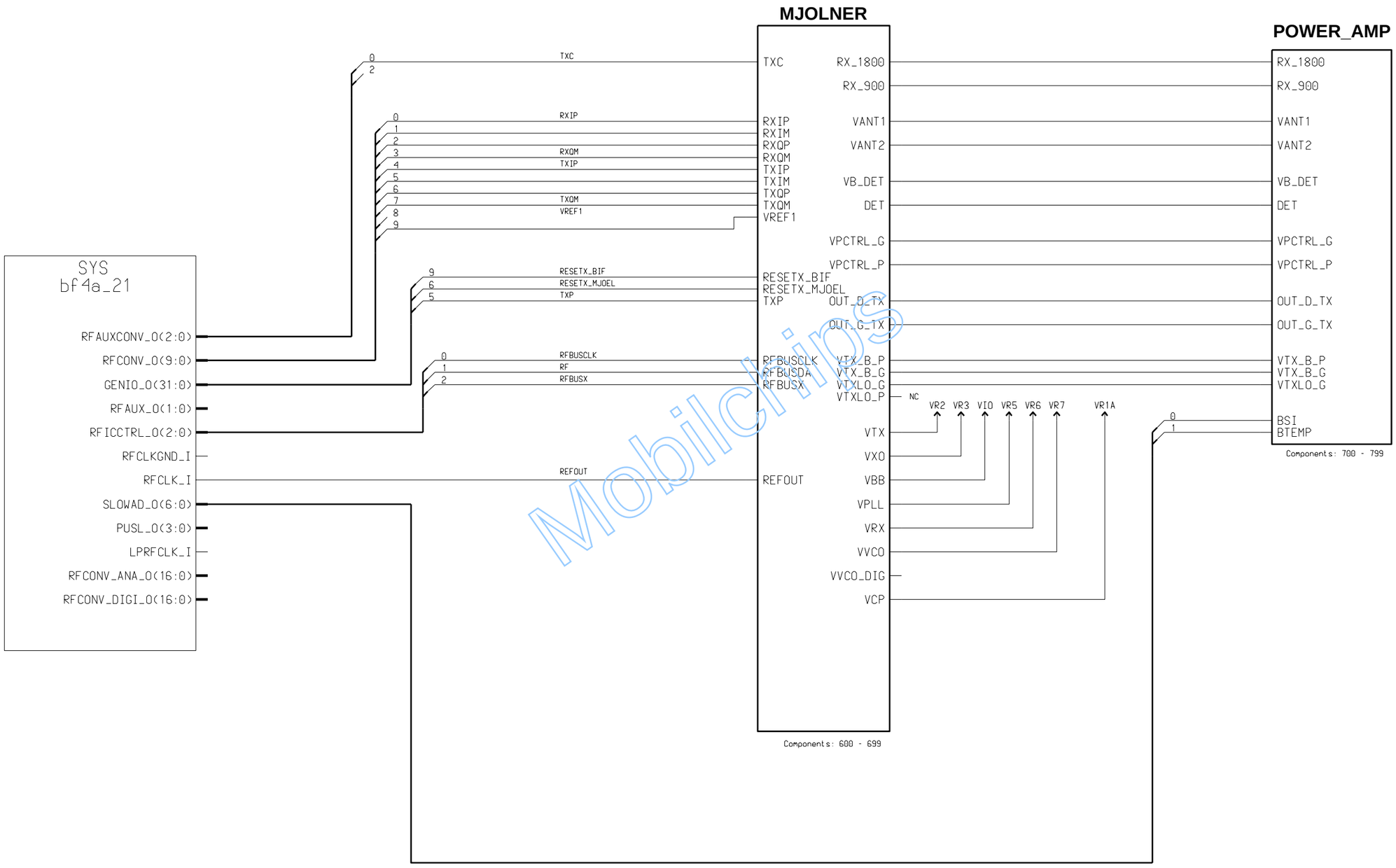
RF & BB



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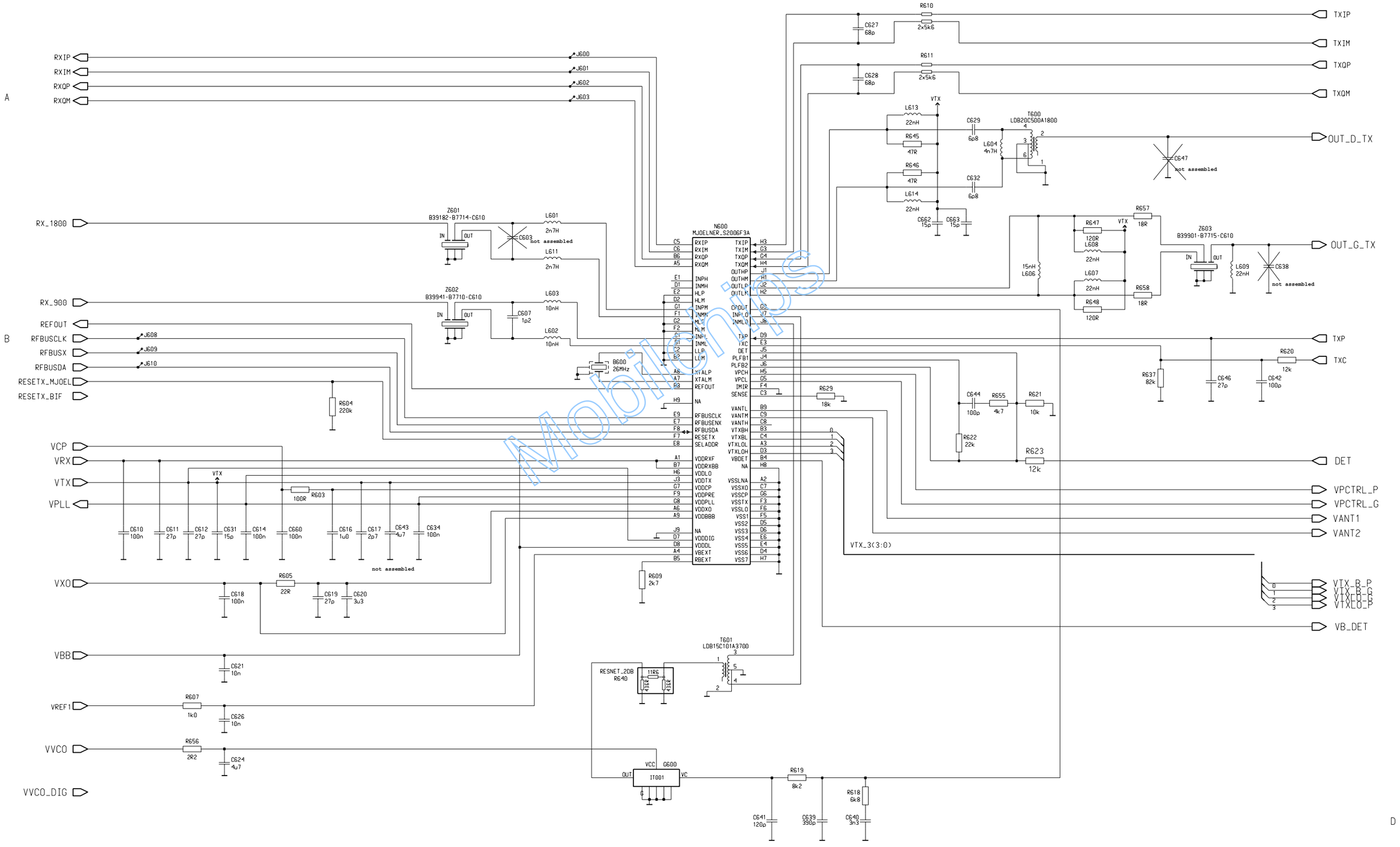
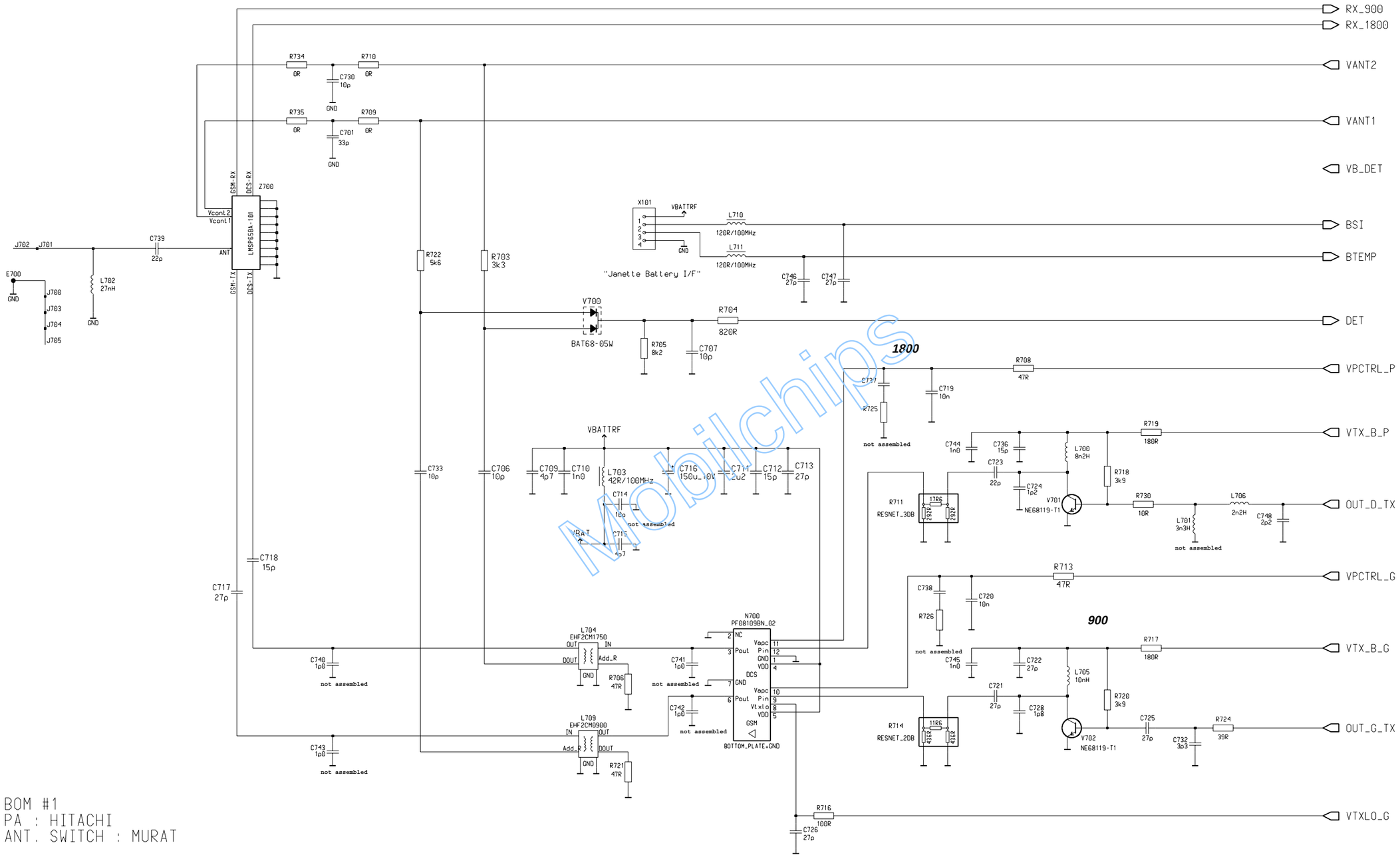
Schematics & manuals on www.mobilchips.com Mobilchips

Mjoelner


RXIP
RXIM
RXQP
RXQM
J600
J601
J602
J603
RX_1800
RX_900
REFOUT
RFBUSCLK
RFBUSX
RFBUSDA
RESETX_MJOEL
RESETX_BIF
J608
J609
J610
R604 220k
VCP
VRX
VTX
VPLL
VXO
VBB
VREF1
VVCO
VVCO_DIG
C610 100n
C611 27p
C612 27p
C631 15p
C614 100n
C660 100n
C616 1u0
C617 2p7
C643 4u7
C634 100n
not assembled
R603 100R
C618 100n
R605 22R
C619 27p
C620 3u3
C621 10n
R607 1k0
C626 10n
R656 2R2
C624 4u7
Z601 B39182-B7714-C610
Z602 B39941-B7710-C610
IN
OUT
L601 2n7H
C603 not assembled
L611 2n7H
L603 10nH
C607 1p2
L602 10nH
B600 26MHz
N600 MJOELNER_S2006F3A
RXIP
RXIM
RXQP
RXQM
INPH
INMH
HLP
HLM
INPM
INMM
MLP
MLM
INPL
INML
LLP
LLM
XTALP
XTALM
REFOUT
NA
RFBUSCLK
RFBUSENX
RFBUSDA
RESETX
SELADDR
VDDRXF
VDDRXBB
VDDLO
VDDTX
VDDCP
VDDPRE
VDDPLL
VDDXO
VDDBBB
VDDDIG
VDDDL
VBEXT
RBEXT
TXIP
TXIM
TXQP
TXQM
OUTHP
OUTHM
OUTLP
OUTLK
CPOUT
INPLLO
INMLO
TXP
TXC
DET
PLFB1
PLFB2
VPCH
VPCL
IMIR
SENSE
VANTL
VANTM
VANTH
VTXBH
VTXBL
VTXLOL
VTXLOH
VBDET
VSSLNA
VSSXO
VSSCP
VSSTX
VSSLO
VSS1
VSS2
VSS3
VSS4
VSS5
VSS6
VSS7
R609 2k7
R610 2x5k6
R611 2x5k6
C627 68p
C628 68p
R629 18k
L613 22nH
R645 47R
R646 47R
L614 22nH
C662 15p
C663 15p
C629 6p8
C632 6p8
T600 LDB20C500A1800
L604 4n7H
C647 not assembled
OUT_D_TX
VTX
VTX_3(3:0)
R647 120R
L608 22nH
L607 22nH
R648 120R
15nH L606
R657 18R
R658 18R
Z603 B39901-B7715-C610
L609 22nH
C638 not assembled
OUT_G_TX
R620 12k
R637 82k
C646 27p
C642 100p
C644 100p
R655 4k7
R621 10k
R622 22k
R623 12k
VPCTRL_P
VPCTRL_G
VANT1
VANT2
VTX_B_P
VTX_B_G
VTXLO_B
VTXLO_P
VB_DET
T601 LDB15C101A3700
RESNET_20B R640
11R6
4X33
4X33
G600
IT001
VC
R619 8k2
R618 6k8
C641 120p
C639 390p
C640 3n3
Modification

Power Amplifier



BOM #1
PA : HITACHI
ANT. SWITCH : MURAT

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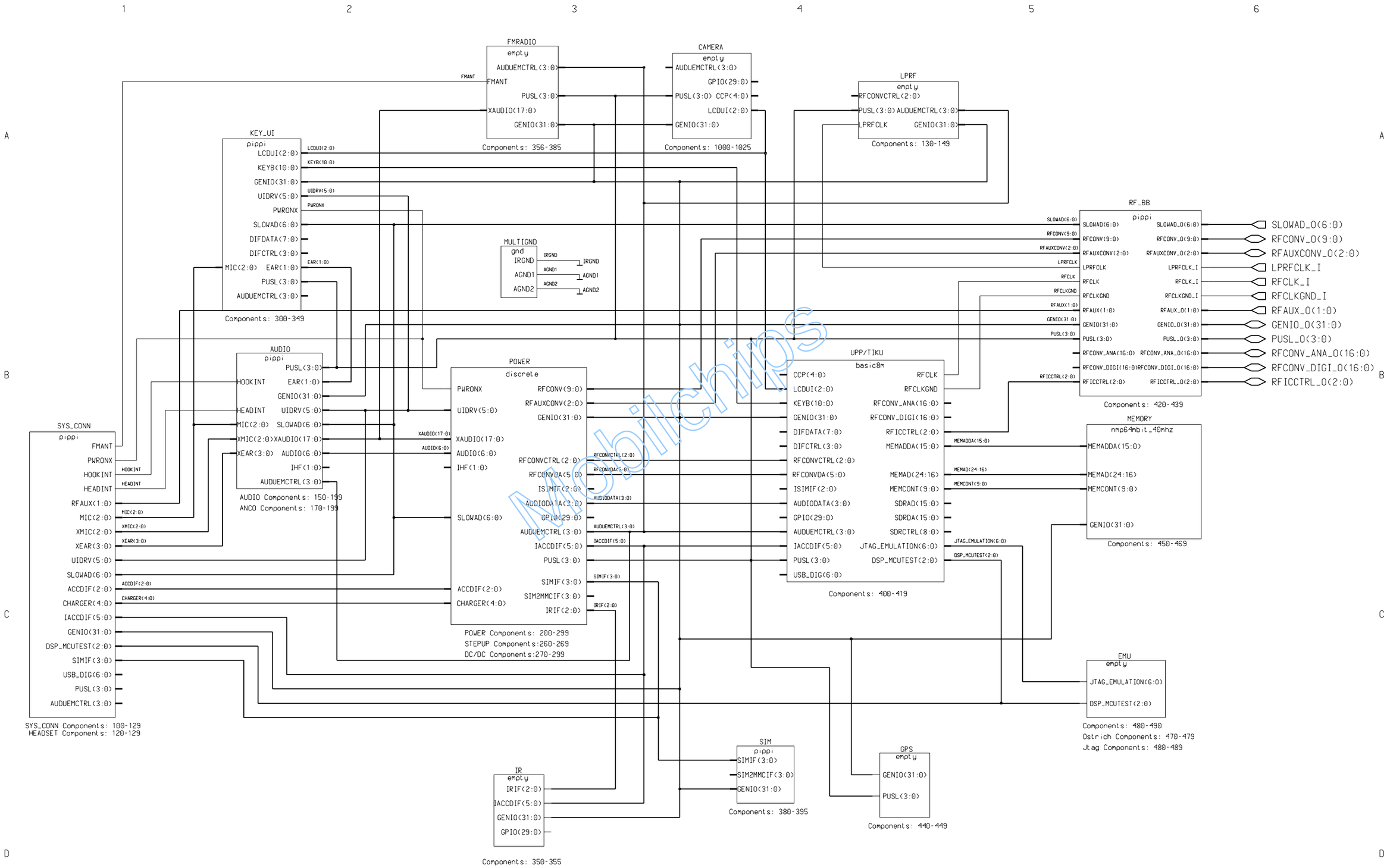
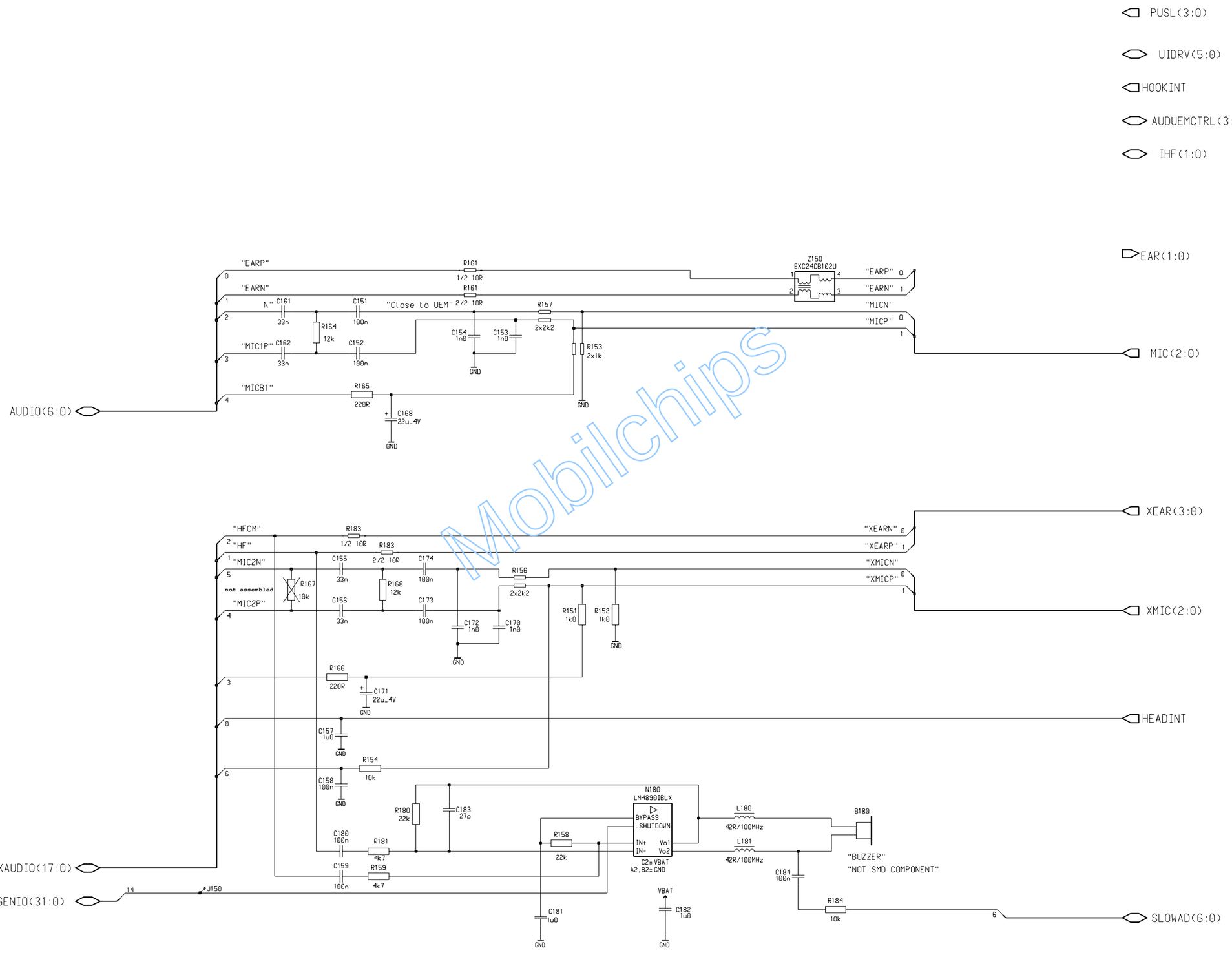
System



Mobile Schematics

Audio Interface



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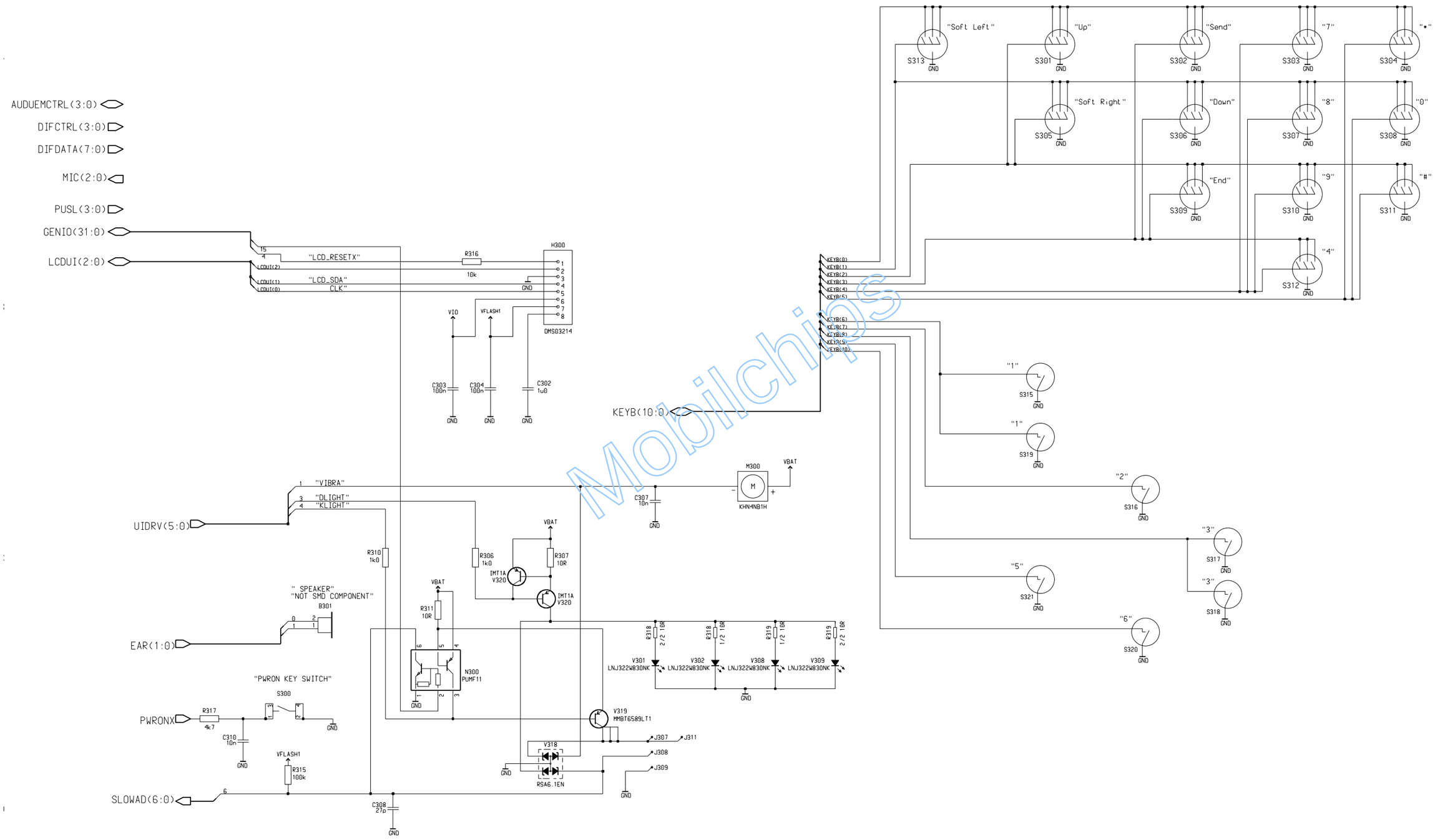
Key User Interface



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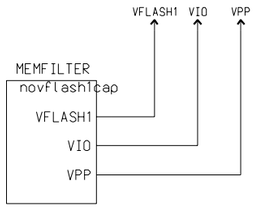
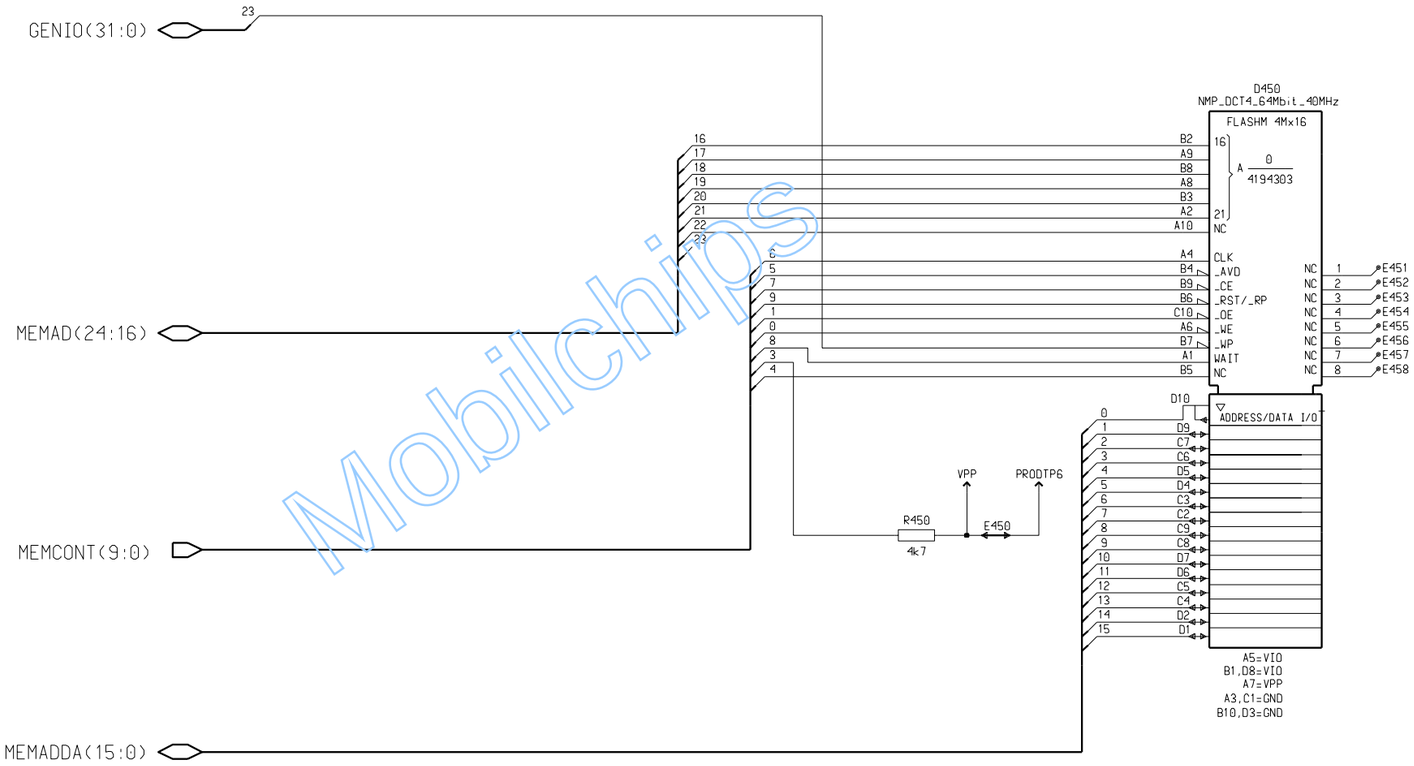
Flash Memory





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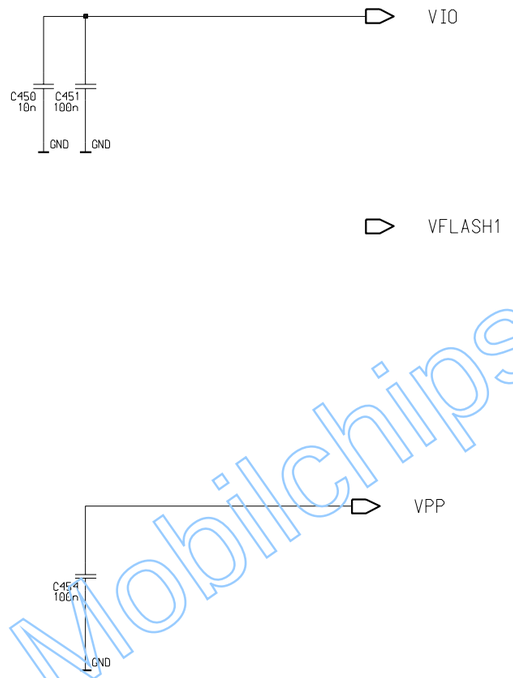
Memory filter



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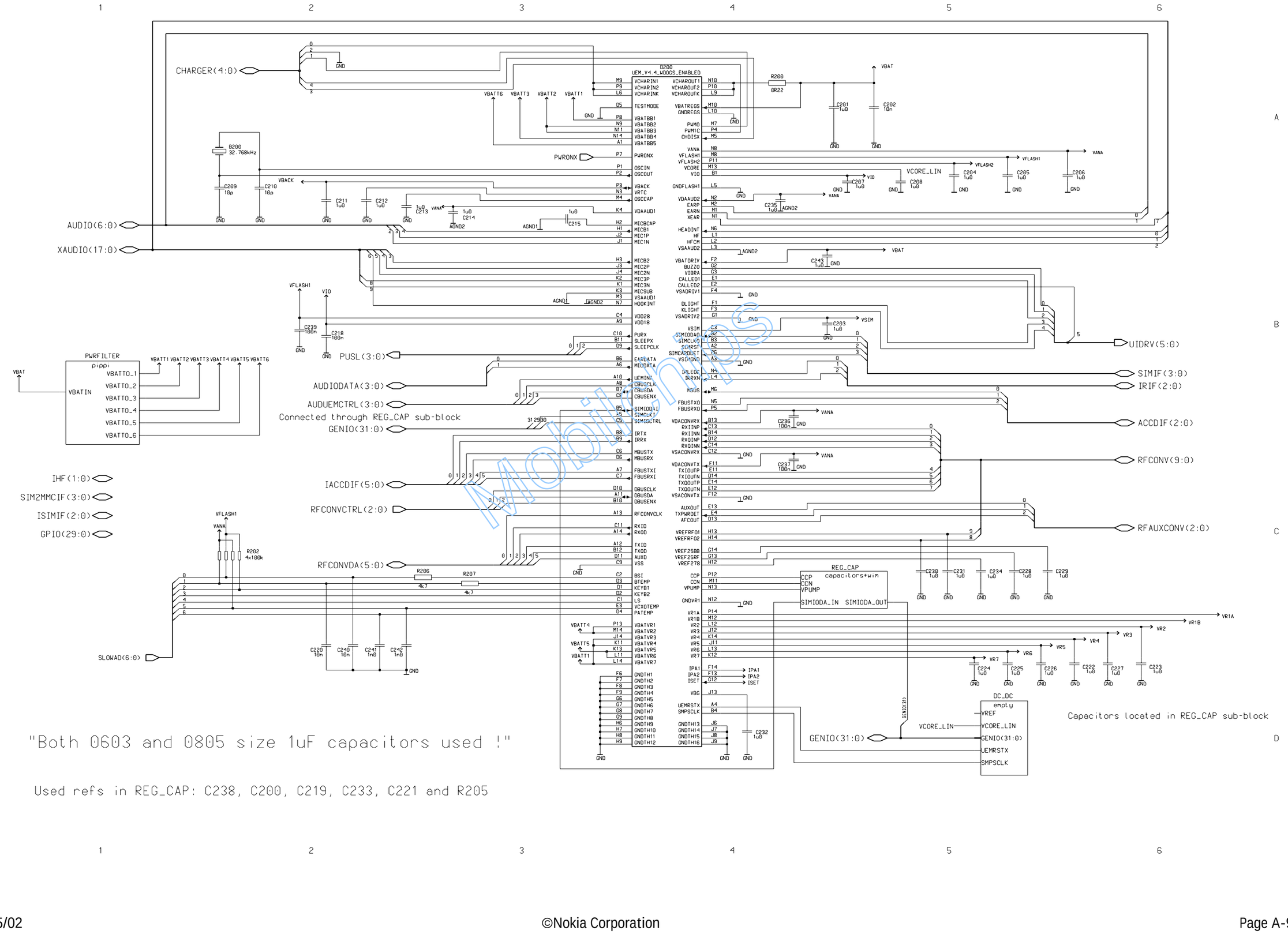
System - Discrete Power Mangement



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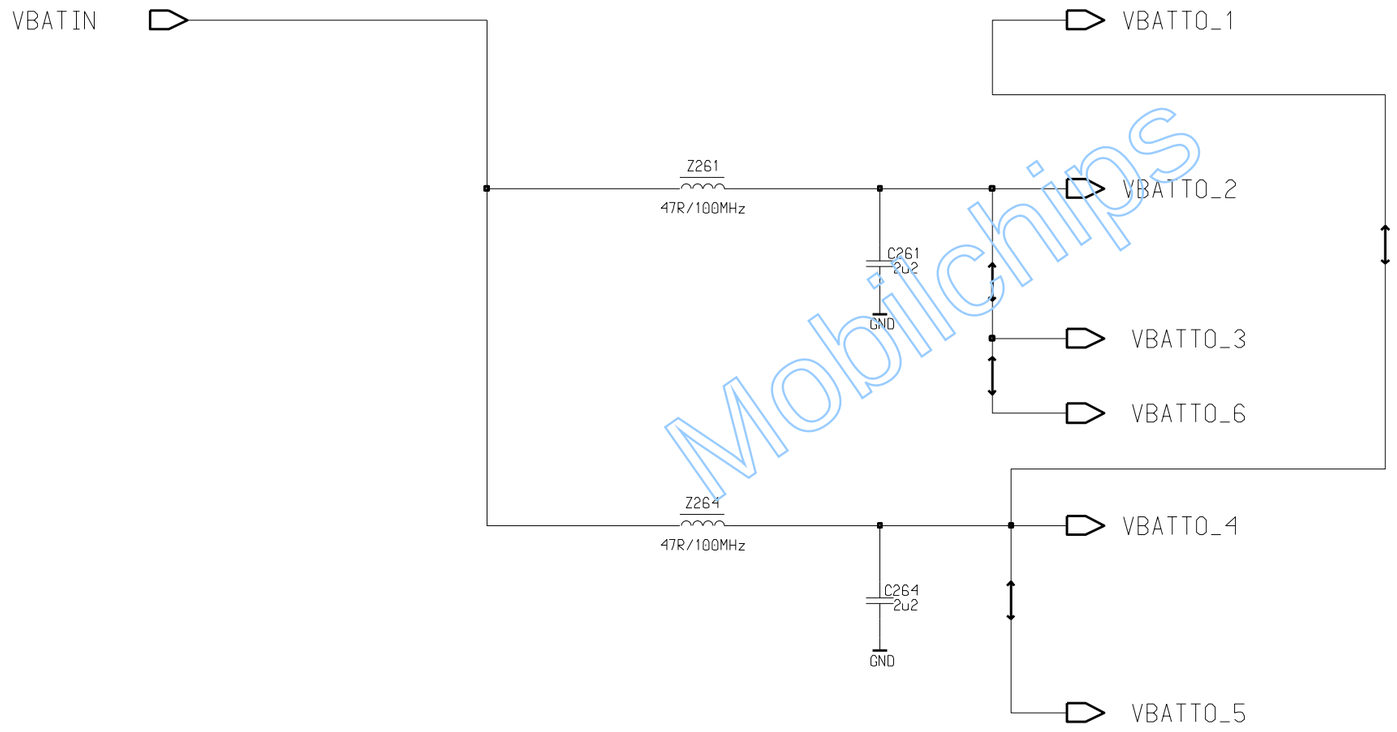
UEM Power filter



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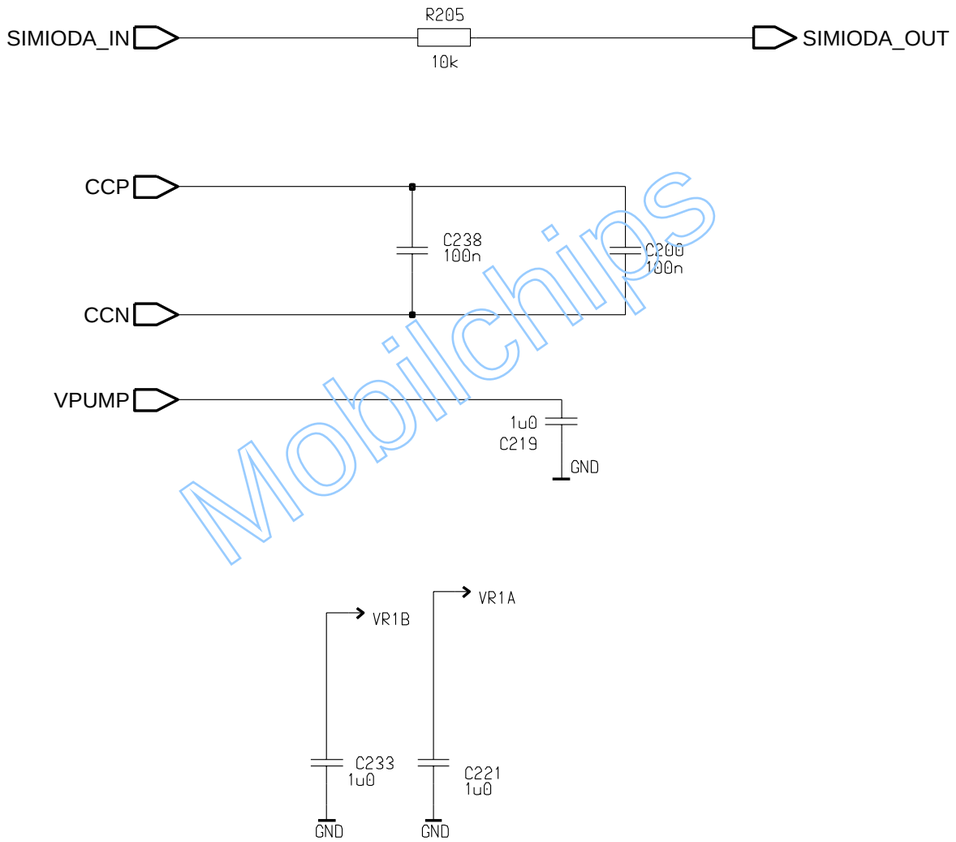
Charge Pump Capacitors



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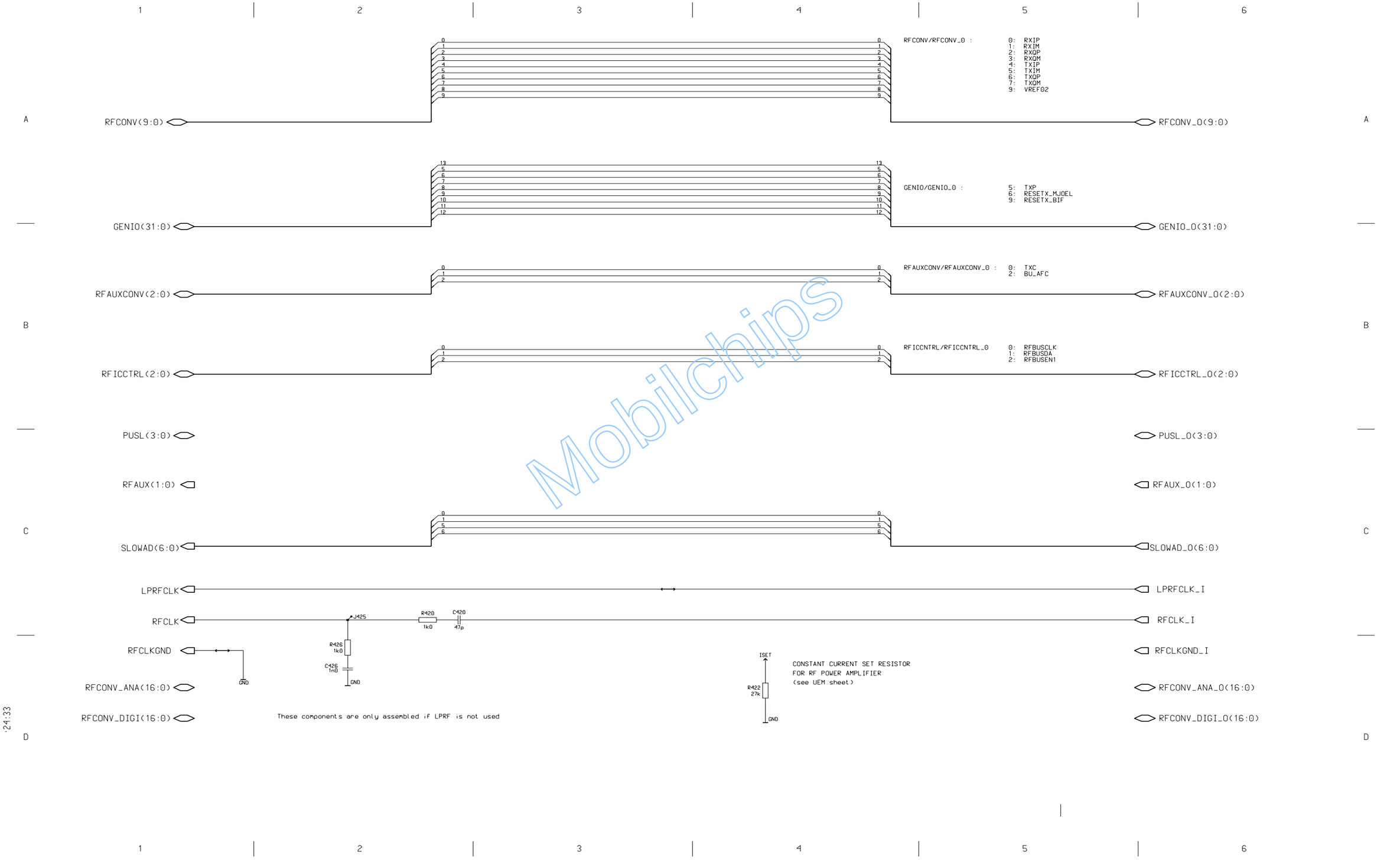
RF - BB Interface



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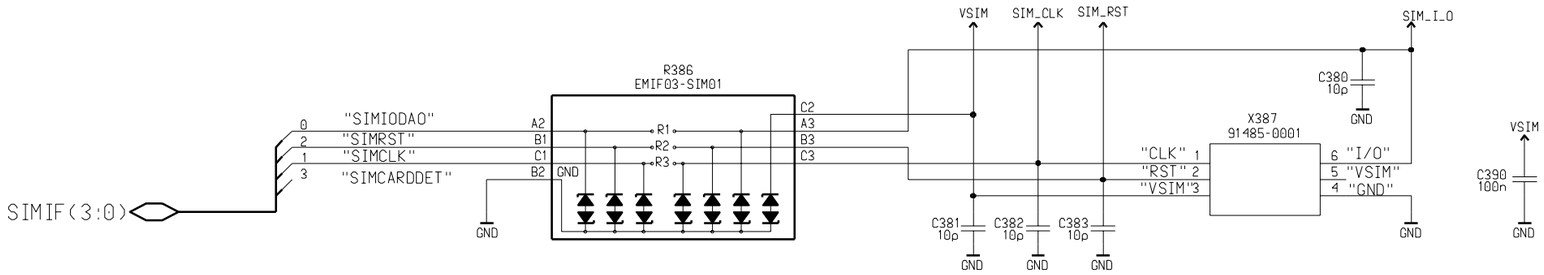
SIM Reader



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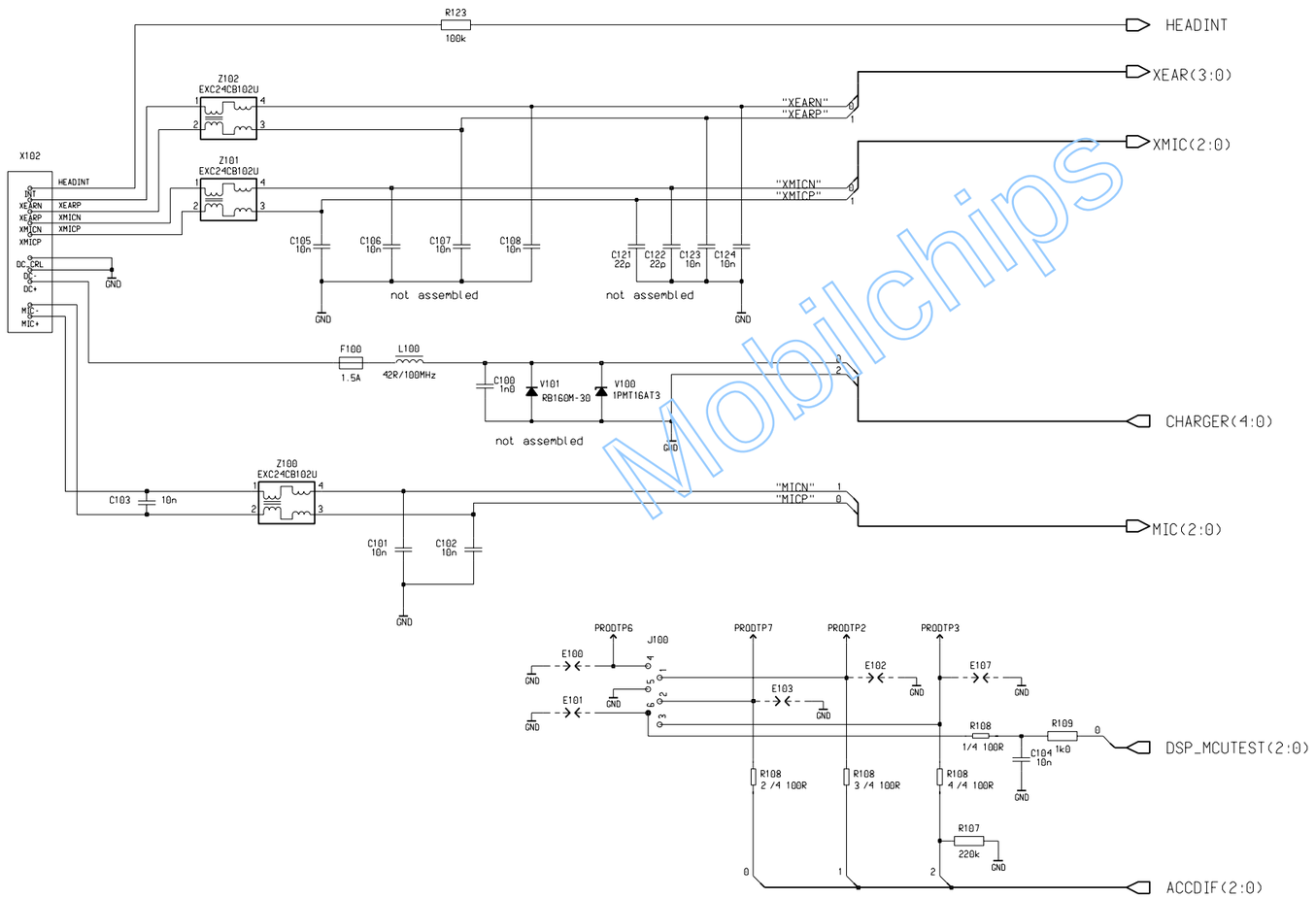
System Connector



UIDRV(5:0)
IACCDIF(5:0)
RFAUX(1:0)
PWRONX
SIMIF(3:0)
HOOKINT
GENIO(31:0)
FMANT
SLOWAD(6:0)
USB_DIG(6:0)
PUSL(3:0)
AUDUEMCTRL(3:0)

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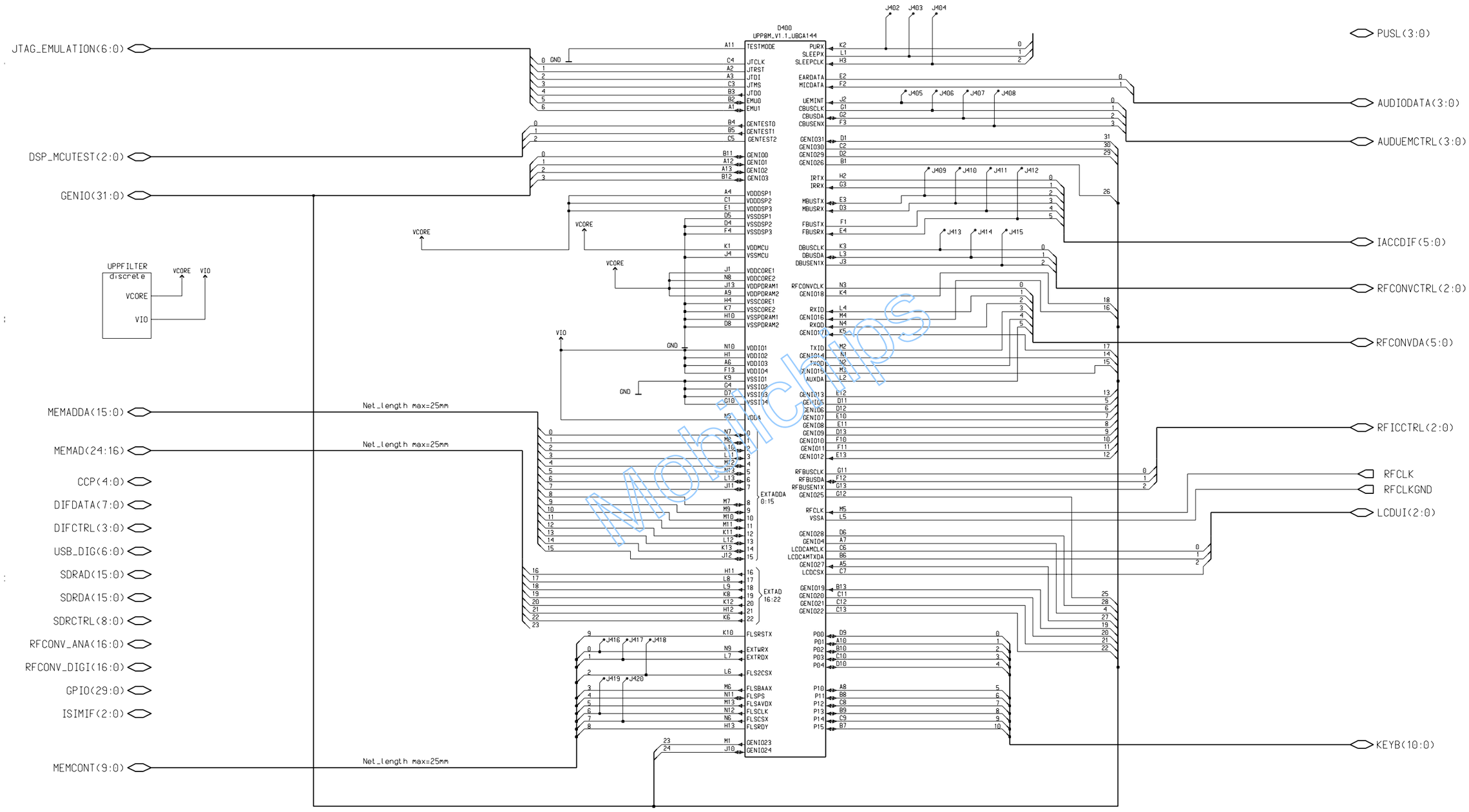
UPP



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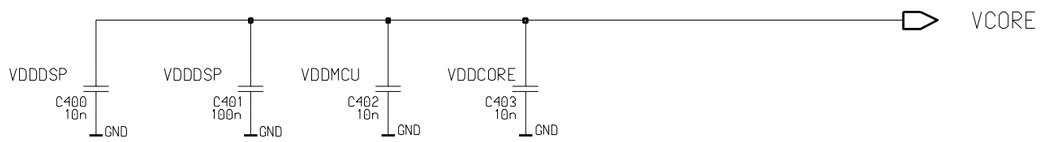
Discrete decoupling capacitors



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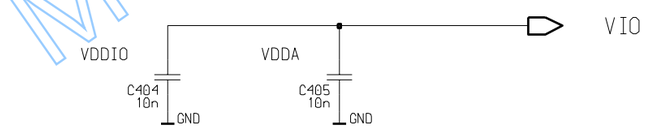
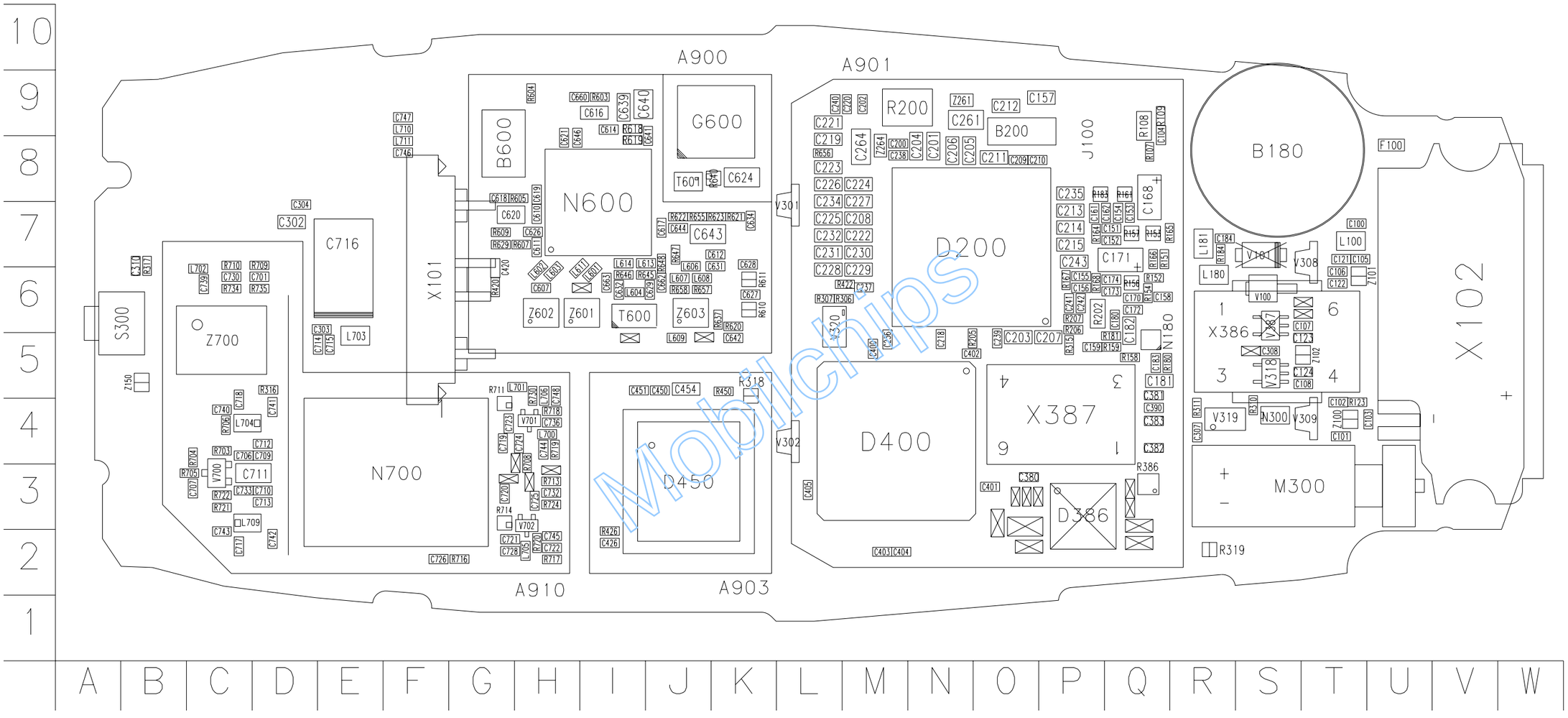


Layout Diagram of BF4A - Top


A900
A901
A910
A903
B600
G600
N600
T600
Z602
Z601
Z603
X101
C716
S300
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L703
N700
D450
D200
D400
X387
D386
B200
J100
C261
C212
C157
C168
C171
B180
F100
X102
V301
V302
V320
N180
X386
V318
V319
N300
V309
M300
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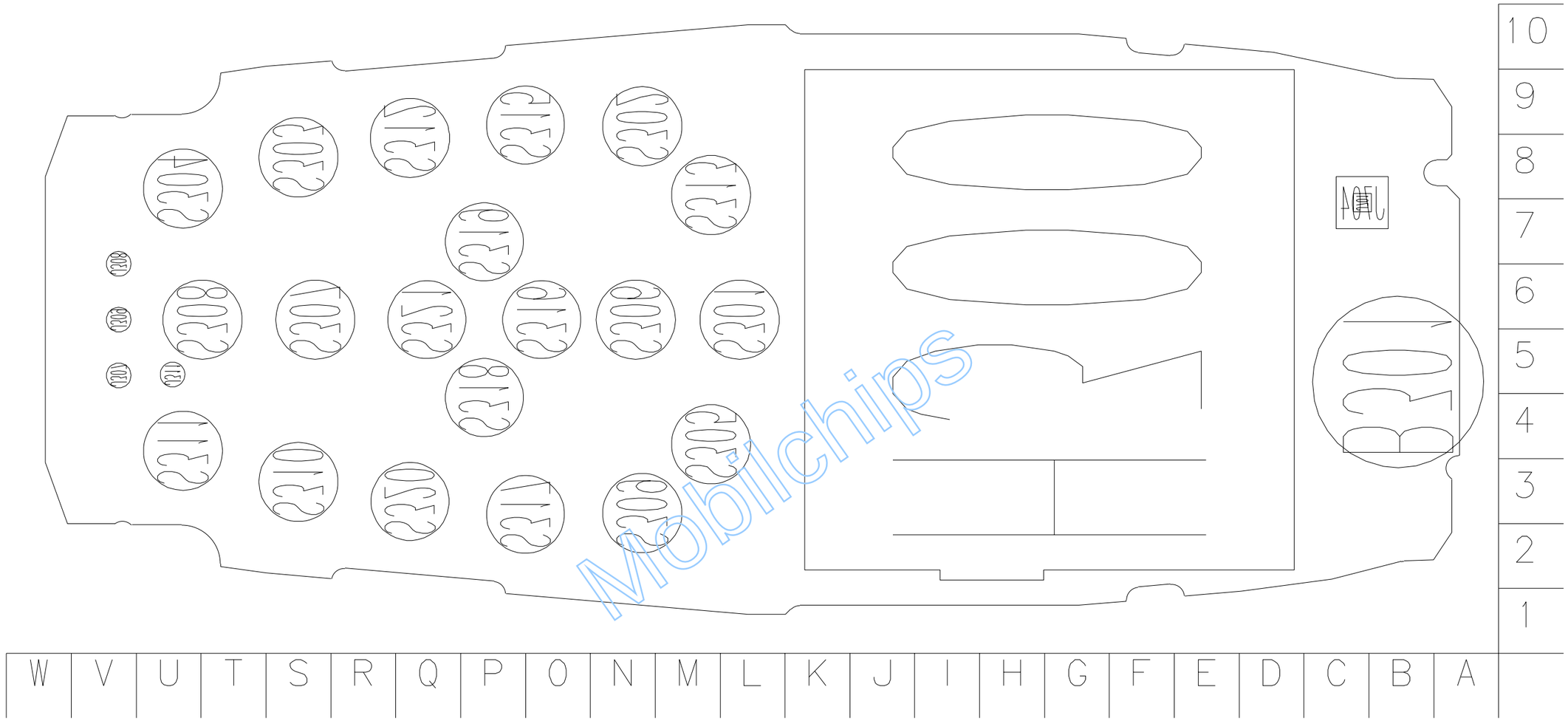
R258
R259
R260
R261

Layout Diagram of BF4A - Bottom



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