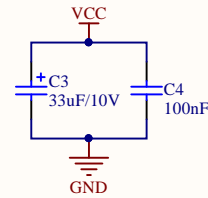


Power Decoupling

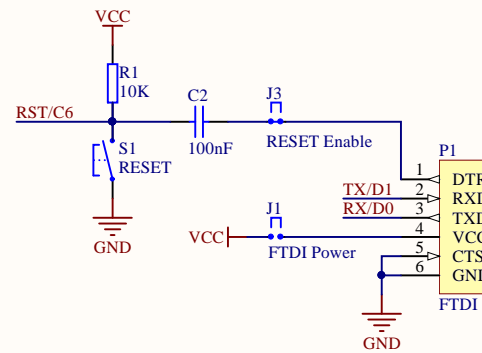


Design Notes

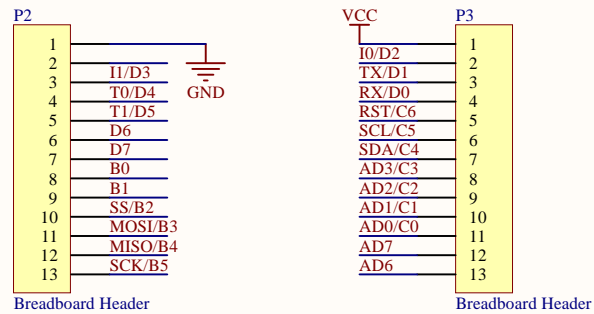
Revision History

V1.0 (11 sep 2016)
- Initial Release

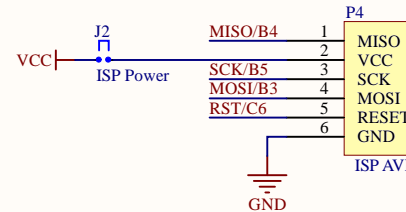
FTDI Connector



BreadBoard Connectors



AVR ISP Connector



Title: **Atmel328p Breadboard Breakout**

Author: Dirk Janssens

Revision: v1.0

Date: 11/09/2016

Size: A4

File: Atmel328p.SchDoc

Sheet: 1 of 1

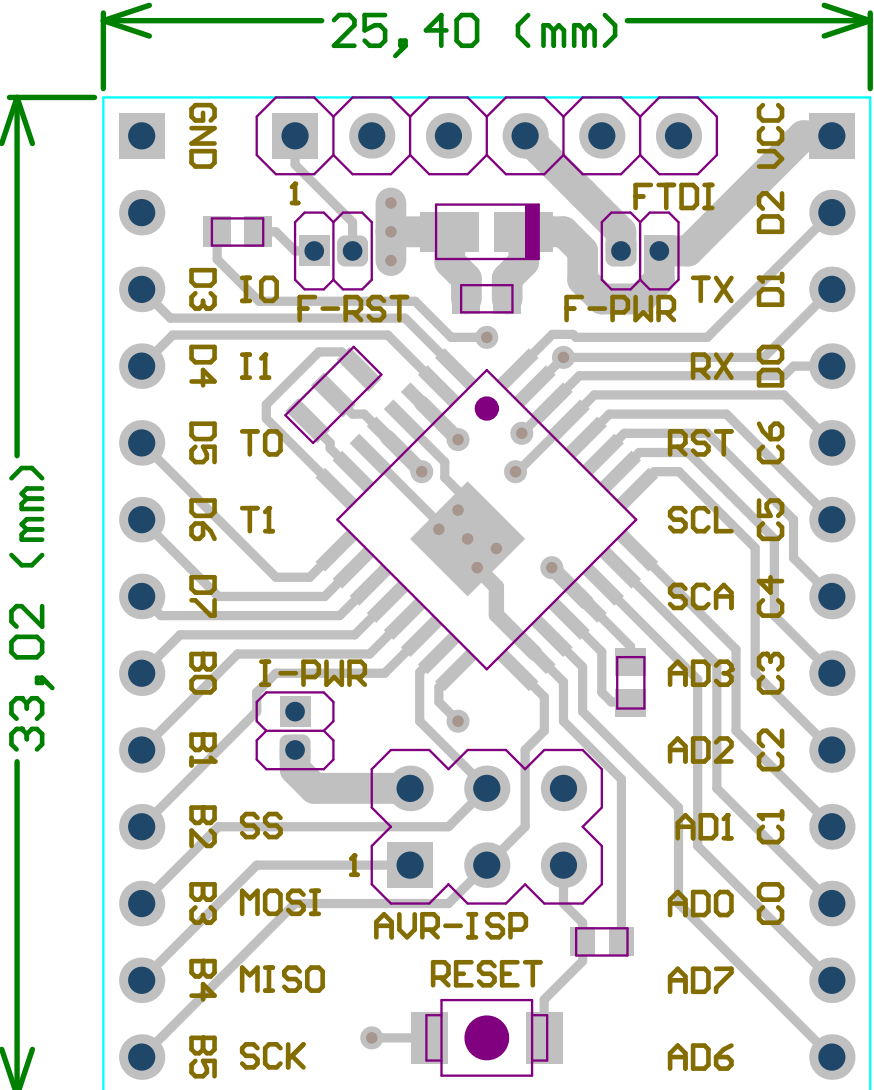
Title : Atmel328p Breadboard Breakout

Author : Dirk Janssens

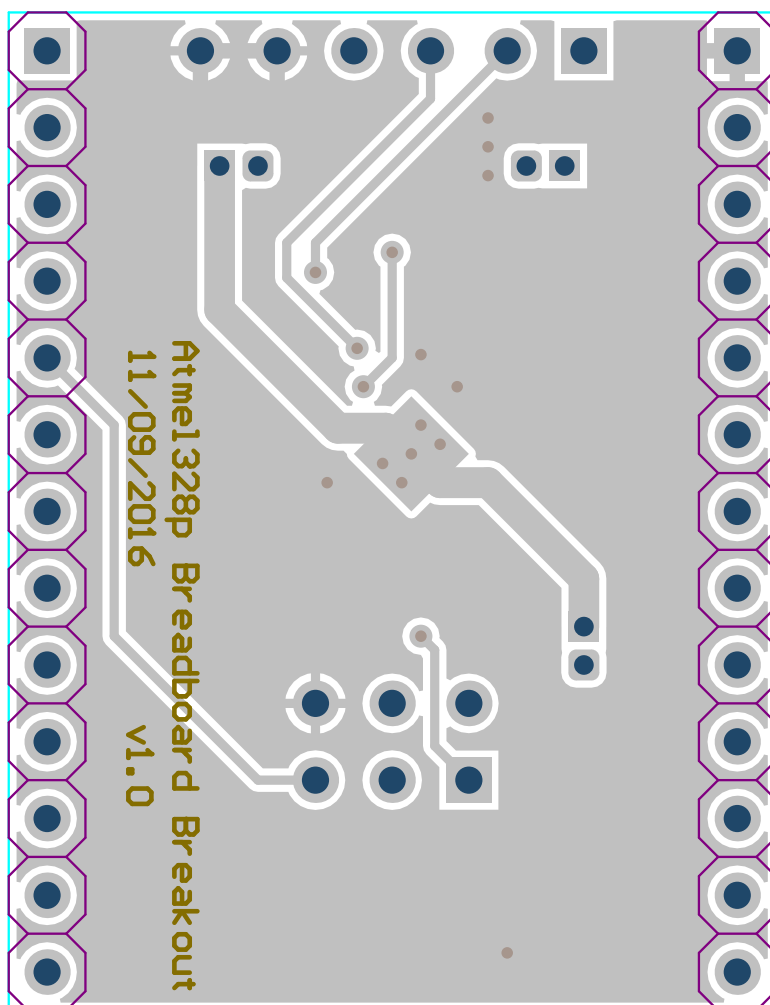
Revisic v1.0

Date: 11/09/2016

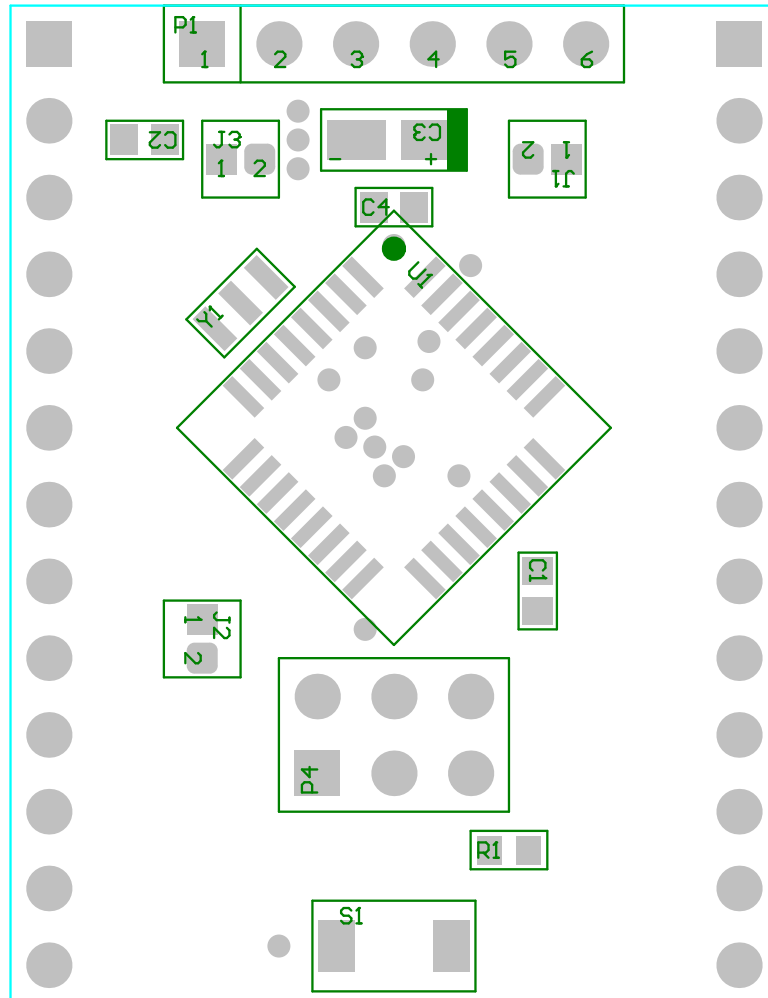
Designator	Quantity	Supplier	Supplier Part Number	Comment	Description	LibRef	Footprint
J1	1	TME	ZL319-2P	FTDI Power	CONNFLY - DS1031-01-1*2P8BV3-1	Jumper (2p, NO)	HDR1X2-1.27
J2	1	TME	ZL319-2P	ISP Power	CONNFLY - DS1031-01-1*2P8BV3-1	Jumper (2p, NO)	HDR1X2-1.27
J3	1	TME	ZL319-2P	RESET Enable	CONNFLY - DS1031-01-1*2P8BV3-1	Jumper (2p, NC)	HDR1X2-1.27
Y1	1	Farnell	2470359	16Mhz	MURATA - CSTCE16M0V53Z-R0 - RESONATOR, CERAMIC, 16MHZ, SMD	Ceramic Resonator	CSTCE-Ceramic resonator
C1, C2, C4	3	Farnell	1759016	100nF	MULTICOMP - MC0603B104K160CT - CAP, MLCC, X7R, 100NF, 16V, 0603	Capacitor	CAPC1608X05N
C3	1	Farnell	1658495	33uF/10V	AVX - TPSA336K010R0700 - CAP, TANT, 33UF, 10V, CASE A	Capacitor Polarized	CAPMP3216X18N
JCAP1, JCAP2, JCAP3	3	Farnell	2078261	Jumper Cap	HARWIN - M50-1920005 - JUMPER, SOCKET, RED, 1.27MM	Jumper Cap	
P1	1	Farnell	1593415	FTDI	MULTICOMP - 2211S-06G - HEADER, THT, VERTICAL, 2.54MM, 6WAY	FTDI	HDR1X6-2.54
P2, P3	2	Farnell	1593421	Breadboard Header	MULTICOMP - MC34735 - HEADER, THT, VERTICAL, 2.54MM, 14WAY (Break away 1 pin)	Header 1x13	HDR1X13-2.54
P4	1	Farnell	1593440	ISP AVR	MULTICOMP - 2213S-06G - HEADER, 2 ROW, VERT, 6WAY	ISP AVR	HDR2X3-2.54
U1	1	Farnell	1715486	ATMEGA328p-AU	ATMEL - ATMEGA328P-AU - MCU, 8BIT, ATMEGA, 20MHZ, TQFP-32	ATMEGA328p-AU	TQFP80P900X900X120-32N
S1	1	Farnell	2500851	RESET	OMRON ELECTRONIC COMPONENTS - B3U-1000P - TACTILE SWITCH, SPST-NO, 0.05A, SMD	Switch Momentary SPST-NO	B3U-1000P
R1	1	Farnell	9330399	10K	MULTICOMP - MC0063W0603110K - RES, THICK FILM, 10K, 1%, 0.063W, 0603	Resistor	RESC1608X05N



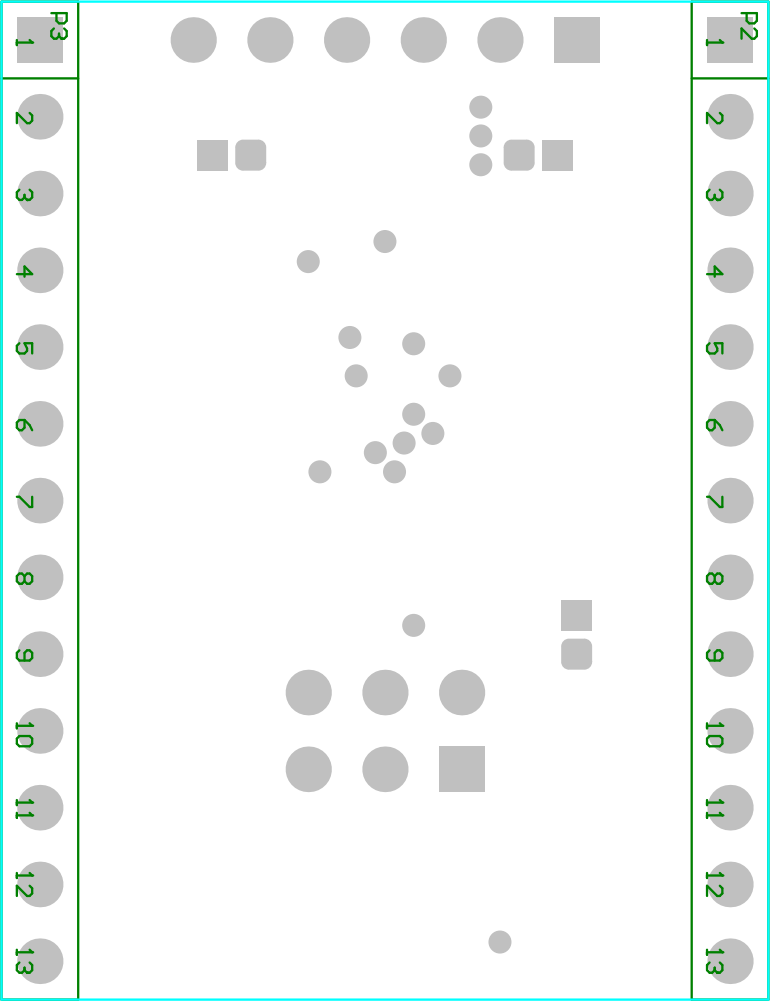
Top Layer Outline



Bottom Layer Outline



Top Layer Assembly



Bottom Layer Assembly

Design Rules Verification Report

Filename : C:\Users\bc547\Documents\bcdev-data\playground\Altium\bbelements\Atmel328p.PcbDoc

Warnings 0
Rule Violations 0

Warnings	
Total	0

Rule Violations	
Board Clearance Constraint (Gap=0mil) (not OnSilkscreen)	0
Modified Polygon (Allow modified: No), (Allow shelved: No)	0
Net Antennae (Tolerance=0mil) (All)	0
Minimum Solder Mask Sliver (Gap=3mil) (All),(All)	0
Hole To Hole Clearance (Gap=10mil) (All),(All)	0
Hole Size Constraint (Min=15mil) (Max=100mil) (All)	0
Height Constraint (Min=0mil) (Max=1000mil) (Preferred=500mil) (All)	0
Width Constraint (Min=10mil) (Max=50mil) (Preferred=12mil) (All)	0
Power Plane Connect Rule(Relief Connect)(Expansion=20mil) (Conductor Width=10mil) (Air Gap=10mil) (Entries=4)	0
Clearance Constraint (Gap=9mil) (All),(All)	0
Un-Routed Net Constraint (All)	0
Short-Circuit Constraint (Allowed=No) (All),(All)	0
Minimum Annular Ring (Minimum=7mil) (All)	0
Total	0

