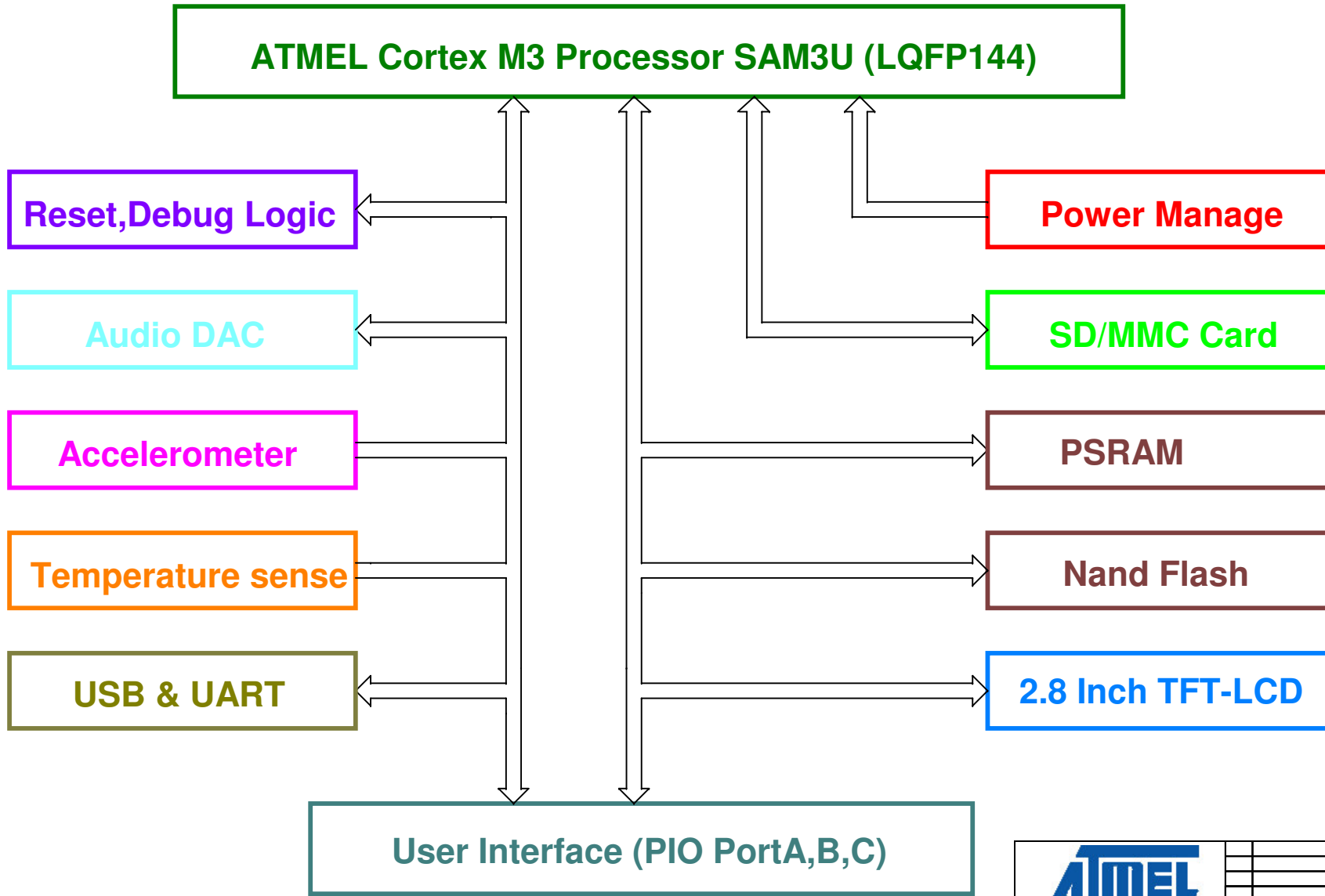



SAM3U-EK RevB Block Diagram



| | | | | | | | |
|--|--|------------------|---------------|-------------------|----------------------------|-----------------------------|---------------------|
|  SAM3U-EK RevB Block Diagram | | | | | | | |
| | | SCALE 1/1 | REV. B | SHEET 1/15 | ZXL 19-MAY-09 PP 20-JAN-10 | ZXL 03-FEB-09 XXX XX-XXX-XX | DES. DATE VER. DATE |

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{7,8,9,10,11,12,14,15} PA[31:0]

PB[31:0] {5,6,7,11,13,14,15}

MN1A
SAM3U

| | |
|------|-----|
| PA0 | 109 |
| PA1 | 111 |
| PA2 | 113 |
| PA3 | 115 |
| PA4 | 117 |
| PA5 | 119 |
| PA6 | 121 |
| PA7 | 123 |
| PA8 | 128 |
| PA9 | 130 |
| PA10 | 132 |
| PA11 | 133 |
| PA12 | 134 |
| PA13 | 87 |
| PA14 | 88 |
| PA15 | 91 |
| PA16 | 93 |
| PA17 | 95 |
| PA18 | 99 |
| PA19 | 100 |
| PA20 | 101 |
| PA21 | 102 |
| PA22 | 77 |
| PA23 | 103 |
| PA24 | 105 |
| PA25 | 106 |
| PA26 | 107 |
| PA27 | 64 |
| PA28 | 45 |
| PA29 | 46 |
| PA30 | 78 |
| PA31 | 48 |

| | |
|-------------|----|
| PA0/WKUP0 | 53 |
| PA1/WKUP1 | 55 |
| PA2/WKUP2 | 57 |
| PA3/CK | 79 |
| PA4/CDA | 80 |
| PA5/DA0 | 65 |
| PA6/DA1 | 66 |
| PA7/DA2 | 67 |
| PA8/DA3 | 68 |
| PA9/TWD0 | 31 |
| PA10/TWCK0 | 30 |
| PA11/URXD | 59 |
| PA12/UTXD | 61 |
| PA13/MISO | 62 |
| PA14/MOSI | 29 |
| PA15/SPCK | 97 |
| PA16/NPCS0 | 96 |
| PA17/WKUP7 | 26 |
| PA18/WKUP8 | 25 |
| PA19/WKUP9 | 24 |
| PA20/TXD1 | 23 |
| PA21/RXD1 | 21 |
| PA22/RTS1 | 20 |
| PA23/CTS2 | 19 |
| PA24/WKUP11 | 15 |
| PA25/WKUP12 | 14 |
| PA26/TD | 13 |
| PA27/PCK0 | 12 |
| PA28/TK | 10 |
| PA29/PWMH1 | 8 |
| PA30/TF | 6 |
| PA31/RF | 5 |

| | |
|------------------|----|
| PB0/PWMH0 | 53 |
| PB1/PWMH1 | 55 |
| PB2/PWMH2 | 57 |
| PB3/AD12BAD2 | 79 |
| PB4/AD12BAD3 | 80 |
| PB5/AD1 | 65 |
| PB6/D15 | 66 |
| PB7/A0/NBS0 | 67 |
| PB8/A1 | 68 |
| PB9/D0 | 31 |
| PB10/D1 | 30 |
| PB11/D2 | 59 |
| PB12/D3 | 61 |
| PB13/D4 | 62 |
| PB14/D5 | 29 |
| PB15/D6 | 97 |
| PB16/D7 | 96 |
| PB17/NANDOE | 26 |
| PB18/NANDWE | 25 |
| PB19/NRD | 24 |
| PB20/NCS0 | 23 |
| PB21/A21/NANDALE | 21 |
| PB22/A22/NANDCLE | 20 |
| PB23/NWR0/NWE | 19 |
| PB24/NANDRYD | 15 |
| PB25/D8 | 14 |
| PB26/D9 | 13 |
| PB27/D10 | 12 |
| PB28/D11 | 10 |
| PB29/D12 | 8 |
| PB30/D13 | 6 |
| PB31/D14 | 5 |

| | |
|------|----|
| PB0 | 53 |
| PB1 | 55 |
| PB2 | 57 |
| PB3 | 79 |
| PB4 | 80 |
| PB5 | 65 |
| PB6 | 66 |
| PB7 | 67 |
| PB8 | 68 |
| PB9 | 31 |
| PB10 | 30 |
| PB11 | 59 |
| PB12 | 61 |
| PB13 | 62 |
| PB14 | 29 |
| PB15 | 97 |
| PB16 | 96 |
| PB17 | 26 |
| PB18 | 25 |
| PB19 | 24 |
| PB20 | 23 |
| PB21 | 21 |
| PB22 | 20 |
| PB23 | 19 |
| PB24 | 15 |
| PB25 | 14 |
| PB26 | 13 |
| PB27 | 12 |
| PB28 | 10 |
| PB29 | 8 |
| PB30 | 6 |
| PB31 | 5 |


{5,6,7,10,11,14,15} PC[31:0]

PC[31:0] {5,6,7,10,11,14,15}

| | |
|------|-----|
| PC0 | 110 |
| PC1 | 112 |
| PC2 | 114 |
| PC3 | 116 |
| PC4 | 118 |
| PC5 | 120 |
| PC6 | 122 |
| PC7 | 124 |
| PC8 | 129 |
| PC9 | 131 |
| PC10 | 89 |
| PC11 | 92 |
| PC12 | 94 |
| PC13 | 98 |
| PC14 | 28 |
| PC15 | 81 |

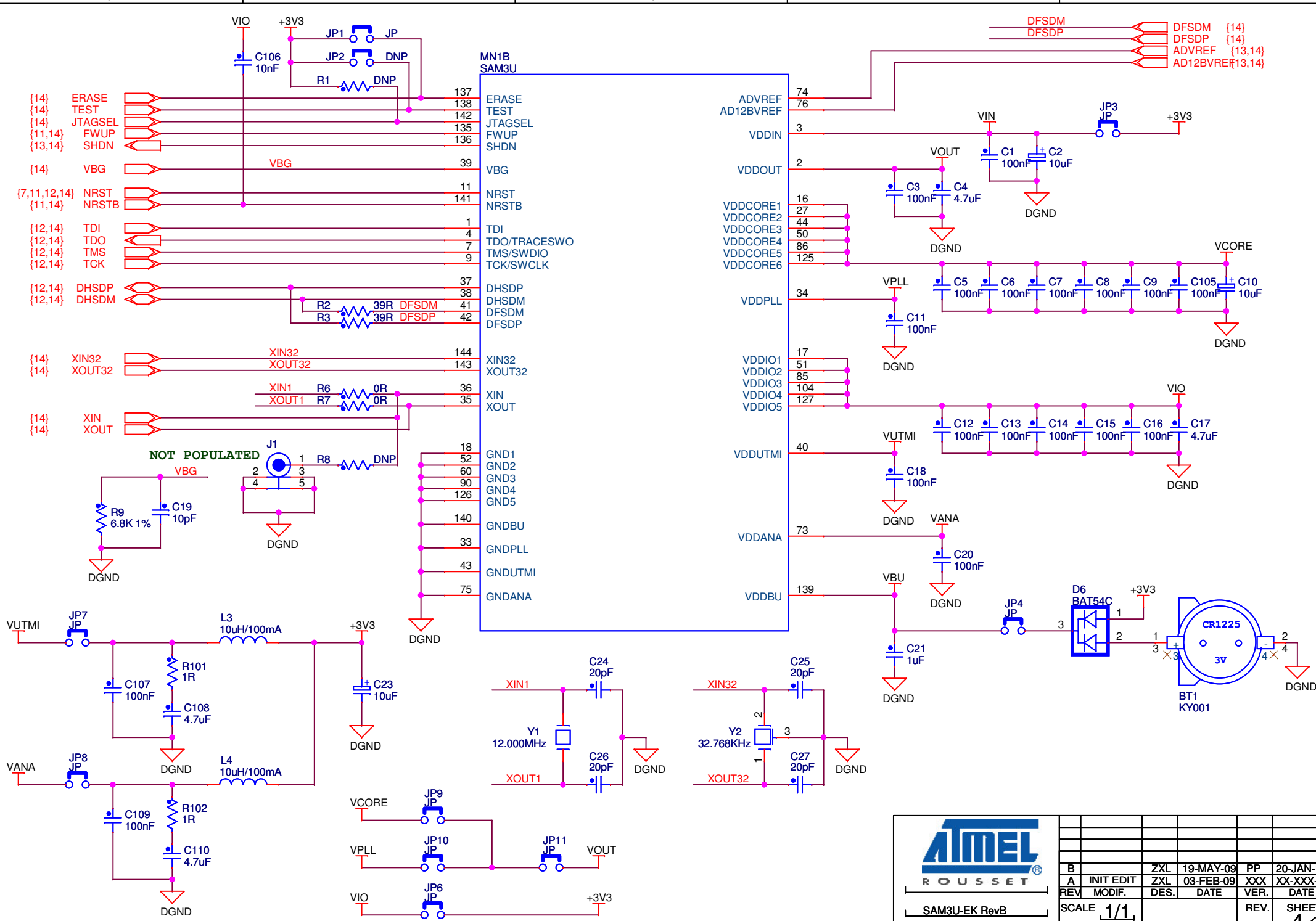
| | |
|----------------|-----|
| PC0/A2 | 82 |
| PC1/A3 | 83 |
| PC2/A4 | 84 |
| PC3/A5 | 32 |
| PC4/A6 | 108 |
| PC5/A7 | 22 |
| PC6/A8 | 47 |
| PC7/A9 | 49 |
| PC8/A10 | 54 |
| PC9/A11 | 56 |
| PC10/A12 | 58 |
| PC11/A13 | 63 |
| PC12/NCS1 | 69 |
| PC13/RXD3 | 70 |
| PC14/NPCS2 | 71 |
| PC15/NWR1/NBS1 | 72 |
| PC16/NCS2 | 82 |
| PC17/AD12BAD6 | 83 |
| PC18/AD12BAD7 | 84 |
| PC19/NPCS1 | 32 |
| PC20/A14 | 108 |
| PC21/A15 | 22 |
| PC22/A16 | 47 |
| PC23/A17 | 49 |
| PC24/A18 | 54 |
| PC25/A19 | 56 |
| PC26/PWMH2 | 58 |
| PC27/A23 | 63 |
| PC28/DA4 | 69 |
| PC29/DA5 | 70 |
| PC30/DA6 | 71 |
| PC31/DA7 | 72 |

| | |
|------|-----|
| PC16 | 82 |
| PC17 | 83 |
| PC18 | 84 |
| PC19 | 32 |
| PC20 | 108 |
| PC21 | 22 |
| PC22 | 47 |
| PC23 | 49 |
| PC24 | 54 |
| PC25 | 56 |
| PC26 | 58 |
| PC27 | 63 |
| PC28 | 69 |
| PC29 | 70 |
| PC30 | 71 |
| PC31 | 72 |



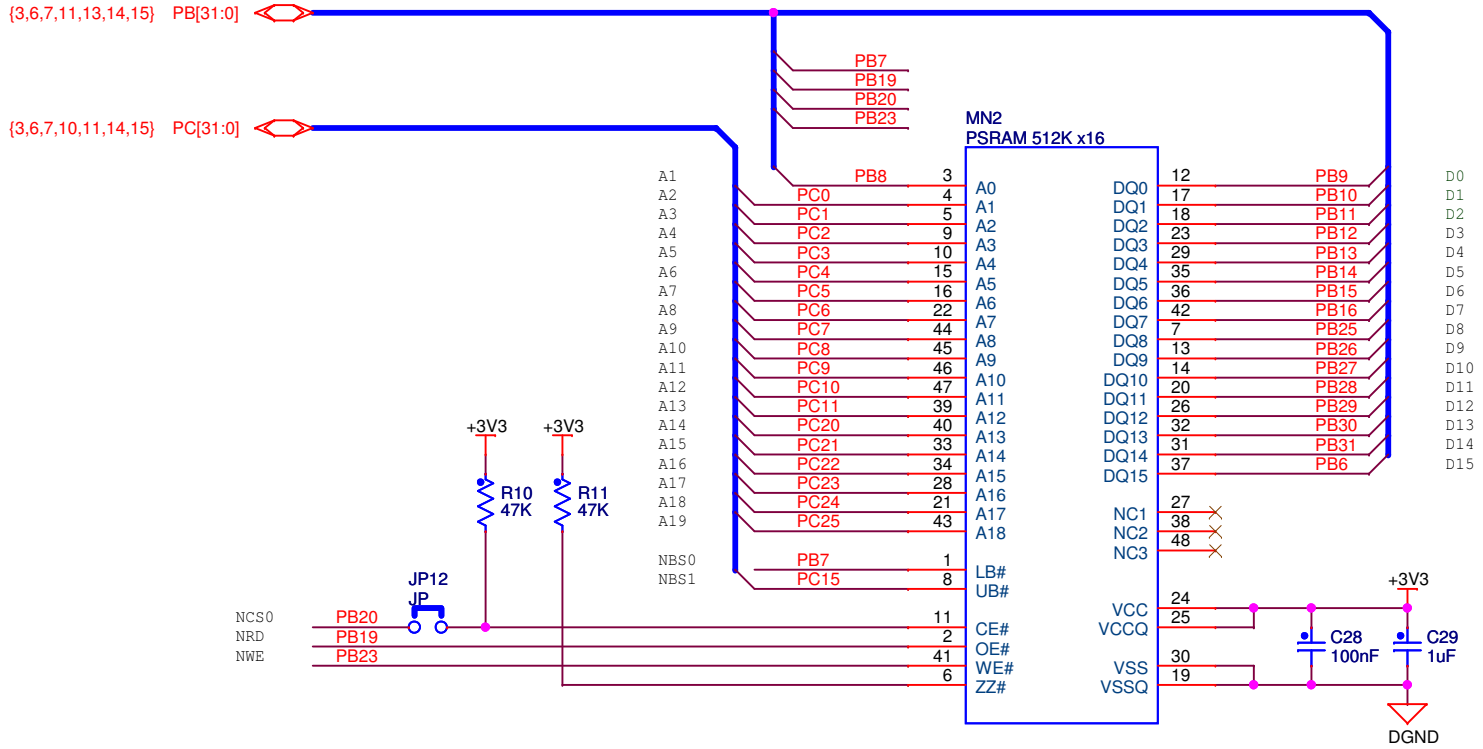
SAM3U-EK RevB
SAM3U PIO

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|-------------------------|-----------|-----------|-----------|---------------|
| ATMEL ROUSSET | | | | |
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| SAM3U CPU | | | | |

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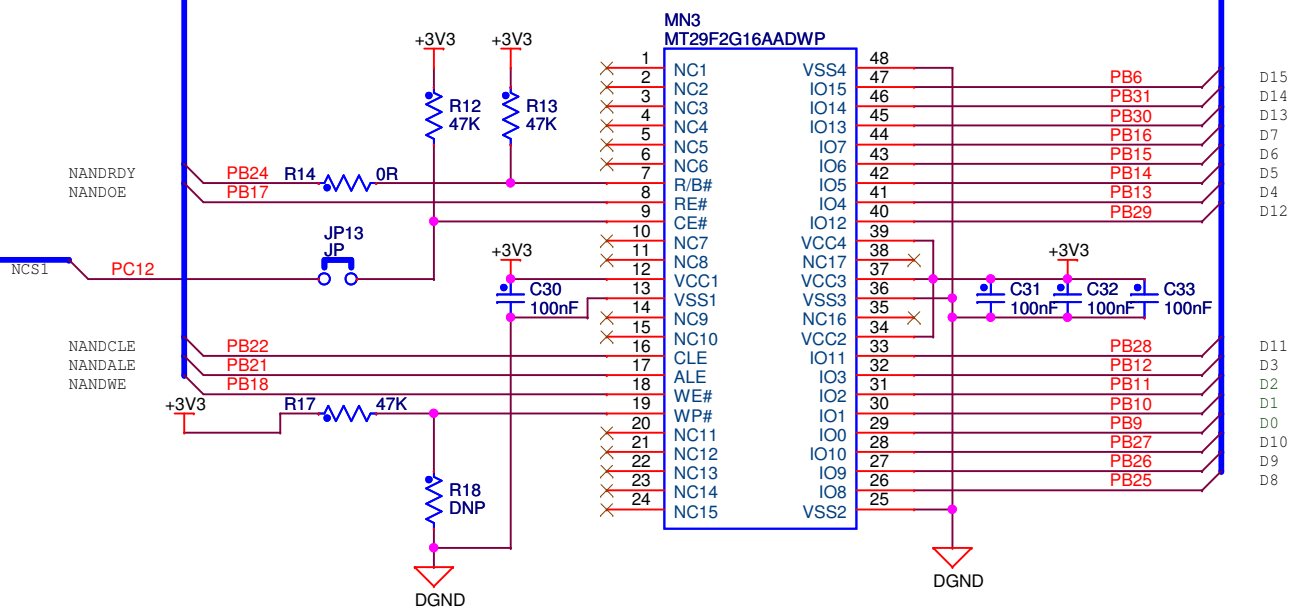


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| | | B | ZXL | 19-MAY-09 | PP | 20-JAN-10 | |
| SAM3U-EK RevB EBI Memory 1MB PSRAM | | A | INIT EDIT | ZXL | 03-FEB-09 | XXX | XX-XXX-XX |
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{3,5,7,11,13,14,15} PB[31:0]

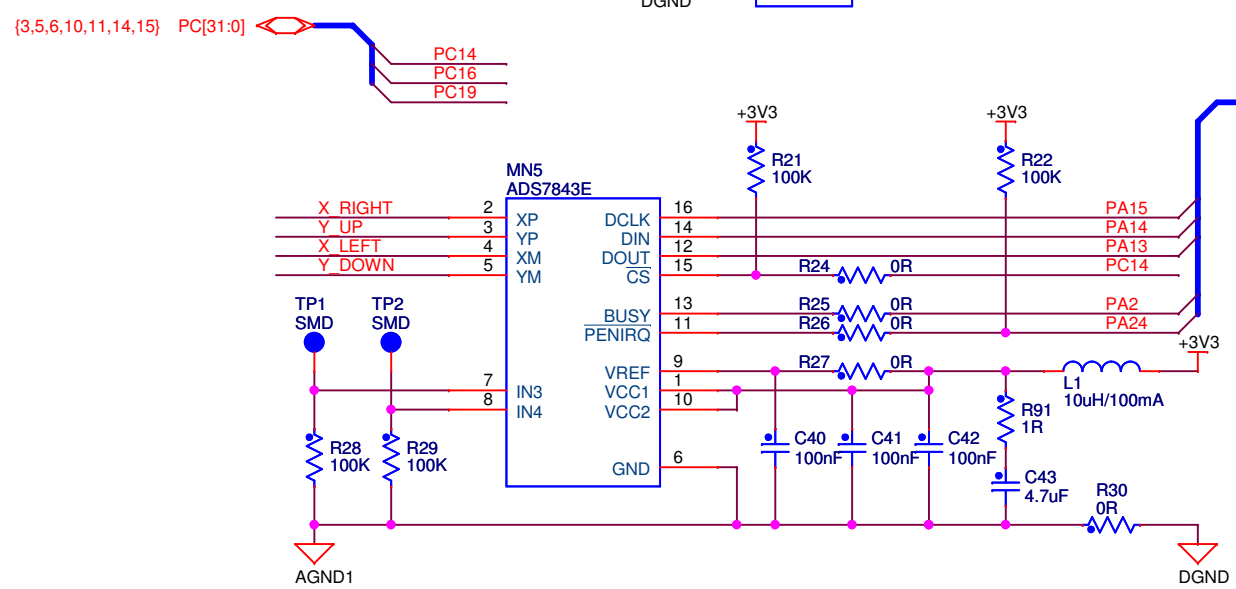
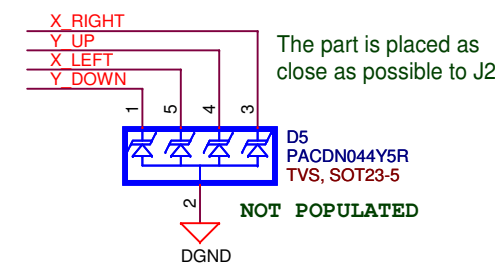
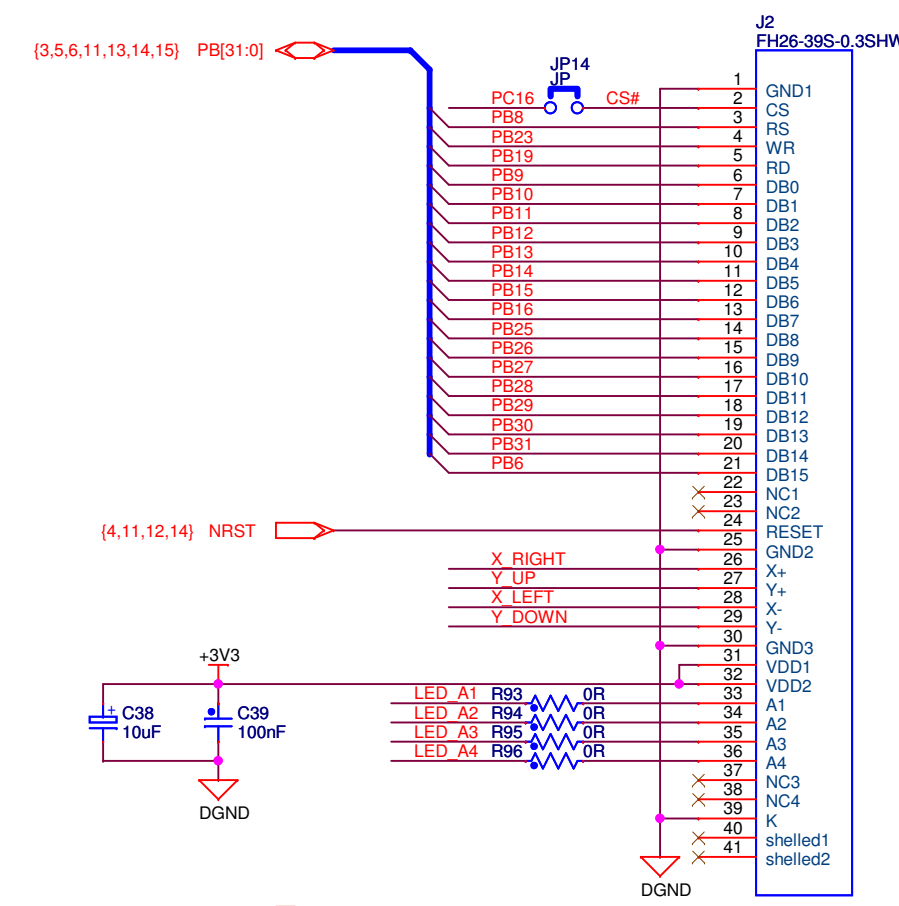
{3,5,7,10,11,14,15} PC[31:0]



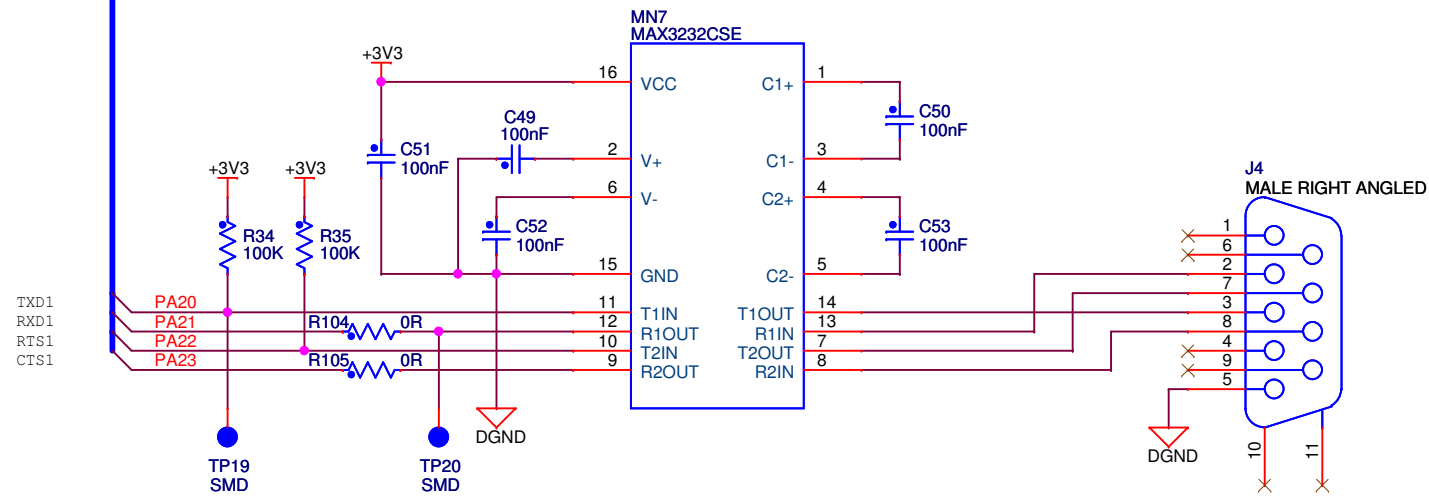
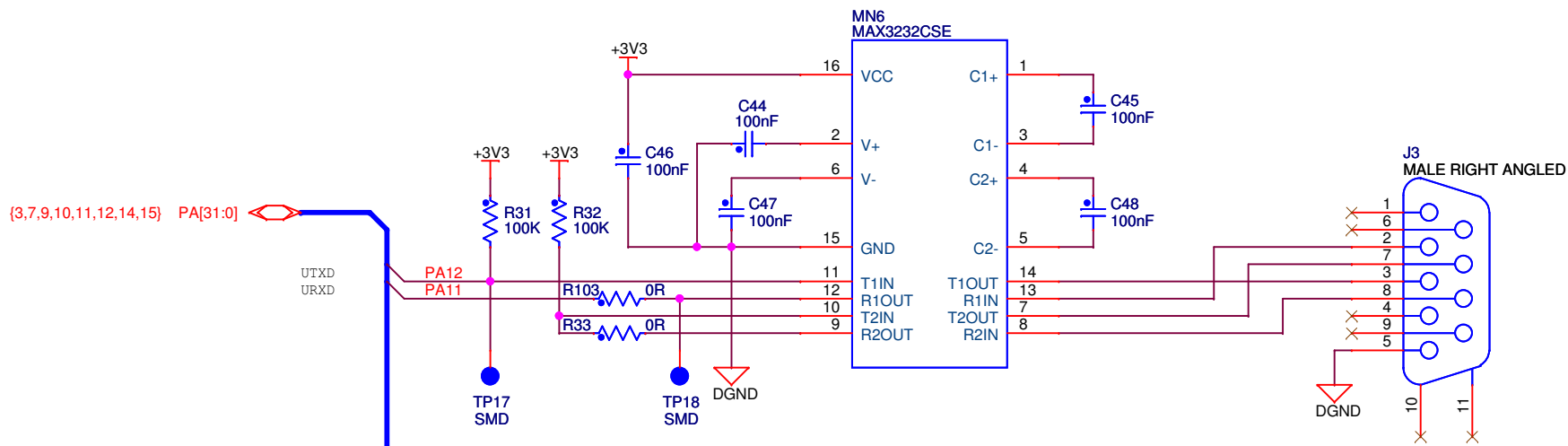
ATMEL
ROUSSET®

SAM3U-EK RevB
EBI Memory II NAND FLASH

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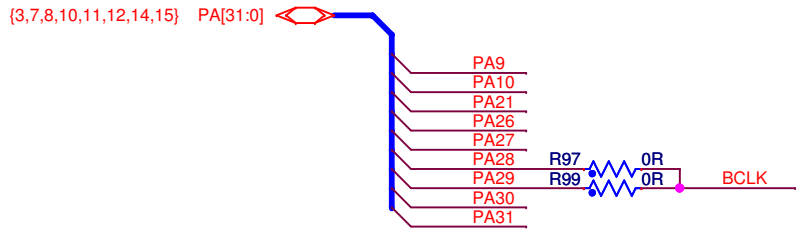
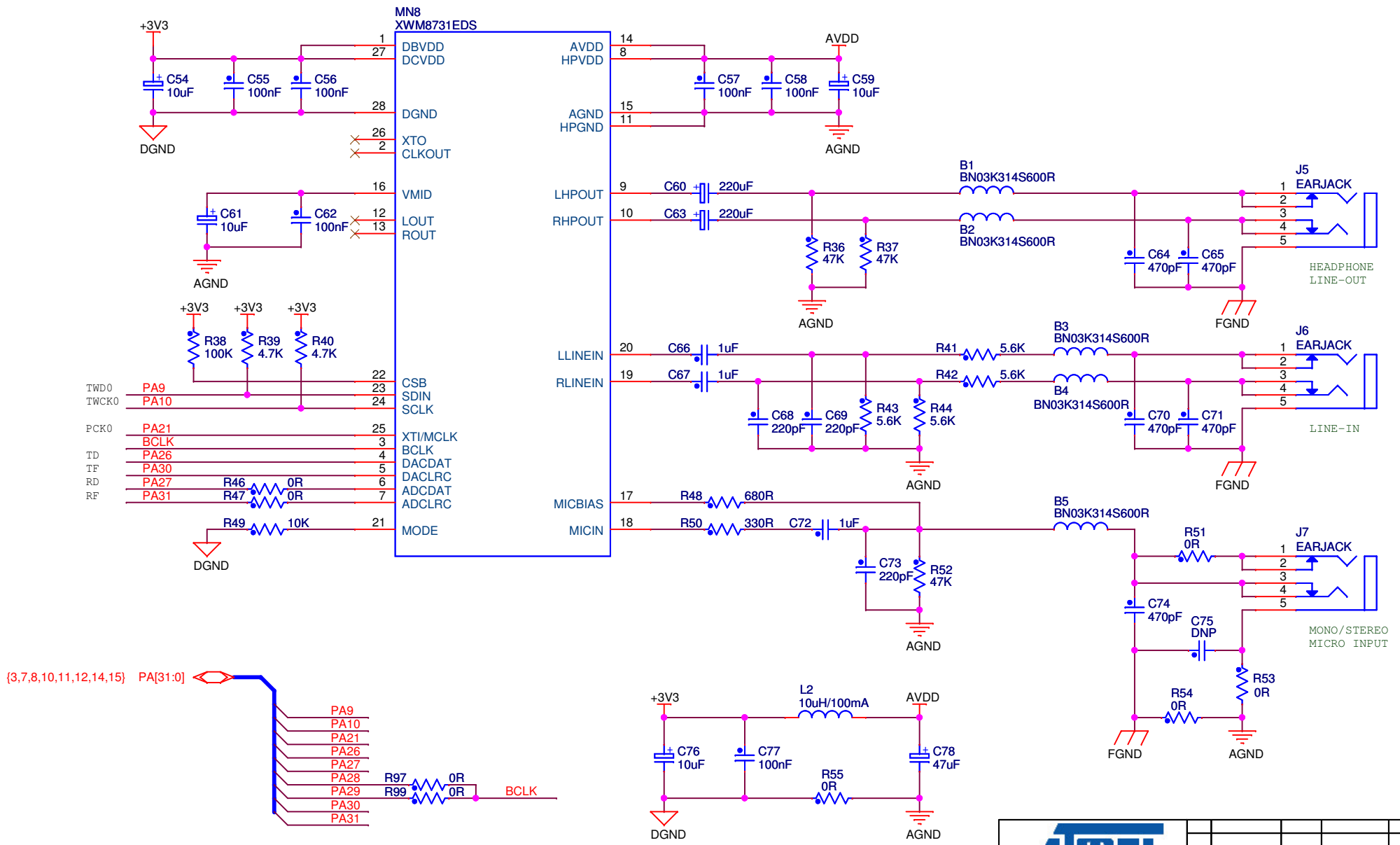


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| ATMEL | | | | | |
| ROUSSET | | | | | |
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| SCALE 1/1 | | | | B | 7/15 |
| SAM3U-EK RevB | | | | | |
| TFT-LCD & TSC | | | | | |



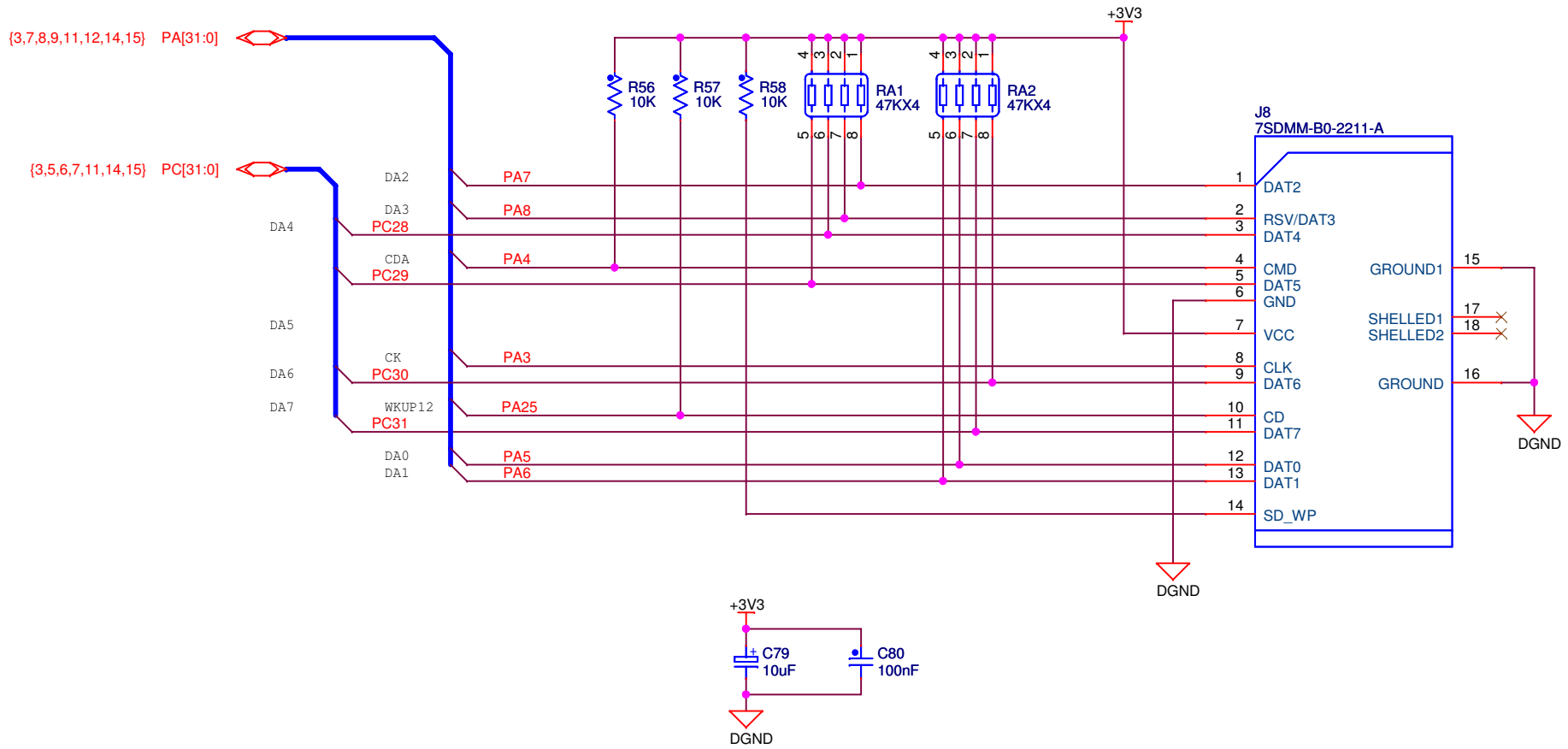
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| ATMEL ROUSSET | | | | | |
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| SAM3U-EK RevB UART & COM1 RS232 | | | | | |

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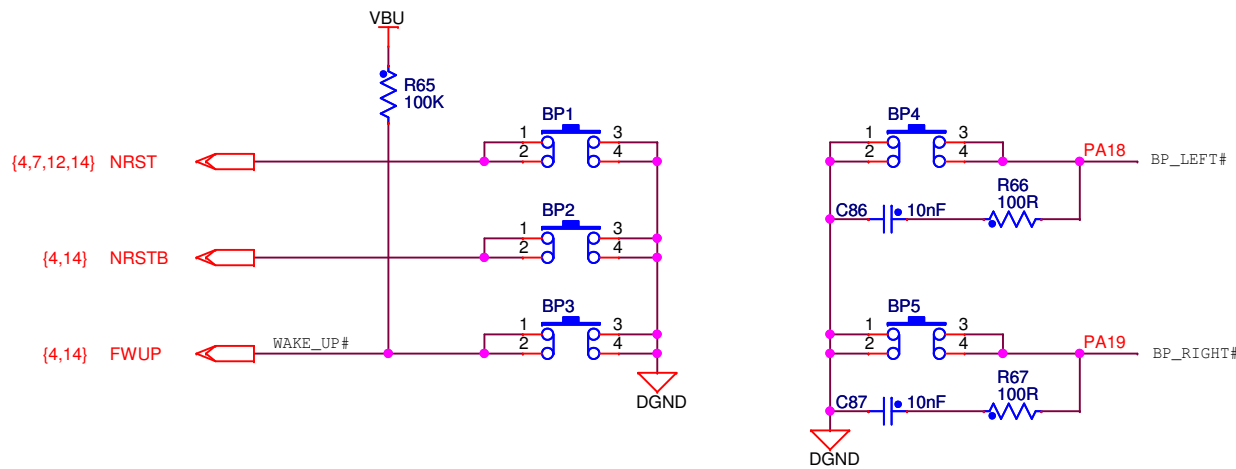
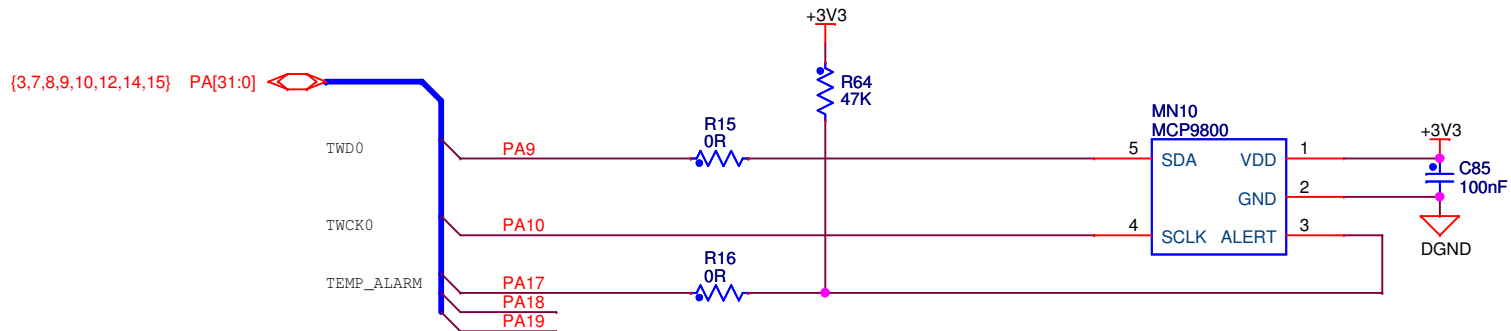
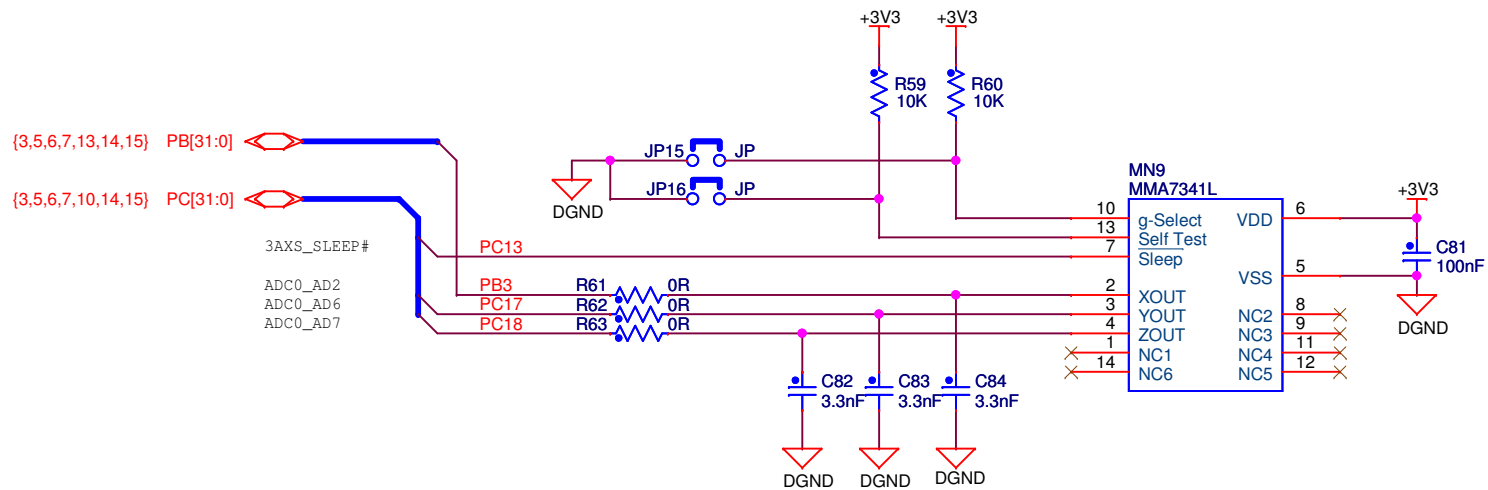


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| SAM3U-EK RevB Audio DAC | | ZXL 19-MAY-09 ZXL 03-FEB-09 | | PP XXX DATE | 20-JAN-10 XX-XXX-XX DATE |
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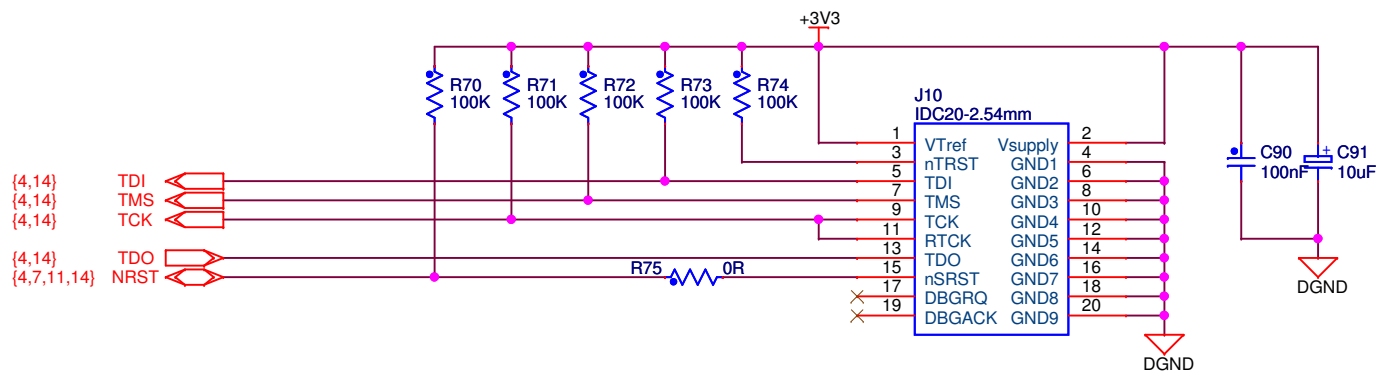
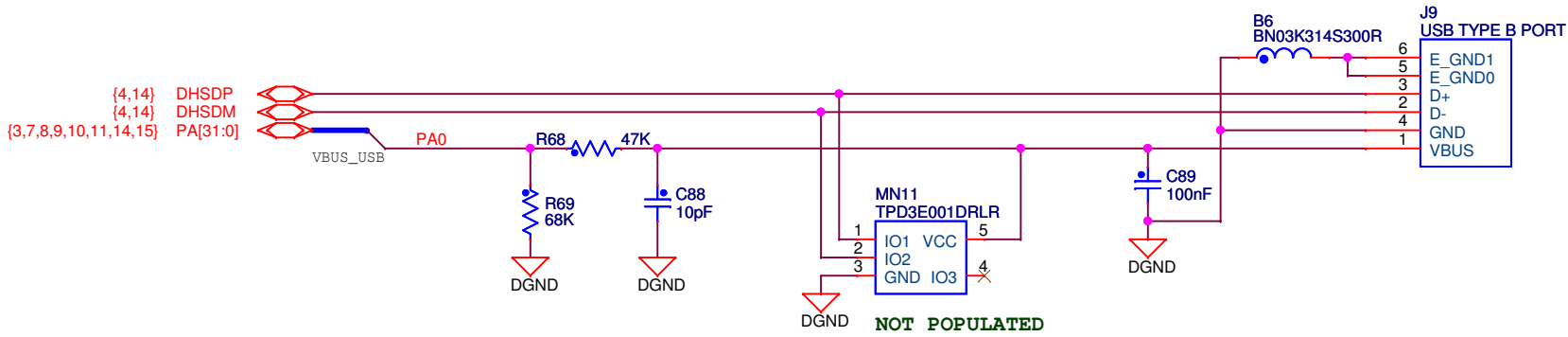


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| SAM3U-EK RevB SD/MMC interface | | SCALE 1/1 | | REV. B | SHEET 10/15 | |
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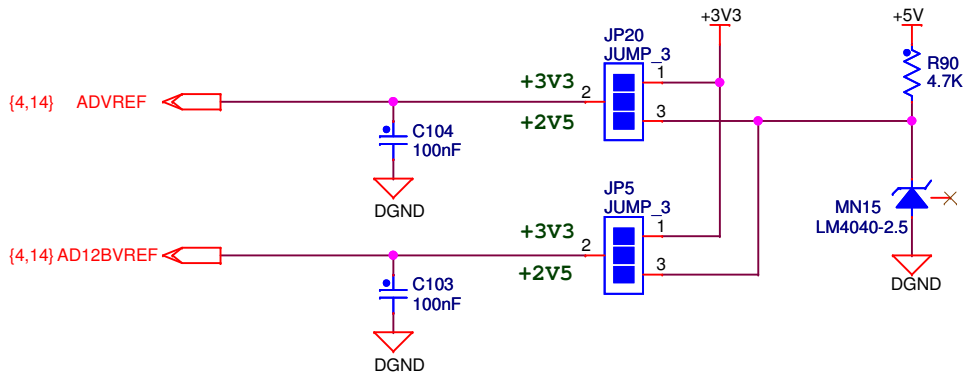
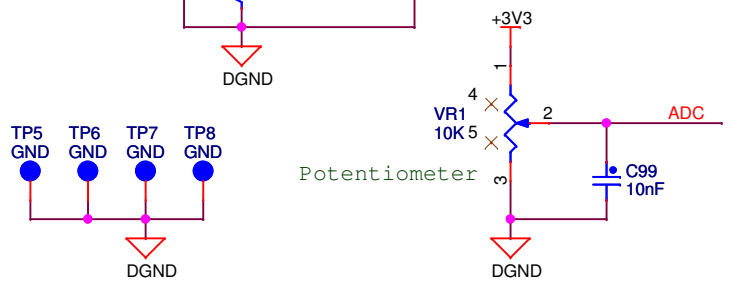
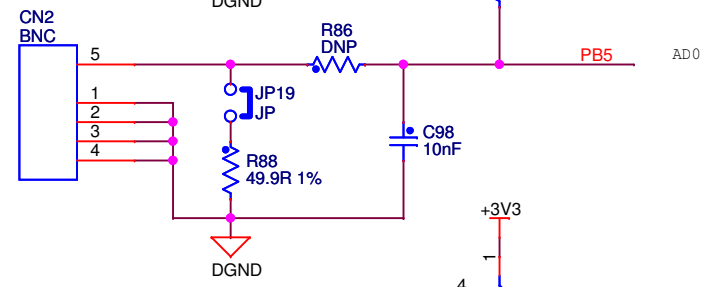
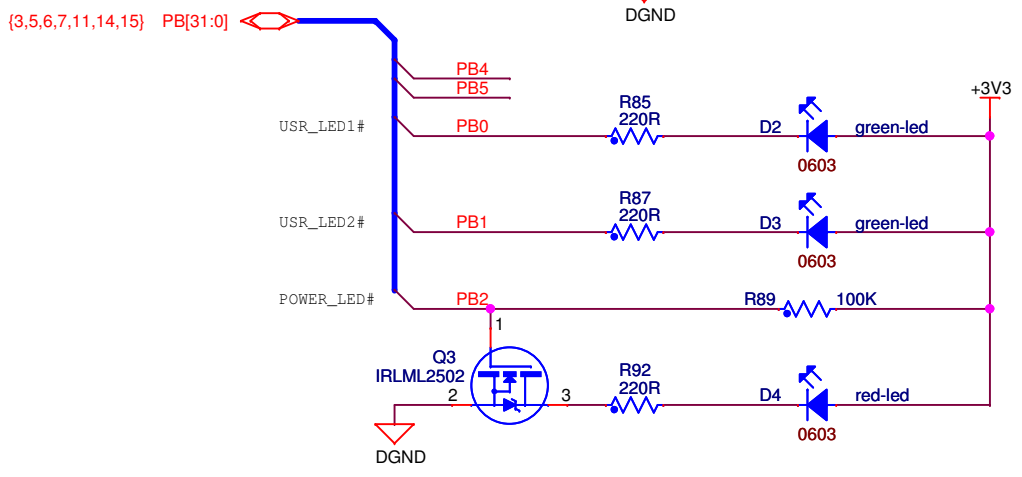
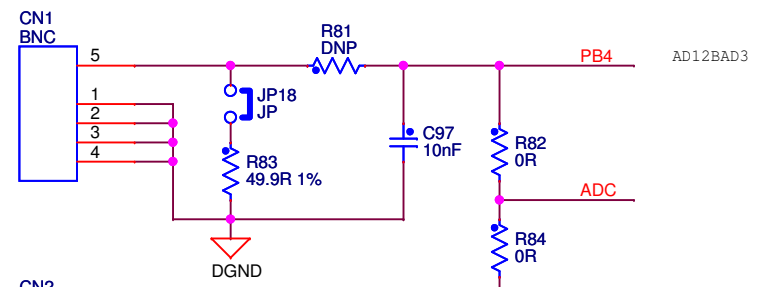
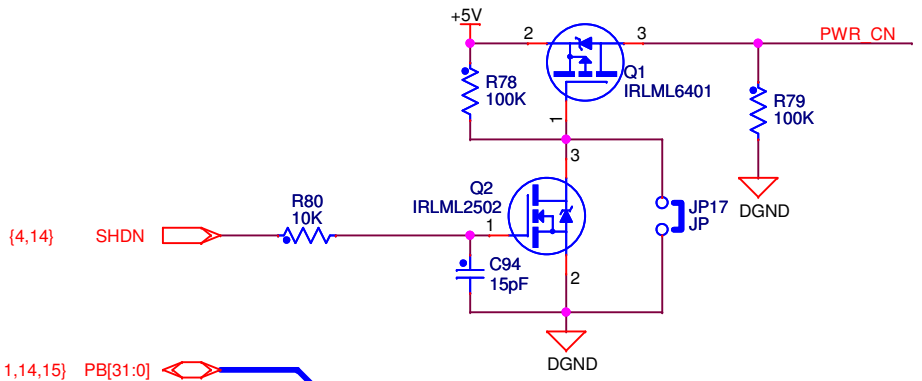
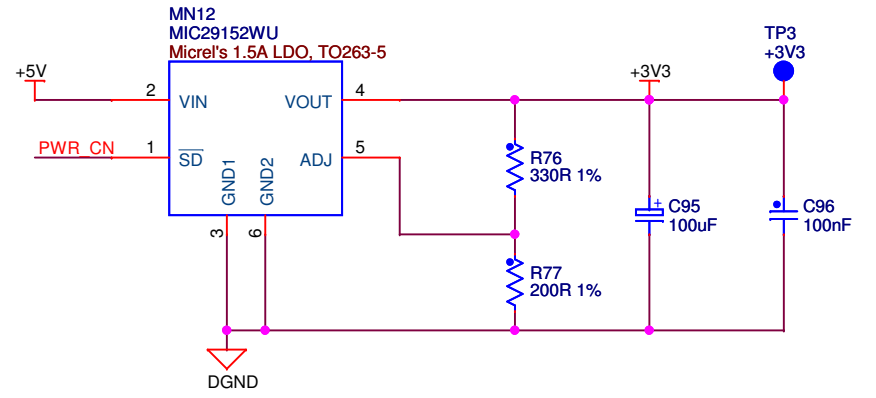
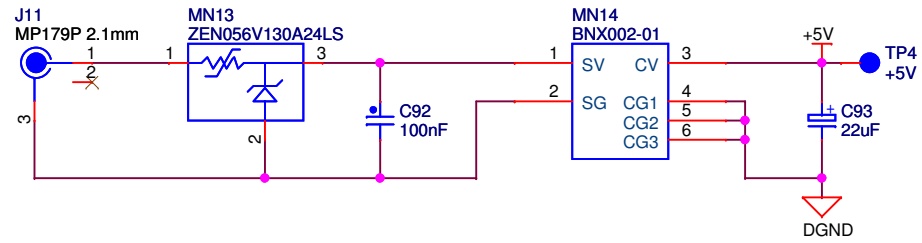
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| SAM3U-EK RevB Accelerometer,Temp.Buttons | | SCALE | 1/1 | | REV. | SHEET | |
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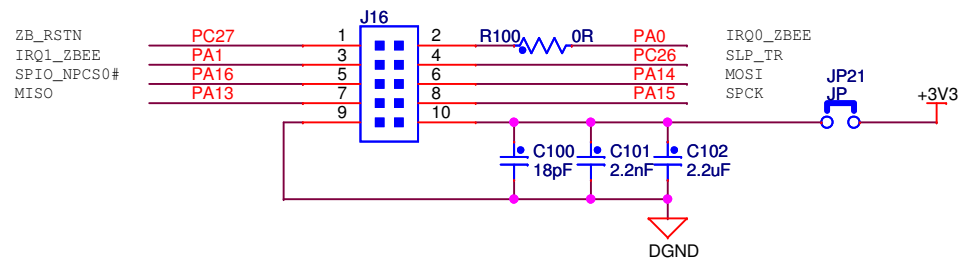
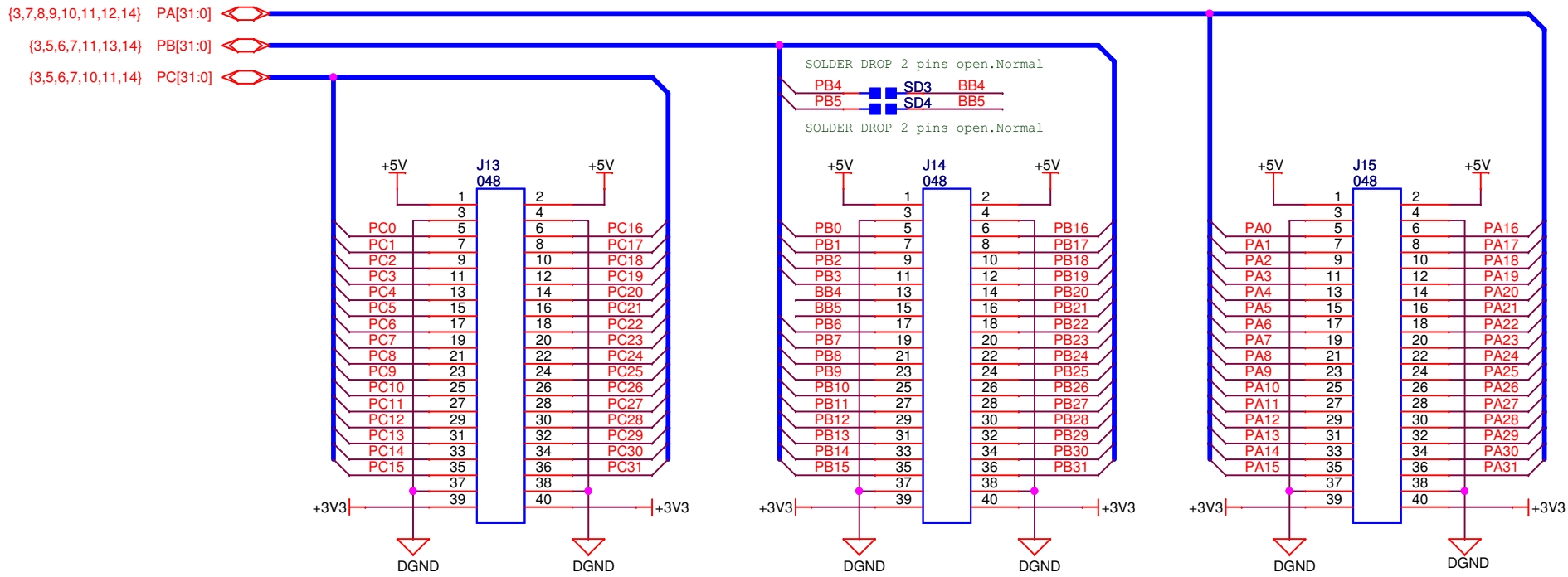
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| | | SCALE 1/1 | | | | REV. B | SHEET 12/15 |
| SAM3U-EK RevB | | | | | | | |
| USB & JTAG | | | | | | | |

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| SAM3U-EK RevB | | A | INIT EDIT | ZXL | 03-FEB-09 | XXX | XX-XX-XX |
| Power Supply, ADC & Led | | REV | MODIF. | DES. | DATE | VER. | DATE |
| SCALE 1/1 | | | | REV. | SHEET | | |
| | | | | B | 13 | | 15 |

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| SAM3U-EK RevB | | SCALE 1/1 | | REV. B | SHEET 15/15 |
| User interface & ZigBee | | | | | |
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