

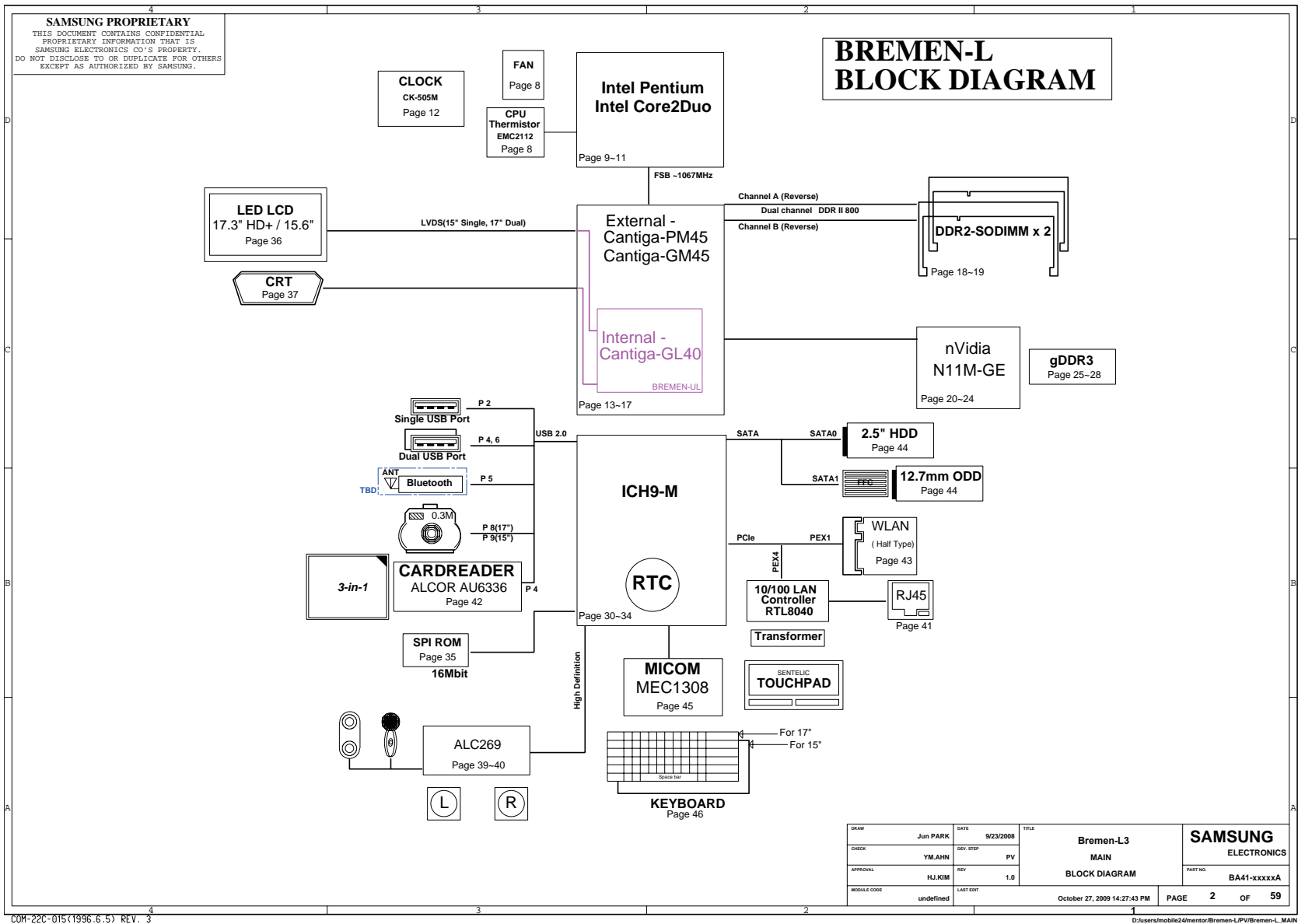
8. Block Diagram and Schematic

| SAMSUNG PROPRIETARY | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------|------------------------------|----------------------|--------|-------|----------|---------|----------|------------|-----------|-------------|-------------|--------------|------|----------------------|-----------------|---------|-------|--|-------------|-----------|------------------------------|--------------|
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| <h1>Bremen-L3</h1> | | | | | | | | | | | | | | | | | | | | | | | |
| CPU : Intel Penryn | | | | | | | | | | | | | | | | | | | | | | | |
| Chip Set : Intel Cantiga & ICH9M | | | | | | | | | | | | | | | | | | | | | | | |
| Remarks : Montevina Platform | | | | | | | | | | | | | | | | | | | | | | | |
| <div>Model Name : Bremen-L3</div> <div>PBA Name : MAIN</div> <div>PCB Code : GCE : BA41-01226A</div> <div>NY : BA41-01227A</div> <div>HST : BA41-01228A</div> <div>Dev. Step : PV</div> <div>Revision : 1.0</div> <div>T.R. Date : 2009.10.27</div> | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"><thead><tr><th>Design</th><th>CHECK</th><th>APPROVAL</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table> | | | | Design | CHECK | APPROVAL | | | | | | | | | | | | | | | | | |
| Design | CHECK | APPROVAL | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Owner : SEC Mobile R & D Signature : X | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"><thead><tr><th>DESIGN</th><th>DATE</th><th>TITLE</th><th>SAMSUNG</th></tr></thead><tbody><tr><td>Jun PARK</td><td>10/10/2008</td><td>Bremen-L3</td><td>ELECTRONICS</td></tr><tr><td>CHECK YMAHN</td><td>DEV. STEP PV</td><td>MAIN</td><td>PART NO. BA41-xxxxxA</td></tr><tr><td>APPROVAL HJ.KIM</td><td>REV 1.0</td><td>COVER</td><td></td></tr><tr><td>MOBILE CODE</td><td>LAST EDIT</td><td>October 27, 2009 14:27:43 PM</td><td>PAGE 1 OF 59</td></tr></tbody></table> | | | | DESIGN | DATE | TITLE | SAMSUNG | Jun PARK | 10/10/2008 | Bremen-L3 | ELECTRONICS | CHECK YMAHN | DEV. STEP PV | MAIN | PART NO. BA41-xxxxxA | APPROVAL HJ.KIM | REV 1.0 | COVER | | MOBILE CODE | LAST EDIT | October 27, 2009 14:27:43 PM | PAGE 1 OF 59 |
| DESIGN | DATE | TITLE | SAMSUNG | | | | | | | | | | | | | | | | | | | | |
| Jun PARK | 10/10/2008 | Bremen-L3 | ELECTRONICS | | | | | | | | | | | | | | | | | | | | |
| CHECK YMAHN | DEV. STEP PV | MAIN | PART NO. BA41-xxxxxA | | | | | | | | | | | | | | | | | | | | |
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| MOBILE CODE | LAST EDIT | October 27, 2009 14:27:43 PM | PAGE 1 OF 59 | | | | | | | | | | | | | | | | | | | | |

COM-220-015(1996.6.5) REV. 3

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8. Block Diagram and Schematic



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BOARD INFORMATION

SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

I²C / SMB Address

| Devices | Address | Hex | Bus |
|---------------------------|-----------|-----|------------------------------------|
| ICH9M Master | | | |
| CK-505M (Clock Generator) | 1101 001X | D2h | Clock, Unused Clock Output Disable |
| SODIMM0 | 1010 000X | A0h | - |
| SODIMM1 | 1010 001X | A4h | - |
| MICOM Master | | | |
| BATTERY | 0001 011X | 16h | - |
| EMC2102 | 0111 101X | 7Ah | - |

USB PORT Assignment

| Port Number | ASSIGNED TO | Port Number | ASSIGNED TO |
|-------------|-------------------------|-------------|-------------------------|
| UHCL_0 | 1 USB PORT (RIGHT, SUB) | UHCL_3 | 6 USB PORT (RIGHT, SUB) |
| UHCL_1 | 2 USB PORT (LEFT) | UHCL_4 | 9 CAMERA(17") |
| UHCL_2 | 4 CARD READER(AU6336) | UHCL_5 | 10 CAMERA(15") |
| | 5 BLUETOOTH(TBD) | | 11 |

SATA Assignment

| Port Number | ASSIGNED TO | Port Number | ASSIGNED TO |
|-------------|-------------|-------------|-------------|
| SATA0 | HDD | SATA1 | ODD |
| SATA2 | - | SATA3 | - |

PCI EXPRESS Assignment

| Port Number | ASSIGNED TO | Port Number | ASSIGNED TO |
|-------------|-------------|-------------|-------------|
| PCle1 | WLAN | PCle2 | Wired LAN |
| PCle3 | - | PCle4 | - |

Crystal / Oscillator

| TYPE | FREQUENCY | DEVICE | USAGE |
|---------|-----------|-----------------|-------|
| Crystal | 32.768KHz | ICH9-M | |
| Crystal | 10MHz | MICOM | |
| Crystal | 14.318MHz | CLOCK-Generator | |
| Crystal | 25MHz | LAN | |

Voltage Rails

| Power Rail | Descriptions | Power Rail | Descriptions |
|------------------------|--|-------------------|--|
| VDC_ADPT | Primary DC system power supply (9 to 19V) | P1.05V_PEG | P1.05V (Direct Media Interface Compensation) |
| VDC | Charger Reference Voltage Source | P5.0V | 5.0V Power Rail (off in S3-S5) |
| VDC_CHG | 3.3V supply for the RTC well. | P3.3V | 3.3V Power Rail (off in S3-S5) |
| PRTC_BAT | 5.0V always power well | P1.05 | 1.05V Power Rail (off in S3-S5) |
| P5.0V_ALW | 12.0V always power well | P0.9V | DDR2 Termination |
| P12.0V_ALW | Power Chip Reference | P5.0V_AUX | 5.0V Power Rail (off in S4-S5) |
| P1.7V_VREF | Power Chip Reference | P3.3V_AUX | 3.3V Power Rail (off in S4-S5) |
| P2.0V_VREF | Power Chip Reference | P1.8_AUX | 1.8V Power Rail (off in S4-S5) |
| P5.0V_VREF_FILT | Power Chip Reference | CPU_CORE | Core Voltage for CPU |
| | | | |
| P3.3V_MICOM | Output voltage of RT8205AGQW (if VDC is removed, it will be off) | AUD_P5V | 5.0V supply for Audio |
| LCD_VDD3V | 3.3V (LED LCD) | P4.75V_AUD | Audio Analog Voltage |
| KBC3_CHG4.2V | To charge battery | P5.0V_STB | To charge USB device at sleep status |
| | | P5.0V_ODD | 5.0V supply at SUB_ODD Board |
| P1.2V_LAN | Internal Regulator's Power of LAN Controller | EGFX_CORE | nVidia Graphic Chip power |
| P2.5V_LAN | | P1.5V | 1.5V Power Rail (off in S3-S5) |
| P3.3V_MCD | | P1.5_AUX | 1.5V Power Rail (off in S4-S5) |
| | | P1.8V | 1.8V Power Rail (off in S3-S5) |

Power source of External

REVISION HISTORY

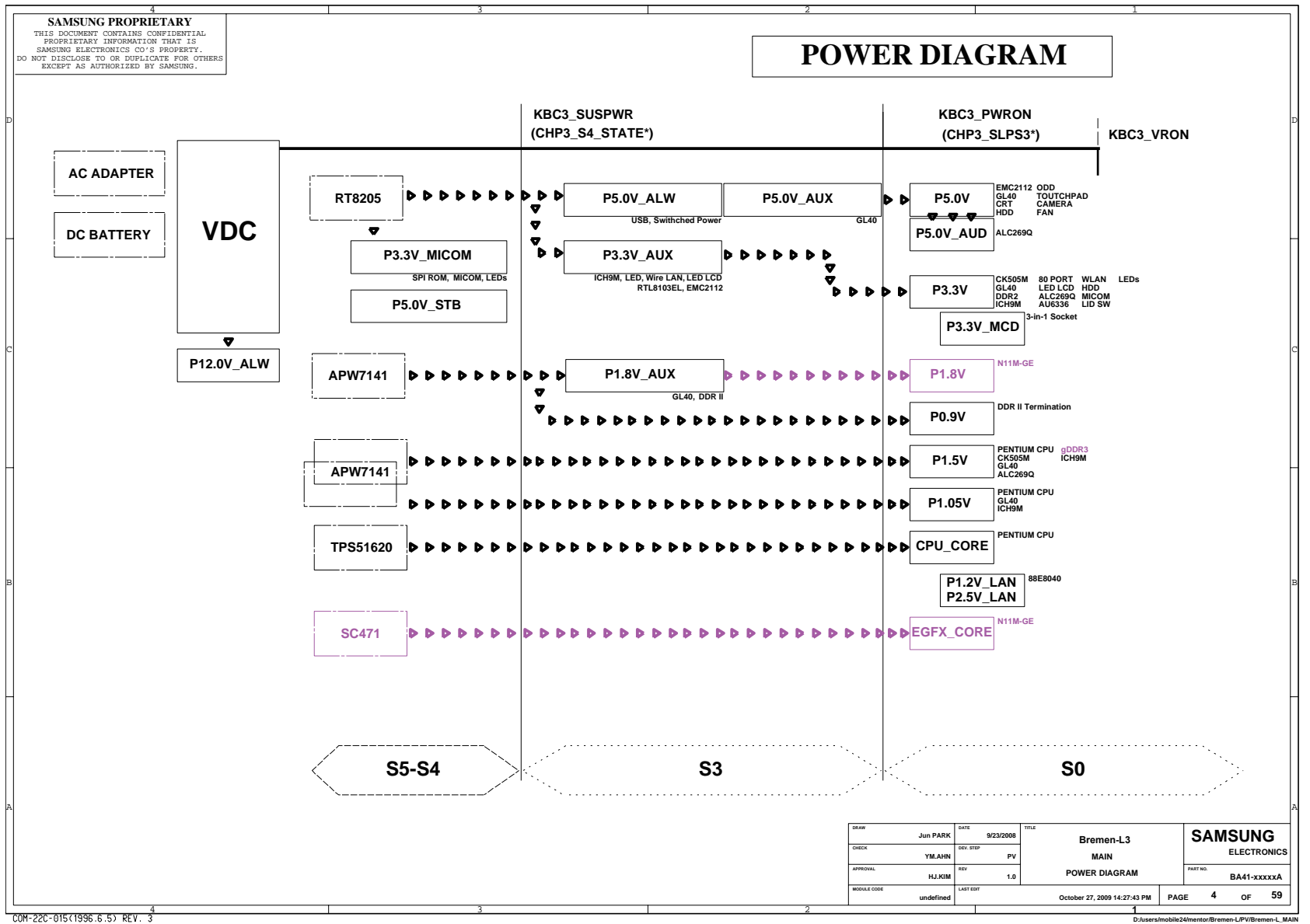
See rev notes for more information.

| | | | | | | | | |
|-------------|-----------|-----------|------------------------------|-------|------------|---|-------------|-------------|
| DRAW | Jun PARK | DATE | 9/23/2008 | TITLE | Bremen-L3 | | SAMSUNG | |
| CHECK | YMAHN | REV. STEP | PV | | MAIN | | ELECTRONICS | |
| APPROVAL | HJ.KIM | REV | 1.0 | | BOARD INFO | | PART NO. | BA41-xxxxxA |
| MODULE CODE | undefined | LAST EDIT | October 27, 2009 14:27:43 PM | | PAGE | 3 | OF | 59 |

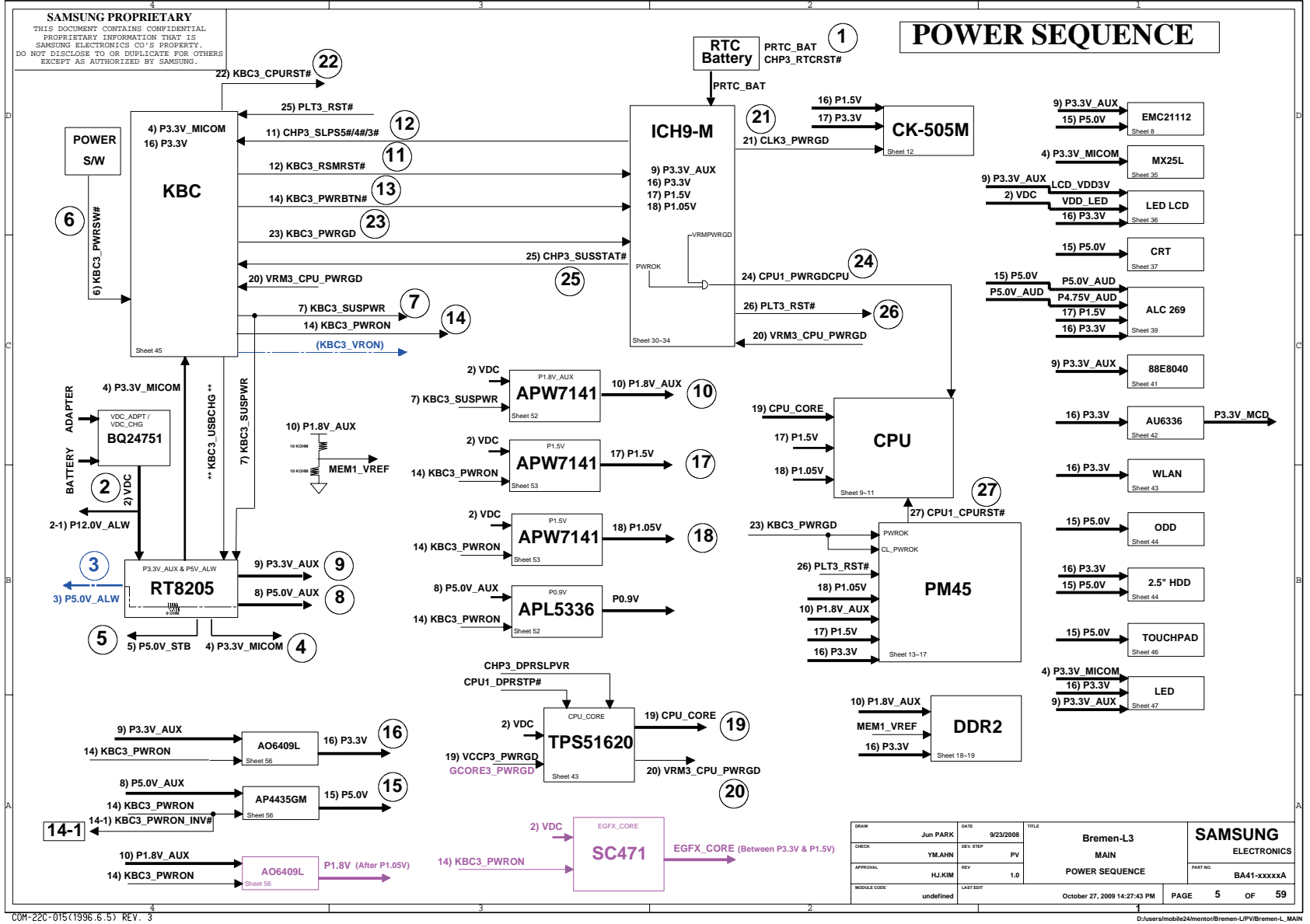
COM-22C-015(1996.6.5) REV. 3

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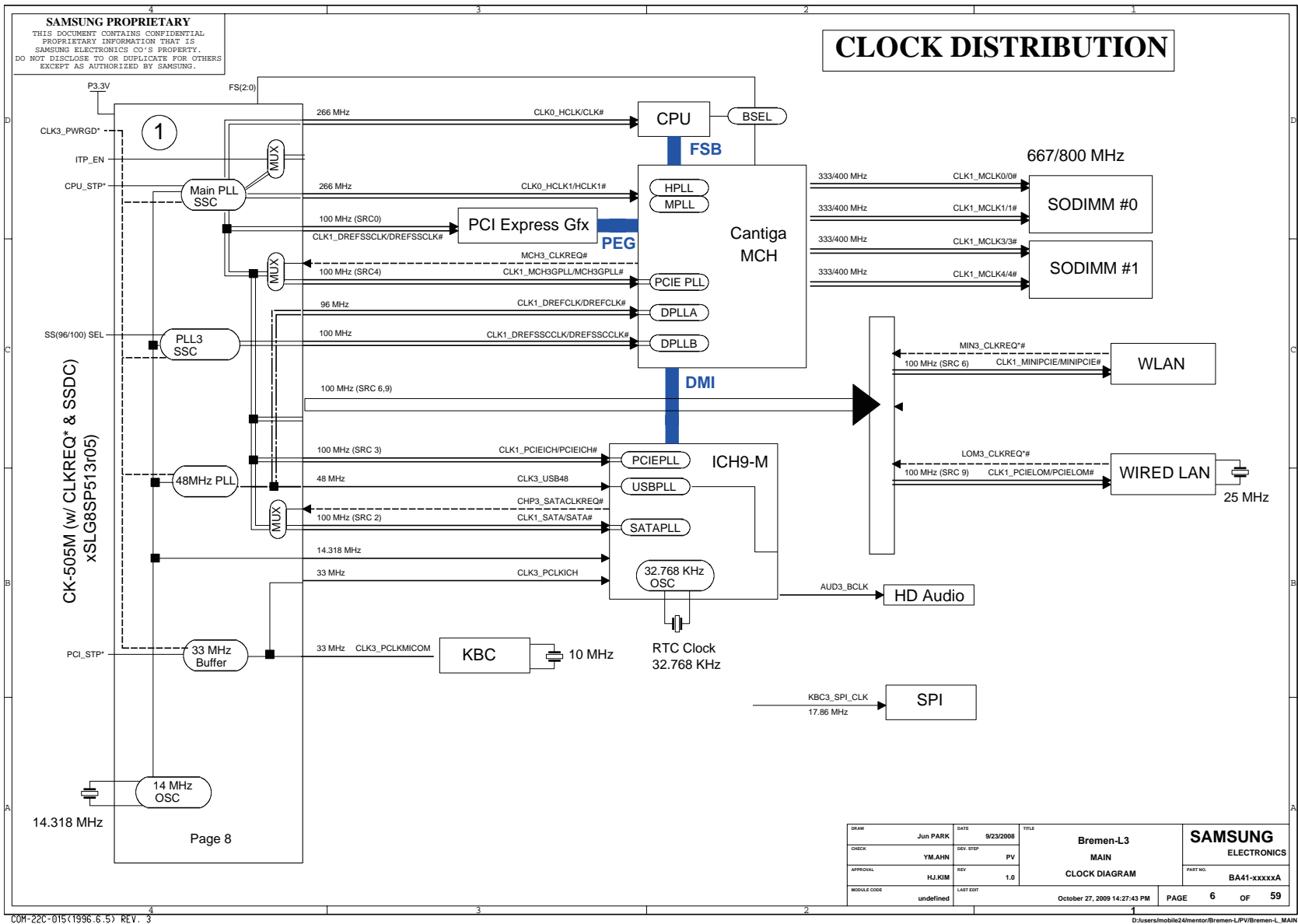
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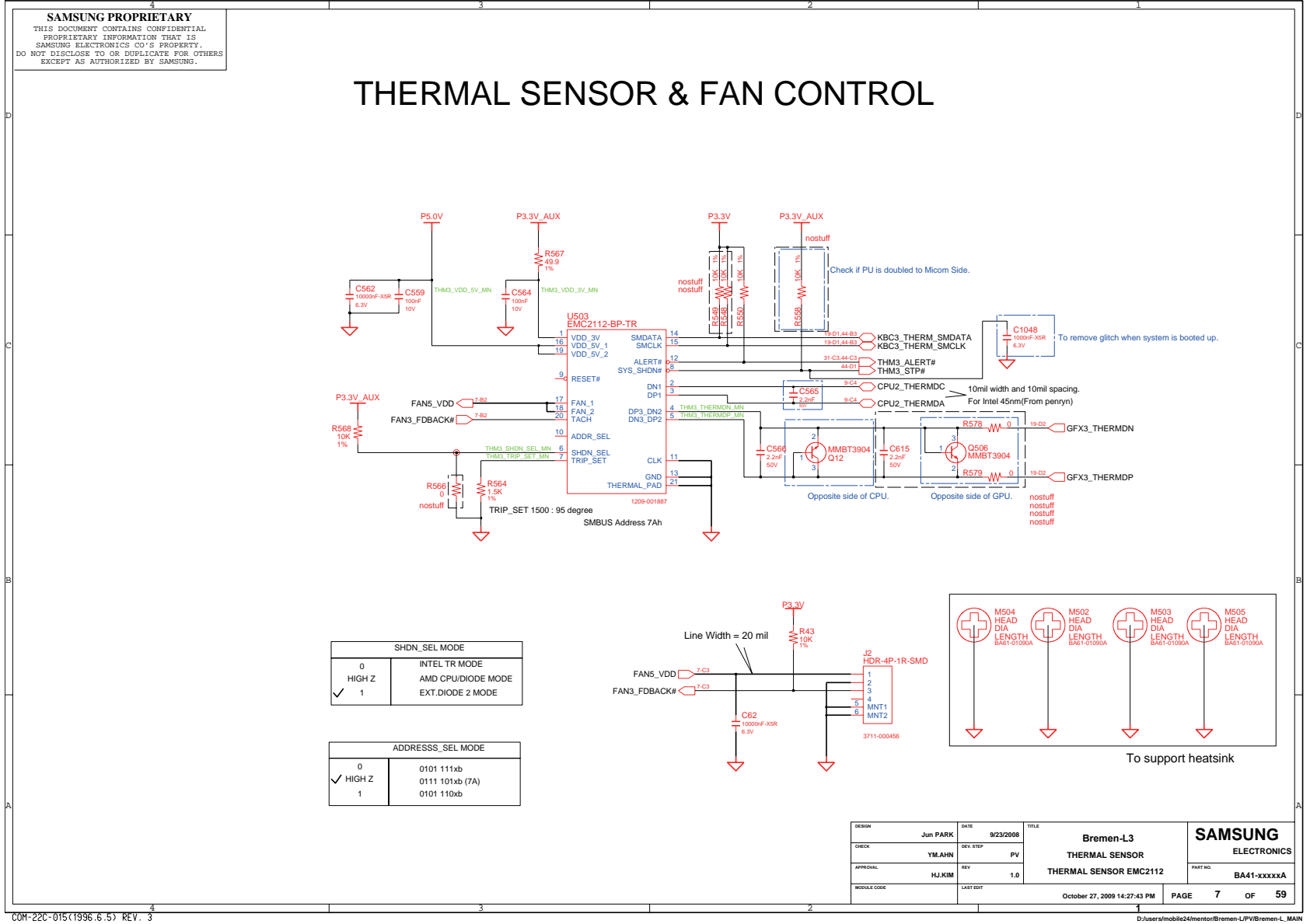
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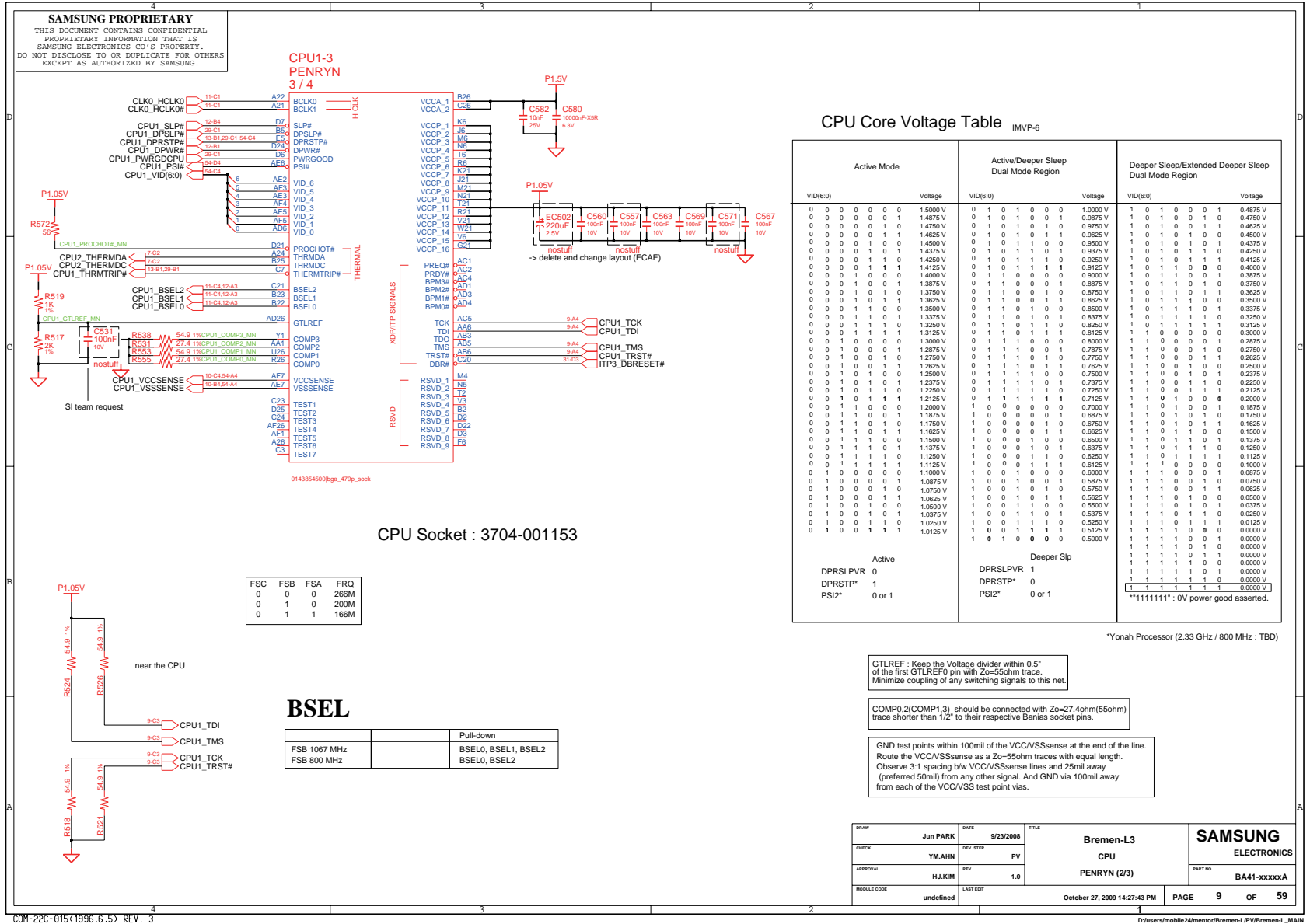


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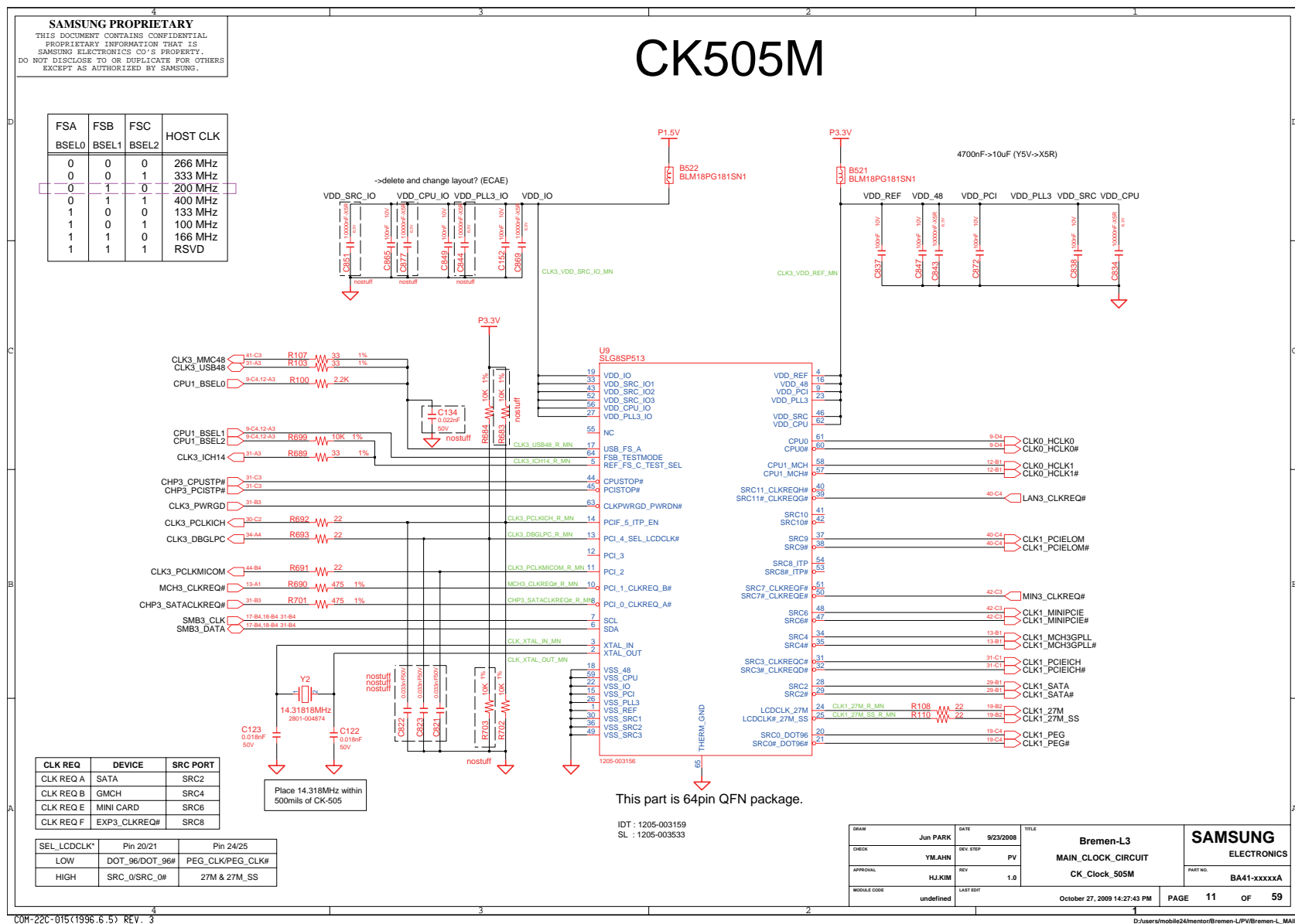
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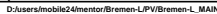
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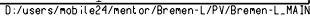
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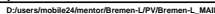


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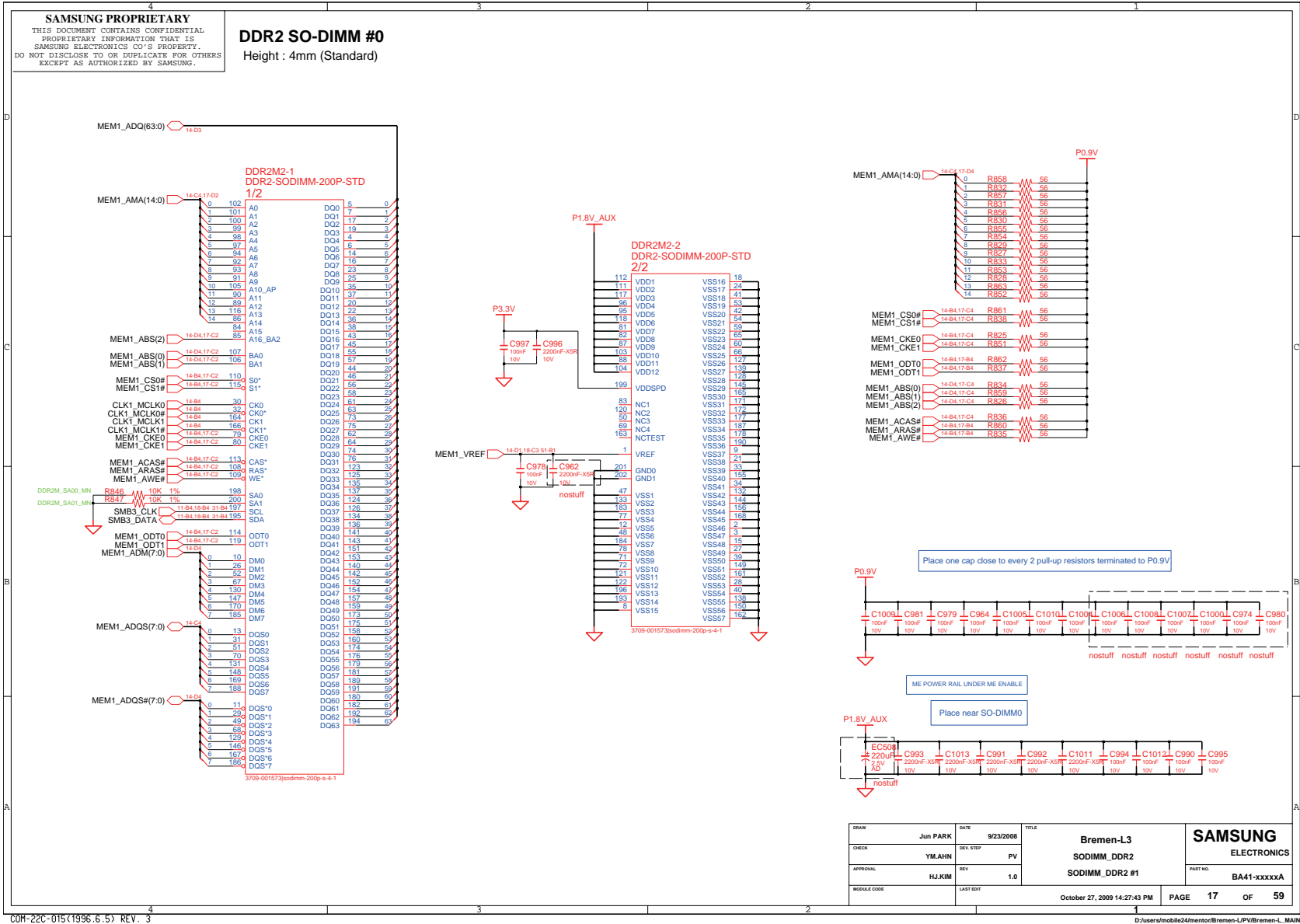








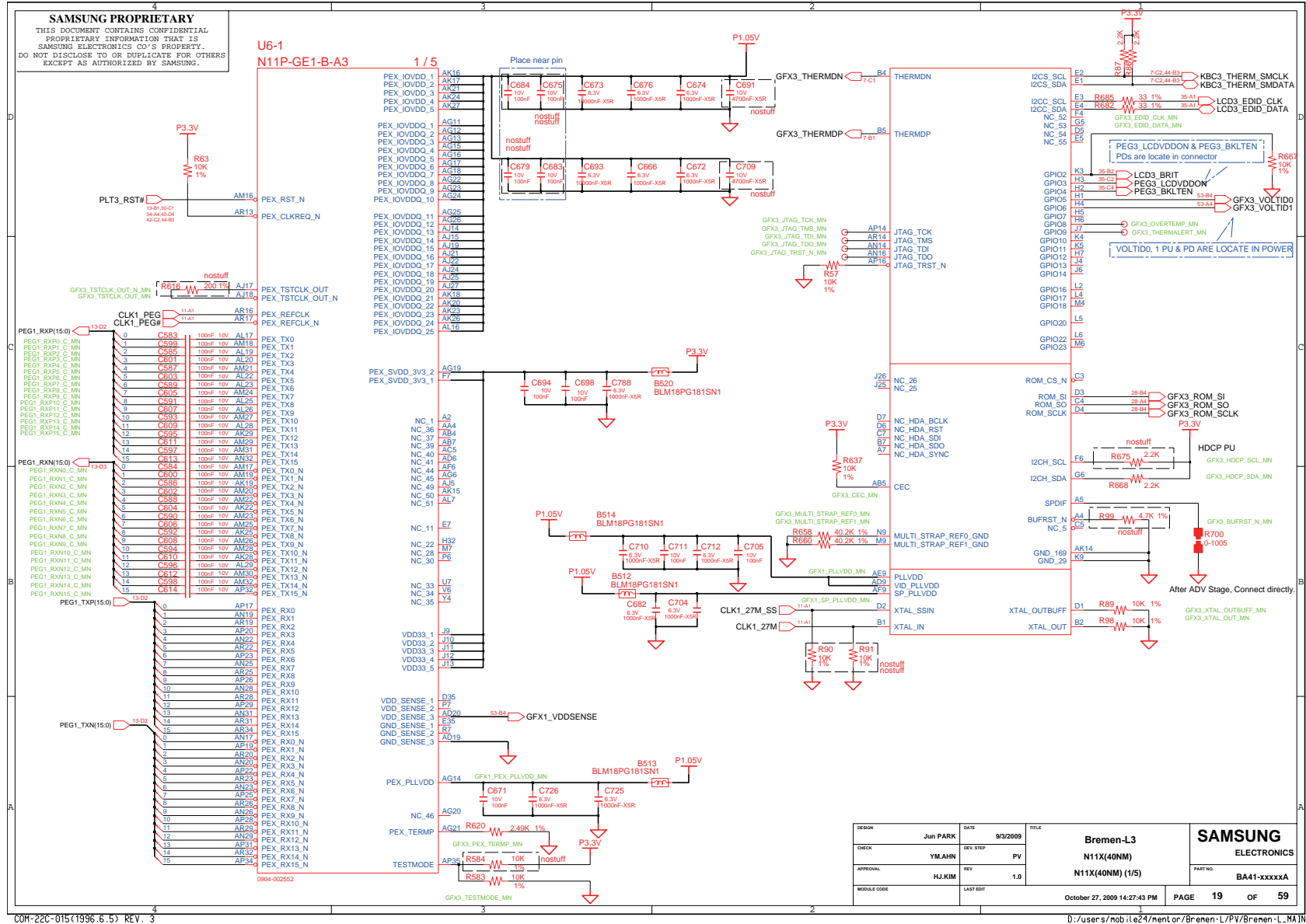
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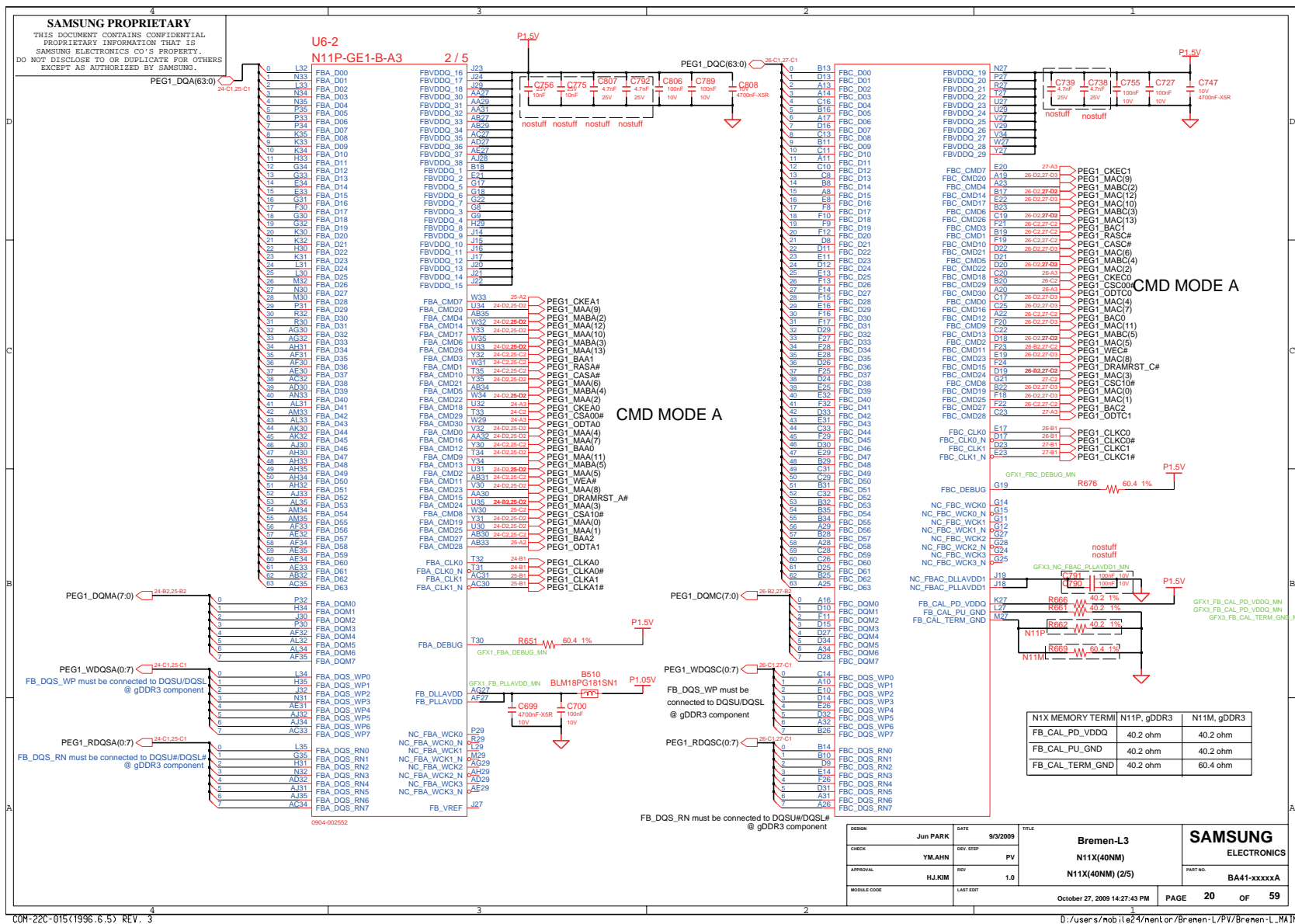
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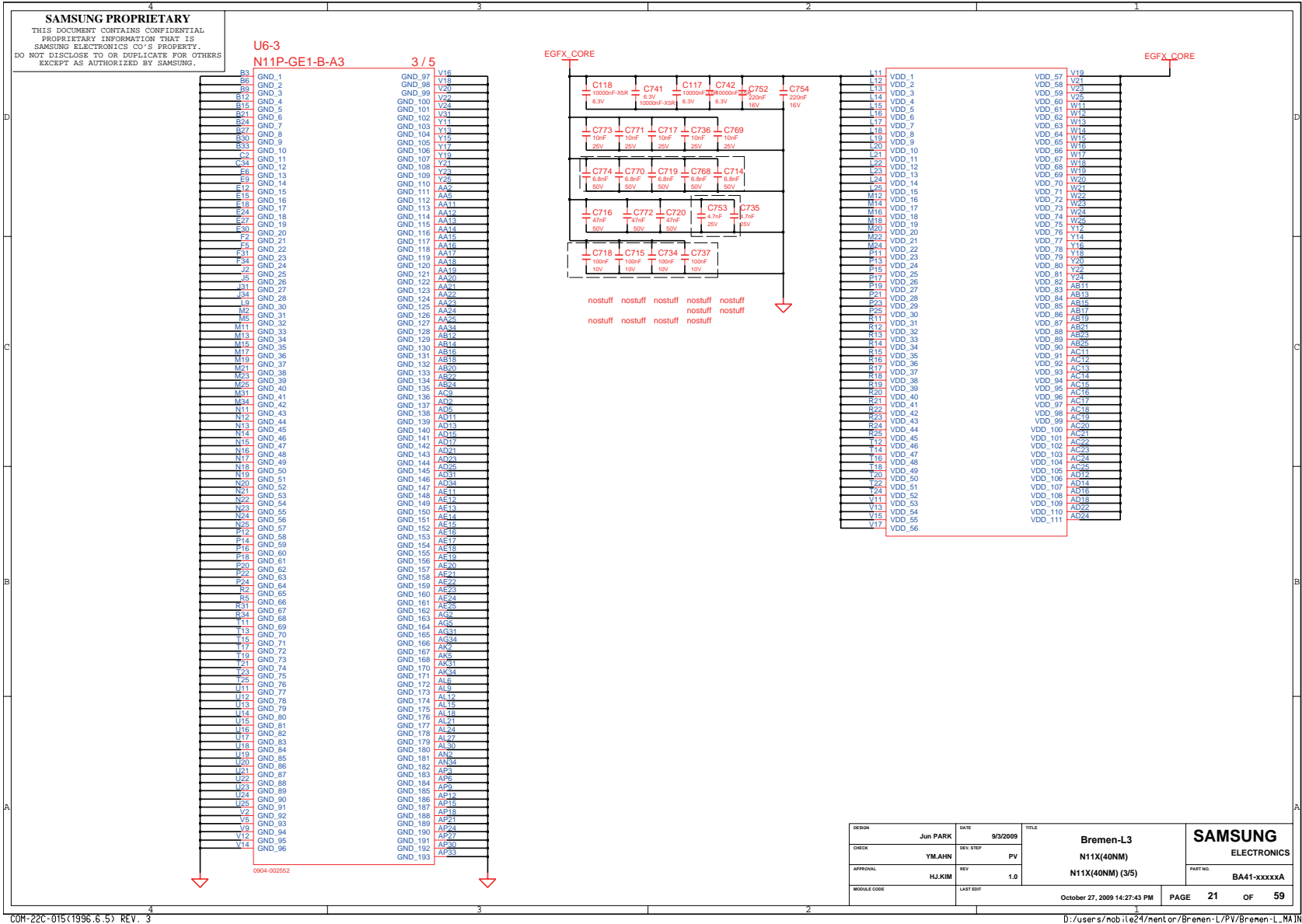
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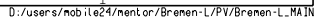


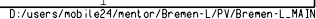
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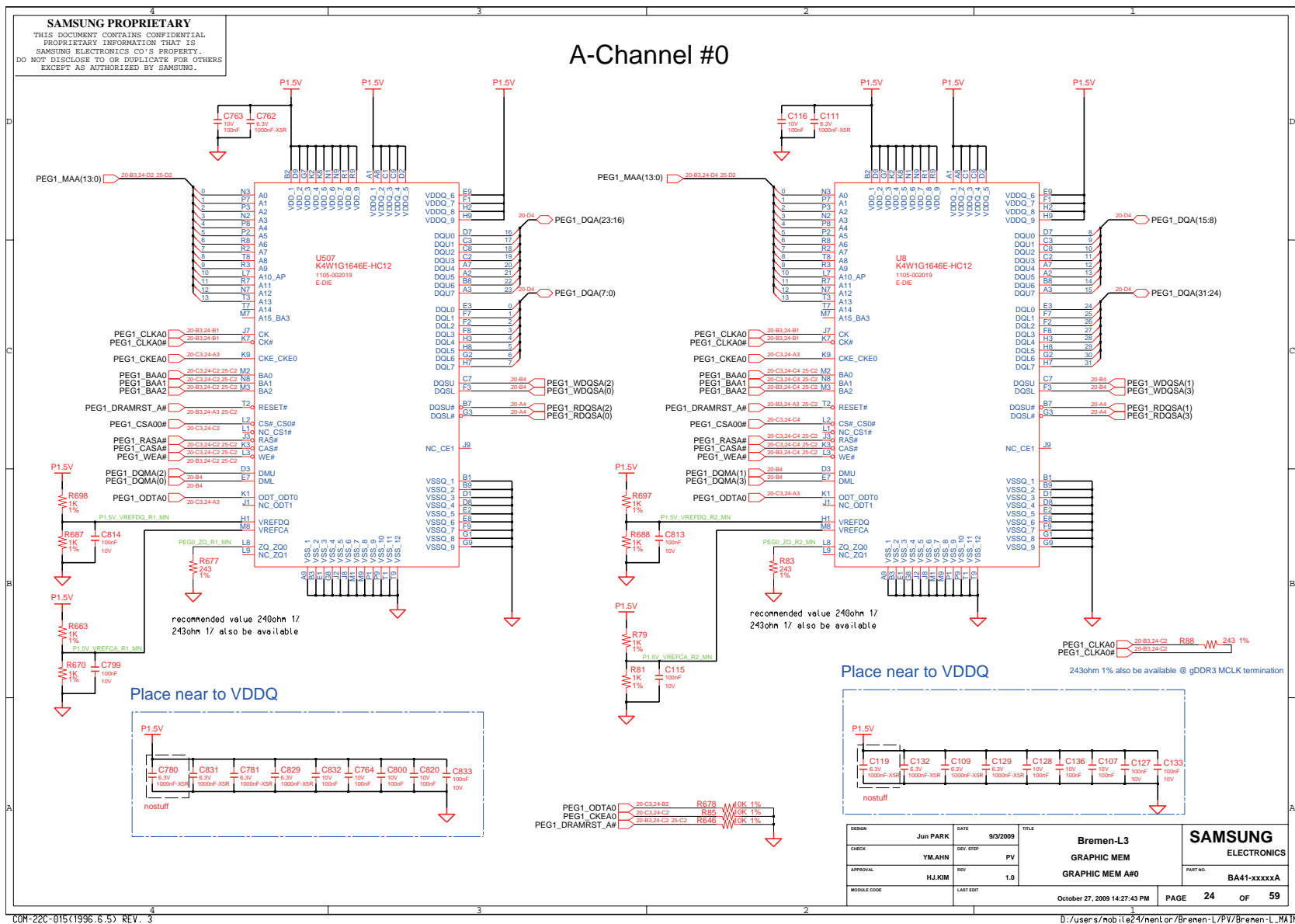
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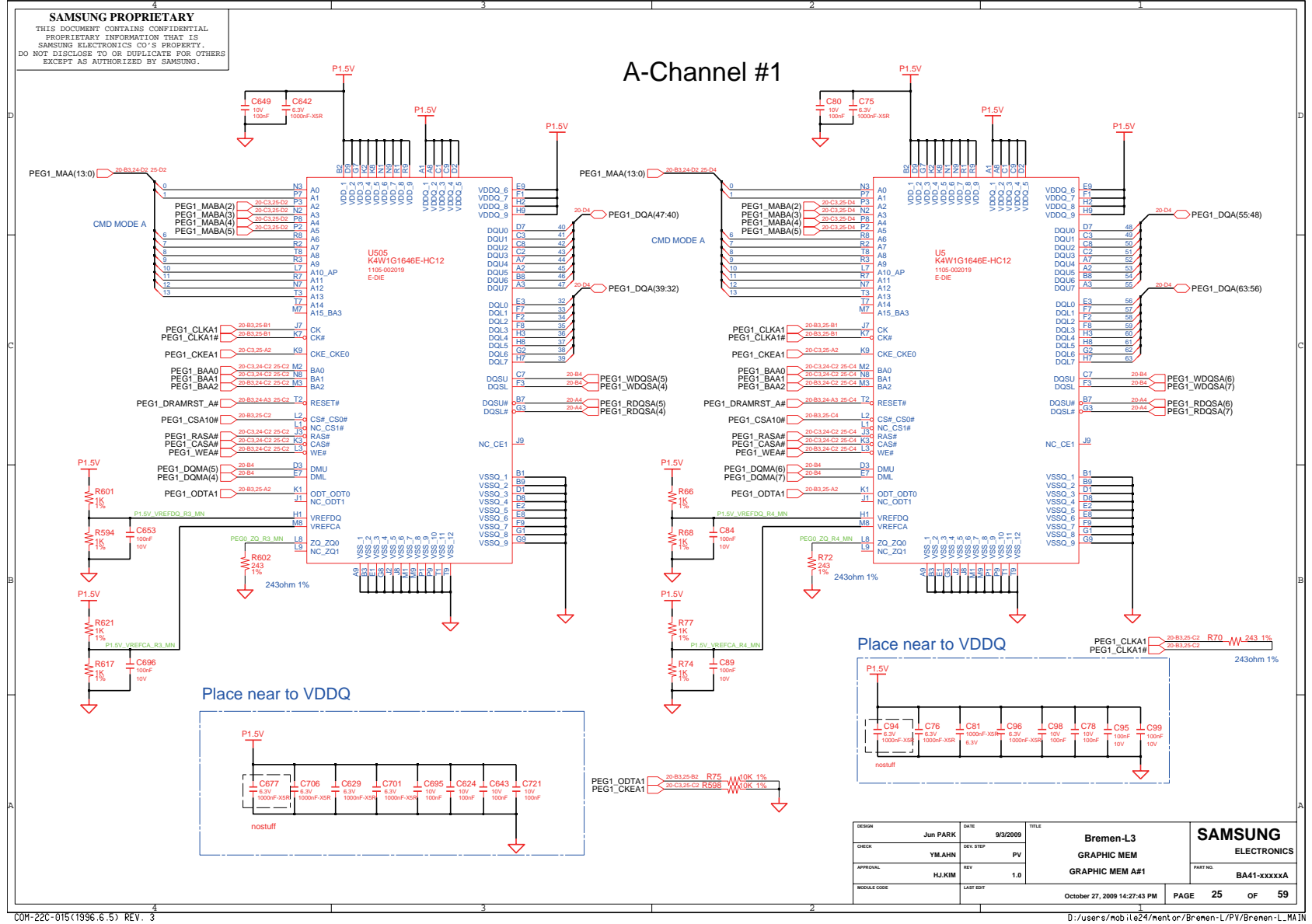




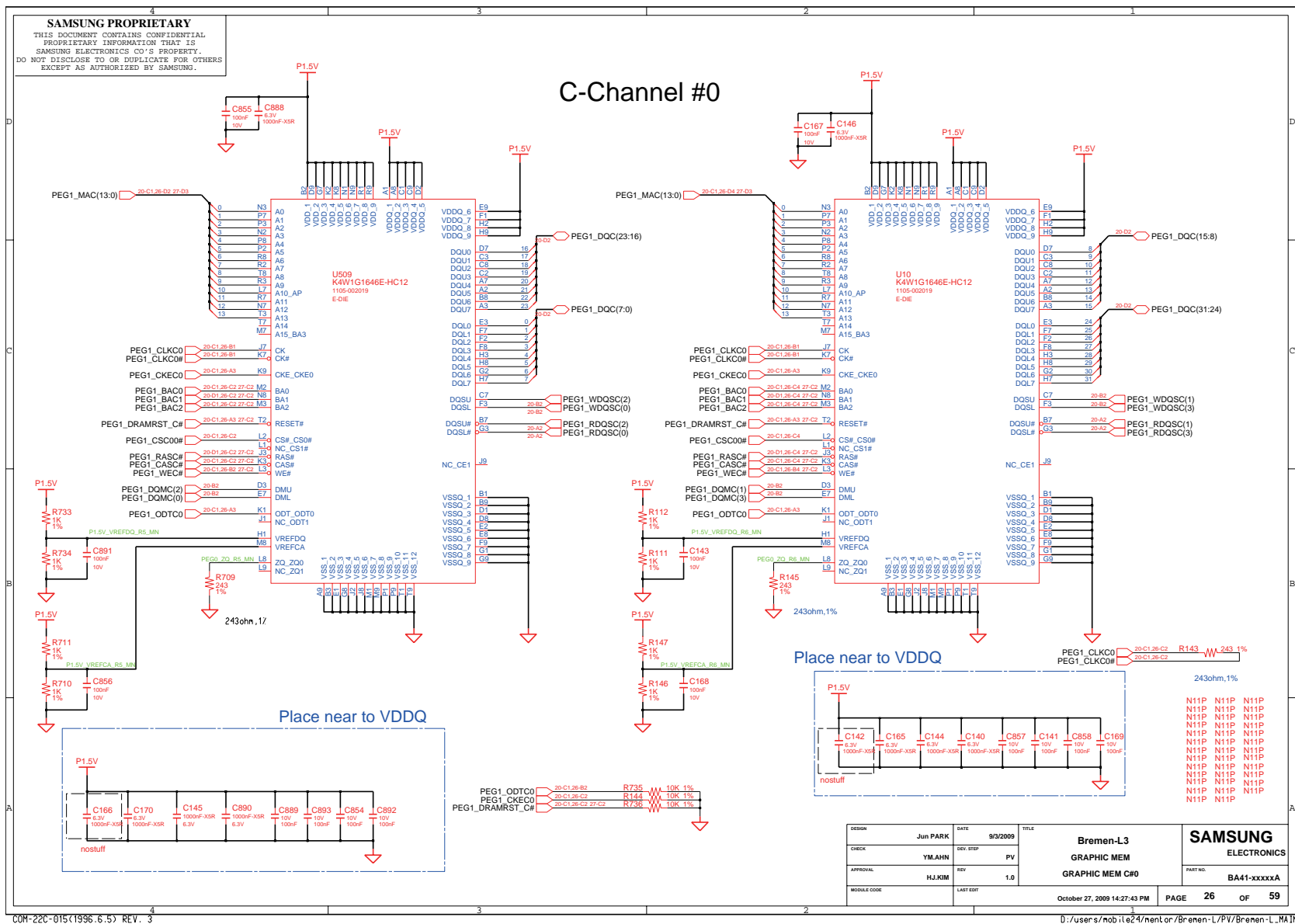
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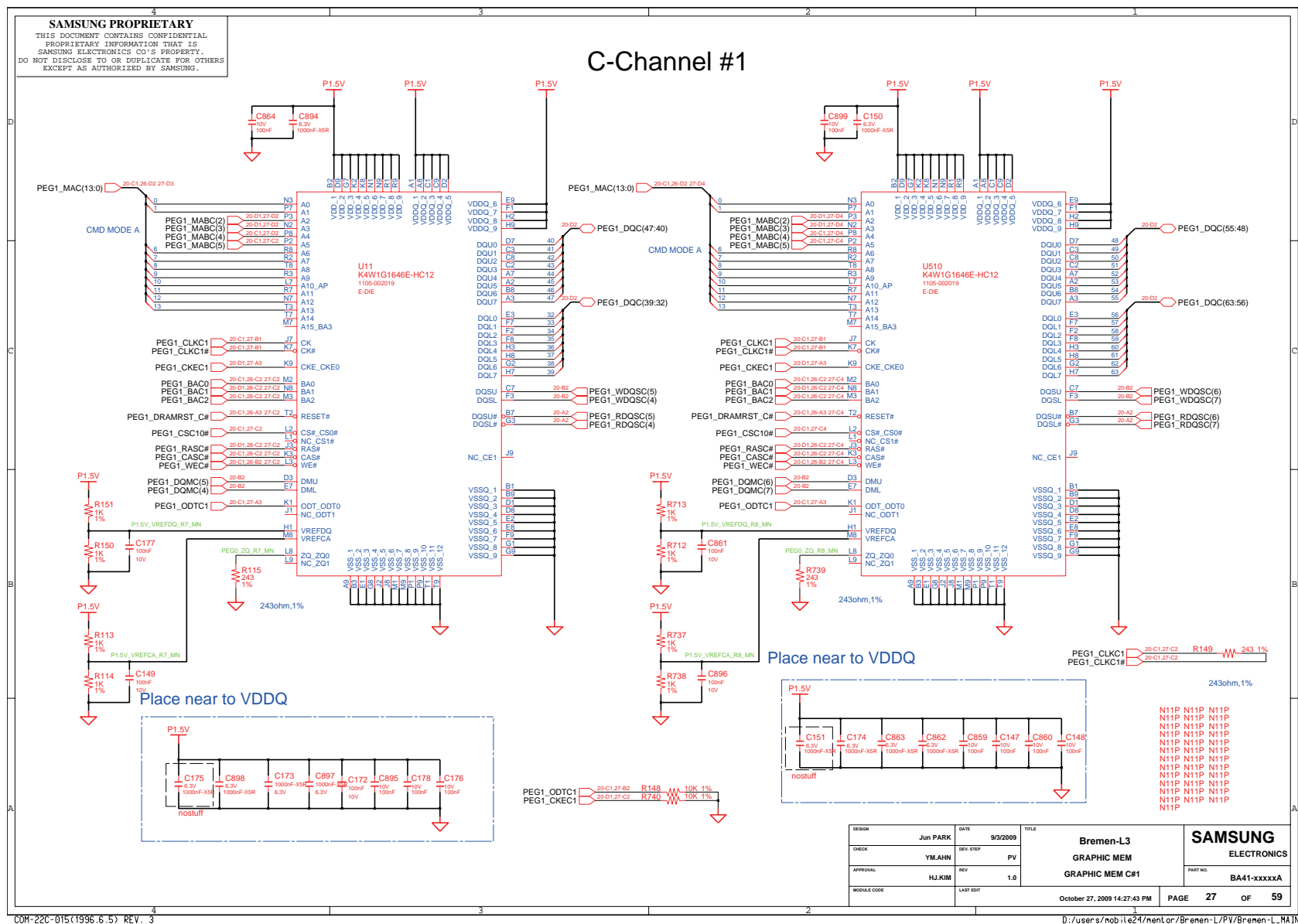
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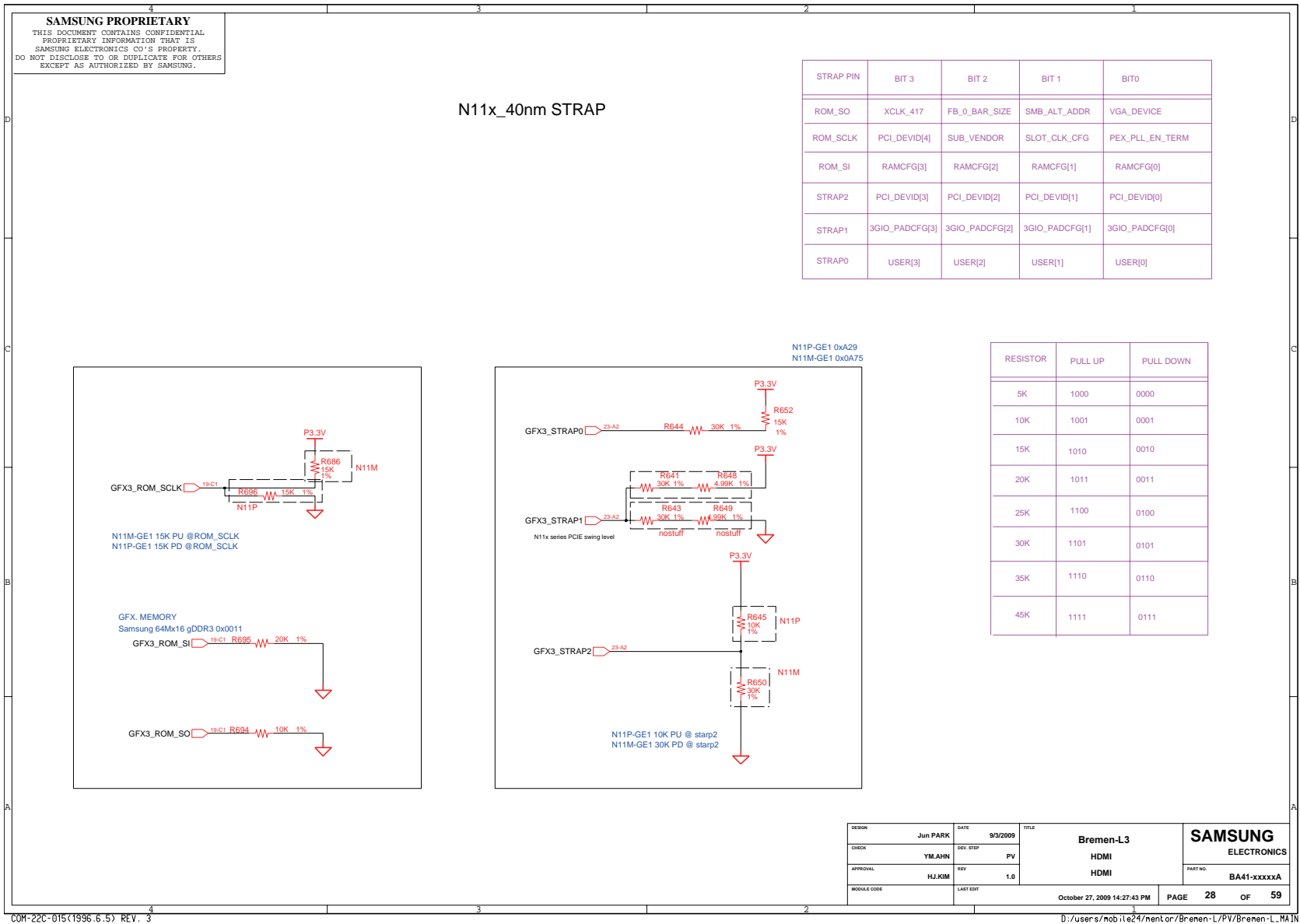
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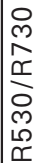


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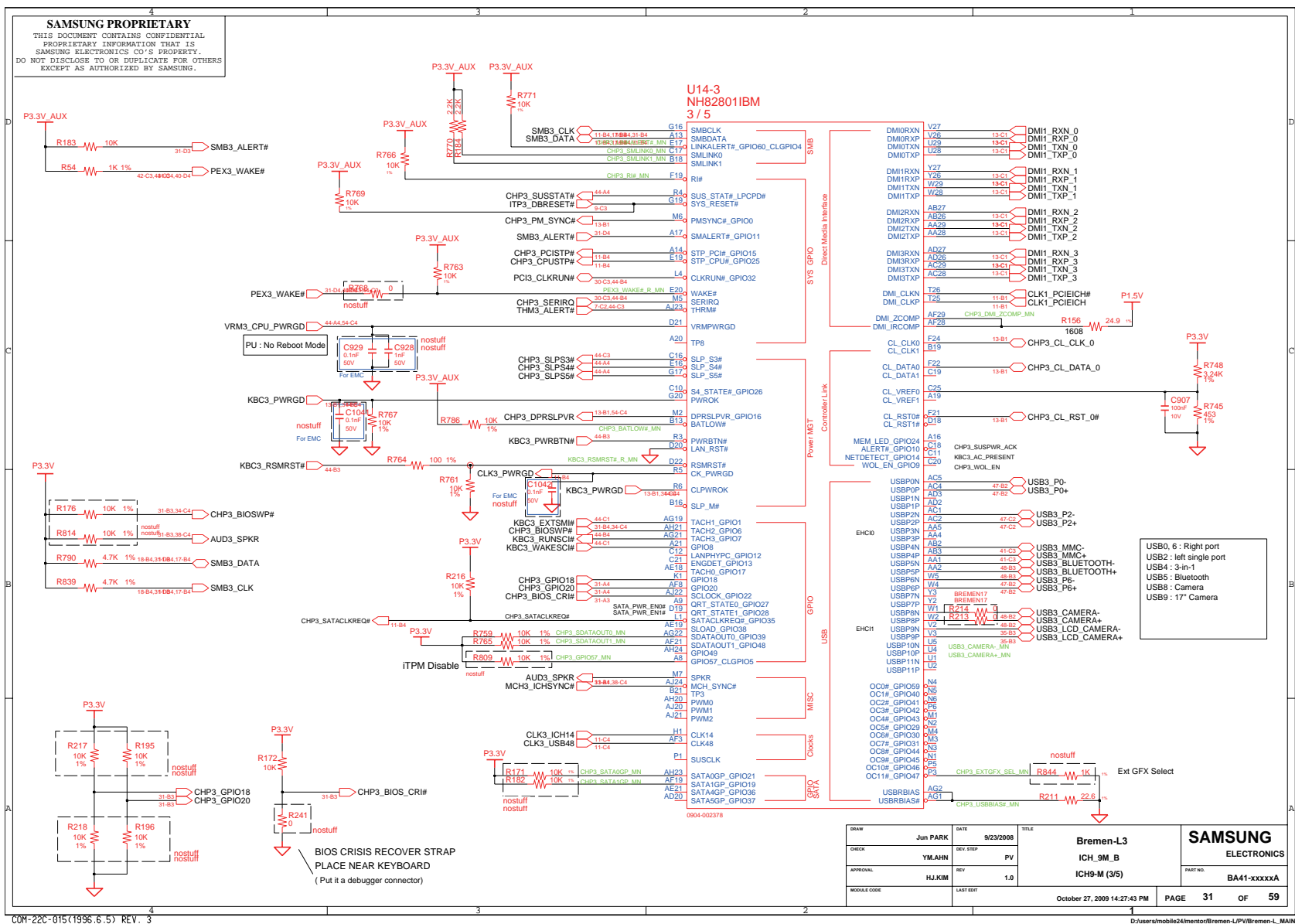
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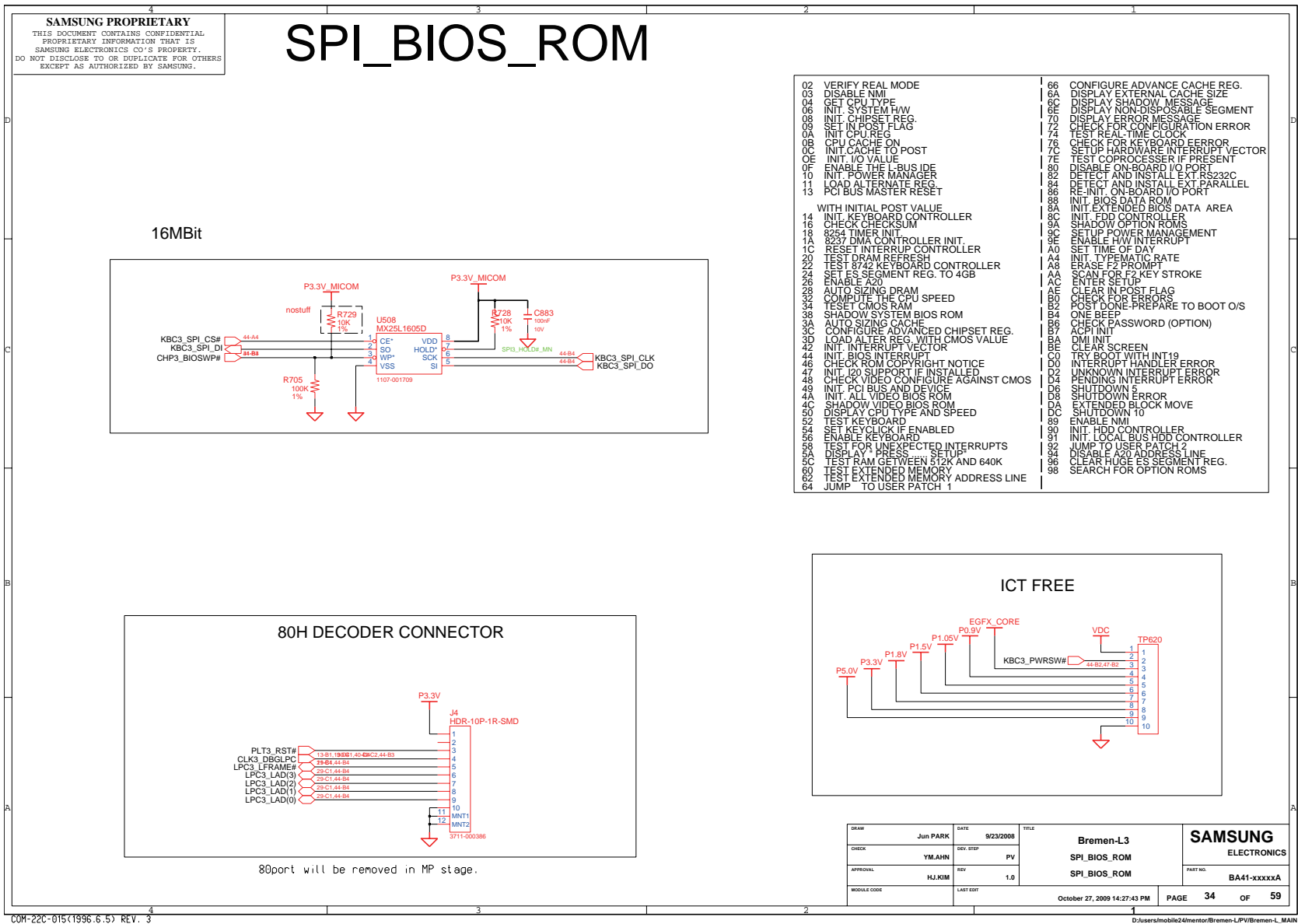


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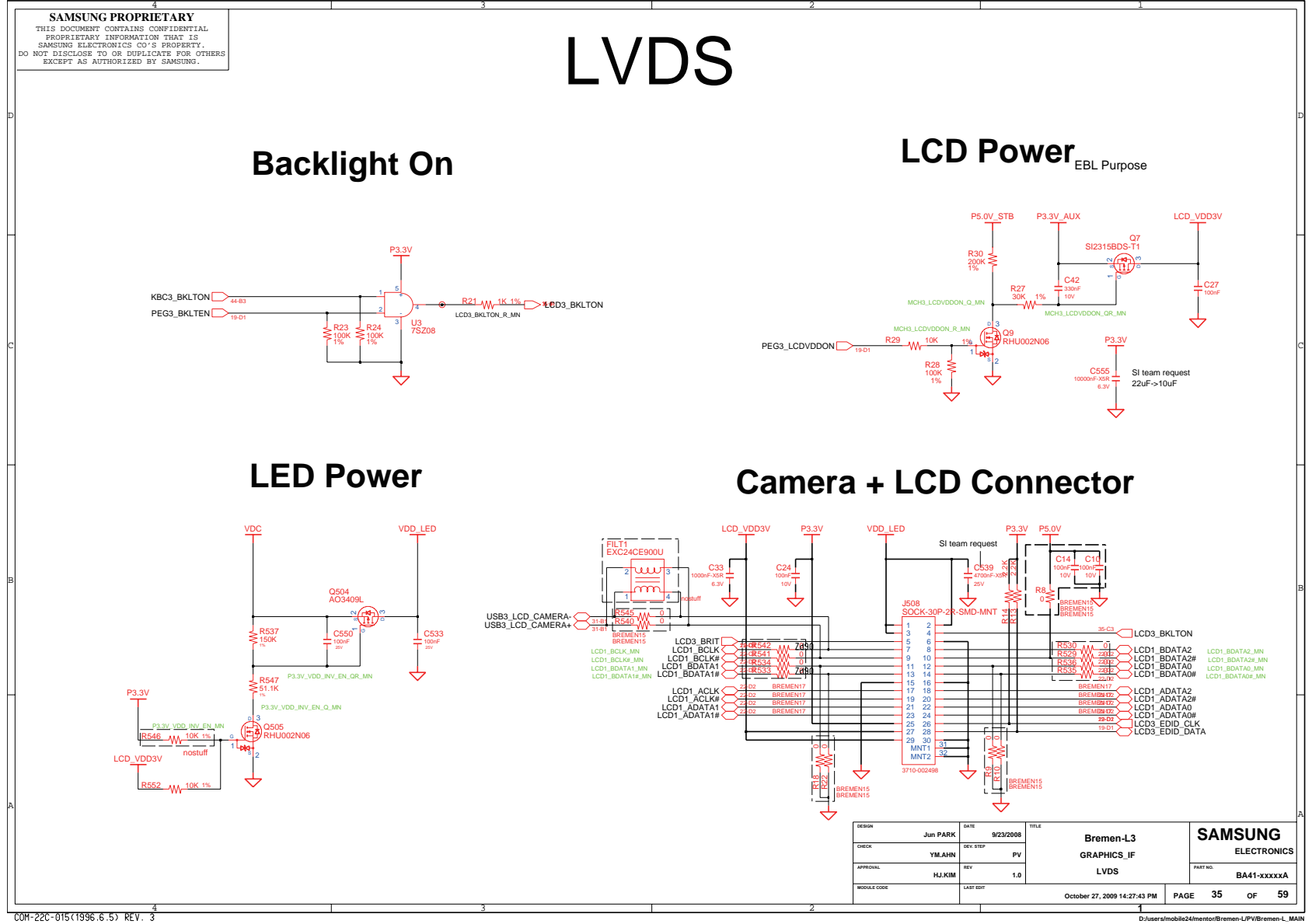




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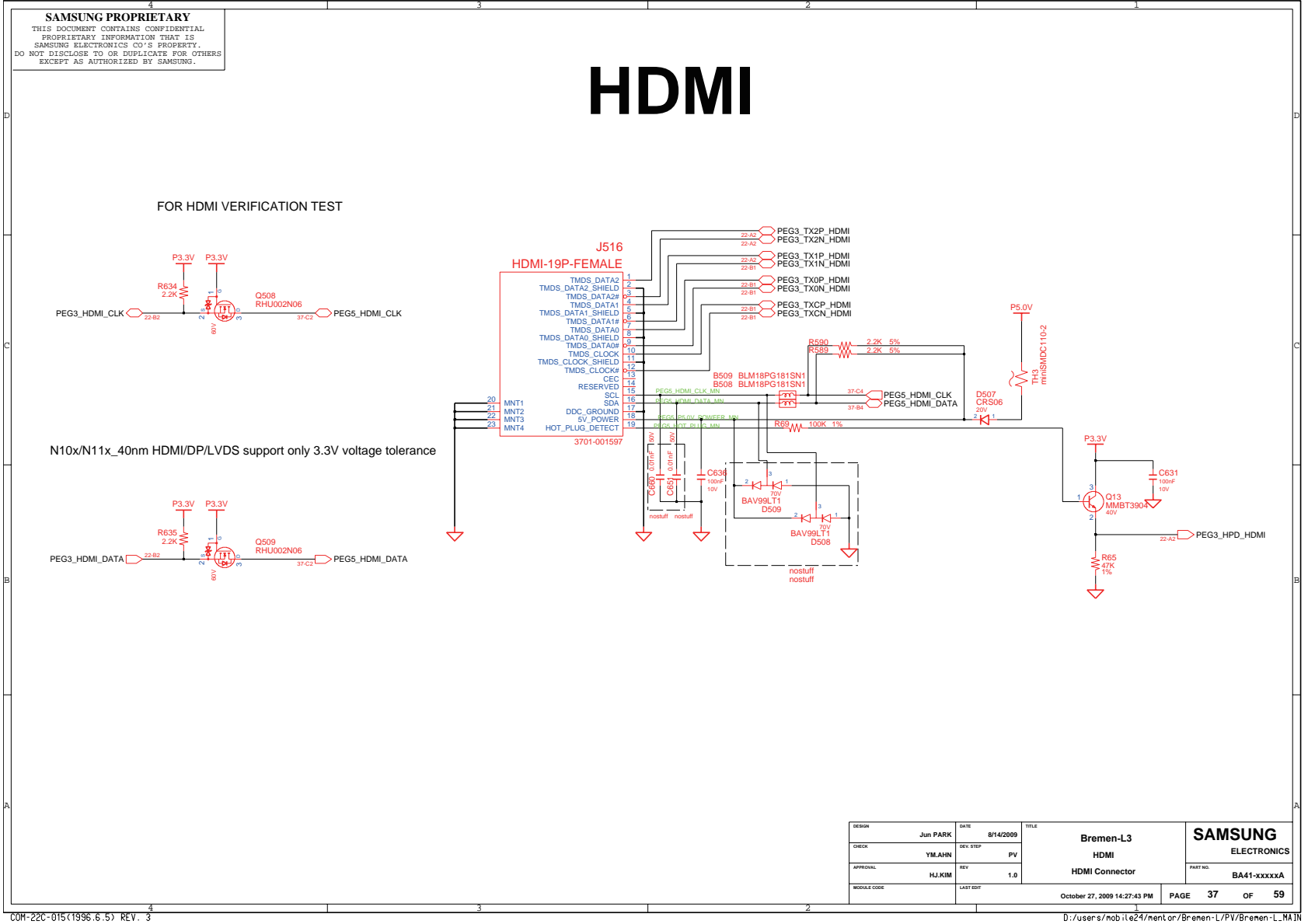


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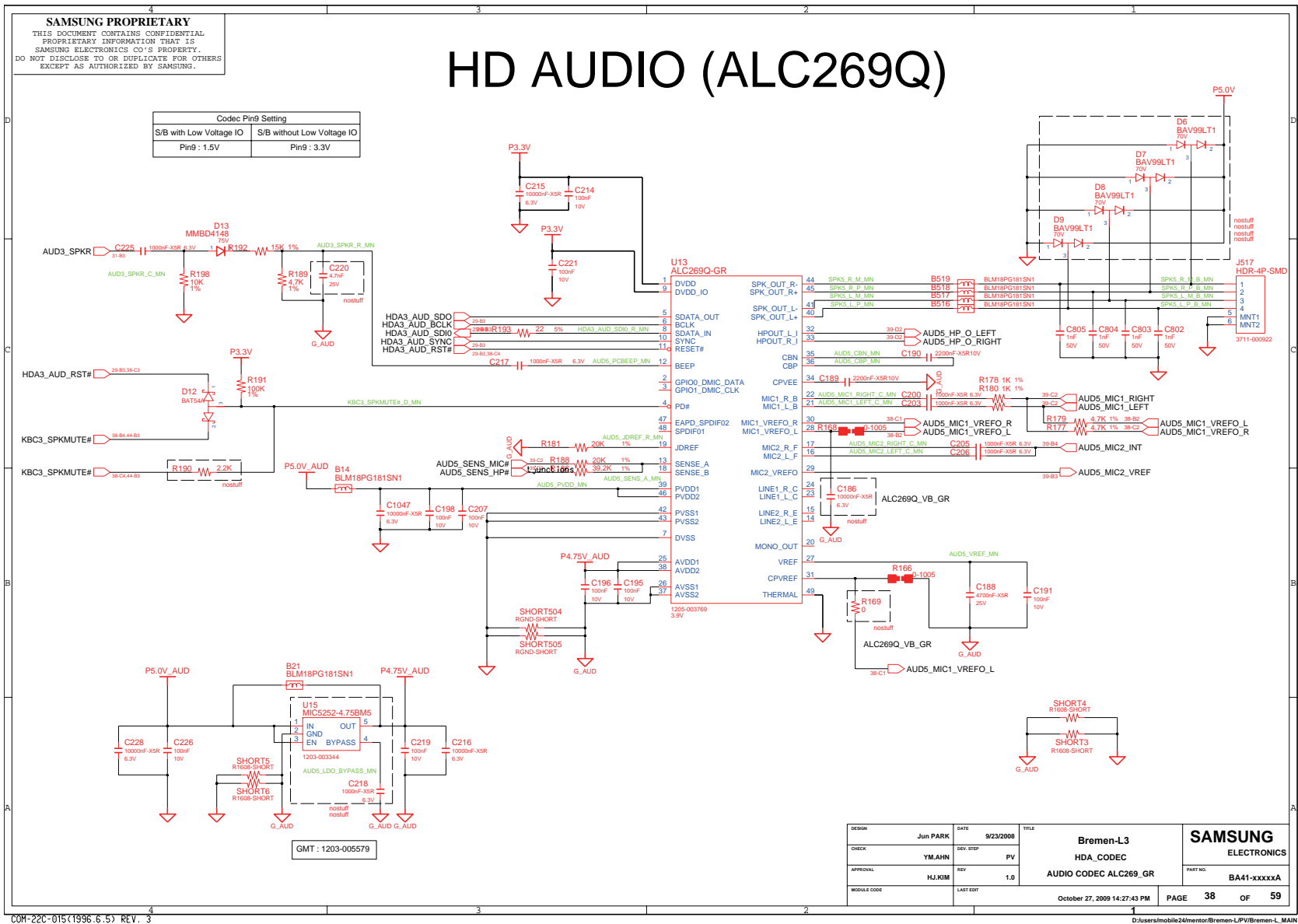




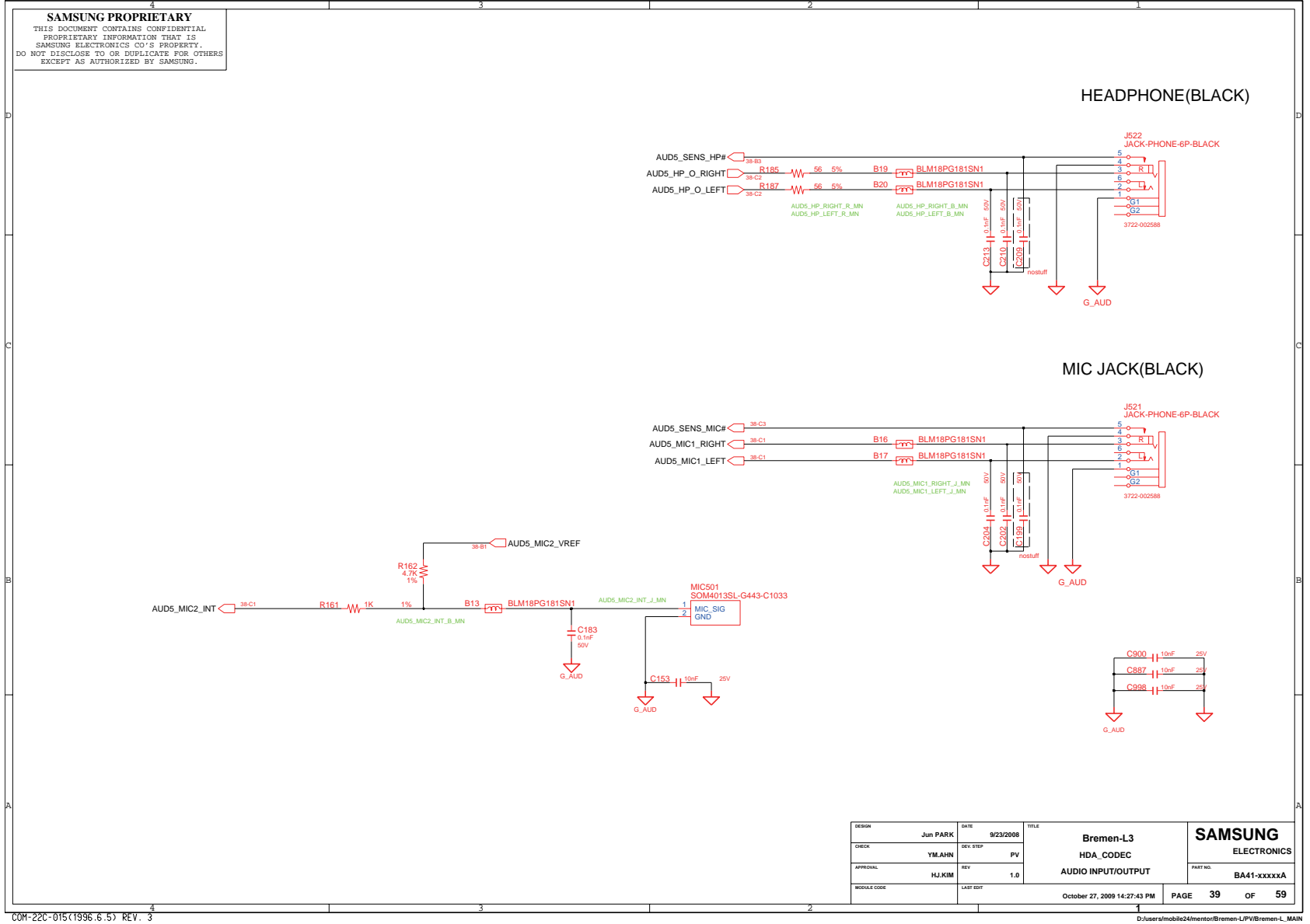
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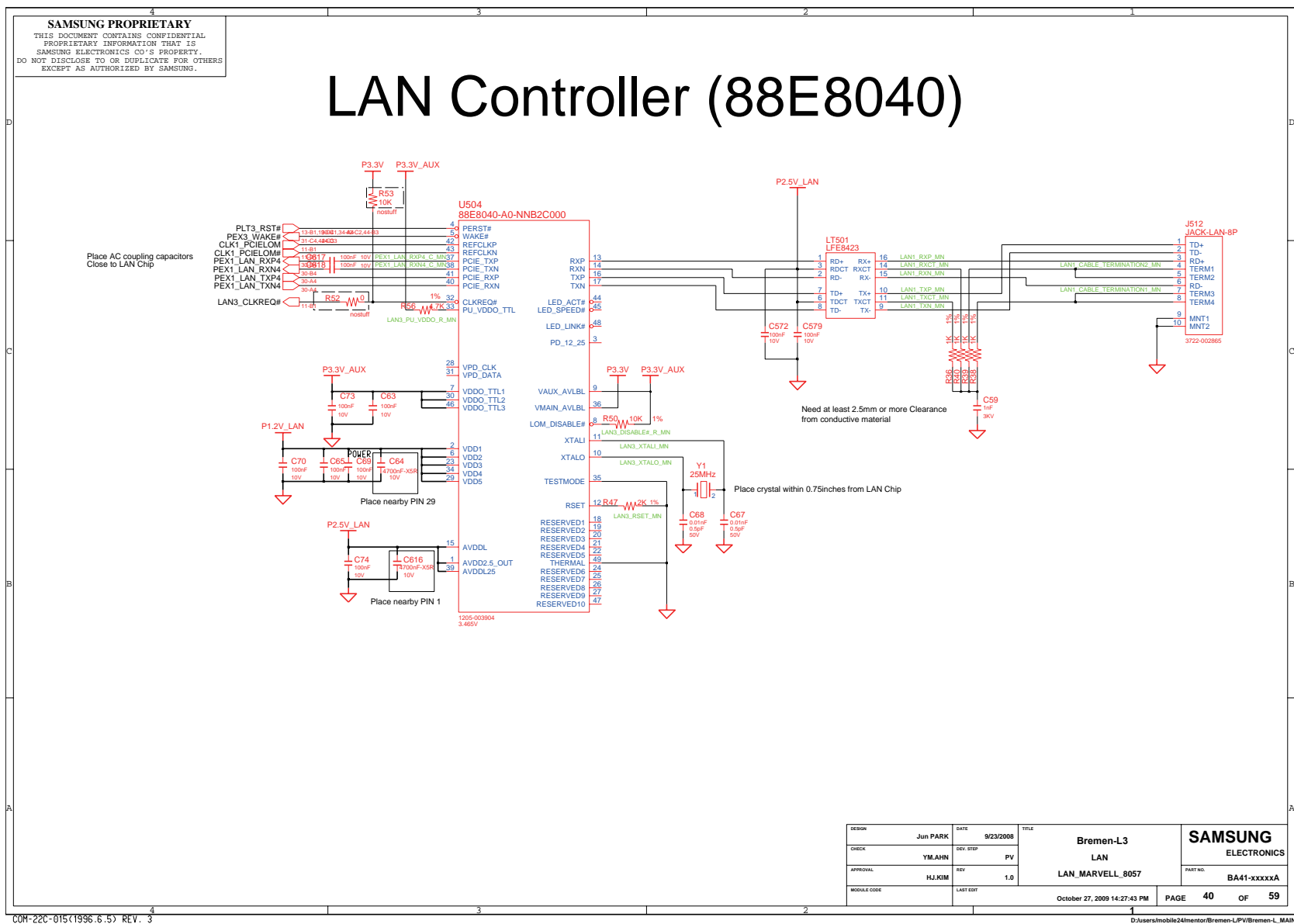
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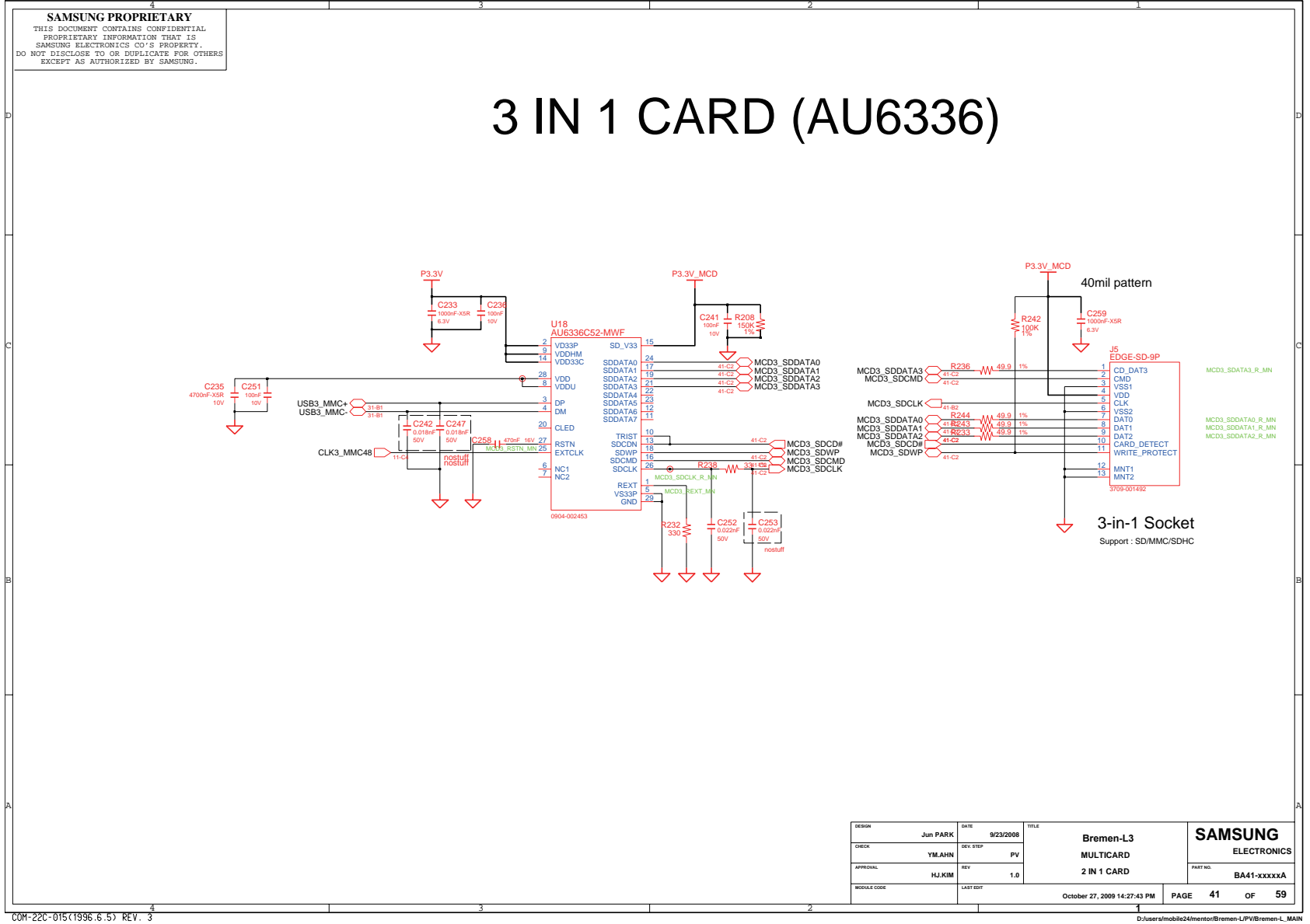
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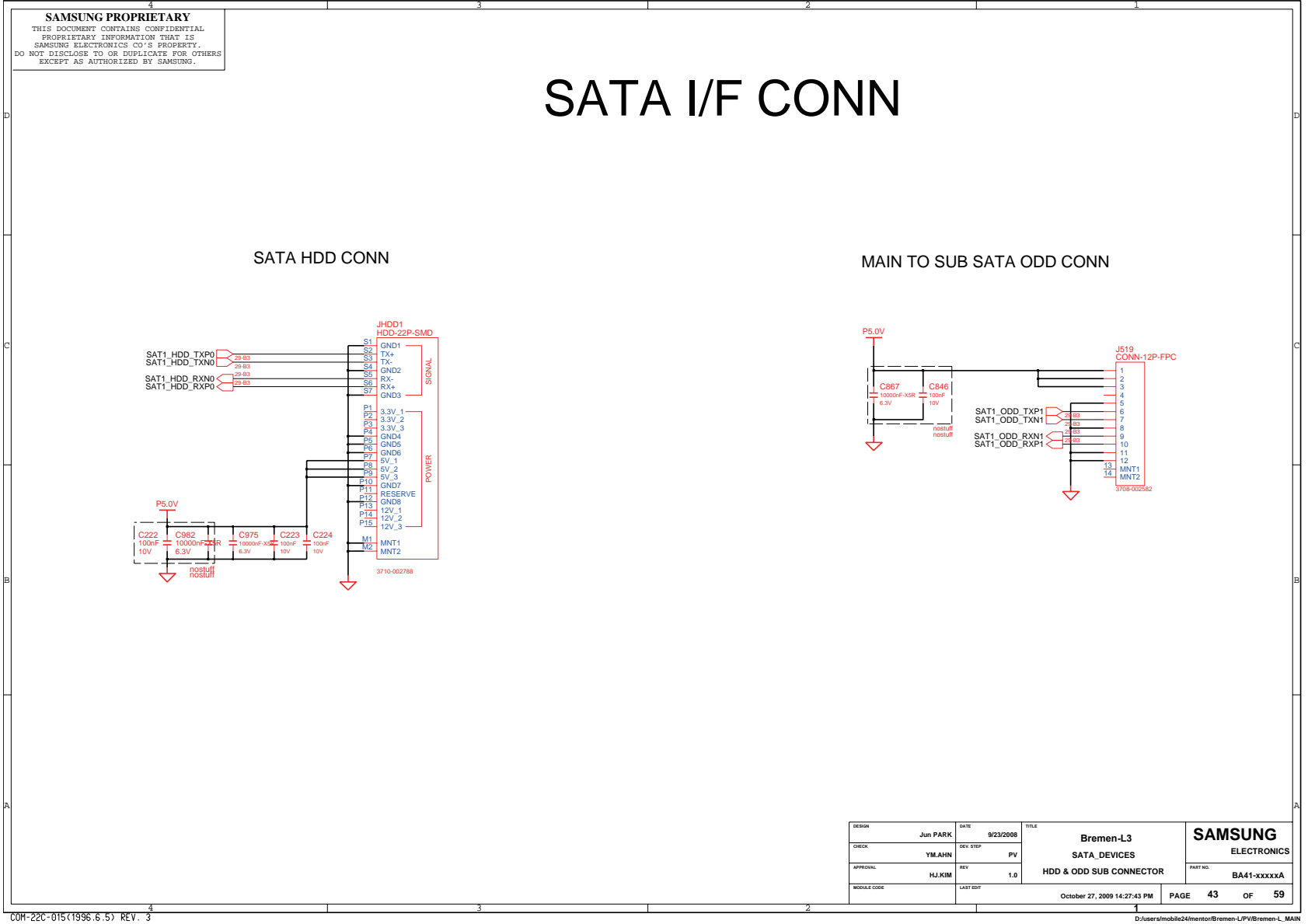


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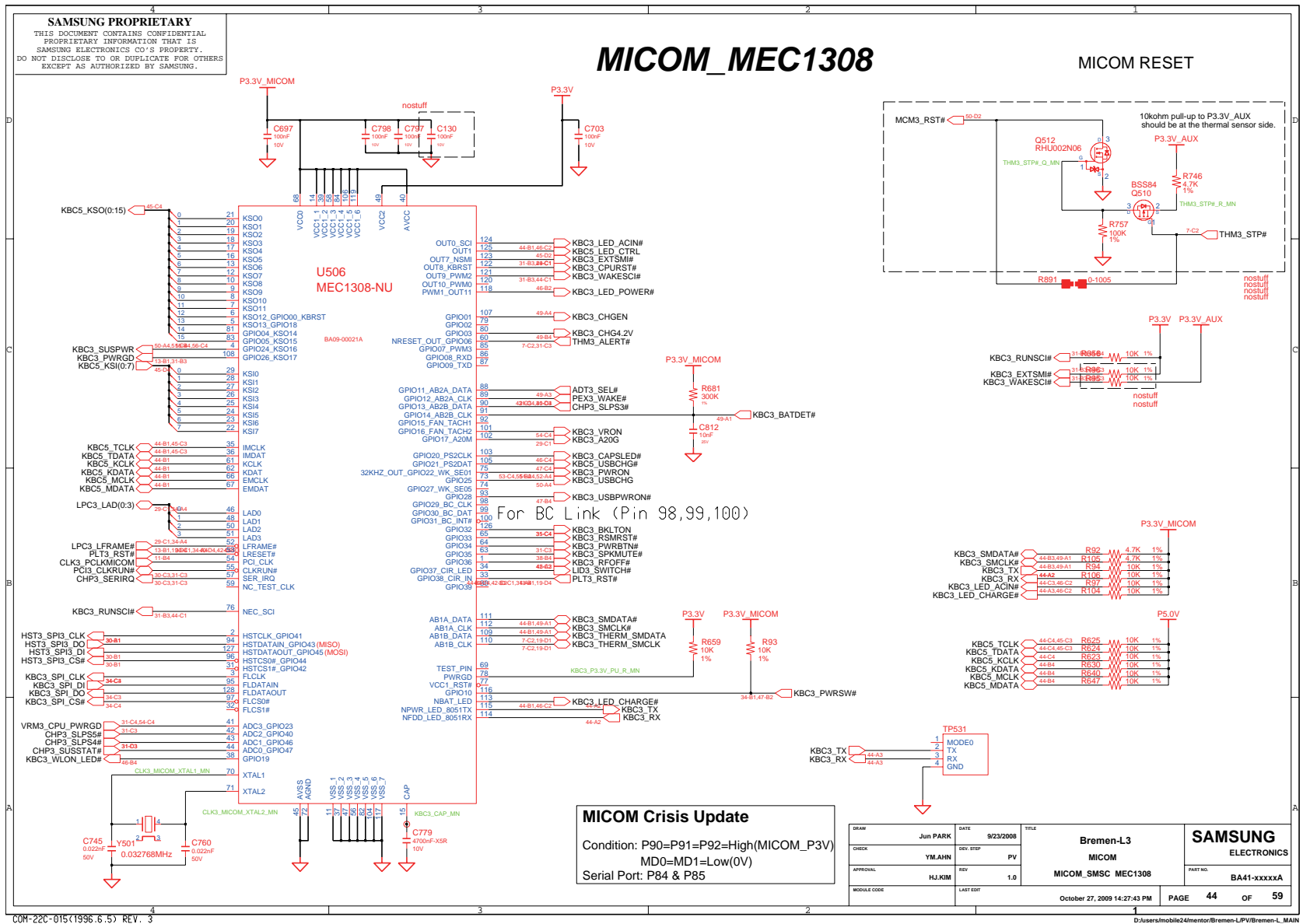




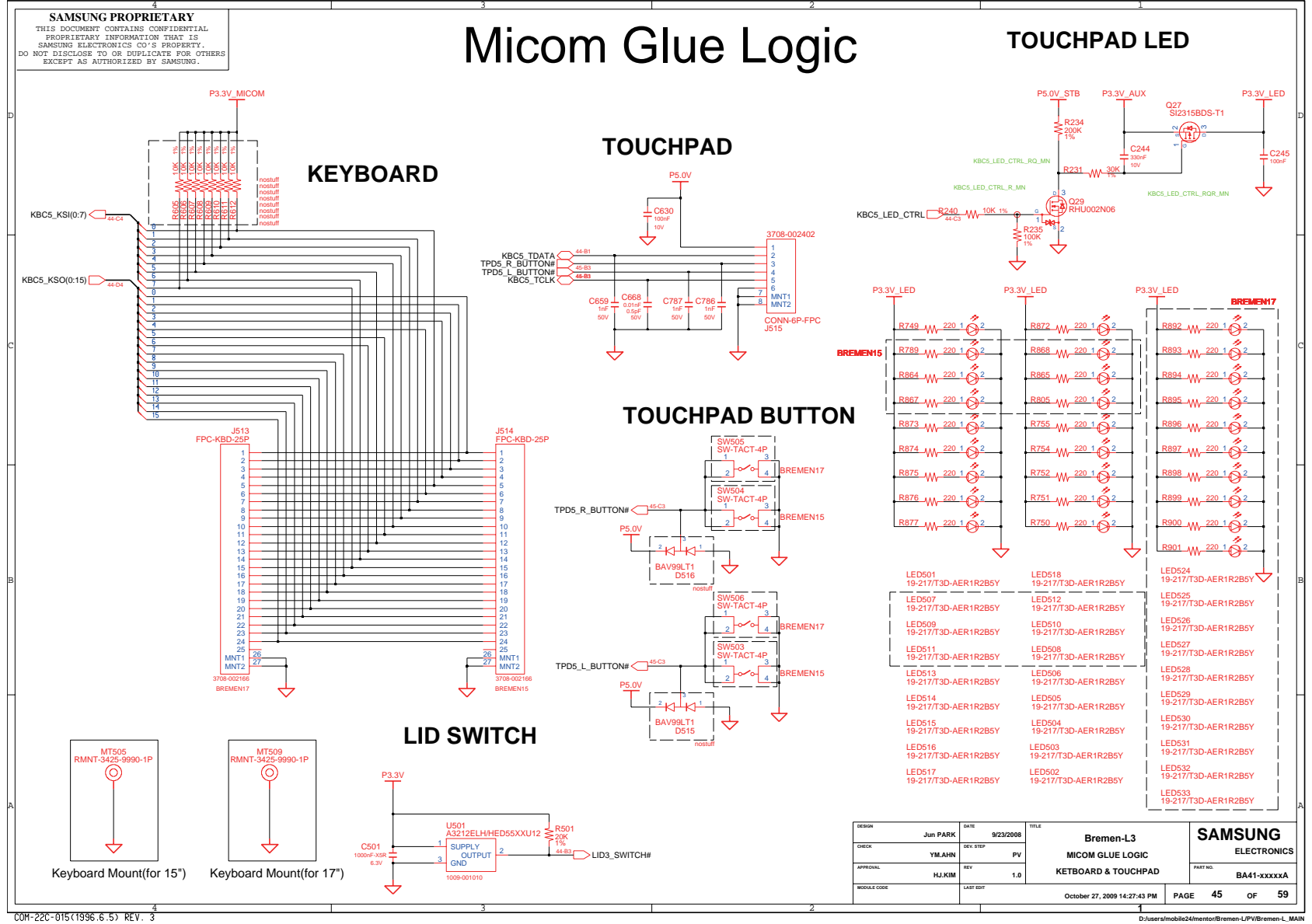
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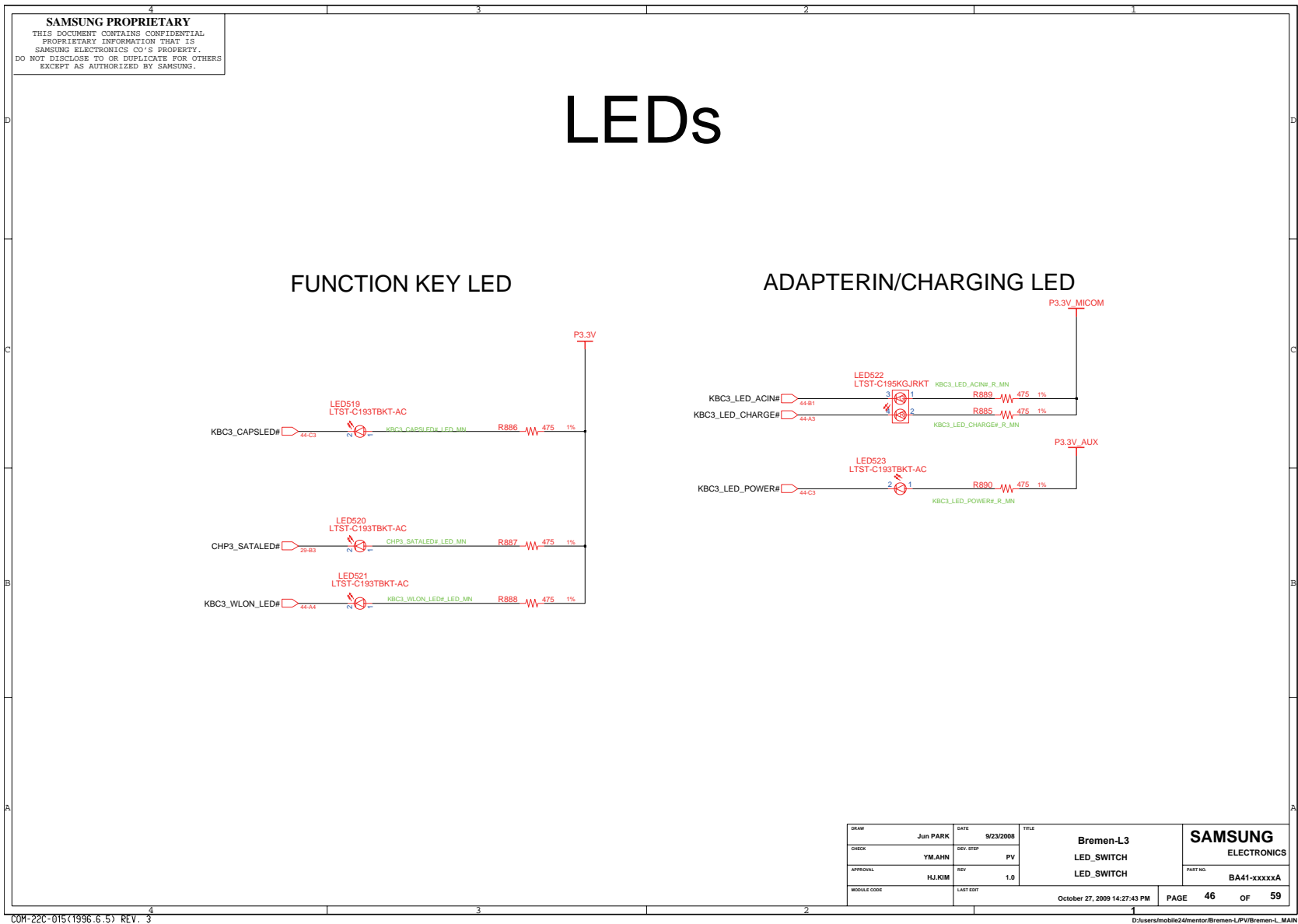
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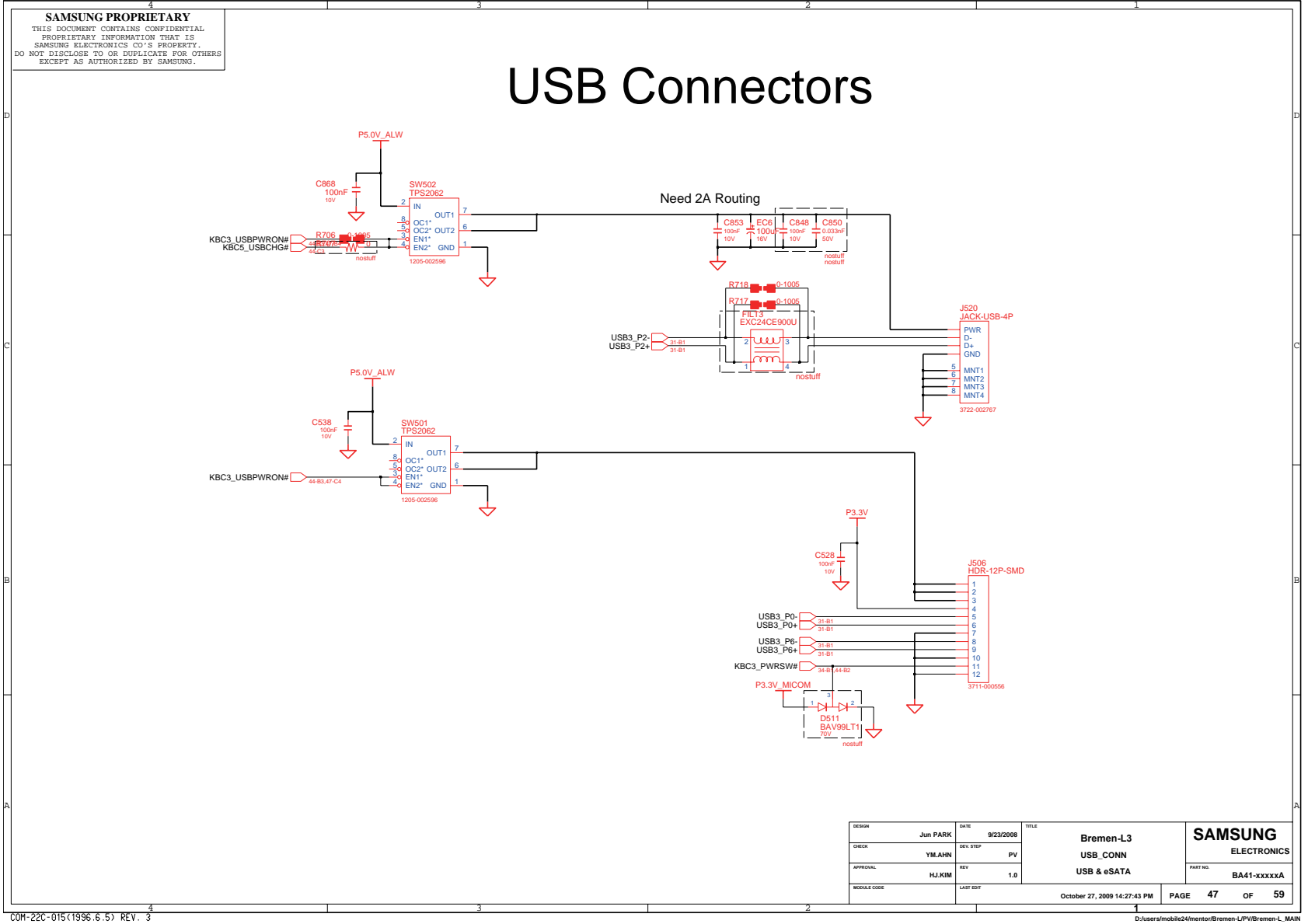
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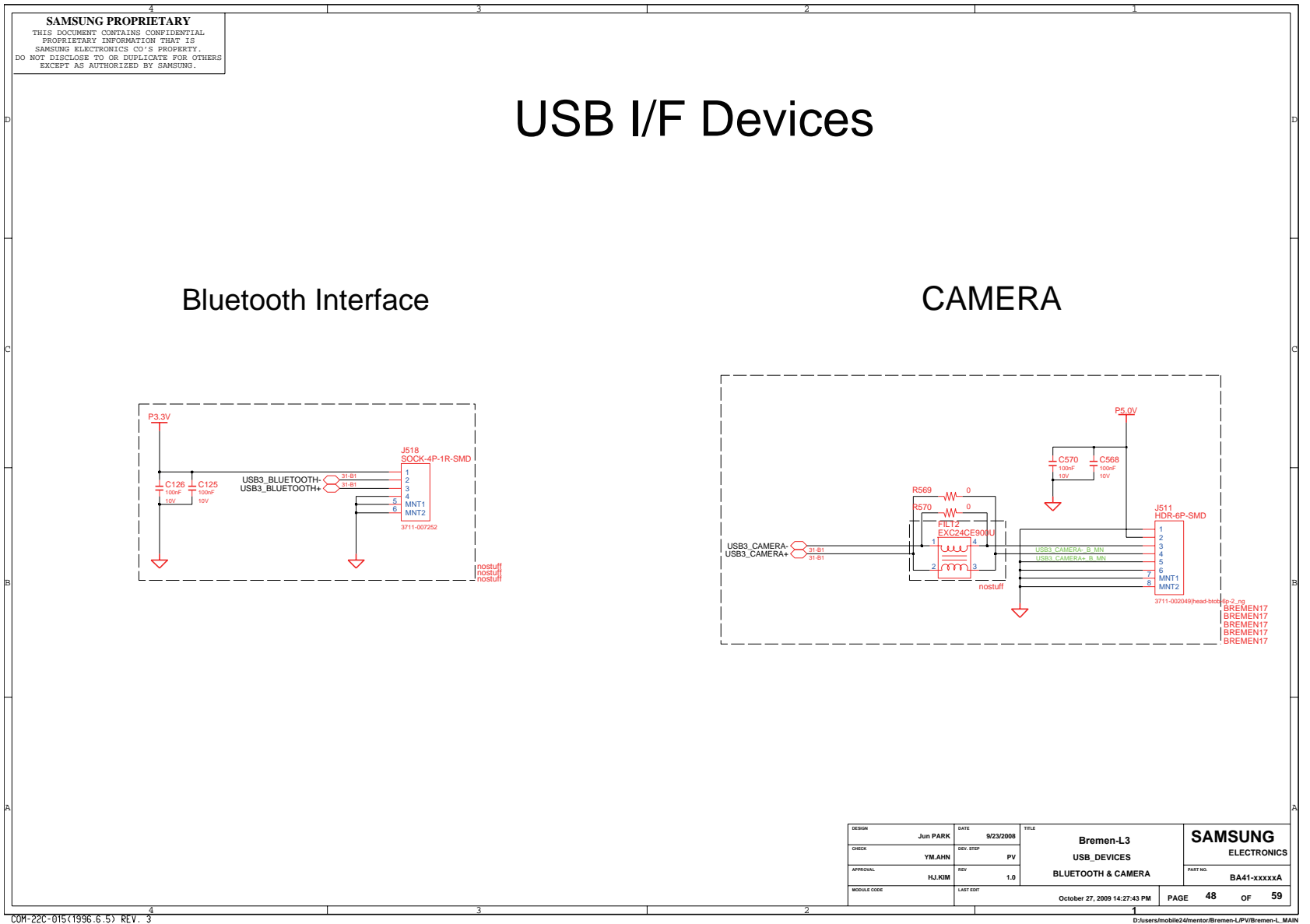
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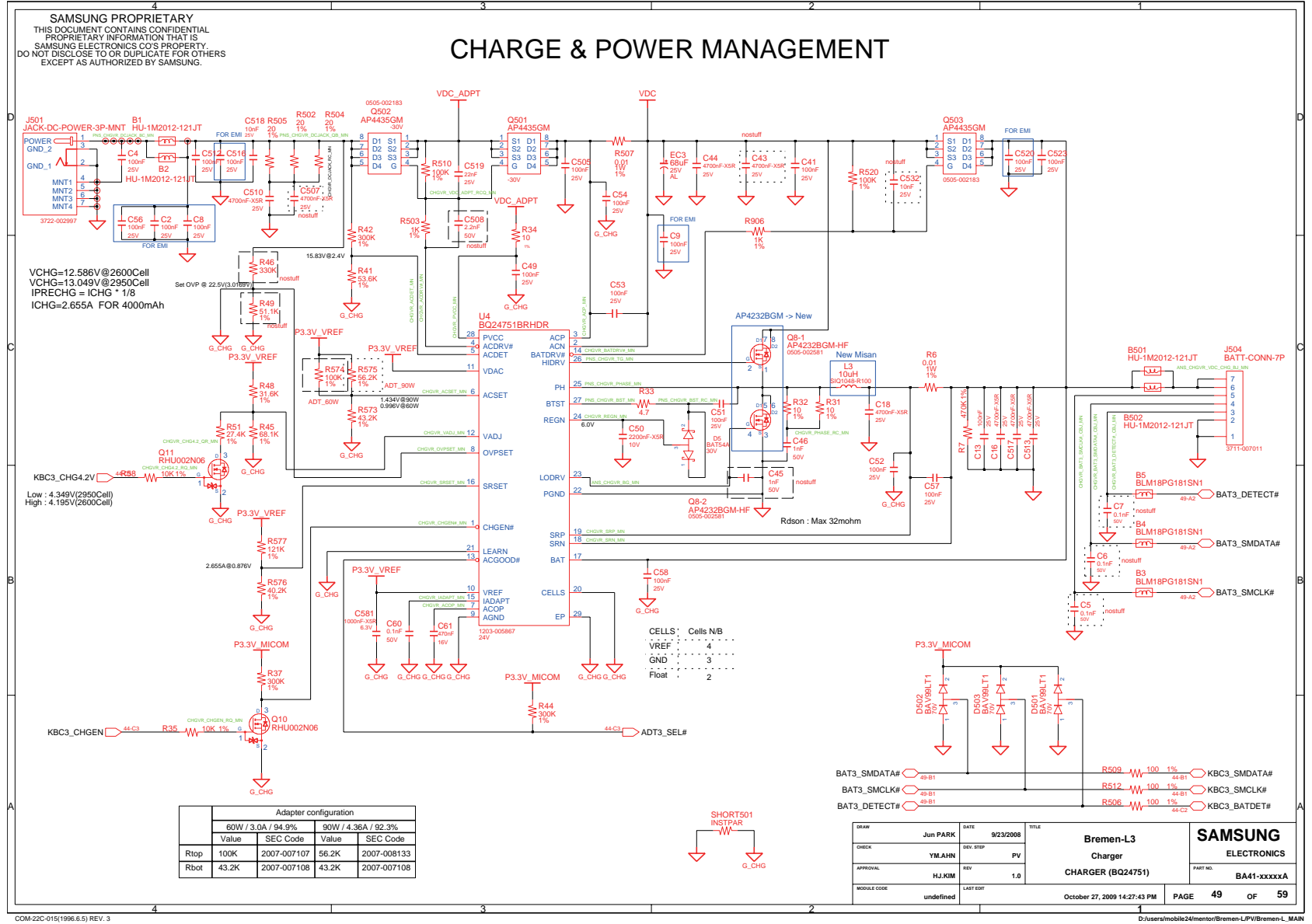
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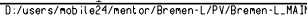


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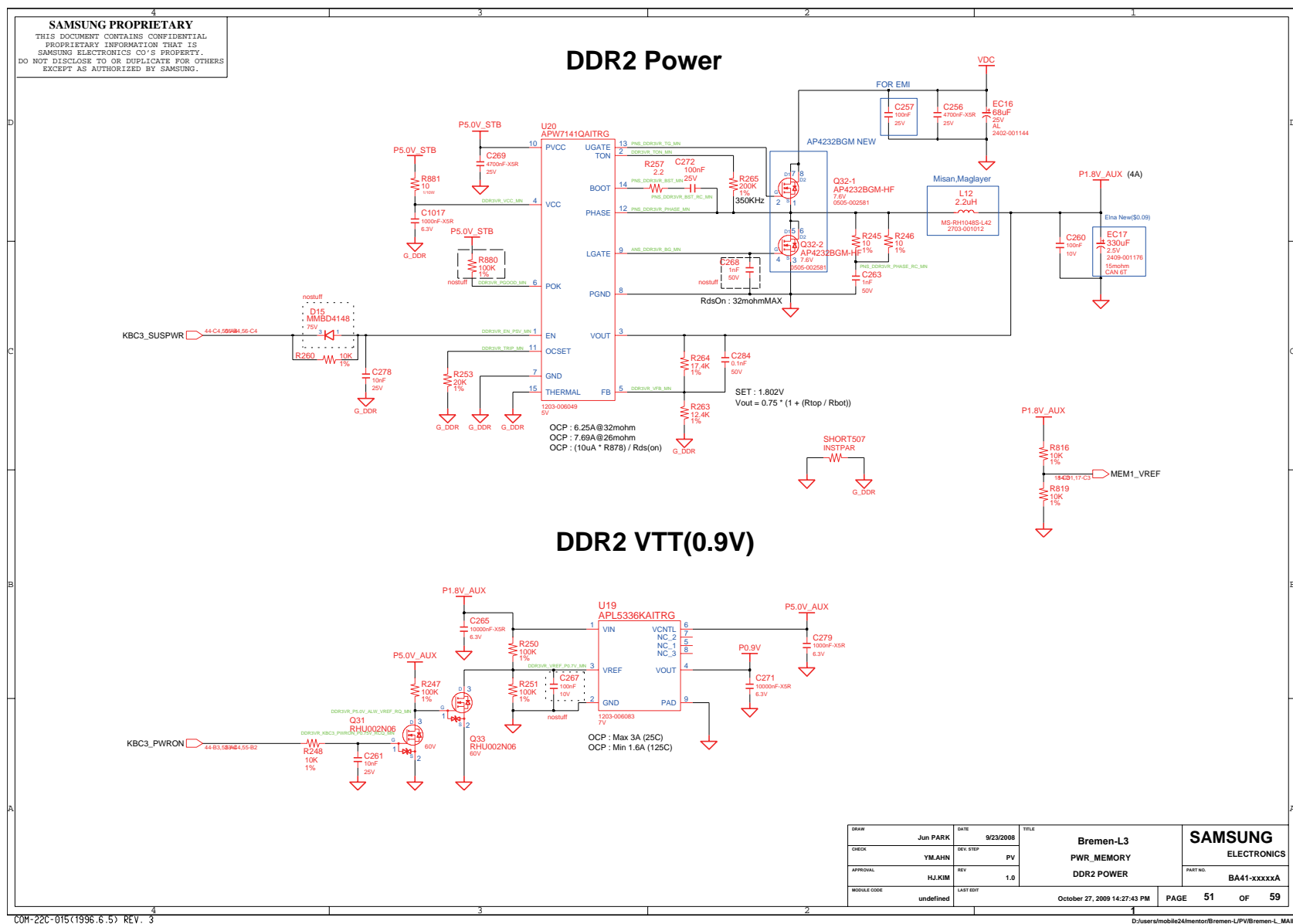


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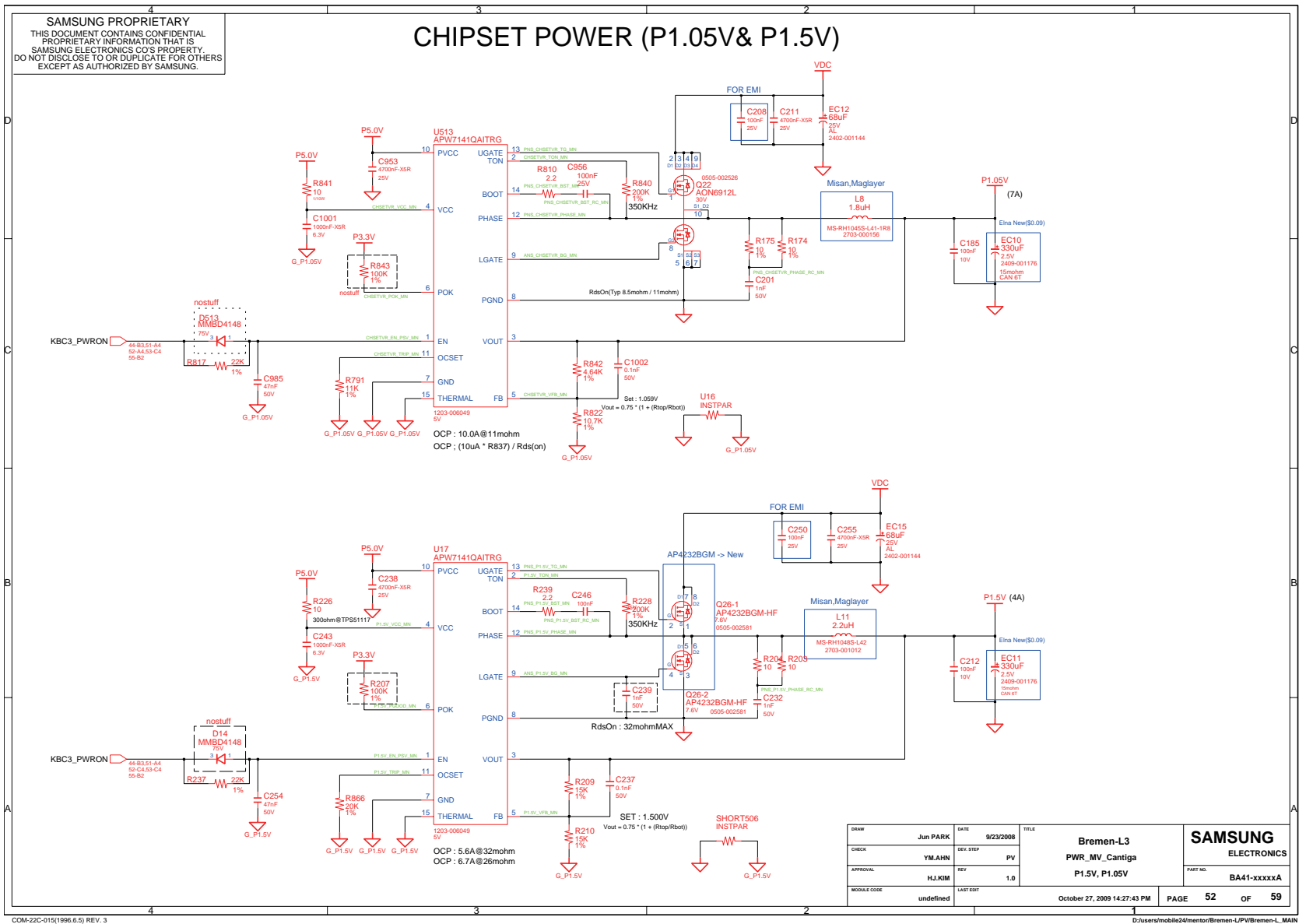




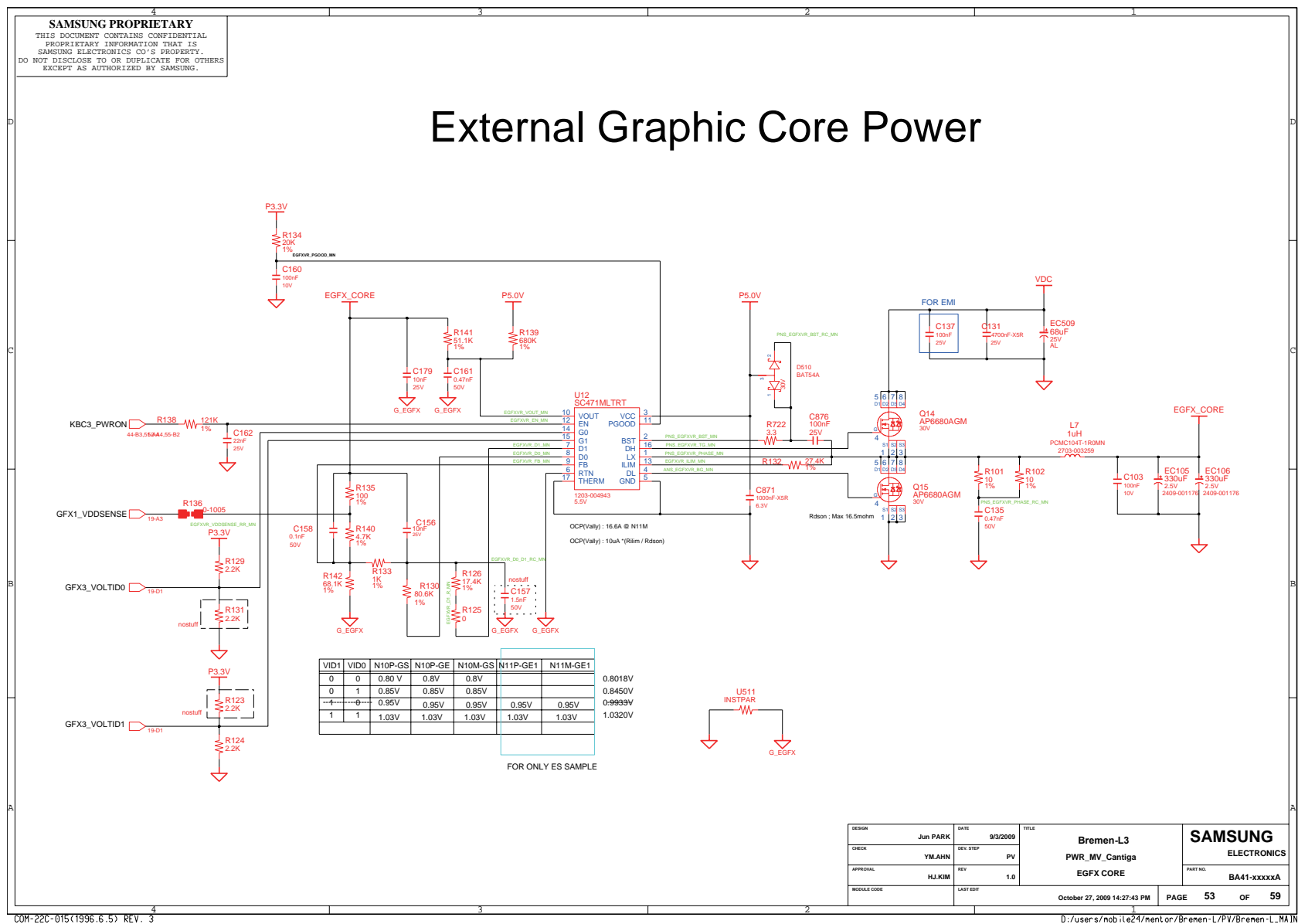
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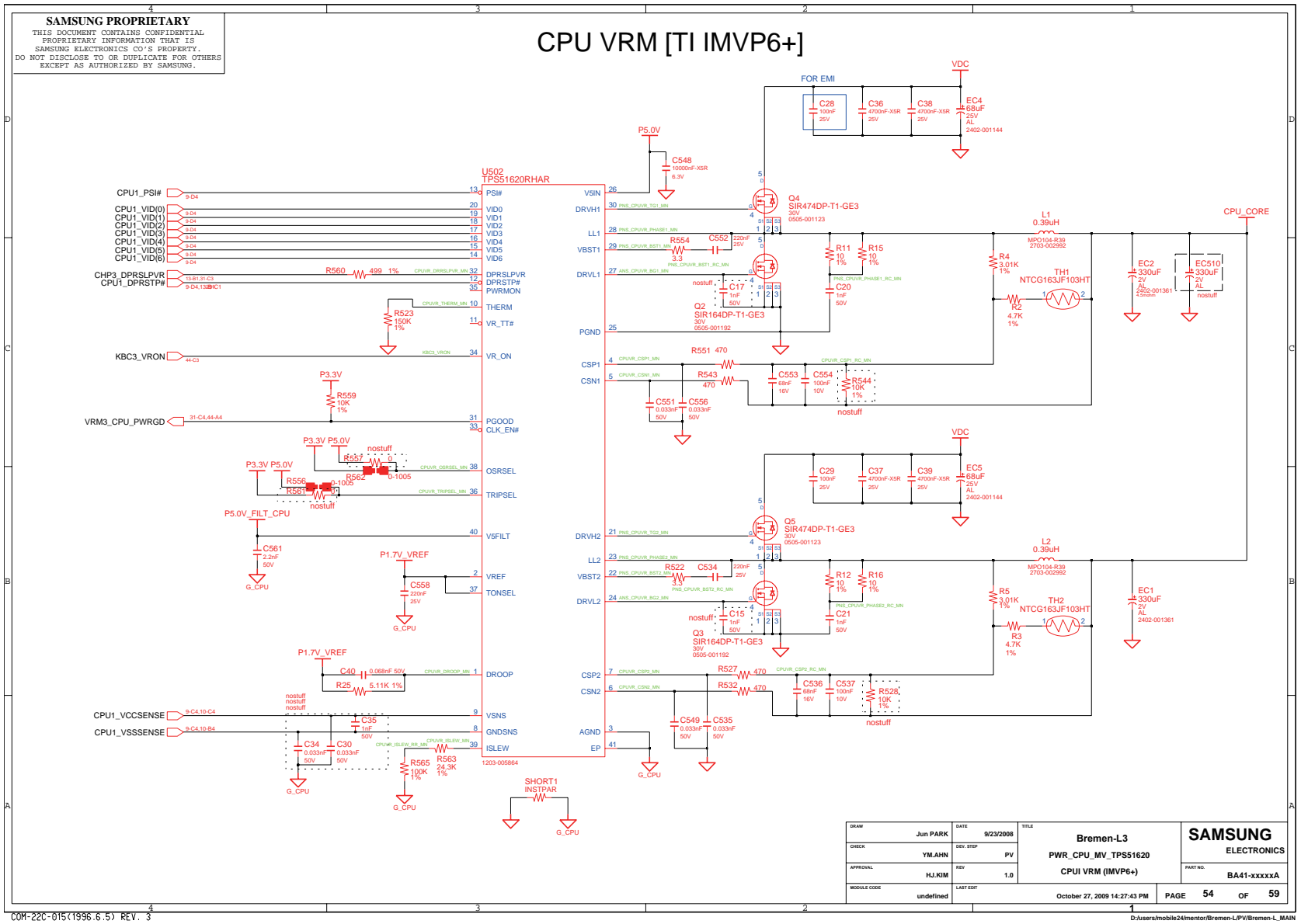
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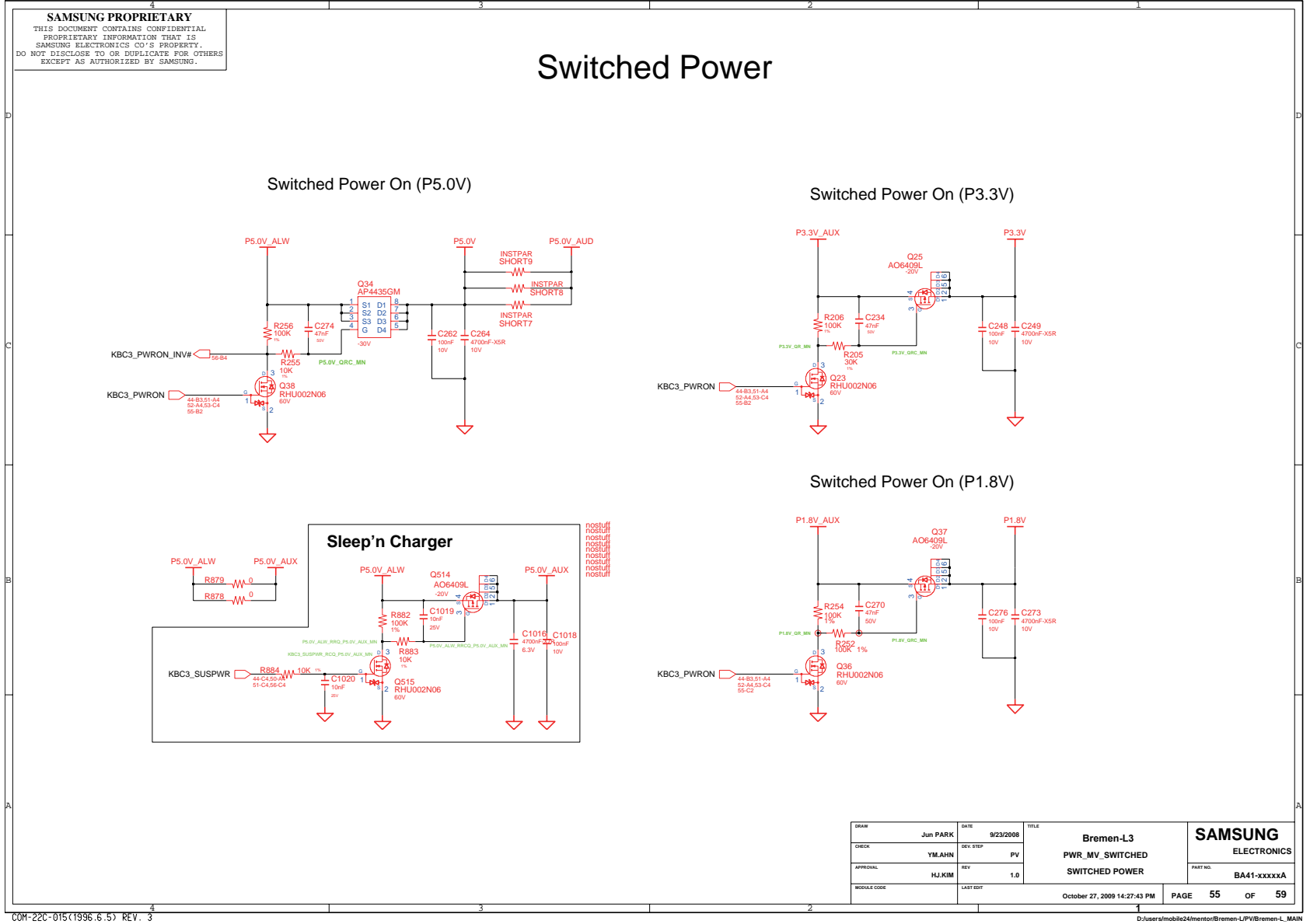
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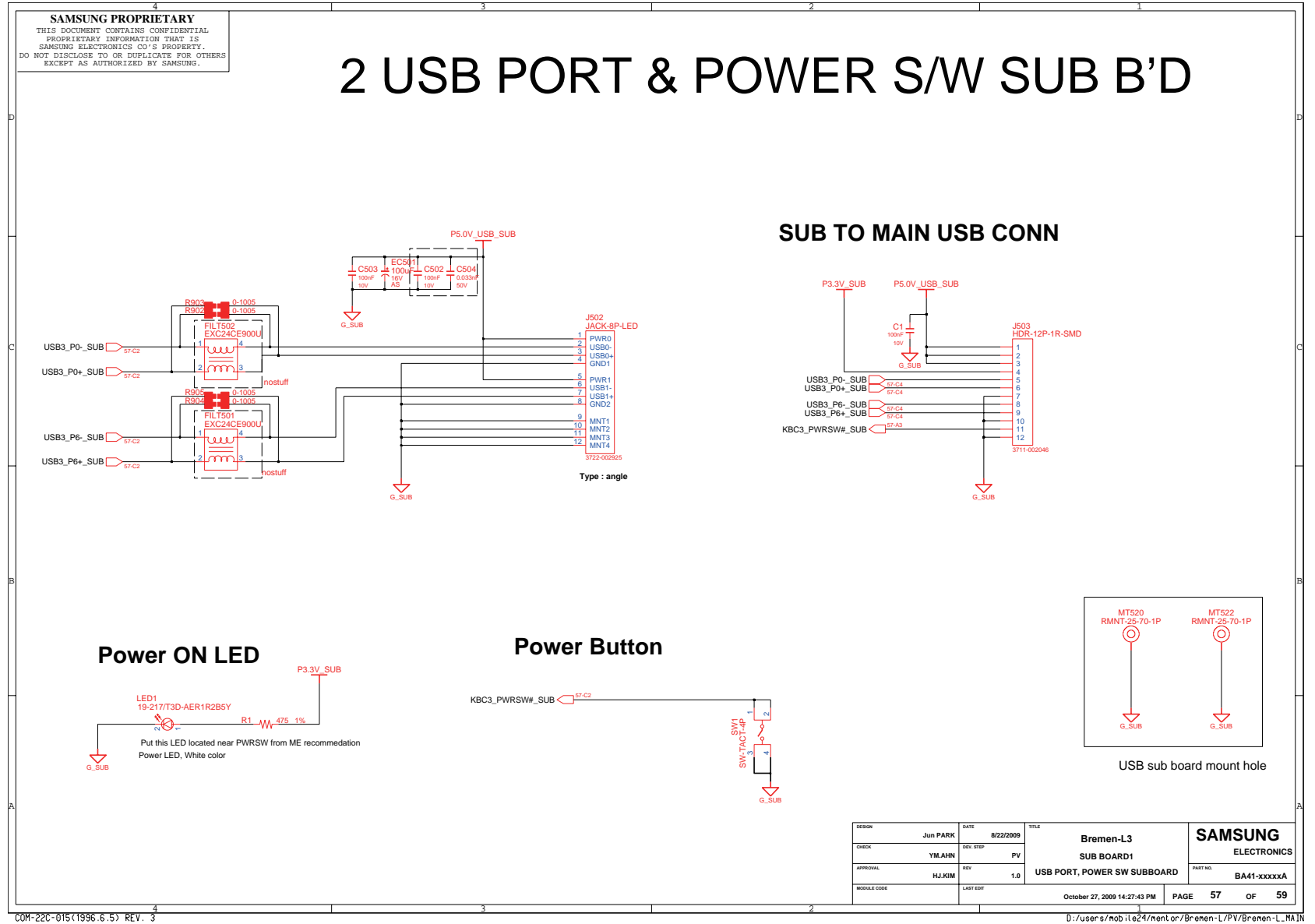


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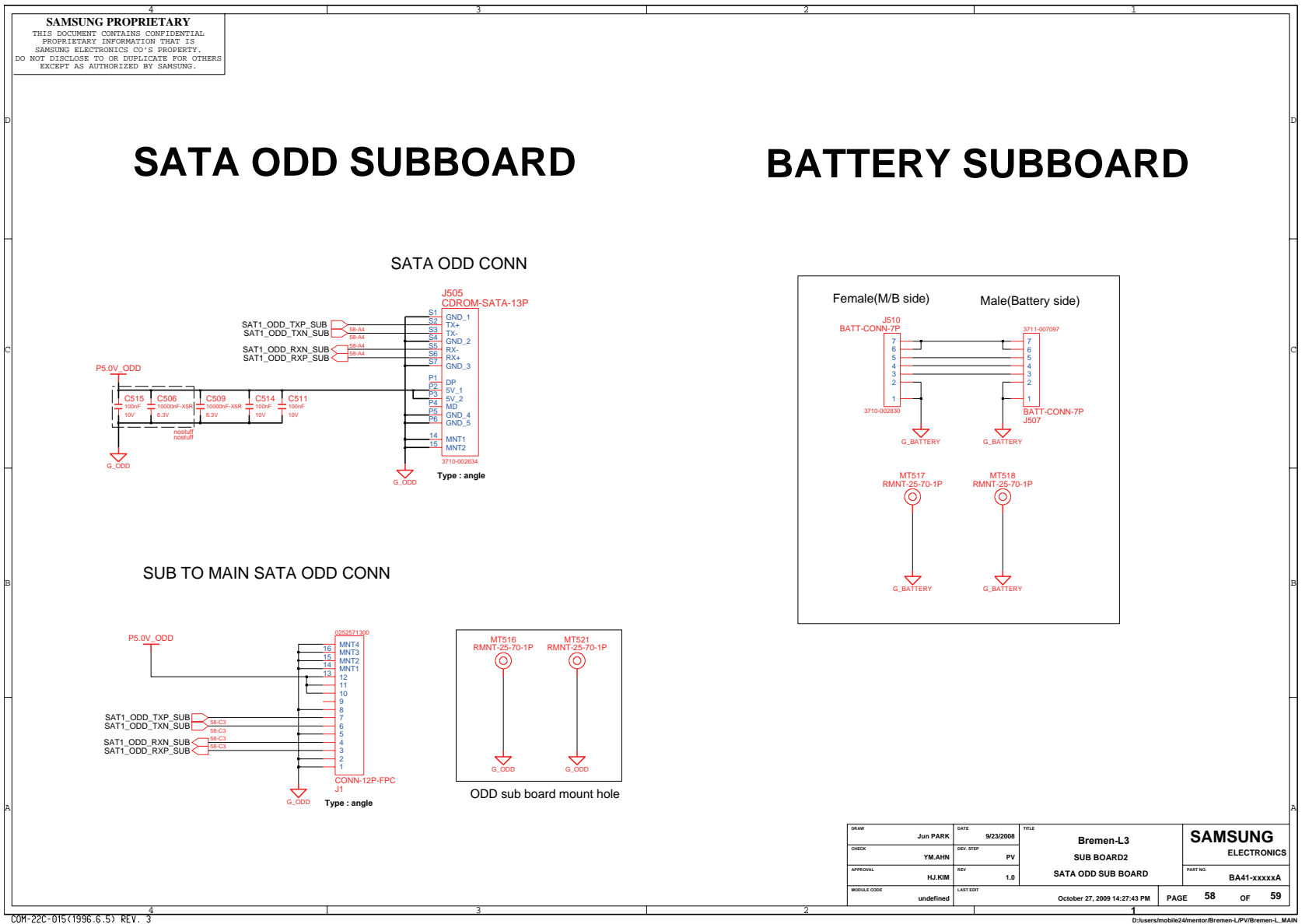




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