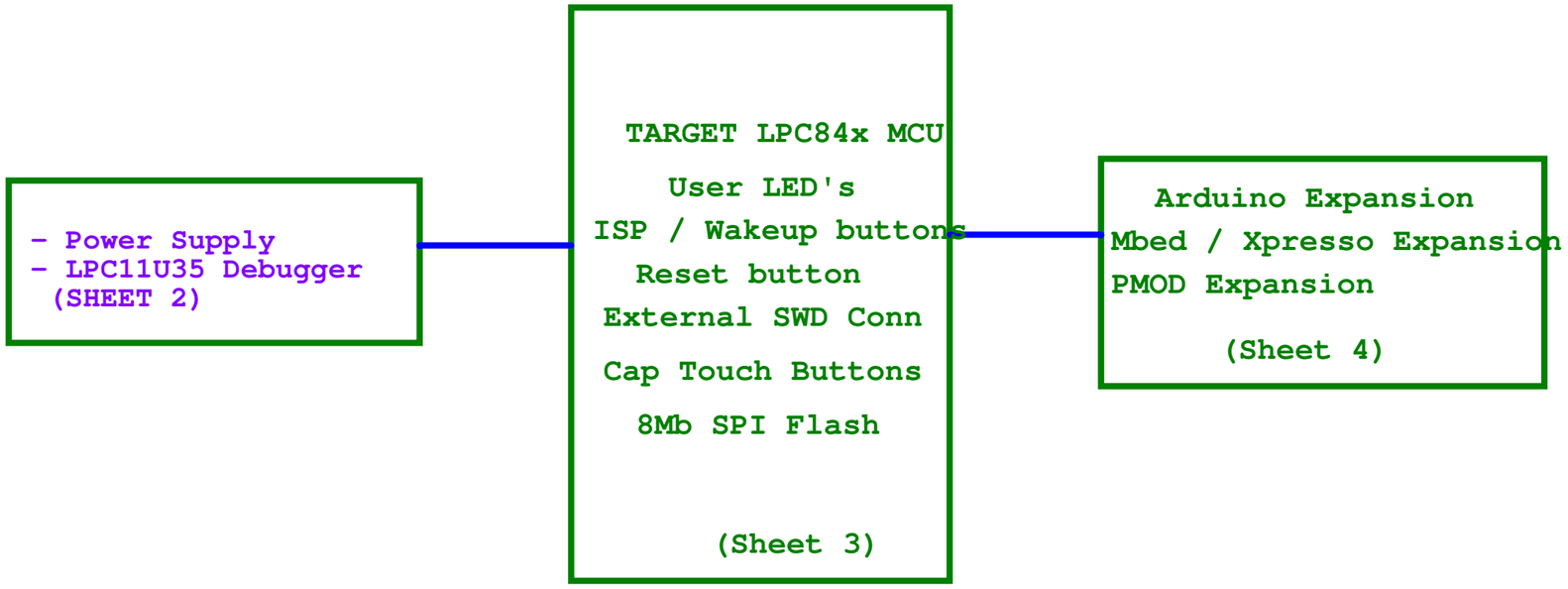
Table of Content

Page 1	TITLE PAGE
Page 2	POWER, LPC11U35 DEBUGGER
Page 3	TARGET MCU LPC84X
Page 4	EXPANSION HEADERS

LPCXpresso84x MAX Board

Revision History

Rev. Code	Date	Description
0.3	12/2/2016	Remove P7; add 5 SJx to isolate Cap swt from hdr
1.0	12/7/2016	Move SJx to isolate Cap_Touch swt; Reorder RefDes; Release to Fab. Add C25; remove FB2 by request.
2.0	03/26/2017	Shuffled '845 ports to get I2C0 at Arduino D15/D14; P0_1-CLKIN to Arduino D7; Sht 4.



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ICAP Classification: CP: ____ IUO: X PUBI: ____

Designer: <Designer>	Drawing Title: LPCX84x_MAX Board	
Drawn by: <DrawnBy>	Page Title: TOP LEVEL BLOCKS	
Approved: <Approver>	Size C / Document Number SCH-LPCX84X-MAX	Rev 2.0
	Date: Tuesday, March 28, 2017	Sheet 1 of 4

LPC11U35 SWD DEBUG

P5
3V3_DEBUG
SWDIO
SWCLK
nRESET
HDR_2X5

+3.3V
R19 100K
JP1 HDR_1X2
C3 0.1uF
JP3 HDR_1X2
LPC11U35 Manual Reset
nRESET
N.O. SJ7
TARGET_nRESET-P0_5
R29 270
USB_VBUS

LPC11U35 ISP Boot
Short JP3 to put LPC11U35 in ISP boot mode.

U4
LPC11U35FHI33/501
nRESET/PIO0_0
PO0_1/CLKOUT/CT32B0_MAT2/USB_FTOGGL
PIO0_2/SSEL0/CT16B0_CAP0 (ISP)
PIO0_3/USB_VBUS
PIO0_4/SCL
PIO0_5/SDA
PIO0_6/USB_nCONNECT/SCK0
PIO0_7/nCTS
PIO0_8/MISO0/CT16B0_MAT0
PIO0_9/MOSI0/CT16B0_MAT1
SWCLK/PIO0_10/SCK0/CT16B0_MAT2
TDI/PIO0_11/AD0/CT32B0_MAT3
TMS/PIO0_12/AD1/CT32B1_CAP0
TDO/PIO0_13/AD2/CT32B1_MAT0
nTRST/PIO0_14/AD3/CT32B1_MAT1
SWDIO/PIO0_15/AD4/CT32B1_MAT2
PIO0_16/AD5/CT32B1_MAT3/WAKEUP
VDD_1
VDD_2
XTALIN
XTALOUT
USB_DM
USB_DP
PIO0_17/nRTS/CT32B0_CAP0/SCLK
PIO0_18/RXD/CT32B0_MAT0
PIO0_19/TXD/CT32B0_MAT1
PIO0_20/CT16B1_CAP0
PIO0_21/CT16B1_MAT0/MOSI1
PIO0_22/AD6/CT16B1_MAT1/MISO1
PIO0_23/AD7
PIO1_15/nDCD/CT16B0_MAT2/SCK1
PIO1_19/nDTR/SSEL1
VSS

Z1 TESTPOINT_Fanout
TARGET_SWCLK
TARGET_SWDIO
R38 270
R39 270
RSV_TARGET_SWO
SWCLK
LED_BLU
SWDIO
SJ11 N.O.
P0_9-LINK_nWAKE
nUSB_CONNECT
+3.3V
R37 10K

+3.3V
FB4 600ohm 300mA
FB1 600ohm 300mA
C13 0.1uF
C12 0.01uF
C8 0.1uF
C9 0.01uF
Y1 12MHz
C5 27pF
C4 27pF
R22 0
R35 33
R36 33
USB_DM
USB_DP
R33 270
LED_RED
LED_GRN
SJ10 N.O.
P0_8-LINK_nSLEEP

SJ18 N.C.
TARGET_TX_DEBUG_P1_17
P6 HDR_1X2
SJ17 N.C.
TARGET_RX_DEBUG_L-P1_16
P7 HDR_1X2

+3.3V
R12 270
R10 750
R11 1.5K
D7 BLUE (USB-COMM)
D5 GRN (CMSIS-DAP)
D6 RED (USB Disk)
LED_RED
LED_GRN
LED_BLU

BOARD 3.3V POWER

Page -3 EXT_VIN
D9 PMEG2005EJ
D8 PMEG2005EJ
+5V
Z2 TESTPOINT_Fanout
USB_VBUS
R30 270
FB5 220ohm 2A
C15 2.2uF

XC6227C331PR-G
U5
CE VOUT NC VIN GND
C24 2.2uF
C23 0.1uF
C21 0.1uF
C22 10uF
R44 0
R14 750
D4 GRN

POWER ON LED

TP21 TESTPOINT_LOOP_5011_BLACK

GND TP

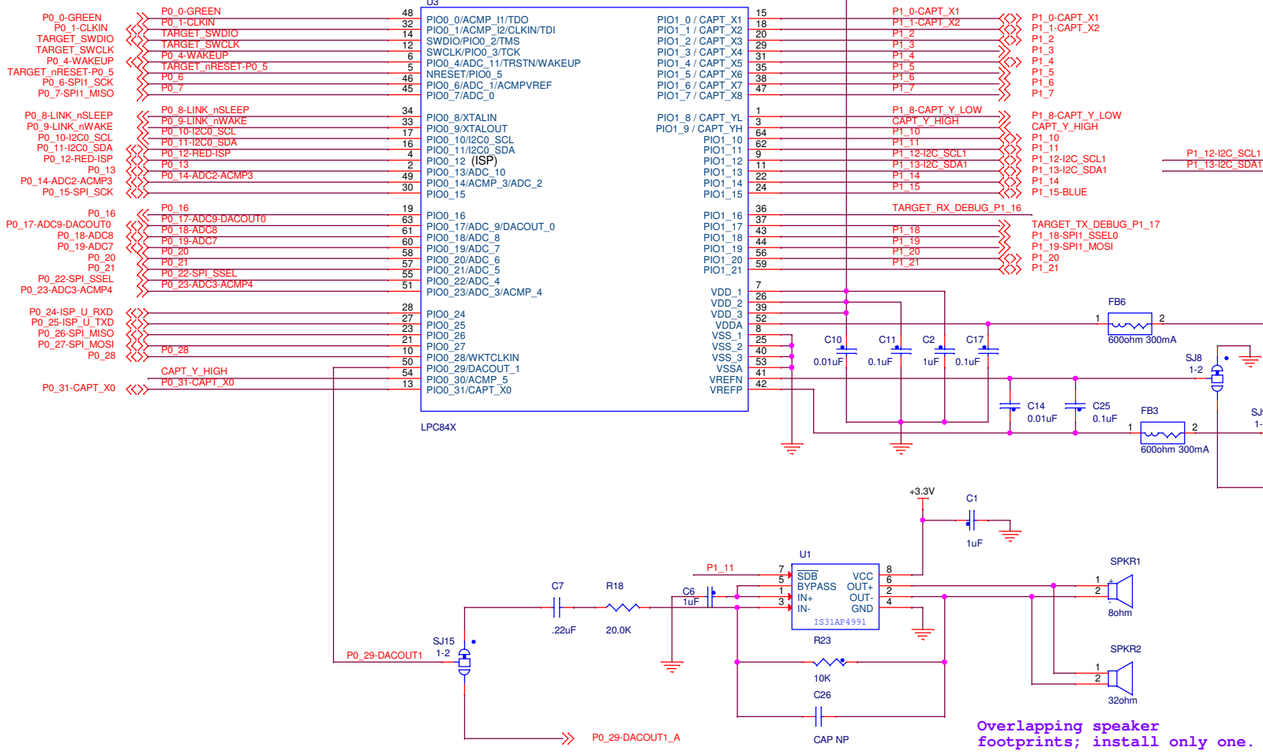
USB Device Micro-B

U2
PRTR5V0U2X
I/O1 I/O2 GND VCC
J4
ZX62D-B-5P8(30)
5V D- D+ ID G
S1 S2 S3 S4 S5 S6
GND

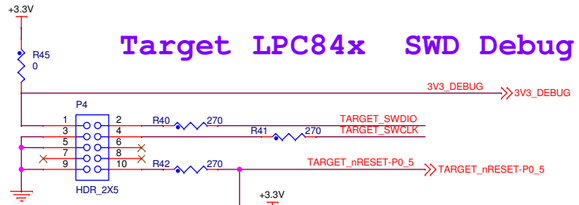
R16 10K
R17 1.5K
Q1 PMBTA92
R27 1.5K
nUSB_CONNECT
USB_DM
USB_DP

ICAP Classification:	CP: ___	IUO: X	PUBI: ___
Drawing Title:	LPCX84x_MAX Board		
Page Title:	LPC11U35 MBEDIF		
Size: C	Document Number: SCH-LPCX84X-MAX		Rev: 2.0
Date: Tuesday, March 28, 2017	Sheet 2 of 4		

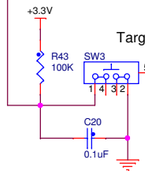
Target LPC84x



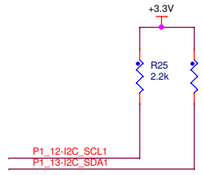
Target LPC84x SWD Debug

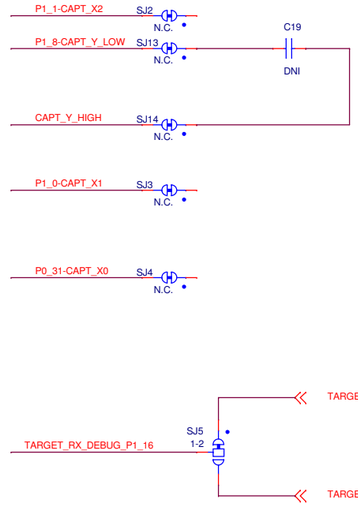


Target Manual Reset

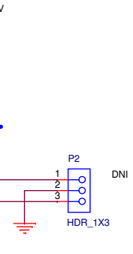


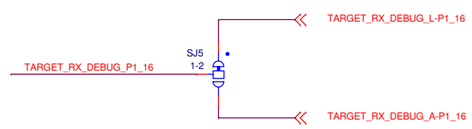
Target manual reset



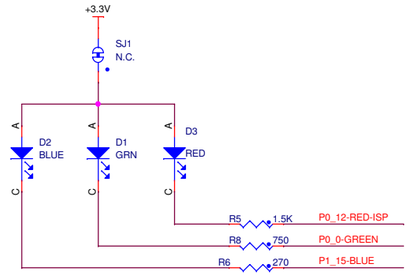


Overlapping speaker footprints; install only one.

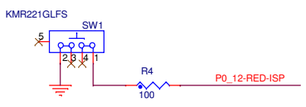




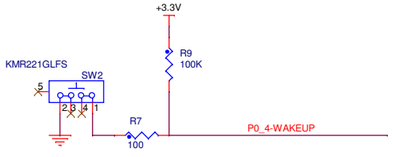
USER LEDs



Target ISP



Target Wakeup



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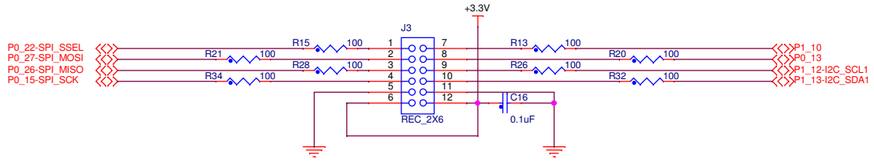
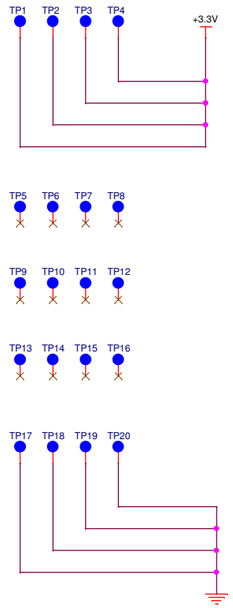
Drawing Title: **LPCX84x_MAX Board**		
Page Title: **LPC84x Target MCU**		
Size C	Document Number SCH-LPCX84X-MAX	Rev 2.0
Date: Tuesday, March 28, 2017	Sheet 3 of 4	

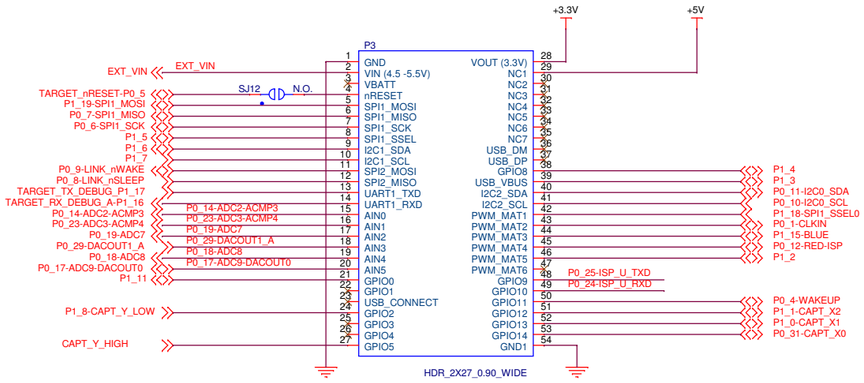
PMOD compatible receptacle



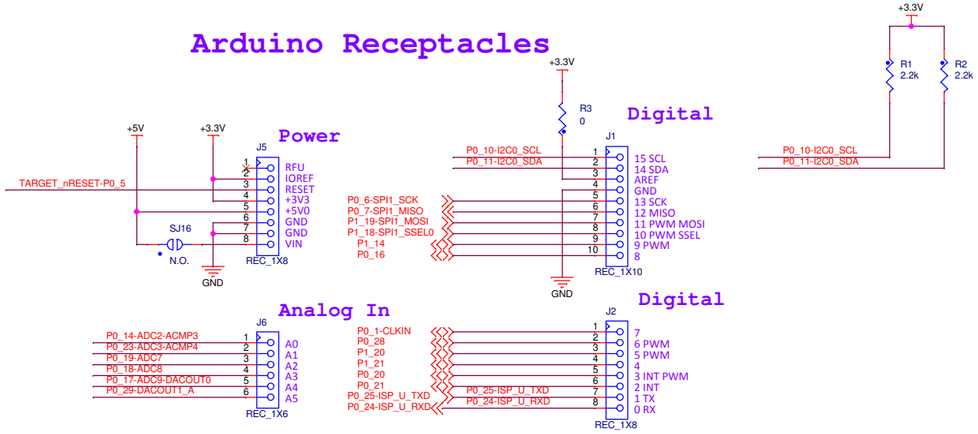
Breadboard 5x4 pin array



LPCXpresso header (Bottom side of PCB)



Arduino Receptacles



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Page Title:	**EXPANSION INTERFACE**	
Size: C	Document Number: SCH-LPCX84X-MAX	Rev: 2.0
Date: Tuesday, March 28, 2017	Sheet 4 of 4	