Page 2

LPC3154 Powering and Unused parts

Page 3

LPC3154 Digital I/O

Page 4

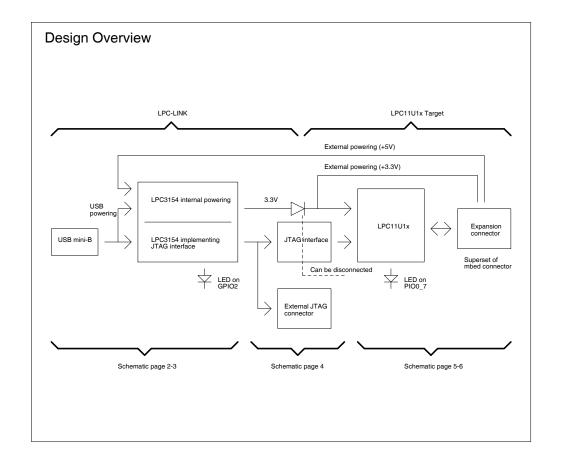
JTAG Interface

Page 5

LPC17XX with Expansion connector

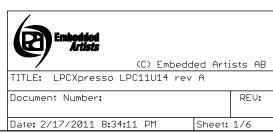
Page 6

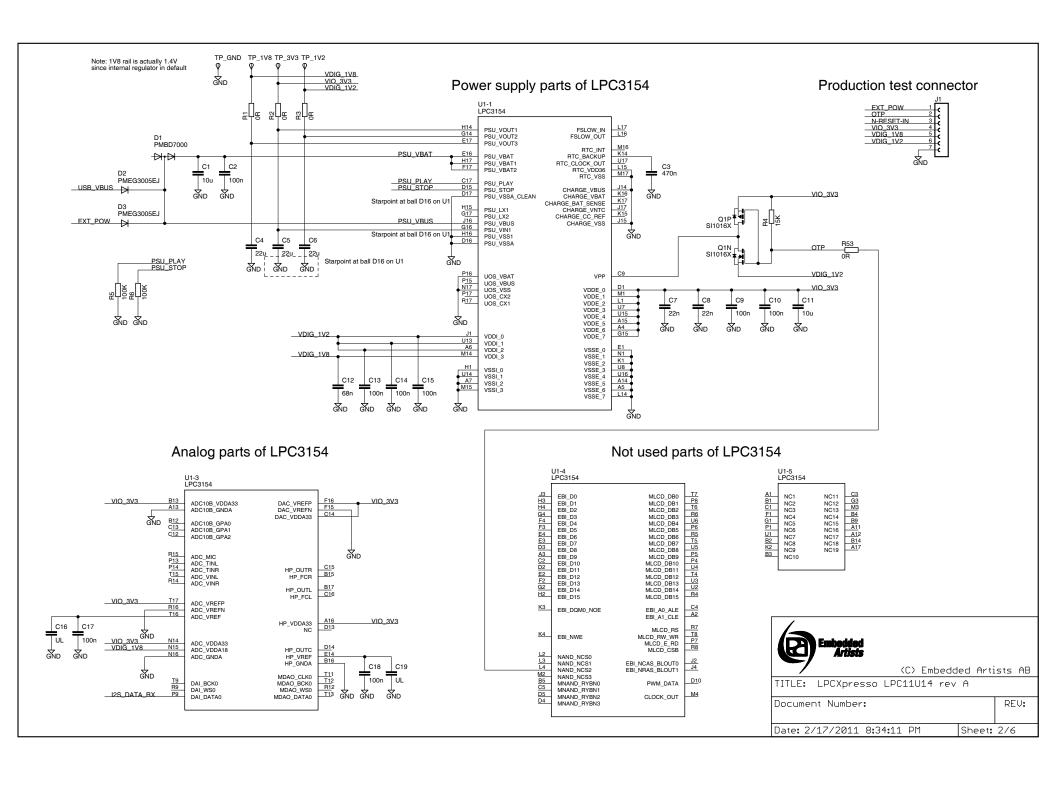
LPC17XX

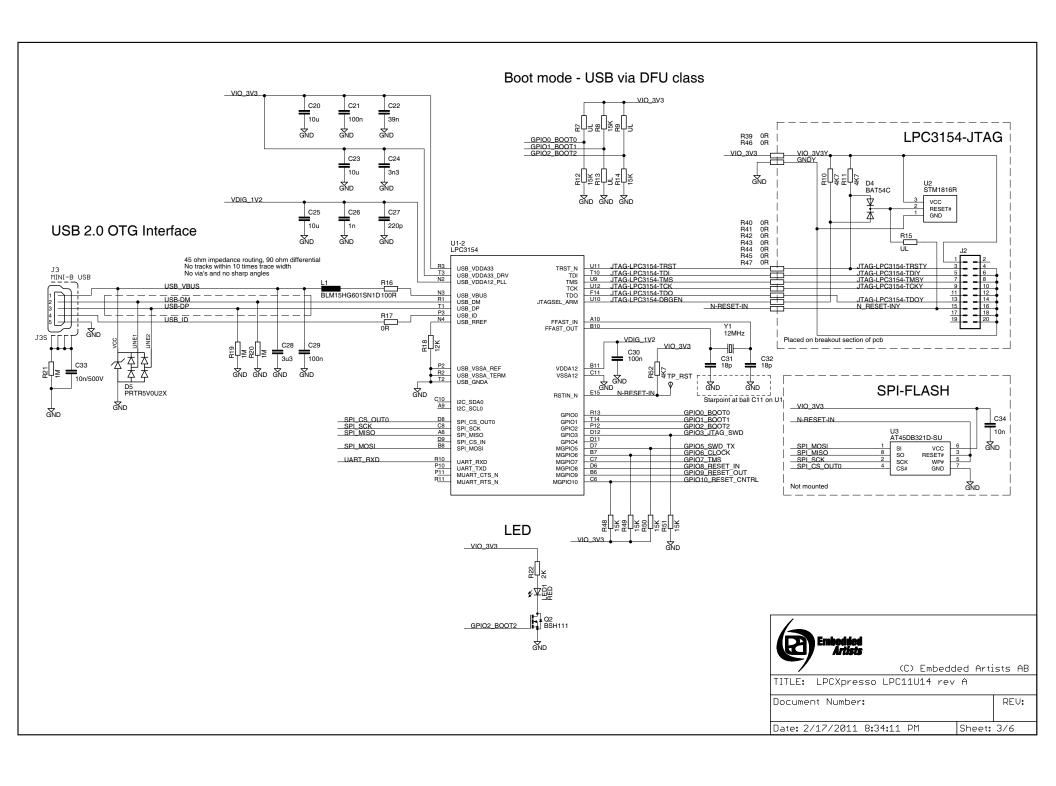


UL = UnLoaded = normally not mounted component.

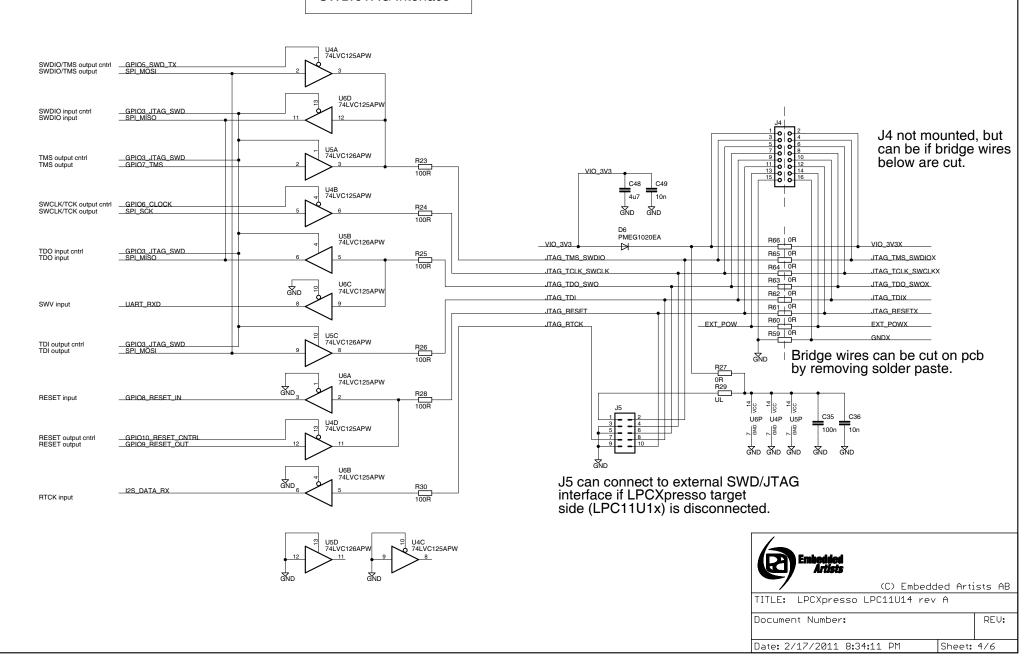
Default jumper settings are indicated in the schematic. However, always check jumper positions on actual boards since there is no guarantee that all jumpers are in default place.







SWD/JTAG Interface



LPC11U14 Target Side From LPC-LINK Side R31 12K ___LPC11U1X_3V3 R36 0R JTAG TMS SWDIOX R35 0R JTAG_TCLK_SWCLKX R33 0R JTAG TDO SWOX R32 0R JTAG_RESETX EXT_POWX ___GND GNDX U7 LPC11U14 RESET/PIO0_0 PIO0_1/CLKOUT/CT32B0_MAT2 PIO0_1 PIO0_2 PIO0_2/SSEL/CT16B0_CAP0 PIO0_3/USB_VBUS PIO0 3 PIO0_4 PIO0_5 PIO0_4/SCL PIO0_5/SDA **LED** PIO0_6 PIO0_7 PIO0_8 PIO0_9 PIO0_10 Y2 12MHz XTALIN XTALOUT PIO0_6/USB_CONNECT/SCK0 PIO0_7/CTS PIO0_8/MISO0/CT16B0_MAT0 C37 18pF PIO0_9/MOSI0/CT16B0_MAT1/SWO SWCLK/PIO0_10/SCK0/CT16B0_MAT2 PIO0_11 TDI/PIO0_11/AD0/CT32B0_MAT3 GNDX GNDX TMS/PIO0_12/AD1/CT32B1_CAP0 TDO/PIO0_13/AD2/CT32B1_MAT0 TRST/PIO0_14/AD3/CT32B1_MAT1 SWDIO/PIO0_15/AD4/CT32B1_MAT2 PIO0_12 PIO0_13 __LPC11U1X_3V3 き本部 PIO0_14 PIO0_15 PIO0_16 PIO0_17 R37 33R PIO0 16/AD5/CT32B1 MAT3/WAKEUP Q3 BC857BSMD USB_DM PIO0_17/RTS/CT32B0_CAP0/SCLK PIO0_18/RXD/CT32B0_MAT0 USB-DMX USB-DPX SNDX PIO0 18 PIO0_19 R38 PIO0_19/TXD/CT32B0_MAT1 PIO0_20/CT16B1_CAP0 PIO0_6 USB_DP PIO0 20 33R PIO0_21/CT16B1_MAT0 PIO0_22/AD6/CT16B1_MAT1 PIQ0 22 SJ1 - short to power Xpresso brd from Target side USB VBUS (J8). SJ1 - must be open when Xpresso Base board is used. PIO0_23 PIO0 23/AD7 PIO1_13 PIO1_14 PIO1_15 EXT_POWX_1 LPC11U1X_3V3 PIO1_13/DTR/CT16B0_MAT0/TXD PIO1_14/DSR/CT16B0_MAT1/RXD PIO1_15/DCD/CT16B0_MAT2 VDDIO C39 C40 SJ1 PIO1_16 PIO1_19 PIO1_20 R54 USB_VBUSX 100R 100n 10n PIO1_16/RI/CT16B0_CAP0 PIO1_19/DTR PIO0 3 MINI-B USB PIO1_20/DSR PIO1_21/DCD PIO1_22/RI GNDX GNDX PIO1 21 PIO1_22 PIO1 23 VDDCORE PIO1_23/CT16B1_MAT1 PIO1_24 PIO1_25 PIO1_26 C41 PIO1_24/CT32B0_MAT0 C42 PIO1 26/CT32R0 MAT2/RXD 100n 10n PIO1_27 PIO1_28 PIO1_29 PIO1_27/CT32B0_MAT3/TXD PIO1_28/CT32B0_CAP0/SCLK C43 SNDX SNDX PIO1_29/SCK0/CT32B0_CAP1 PIO1_31 VSSIO VSS PIO1 31 41 C44 GNDX 10n/500V 45 ohm impedance routing, 90 ohm differential GNDX (C) Embedded Artists AB TITLE: LPCXpresso LPC11U14 rev A REV: Document Number:

Date: 2/17/2011 8:34:11 PM

Sheet: 5/6



Expansion Connector (superset of mbed pinning)

mbed	LPCXpresso		Dual row I	holes (2x27), 100	mil spacing						
GND	GND	GNDX	(J6-1							J6-28)	VIO_3V3X
VIN (4.5-14V)	VIN (4.5-5.5V)	EXT_POWX	(J6-2							J6-29) —	
VB (battery supply)	not used		─¢ J6-3							J6-30) —	
nR (reset)	PIO0_0 RESET	PIO0_0	(J6-4							J6-31) —	
SPI1-MOSI	PIO0_9 MOSI0/SWO	PIO0_9	(J6-5							J6-32) —	
SPI1-MISO	PIO0_8 MISO0	PIO0_8	(J6-6							J6-33) —	
SPI1-SCK	PIO1_29 SCK0	PIO1_29	(J6-7							J6-34) —	
GPIO	PIO0_2 SSEL0	PIO0_2	(J6-8							J6-35) —	
UART1-TX / I2C1-SDA	PIO0_19 TXD	PIO0_19	(J6-9							J6-36 >	USB-DMX_
UART1-RX / I2C1-SCL	PIO0_18 RXD	PIO0_18	(J6-10							J6-37) ——	USB-DPX_
SPI2-MOSI	PIO0_7	PIO0_7	(J6-11							J6-38) ——	PIO0_1_
SPI2-MISO	PIO1_19	PIO1_19	(J6-12							J6-39 >	PIO0_3_
SPI2-SCL / UART2-TX	PIO1_20	PIO1_20	(J6-13							J6-40 >	PIO0_5_
UART2-RX	PIO1_21	PIO1_21	(J6-14							J6-41) ——	PIO0_4
AIN0	PIO0_11 AD0	PIO0_11	(J6-15							J6-42)	PIO0_21
AIN1	PIO0_12 AD1	PIO0_12	(J6-16							J6-43) —	PIO0_22
AIN2	PIO0_13 AD2	PIO0_13	(J6-17	GNDX				VIO 3V3X		J6-44) ——	PIO0_23
AIN3 / AOUT	PIO0_14 AD3	PIO0_14	(J6-18			O DAD45	₽ D4D00	_		J6-45) —	PIO1_22_
AIN4	PIO0_15 AD4/SWDIO	PIO0_15	(J6-19	PAD1	□ ØPAD8	→ ⊗ PAD15	- ⊘ PAD22	□ ØPAD29	□ ØPAD36	J6-46) —	PIO1_23
AIN5	PIO0_16 AD5	PIO0_16	(J6-20	— ⊗ PAD2	-ØPAD9	—⊗PAD16	-⊗PAD23	—⊗PAD30	— ⊗ PAD37	J6-47) ——	PIO1_24
	PIO0_17	PIO0_17	(J6-21	⊸⊗ PAD3	— Ø PAD10	ØPAD17 GNDX	⊘ PAD24	— ⊗ PAD31	-ØPAD38	J6-48 >	PIO1_25
	PIO0_20	PIO0_20	(J6-22			GINDA	_			J6-49) ——	PIO1_26
	PIO0_6 USB_SOFT_CONN	PIO0_6	(J6-23							J6-50)	PIO1_27
	PIO0_10 SWCLK	PIO0_10	C J6-24							J6-51 >	PIO1_28_
	PIO1_13	PIO1_13	(J6-25							J6-52)	PIO1_31
	PIO1_14	PIO1_14	(J6-26							J6-53 >	PIO1_16_
	PIO1_15	PIO1_15	(J6-27							J6-54) ——	GNDX
		•									

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LPCX	presso	mbed
VOUT (+3.3	V out) if self se +3.3V input	VOUT (3.3V out)
not used	50 10.01 mpat	VU (5.0V USB out)
not used		IF+
not used		IF-
not used		RD- (Ethernet)
not used		RD+ (Ethernet)
not used		TD- (Ethernet)
not used		TD+ (Ethernet)
USB-DM		D- (USB)
USB-DP		D+ (USB)
PIO0_1		CAN-RD
PIO0_3	USB-VBUS	CAN-TD
PIO0_5	I2C-SDA	UART3-TX / I2C2-SDA
PIO0_4	I2C-SCL	UART3-RX / I2C2-SCL
PIO0_21	MAT=PWM	PWMOUT0
PIO0_22	MAT=PWM	PWMOUT1
PIO0_23		PWMOUT2
PIO1_22		PWMOUT3
PIO1_23		PWMOUT4
PIO1_24		PWMOUT5
PIO1_25		
PIO1_26		
PIO1_27		
PIO1_28		
PIO1_31		1
PIO1_16		
GND		1



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TITLE: LPCXpresso LPC11U14 rev A

Document Number:

Sheet: 6/6

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