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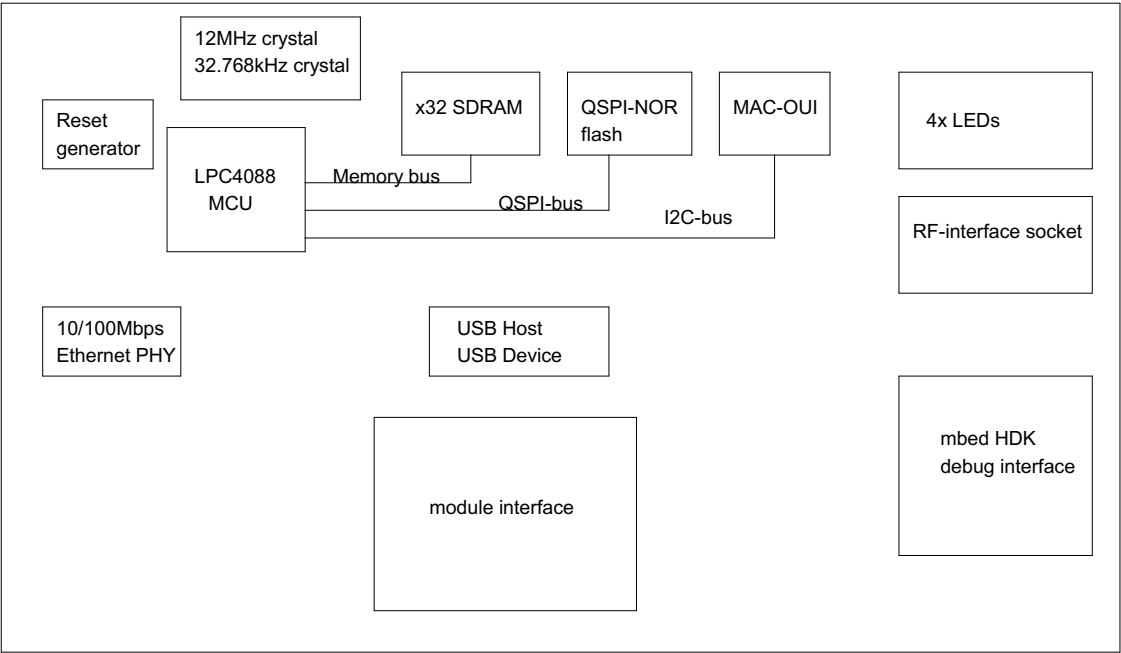
mbed HDK debug interface

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Supply voltages


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mbed and display interfaces

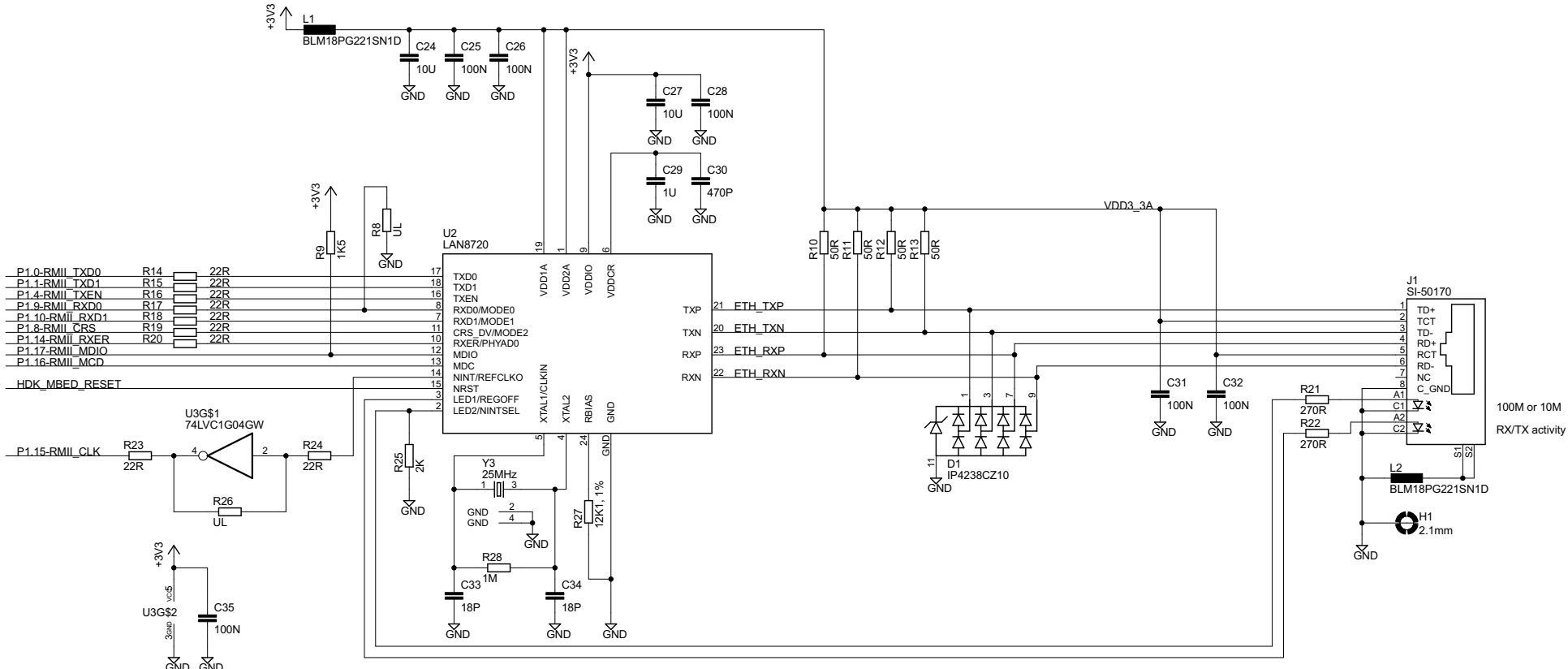


UL = UnLoaded = normally not mounted component.

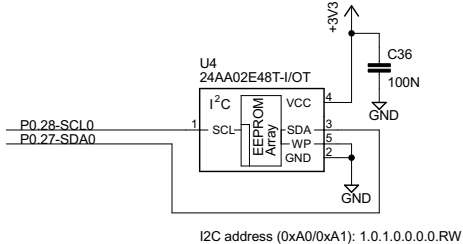
Default jumper settings are indicated in the schematic.
However, always check jumper positions on actual boards
since there is no guarantee that all jumpers are in default place.

Rev B Changed C2/C3 to 20pF. Updated reset generation. Changed C4/C5 to 22pF, R2 to 10K.	
Rev PB1 R97 not mounted (= no Reset-LED), corrected U9 pinning.	
Rev A First release	
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100/10M Ethernet PHY



1Kbit I2C-E2PROM with EUI-48



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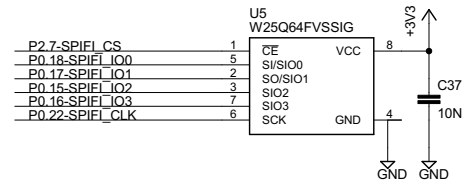
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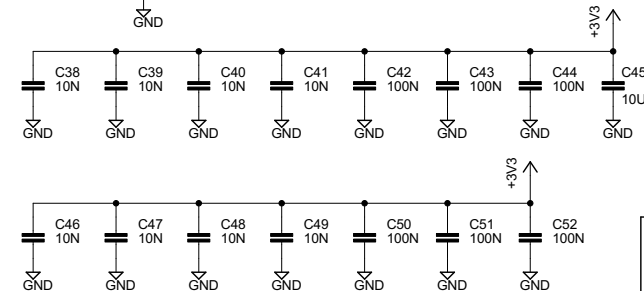
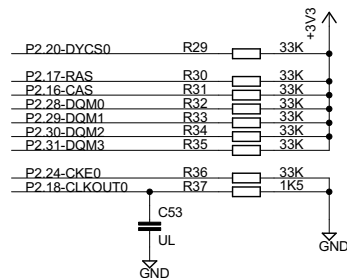
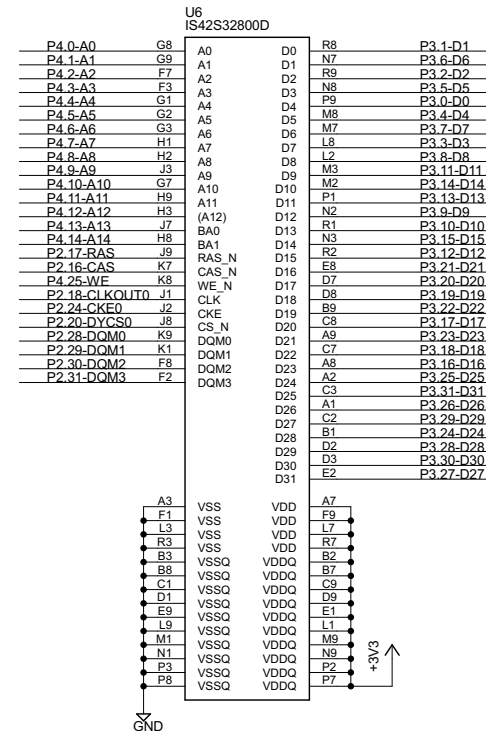
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QSPI FLASH and SDRAM

64Mbit QSPI Flash (SPIFI)
(Address range: 0x2800 0000 - 0x28FF FFFF)



256Mbit (32MByte) SDRAM
(Address range: 0xA000 0000 - 0xAFFF FFFF)



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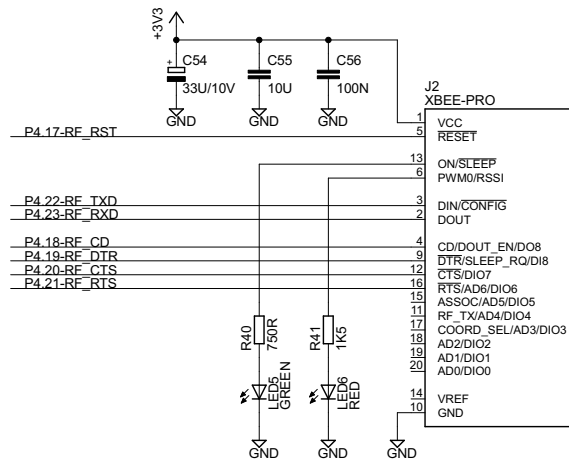
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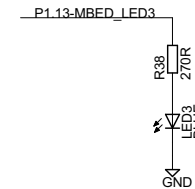
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XBee Interface, Push-button and LEDs

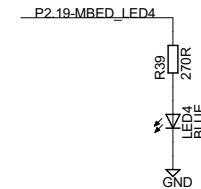
Digi XBee(R) RF-module



mbed LED3

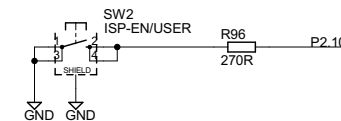


mbed LED4



mbed LED1 and LED2 can be found at USB interfaces

Push-button for ISP enable and User functionality



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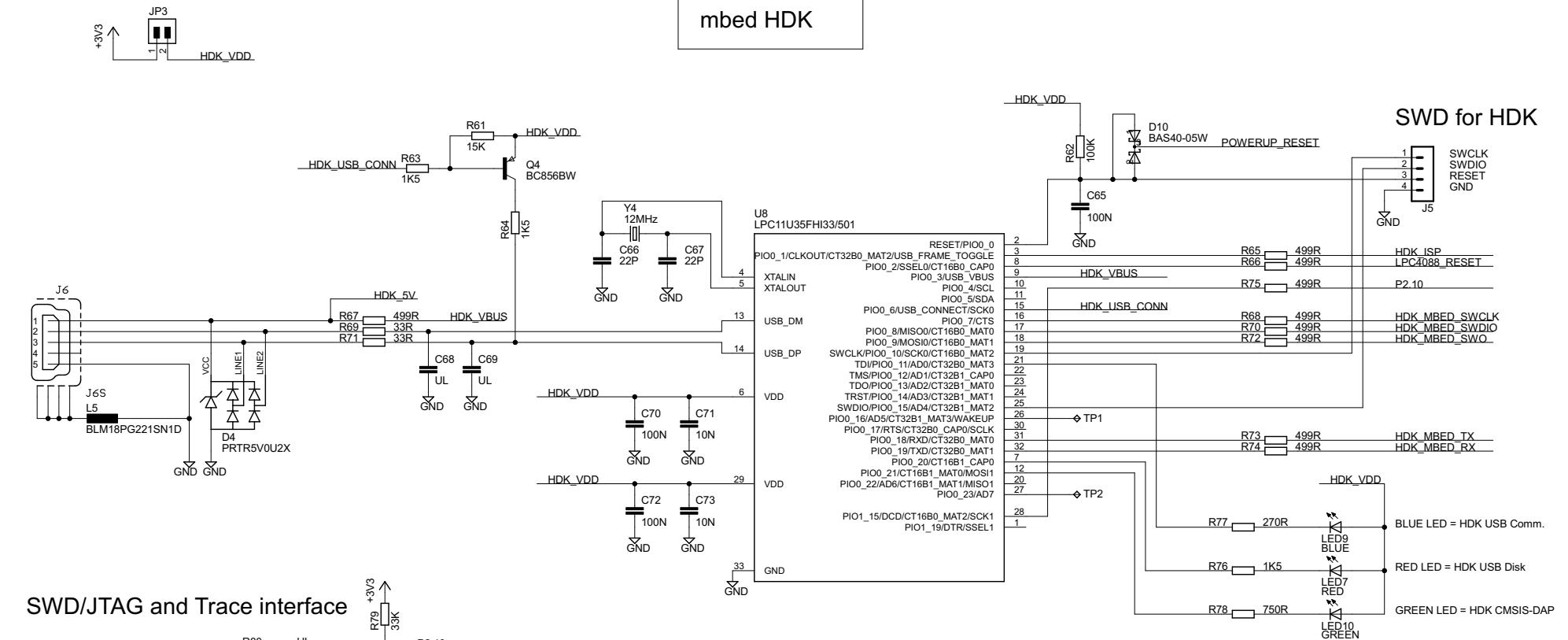
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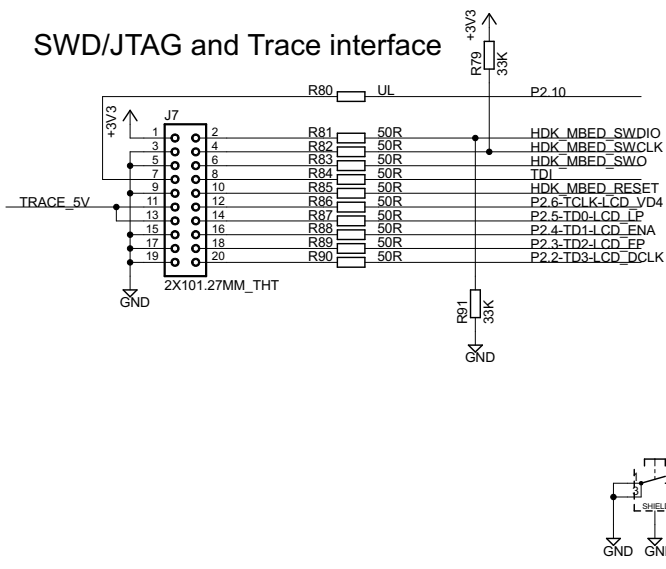
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mbed HDK



Reset generation for LPC4088



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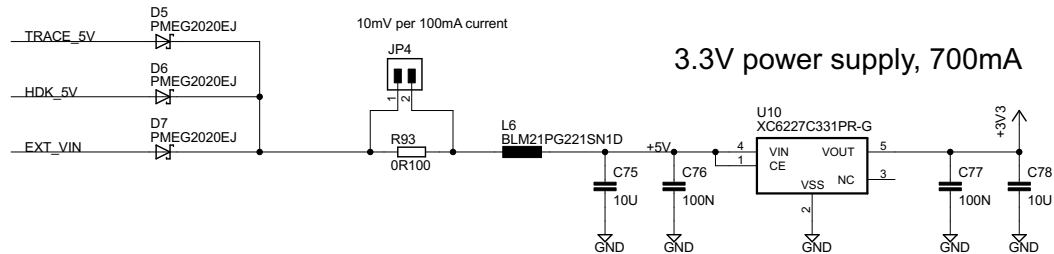
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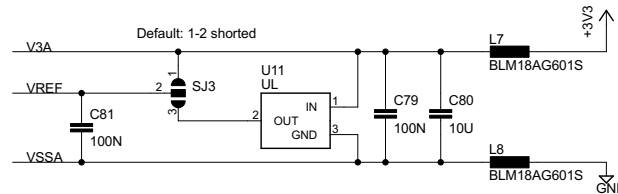
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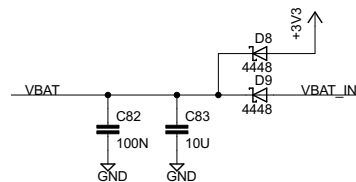
Power supplies



ADC supply and VREF voltage



VBAT supply



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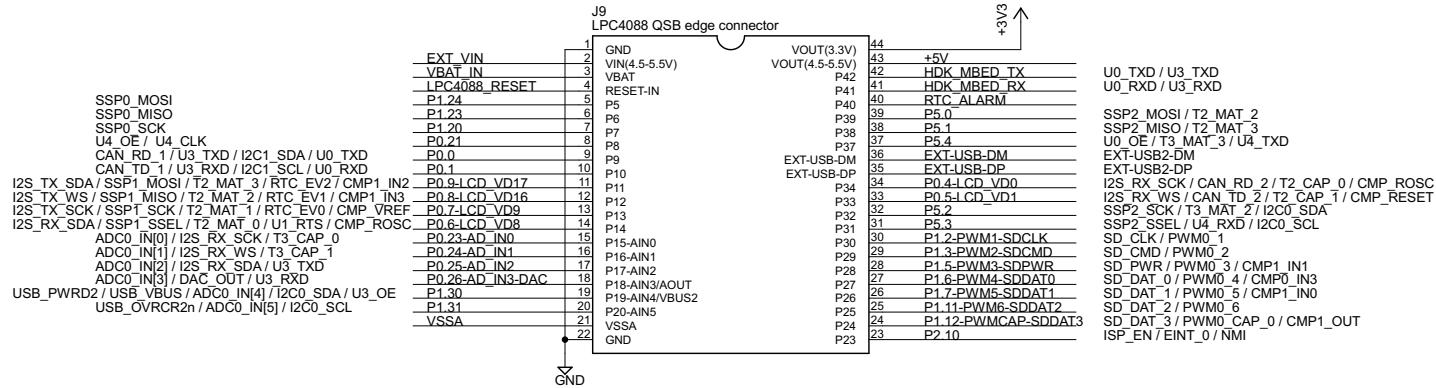
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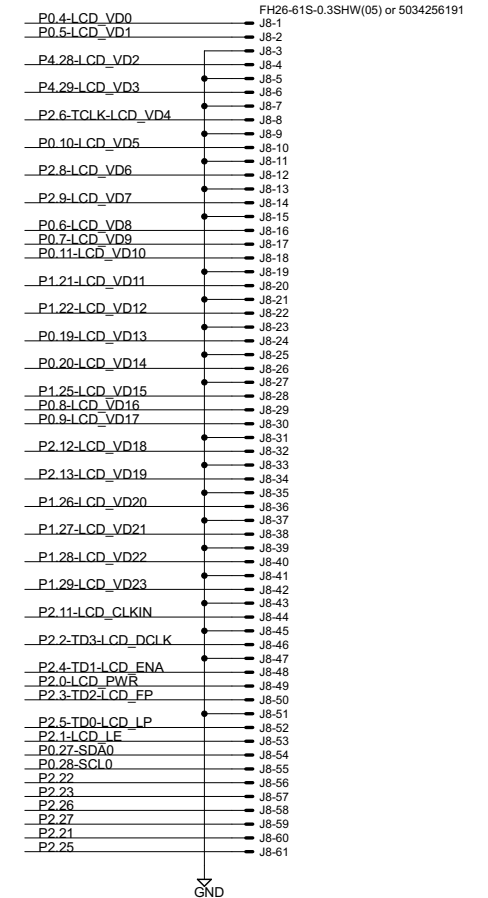
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Expansion Connectors

mbed Interface



Display Interface



mbed LPC1768	LPC4088 QuickStart Board
GND	GND
VIN (4-11V)	VIN (4.5-5.5V) Note reduced voltage range!
VBAT	VBAT
RESET	RESET
SPI1-MOSI	SSP0_MOSI
SPI1-MISO	SSP0_MISO
SPI1-SCK	SSP0_SCK
GPIO	U4_OE / U4_CLK
UART1-TX/I2C1-SDA	CAN_RD_1 / U3_TXD / I2C1_SDA / U0_TXD
UART1-RX/I2C1-SCL	CAN_TD_1 / U3_RXD / I2C1_SCL / U0_RXD
SPI2-MOSI	I2S_TX_SDA / SSP1_MOSI / T2_MAT_3 / RTC_EV2 / CMP1_IN2
SPI2-MISO	I2S_TX_WS / SSP1_MISO / T2_MAT_2 / RTC_EV1 / CMP1_IN3
SPI2-SCK/UART2-TX	I2S_TX_SCK / SSP1_SCK / T2_MAT_1 / RTC_EV0 / CMP_VREF
UART2-RX	I2S_RX_SDA / SSP1_SSEL / T2_MAT_0 / U1_RTS / CMP_ROSC
AIN0	ADC0_IN[0] / I2S_RX_SCK / T3_CAP_0
AIN1	ADC0_IN[1] / I2S_RX_WS / T3_CAP_1
AIN2	ADC0_IN[2] / I2S_RX_SDA / U3_TXD
AIN3/AOOUT	ADC0_IN[3] / DAC_OUT / U3_RXD
AIN4	USB_PWRD2 / USB_VBUS / ADC0_IN[4] / I2C0_SDA / U3_OE (Note: used by USB2 Device Interface)
AIN5	USB_OVRCR2n / ADC0_IN[5] / I2C0_SCL
	VSSA
	GND

mbed LPC1768	LPC4088 QuickStart Board
VOUT 3.3V	VOUT 3.3V
VOUT 5V	VOUT 5V Note: not current limited!
NC	U0_TXD / U3_TXD
NC	U0_RXD / U3_RXD
ETH-RDN	RTC_ALARM
ETH-RDP	SSP2_MOSI / T2_MAT_2
ETH-TDN	SSP2_MISO / T2_MAT_3
ETH-TDP	U0_OE / T3_MAT_3 / U4_TXD
USB-DM	EXT-USB2-DM
USB-DP	EXT-USB2-DP
CAN-RD	I2S_RX_SCK / CAN_RD_2 / T2_CAP_0 / CMP_ROSC
CAN-TD	I2S_RX_WS / CAN_TD_2 / T2_CAP_1 / CMP_RESET
UART3-TX/I2C2-SDA	SSP2_SCK / T3_MAT_2 / I2C0_SDA
UART3-RX/I2C2-SCL	SSP2_SSEL / U4_RXD / I2C0_SCL
PWMOUT0	SD_CLK / PWM0_1
PWMOUT1	SD_CMD / PWM0_2
PWMOUT2	SD_PWR / PWM0_3 / CMP1_IN1
PWMOUT3	SD_DAT_0 / PWM0_4 / CMP0_IN3
PWMOUT4	SD_DAT_1 / PWM0_5 / CMP1_IN0
PWMOUT5	SD_DAT_2 / PWM0_6
	SD_DAT_3 / PWM0_CAP_0 / CMP1_OUT
	ISP_EN / EINT_0 / NMI



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