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Target MCU: LPC1769

Page 3

Ethernet PHY Interface

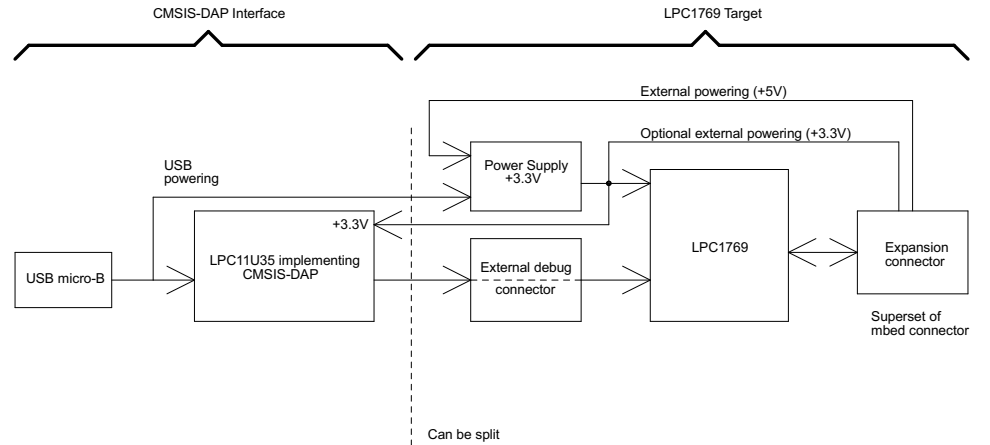
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LPCXpresso expansion connector

Page 5

CMSIS-DAP interface


Design Overview



NXP board number: OM13085

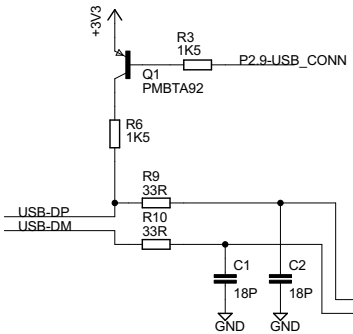
UL = UnLoaded = normally not mounted component.

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.

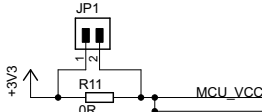
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		TITLE: LPCXpresso LPC1769 CMSIS-DAP rev D	
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# Target MCU: LPC1769

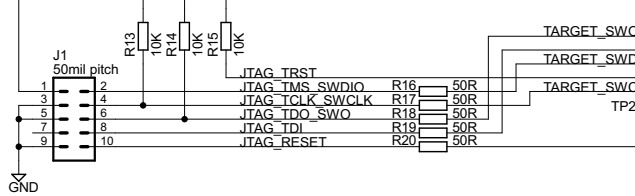
## USB pullup for USB Device operation



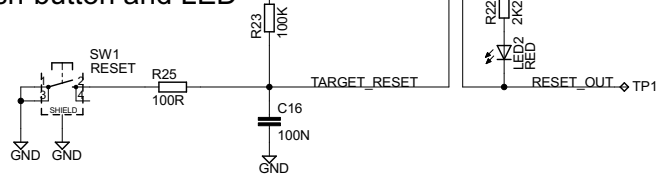
R95 can be replaced to measure current



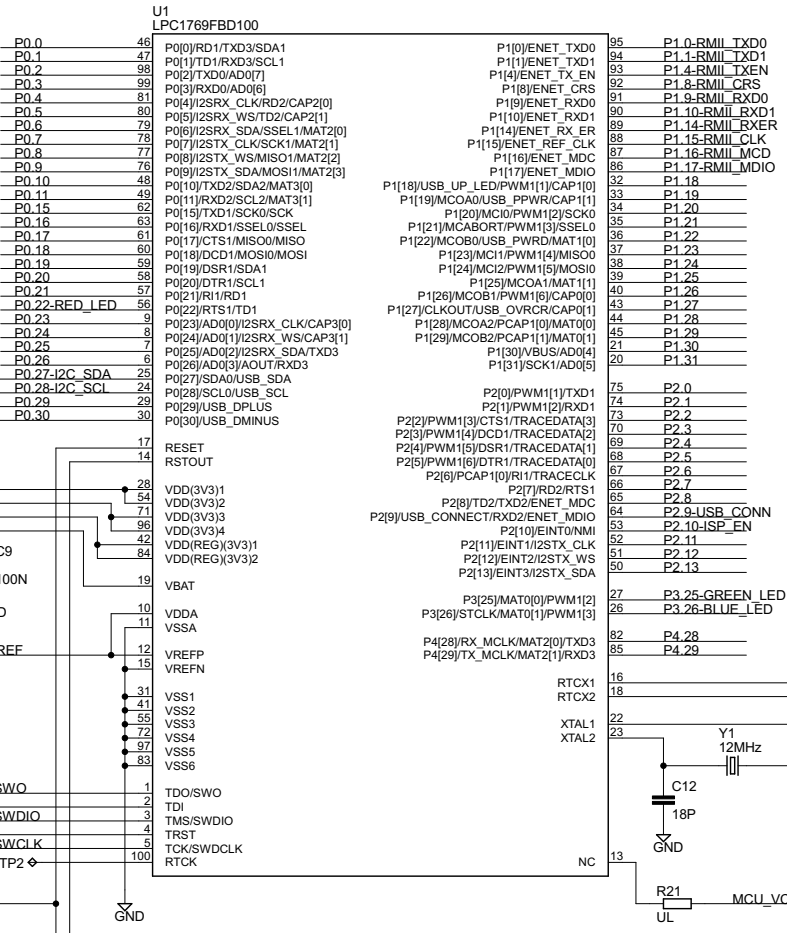
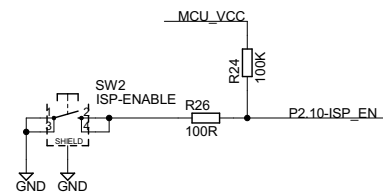
## Debug connector (SWD/JTAG)



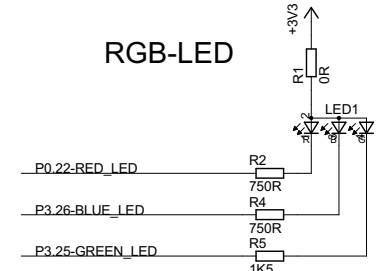
## RESET push-button and LED



## Bootload enable



## RGB-LED

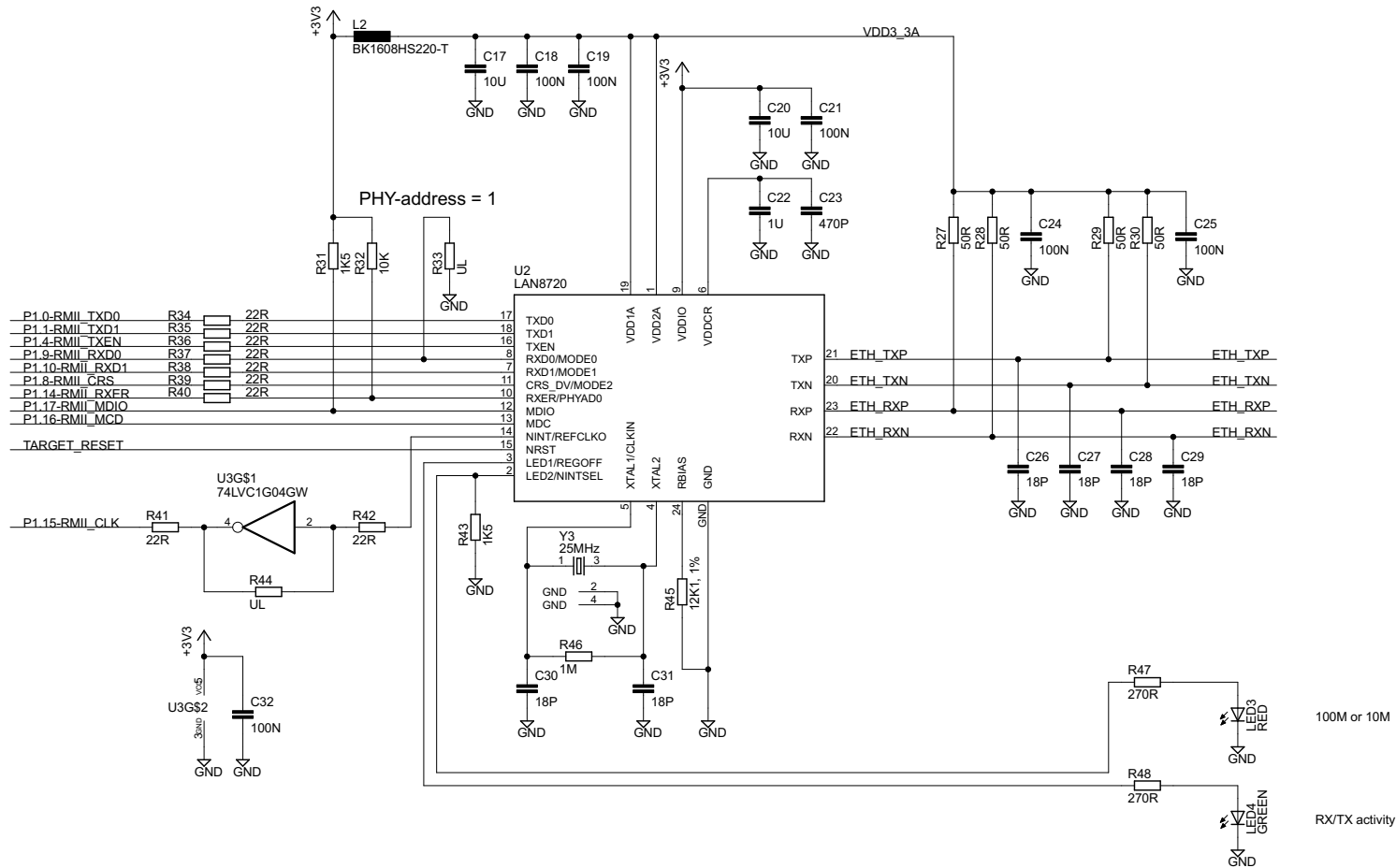


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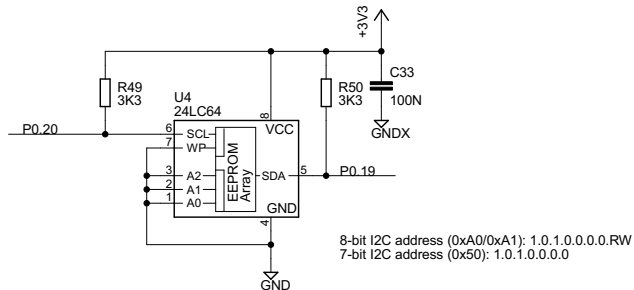
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# 100/10M Ethernet PHY



## I2C-E2PROM



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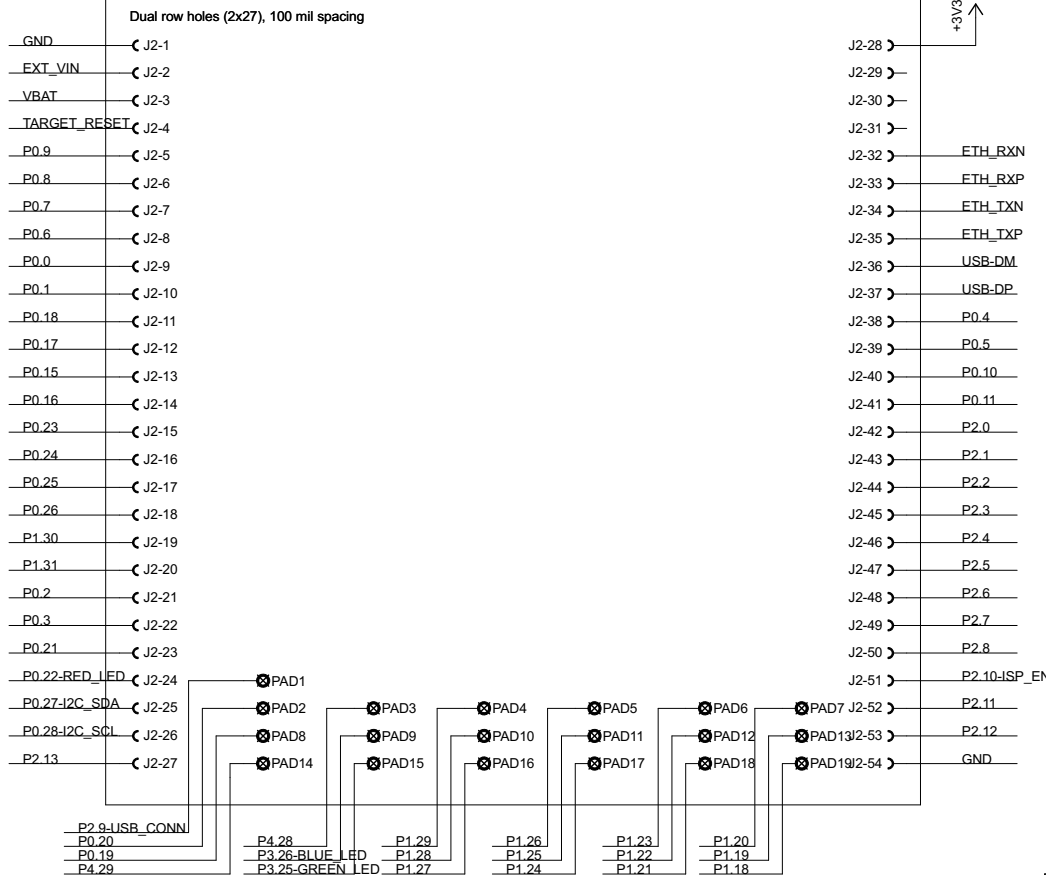
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↑  
CMSIS-DAP side

## Expansion Connector (superset of mbed pinning)

mbed	LPCXpresso
GND	GND
VIN (4.5-14V)	VIN (4.5-5.5V)
VB (battery supply)	VB (battery supply)
nR (reset)	RESET_N
SPI1-MOSI	P0.9 MOSI1
SPI1-MISO	P0.8 MISO1
SPI1-SCK	P0.7 SCK1
GPIO	P0.6 SSEL1
UART1-TX / I2C1-SDA	P0.0 TXD3/SDA1
UART1-RX / I2C1-SCL	P0.1 RXD3/SCL1
SPI2-MOSI	P0.18 MOSI0
SPI2-MISO	P0.17 MISO0
SPI2-SCK / UART2-TX	P0.15 TXD1/SCK0
UART2-RX	P0.16 RXD1/SSEL0
AIN0	P0.23 AD0.0
AIN1	P0.24 AD0.1
AIN2	P0.25 AD0.2
AIN3 / AOUT	P0.26 AD0.3/AOUT
AIN4	P1.30 AD0.4
AIN5	P1.31 AD0.5
	P0.2
	P0.3
	P0.21
	P0.22
	P0.27-I2C_SDA
	P0.28-I2C_SCL
	P2.13



LPCXpresso	mbed
VOUT (+3.3V out) if self powered, else +3.3V input	VOUT (3.3V out)
not used	VU (6.0V USB out)
not used	IF+
not used	IF-
RD-	RD- (Ethernet)
RD+	RD+ (Ethernet)
TD-	TD- (Ethernet)
TD+	TD+ (Ethernet)
USB-D-	D- (USB)
USB-D+	D+ (USB)
P0.4	CAN_RX2
P0.5	CAN_TX2
P0.10	TXD2/SDA2
P0.11	RXD2/SCL2
P2.0	PWM1.1
P2.1	PWM1.2
P2.2	PWM1.3
P2.3	PWM1.4
P2.4	PWM1.5
P2.5	PWM1.6
P2.6	
P2.7	
P2.8	
P2.10	
P2.11	
P2.12	
GND	



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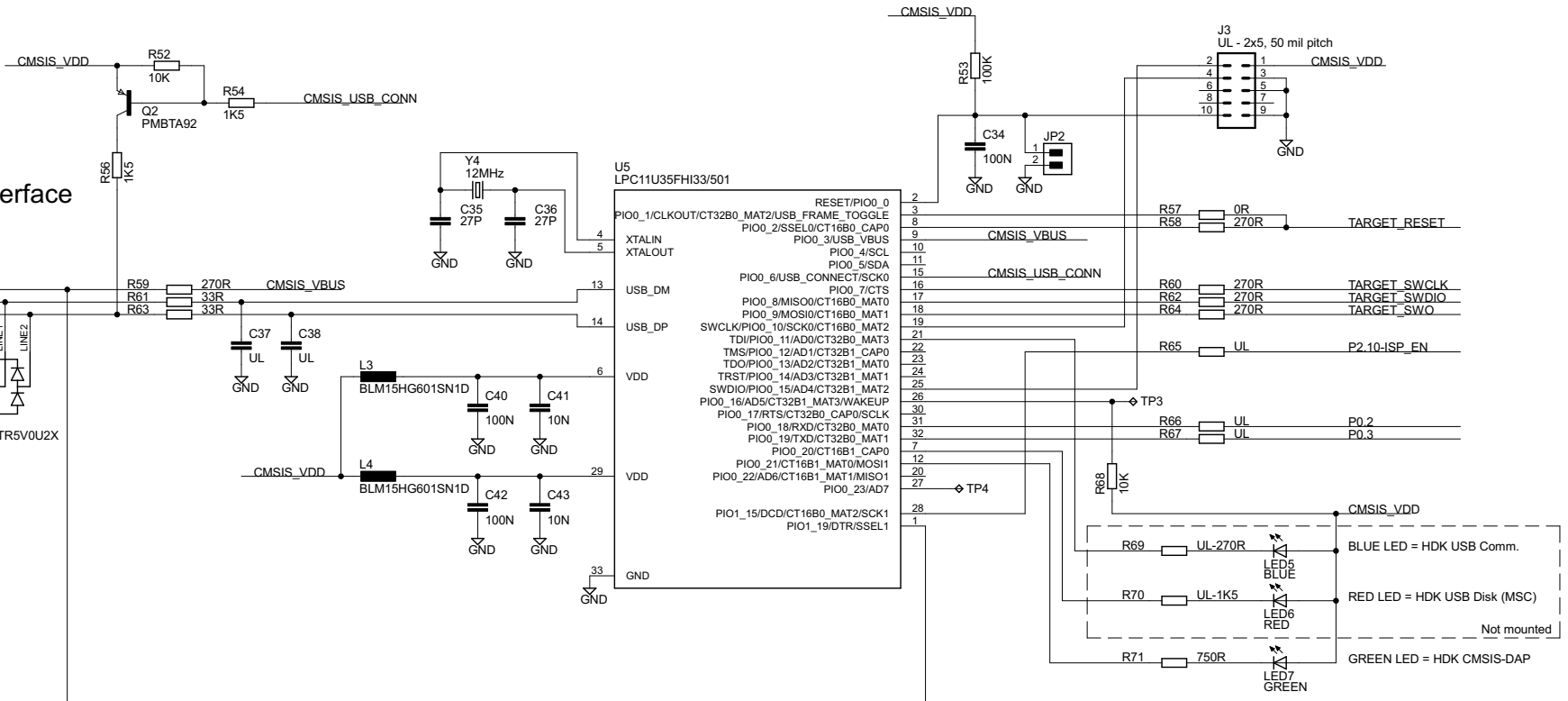
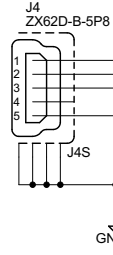
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# CMSIS-DAP Debug Interface

## CMSIS-DAP USB interface (micro-B connector)



## 3.3V power supply, 700mA

Short to disable CMSIS-DAP interface  
(= allow external debugger to be connected)



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