZE	
MFG CHECK		DRAWING No. SCH-209893-001	
Ed: Led By: swellington		C	
Last Ed: 1: Oct 29, 2007, 11:40:20 am		REV 1 SHEET 19 OF 20	

4

3

2

1



Band select

access probe / call

SW_threshold

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DRAWN BY Steve Wellington		TITLE Thunder	
R&D CHECK		(uses: PCB-17073-006)	
MFG CHECK		SIZE DRAWING No. SCH-20983-001	
Edi Led By: swellington		C	
Level: Ed1: Sep 29, 2008, 3:47:27 pm		REV 1	SHEET 20 OF 20