

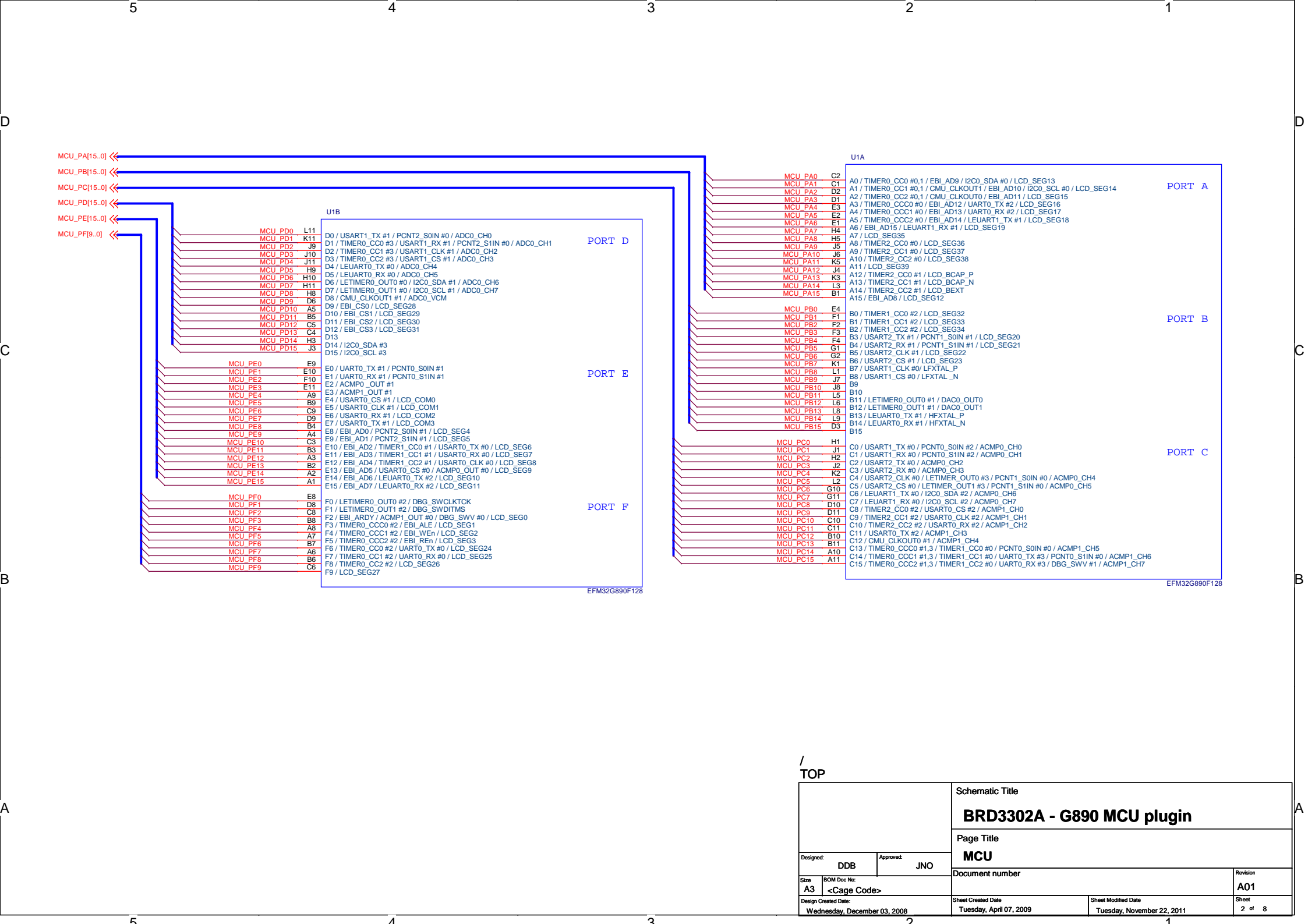
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Revision History	
Rev.	Comment
A00	Initial release

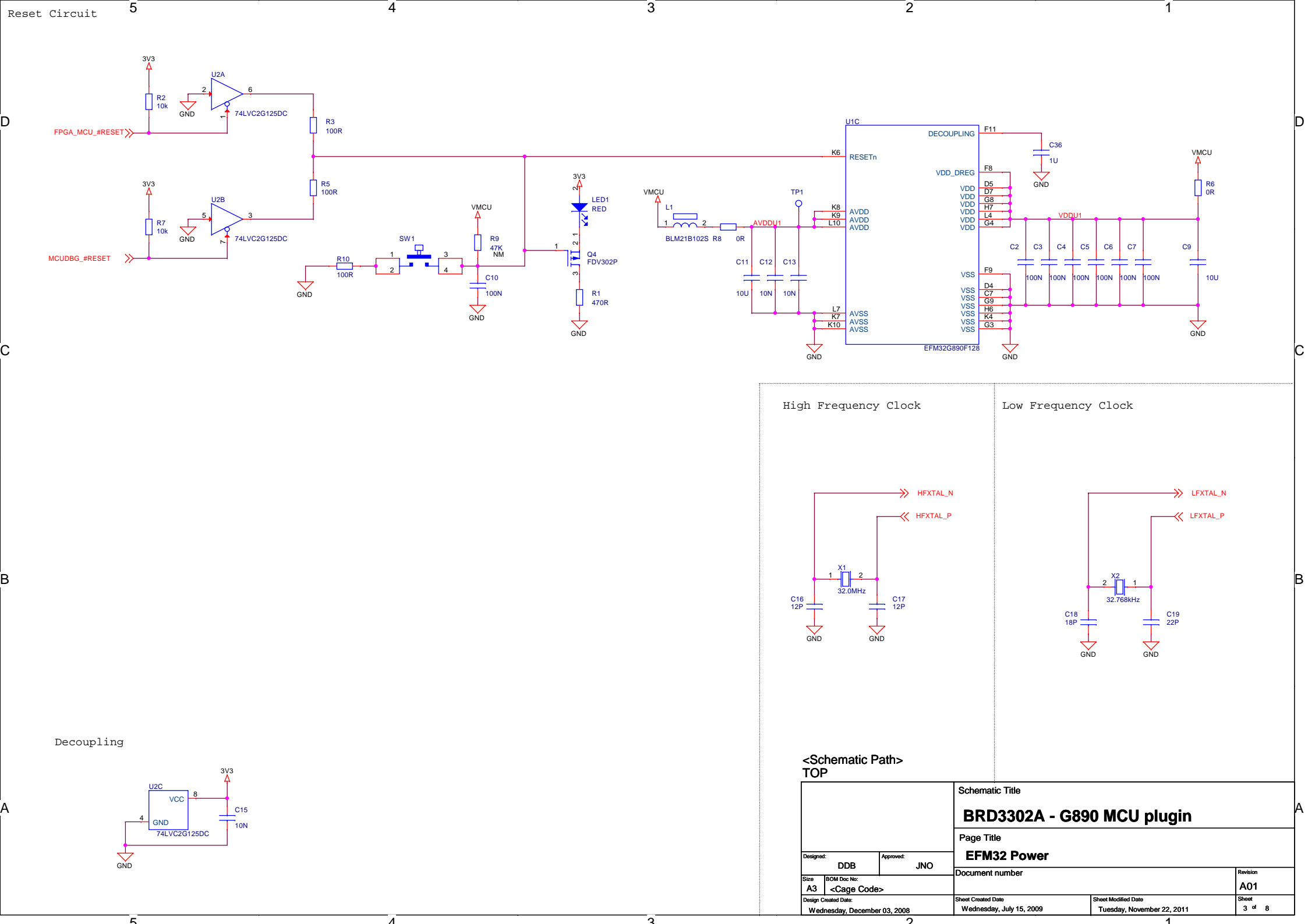
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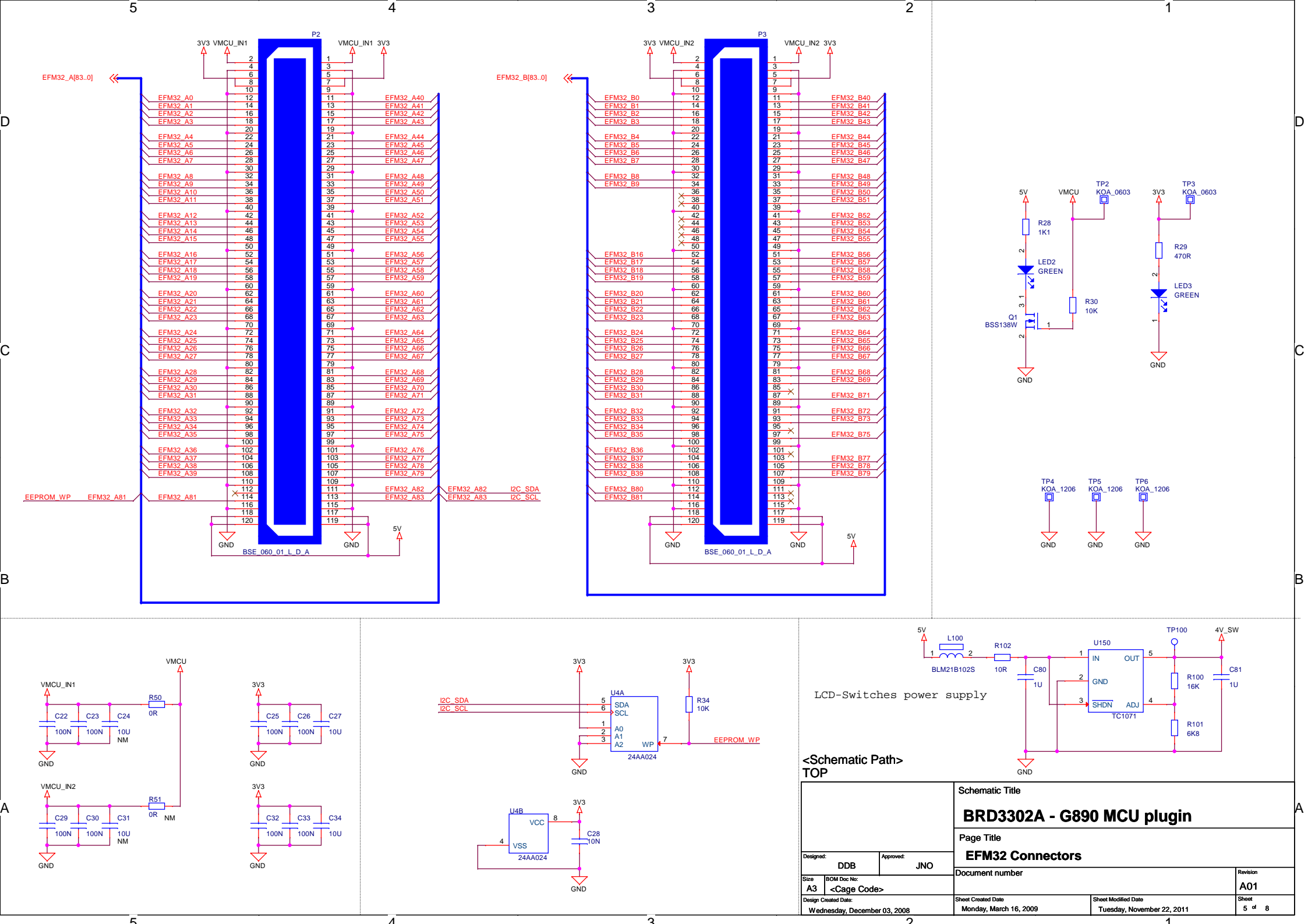


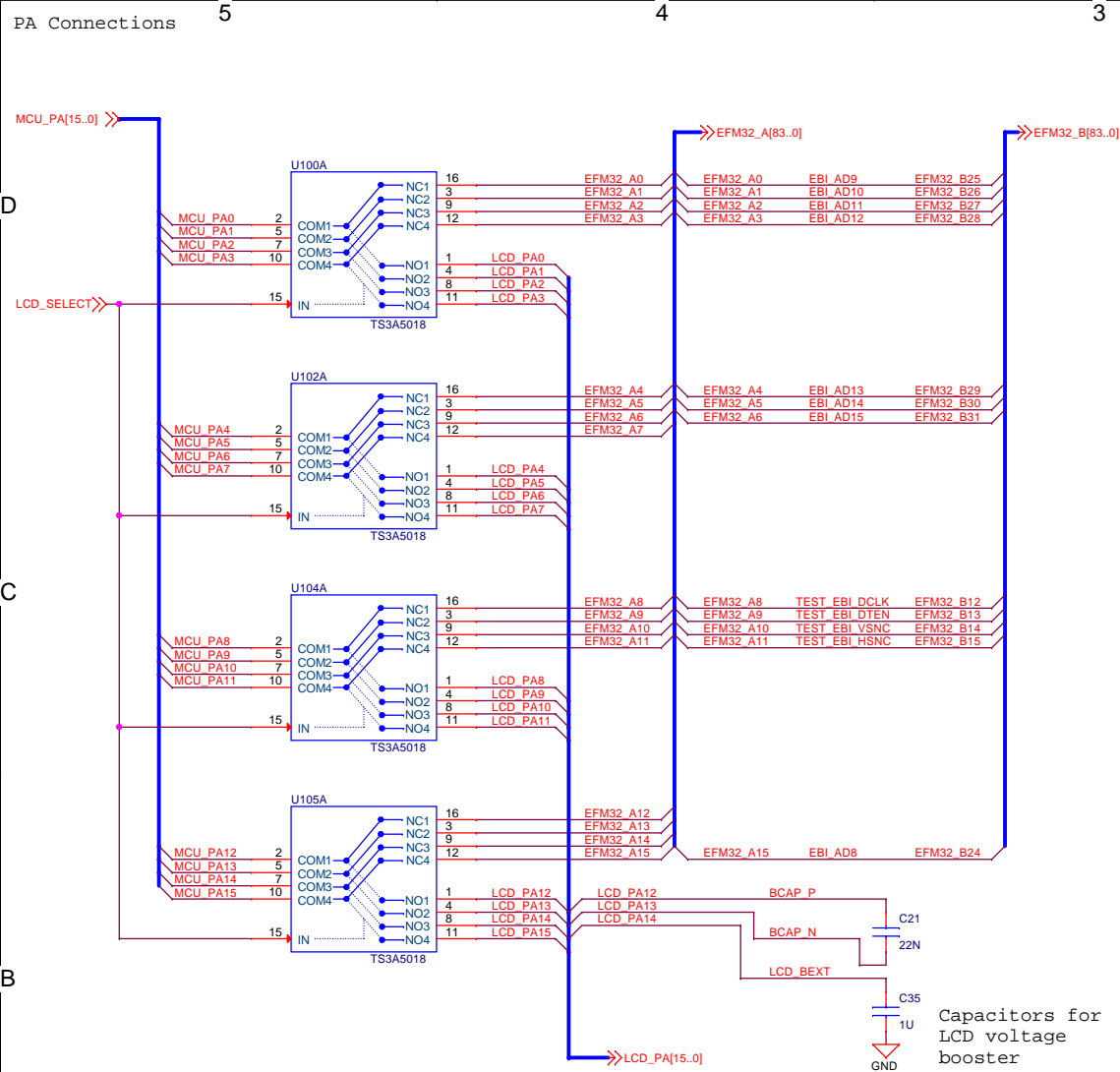
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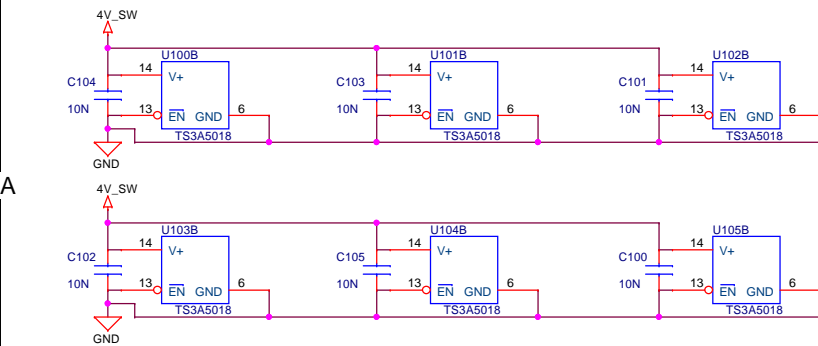


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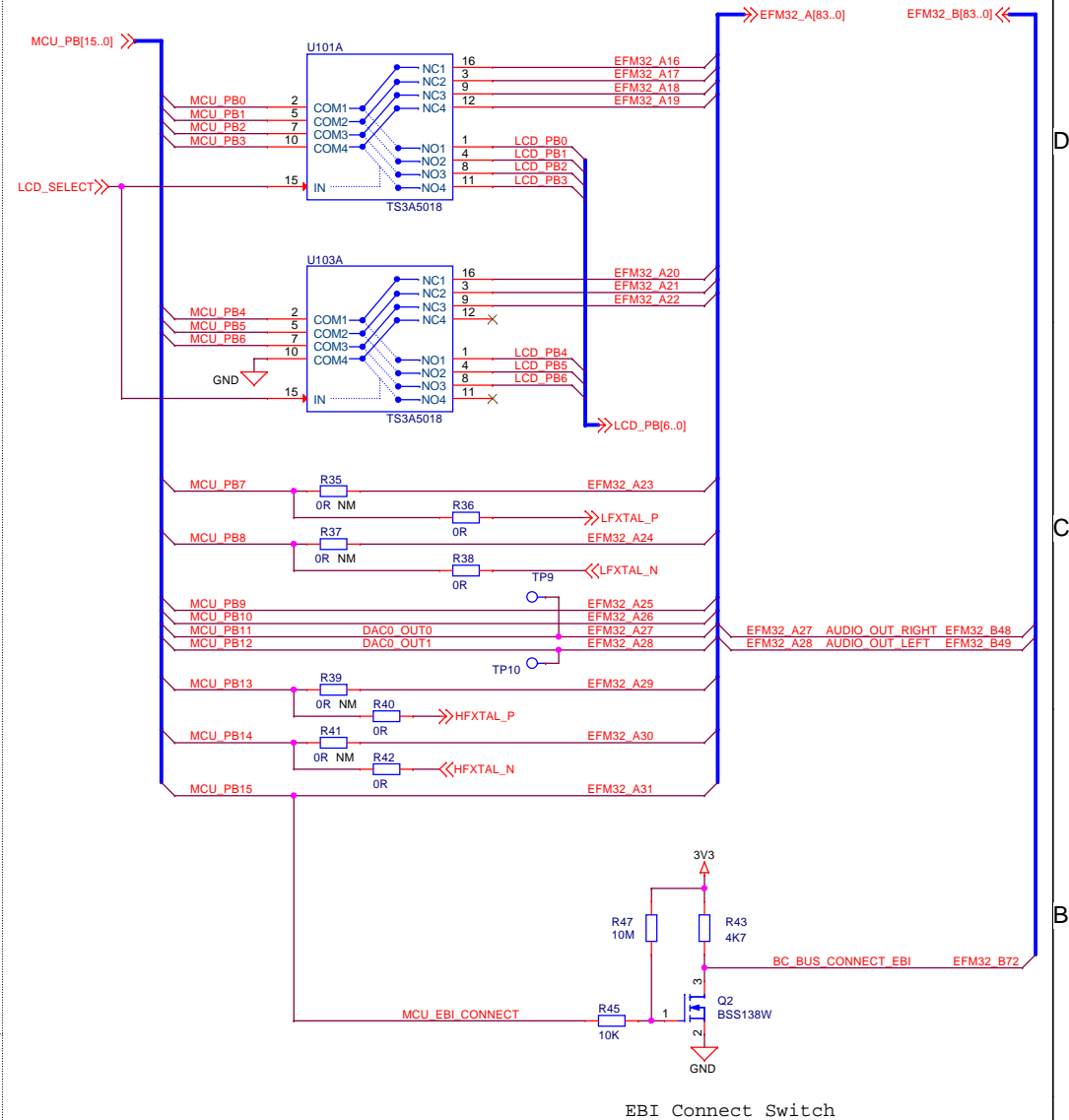




LCD Switch power

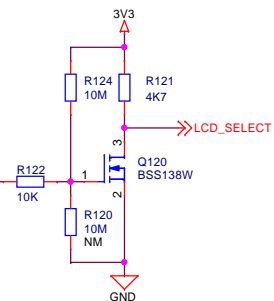


PB Connections

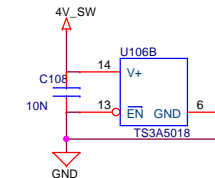
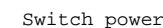


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LCD Switch controll

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		Signal Assignments #2	
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The diagram illustrates the peripheral expansion connections for the EFM32 microcontroller, specifically focusing on PE (Peripheral Expansion) connections and reset connections.

PE Connections:

- MCU PE[15..0] to EFM32 A[83..0]:** The MCU PE[15..0] bus is connected to the EFM32 A[83..0] bus. The connections are as follows:
 - MCU PE0 to EFM32 A64 (UART TX)
 - MCU PE1 to EFM32 A65 (UART RX)
 - MCU PE2 to EFM32 A66 (FPGA #INT)
 - MCU PE3 to EFM32 A67 (TEST_DBG_TCLK)
 - MCU PE4 to EFM32 A68 (TEST_DBG_TD0)
 - MCU PE5 to EFM32 A69 (TEST_DBG_TD1)
 - MCU PE6 to EFM32 A70 (TEST_DBG_TD2)
 - MCU PE7 to EFM32 A71 (TEST_DBG_TD3)
 - MCU PE8 to EFM32 A72 (EBI_AD0)
 - MCU PE9 to EFM32 A73 (EBI_AD1)
 - MCU PE10 to EFM32 A74 (EBI_AD2)
 - MCU PE11 to EFM32 A75 (EBI_AD3)
 - MCU PE12 to EFM32 A76 (EBI_AD4)
 - MCU PE13 to EFM32 A77 (EBI_AD5)
 - MCU PE14 to EFM32 A78 (EBI_AD6)
 - MCU PE15 to EFM32 A79 (EBI_AD7)
- LCD_SELECT to LCD_PE[15..4]:** The LCD_SELECT signal is connected to the LCD_PE[15..4] bus.
- U107A, U108A, U109A:** These are TS3A5018 comparators. Each comparator has four common-mode inputs (COM1, COM2, COM3, COM4) and four non-inverting inputs (NO1, NO2, NO3, NO4). The connections are as follows:
 - U107A: COM1 to EFM32 B55, COM2 to EFM32 B52, COM3 to EFM32 B81, COM4 to EFM32 B63. NO1 to LCD_PE4, NO2 to LCD_PE5, NO3 to LCD_PE6, NO4 to LCD_PE7.
 - U108A: COM1 to EFM32 B59, COM2 to EFM32 B60, COM3 to EFM32 B61, COM4 to EFM32 B62. NO1 to LCD_PE8, NO2 to LCD_PE9, NO3 to LCD_PE10, NO4 to LCD_PE11.
 - U109A: COM1 to EFM32 B20, COM2 to EFM32 B21, COM3 to EFM32 B22, COM4 to EFM32 B23. NO1 to LCD_PE12, NO2 to LCD_PE13, NO3 to LCD_PE14, NO4 to LCD_PE15.

Reset connections:

- EFM32_B[83..0] to FPGA_MCU_RESET and MCUDBG_RESET:** The EFM32_B[83..0] bus is connected to the FPGA_MCU_RESET and MCUDBG_RESET signals.

The schematic diagram illustrates the connections for the BRD3302A - G890 MCU plugin. It is divided into two main sections: PF Connections and Switch power.

PF Connections: This section shows the connections for the MCU (MCU_PF0 to MCU_PF9) and the LCD (LCD_SELECT, LCD_PF2 to LCD_PF9). The MCU connections are routed through the EFM32 B0 and B1 pins. The LCD connections are routed through the EFM32 B2 to B5 pins. The connections are as follows:

- MCU_PF0 to EFM32 B0
- MCU_PF1 to EFM32 B1
- MCU_PF2 to EFM32 B2
- MCU_PF3 to EFM32 B3
- MCU_PF4 to EFM32 B4
- MCU_PF5 to EFM32 B5
- MCU_PF6 to EFM32 B6
- MCU_PF7 to EFM32 B7
- MCU_PF8 to EFM32 B8
- MCU_PF9 to EFM32 B9
- LCD_SELECT to EFM32 B0
- LCD_PF2 to EFM32 B2
- LCD_PF3 to EFM32 B3
- LCD_PF4 to EFM32 B4
- LCD_PF5 to EFM32 B5
- LCD_PF6 to EFM32 B6
- LCD_PF7 to EFM32 B7
- LCD_PF8 to EFM32 B8
- LCD_PF9 to EFM32 B9

Switch power: This section shows the connections for the switch power. It includes the 4V_SW pin, the GND pin, and the EN pin of the TS3A5018 switch. The connections are as follows:

- 4V_SW to V+
- GND to GND
- EN to EN

The schematic also includes a table for the component values and a title block.

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EFM32_B[83..0] is connected to EFM32_B80 and EFM32_B75. EFM32_B80 is connected to FPGA_MCU_#RESET, and EFM32_B75 is connected to MCUDBG_#RESET.

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