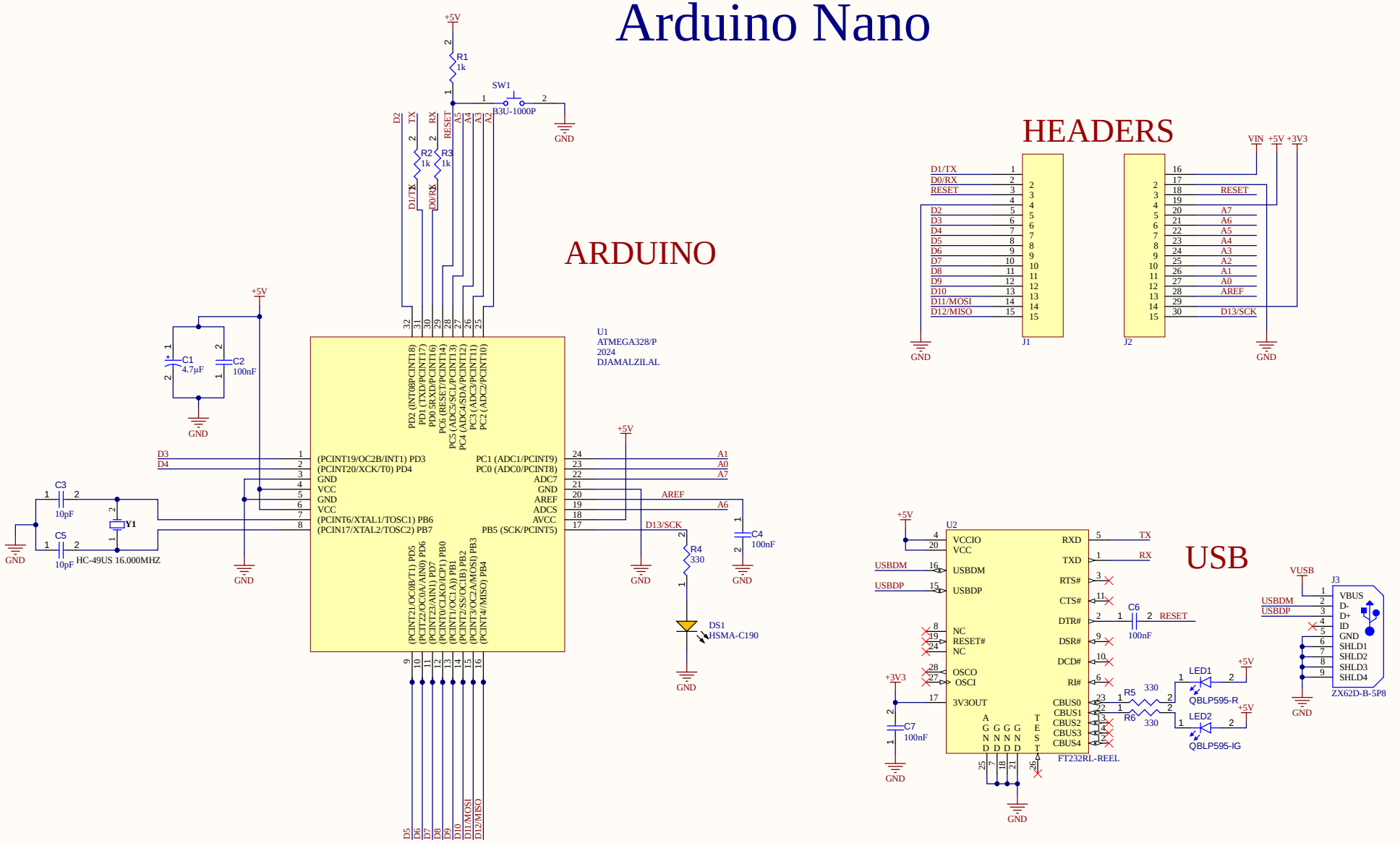
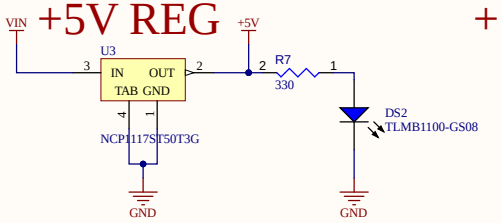
Arduino Nano



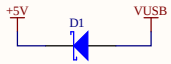
HEADERS

USB

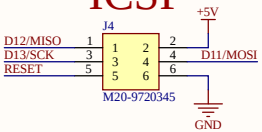
+5V REG

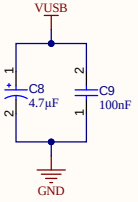


+5V AUTO SELECTOR

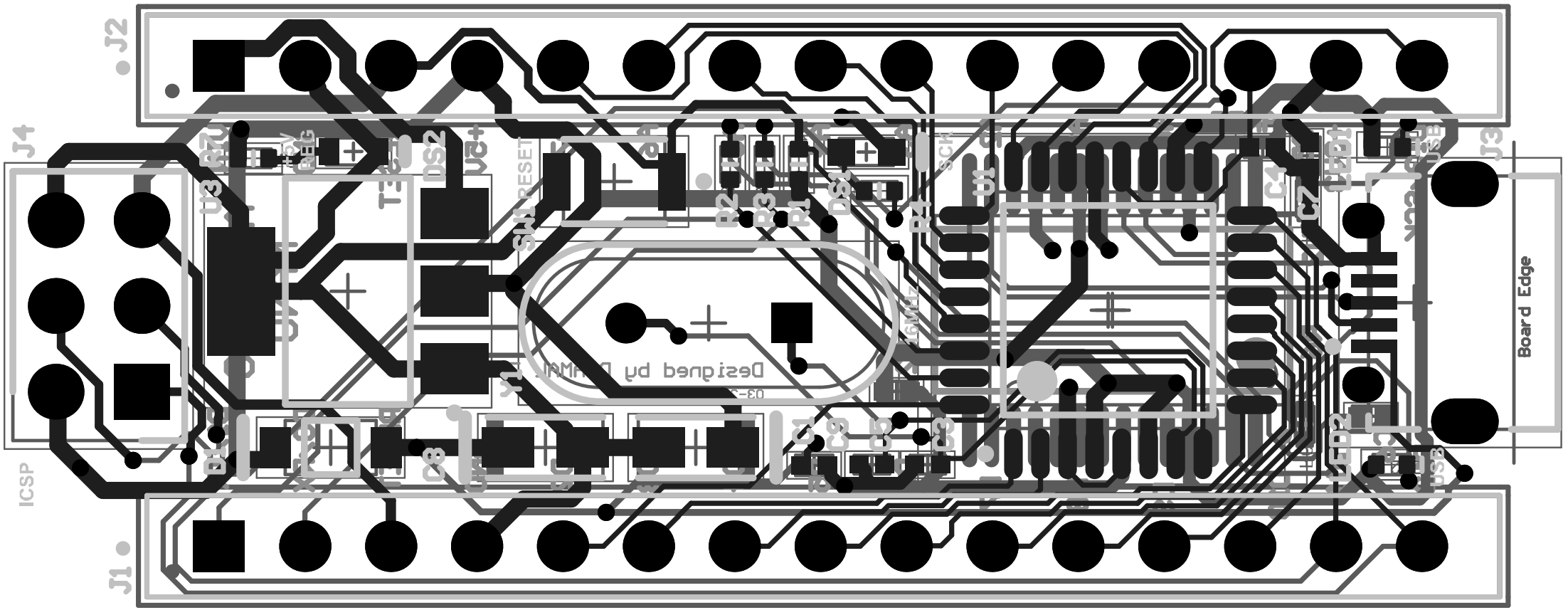


ICSP

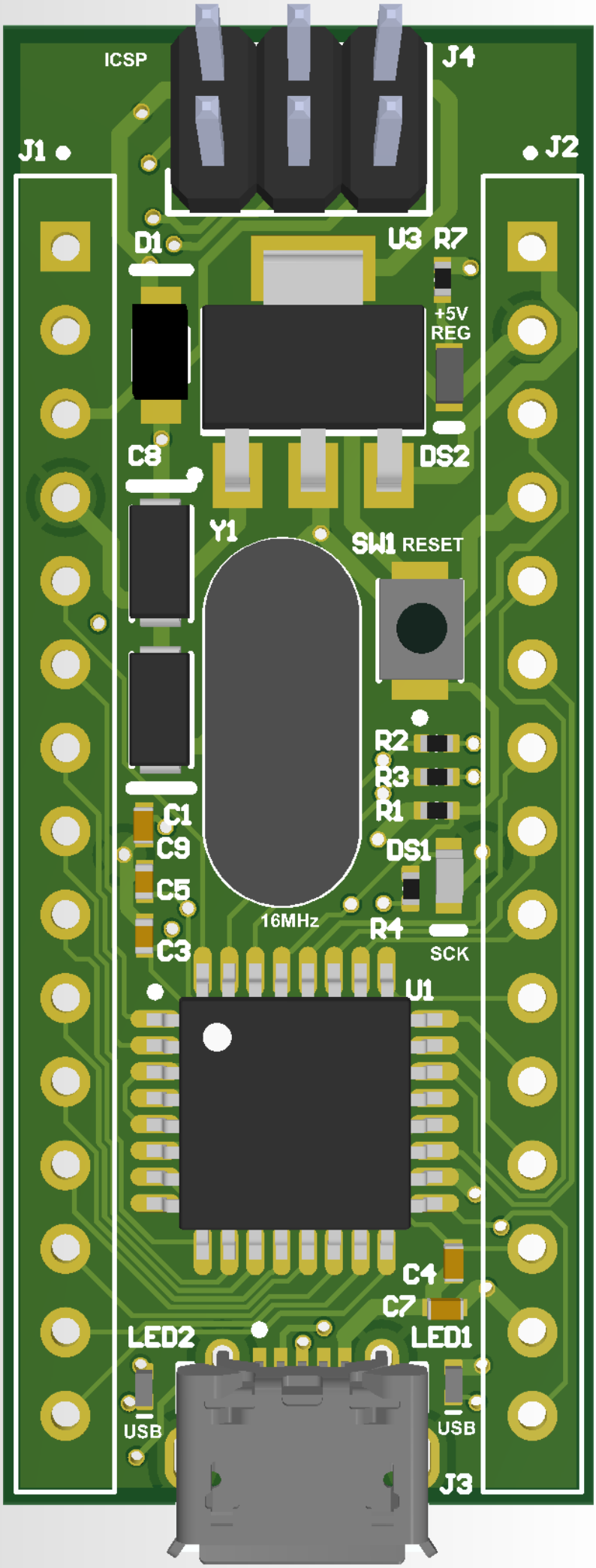


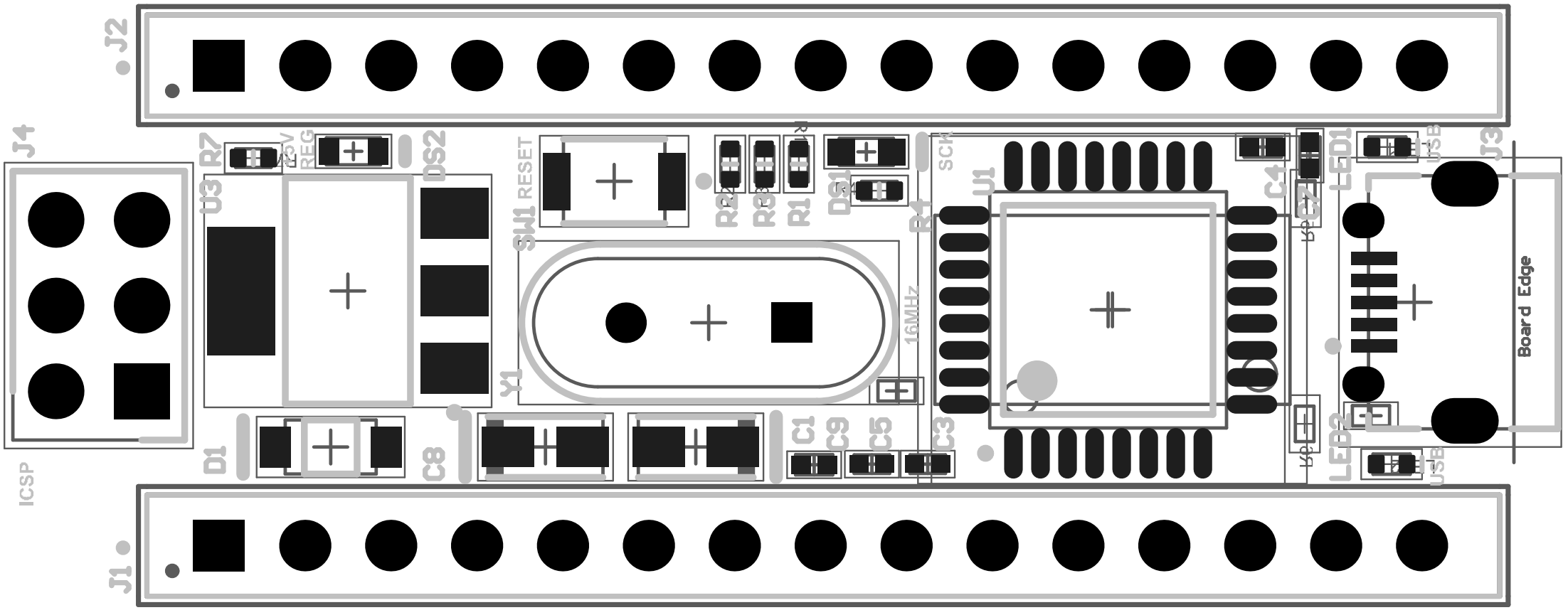


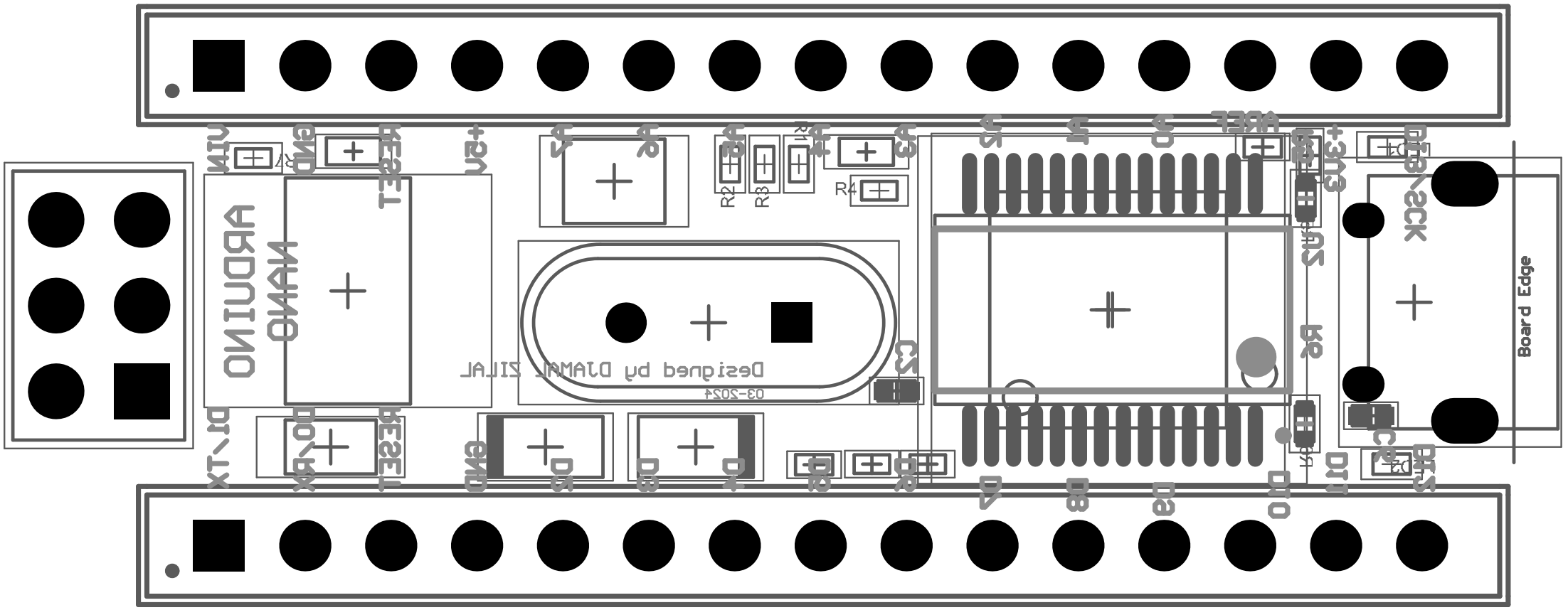
Title		
Size A3	Number	Revision
Date: 3/05/2024		Sheet of
File: D:\Professional\..\Sheet1.SchDoc		Drawn By:


J2
J4
J1
ICSP
J3
Board Edge

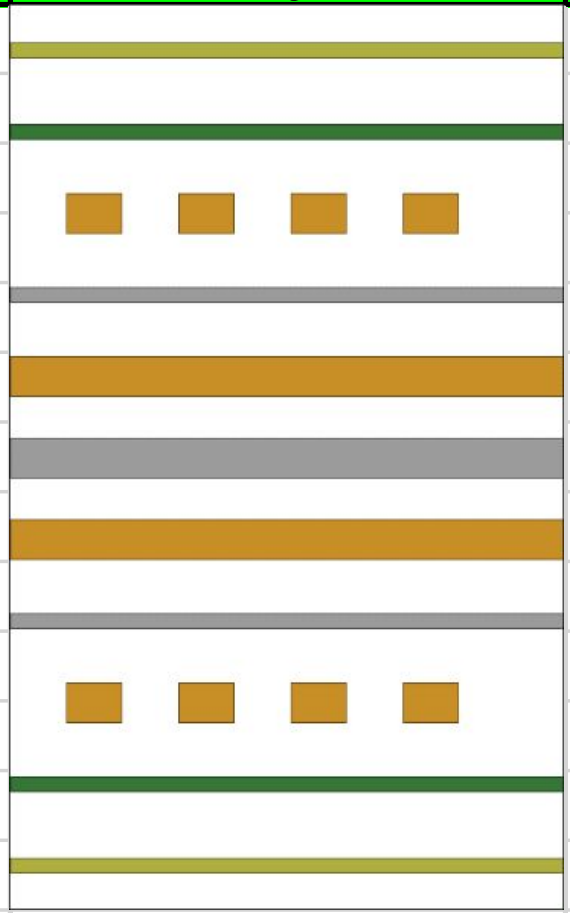
Comment	Description	Designator	Footprint	LibRef	Quantity
ECA1HM4R7	Aluminum Electrolytic Capacitor, 4.7 uF, +/- 20%, 50 V, -40 to 85 degC, 2-Pin THD, RoHS, Bulk	C1, C8	CAPPR55-200-1100X500X1200	CMP-001-00033-7	2
Capacitor 0.1 uF +/- 5% 16 V 0402	Chip Capacitor, 0.1 uF, +/- 5%, 16 V, 0402 (1005 Metric)	C2, C4, C6, C7, C9	CAPC1005X56X25LL10T15	CMP-001-00001-6	5
Capacitor 10 pF +/- 0.25 pF 50 V 0402	Chip Capacitor, 10 pF, +/- 0.25 pF, 50 V, 0402 (1005 Metric)	C3, C5	CAPC1005X55X30LL05T10	CMP-001-00011-6	2
MBR0520LT1G	Schottky Power Rectifier, 20 V, 5.5 A, -65 to 125 degC, 2-Pin SMD, RoHS, Tape and Reel	D1	ONSC-SOD-123-2-425-04_V	CMP-004-00003-2	1
HSMA-C190	LED Uni-Color Amber, 60 mW, 20 mA, -40 to 85 degC, 2-Pin SMD, RoHS, Tape and Reel	DS1	AVAG-HSMX-C190_V	CMP-007-00011-2	1
TLMB1100-GS08	Blue LED, 10 mA, 3.9 V, -40 to 100 degC, 2-Pin SMD (0603), RoHS, Tape and Reel	DS2	VISH-TLMX1100-2_V	CMP-007-00028-2	1
both parts are inseparated		J1, J2	PCBComponent_1	Header 15	2
ZX62D-B-5P8	Right Angle Receptacle Connector, Micro USB, 5 Position, Height 2.65 mm, -30 to 85 degC, RoHS, Tape and Reel	J3	HIRO-ZX62D-B-5P8_V	CMP-002-00043-2	1
M20-9720345	Connector	J4	HDRV6W64P254_2X3_762X508X864P	M20-9720345	1
QBLP595-R	Chip LED 0402, Red, 0.02 A, 2.0 to 2.5 V, -40 to 80 degC, 2-Pin SMD, RoHS, Tape and Reel	LED1	QTB-QBLP595_V	CMP-007-00040-3	1
QBLP595-IG	Chip LED 0402, Green, 0.02 A, 3.1 to 3.7 V, -40 to 80 degC, 2-Pin SMD, RoHS, Tape and Reel	LED2	QTB-QBLP595_V	CMP-007-00041-3	1
1KR2J	1K 0.063W 5% 0402 (1005 Metric) SMD	R1, R2, R3	RESC0402(1005)_L	CMP-009-00075-2	3
330R2J	330R 0.063W 5% 0402 (1005 Metric) SMD	R4, R5, R6, R7	RESC0402(1005)_L	CMP-009-00095-2	4
B3U-1000P	Tactile Switch, SPST-NO, 0.05 A, 12 V, -25 to 70 degC, 2-Pin SMD, RoHS, Tape and Reel	SW1	OMRON-B3U-1000_V	CMP-011-00000-2	1
ATMEGA328/P		U1	ATMEGA328/P	ATMEGA328/P	1
FT232RL-REEL	USB UART IC, -0.5 to 6 V, 24 mA, -40 to 85 degC, 28-Pin SSOP, RoHS, Tape and Reel	U2	FTDI-SSOP-28_M	CMP-015-00000-2	1
NCP1117ST50T3G	Low-Dropout Positive Fixed Voltage Regulator, 1 A, 5 V Vout, 0 to 125 degC, 4-Pin SOT-223, Pb-Free, Tape and Reel	U3	ONSC-SOT-223-4-318H-01_A_V	CMP-019-00031-3	1
HC-49US 16.000MHZ	Crystal, 16 MHz, +/- 30 ppm, 18 pF, -20 to 70 degC, 2-Pin THD	Y1	JPY-HC-49US	CMP-003-00005-2	1


ICSP
J4
J1
J2
D1
U3
R7
+5V
REG
DS2
C8
Y1
SW1
RESET
16MHz
R2
R3
R1
C1
C9
DS1
C5
R4
SCK
C3
U1
C4
C7
LED2
LED1
USB
USB
J3


J2
J4
J1
ICSP
R7
3.3V REG
DS2
U3
SW1
RESET
R2
R3
R1
DS1
R4
SCK
U1
C4
C2
LED1
USB
J3
Board Edge
16MHz
Y1
D1
C8
C1
C9
C5
C3
LED2
USB


ARDUINO
NANO
Designed by DIAMAL ZILAL
03-2024
Board Edge

Board Stack Report

Stack Up		Layer Stack			
Layer	Board Layer Stack	Name	Material	Thickness	Constant
1		Top Paste			
2		Top Overlay			
3		Top Solder	Solder Resist	0,40mil	3,5
4		Top Layer	Copper	1,40mil	
5		Dielectric 2	PP-006	2,80mil	4,1
6		Layer 1 (GND)	Copper	0,25mil	
7		Dielectric 1	FR-4	12,60mil	4,8
8		Layer 2 (PWR)	Copper	0,25mil	
9		Dielectric 3	PP-006	2,80mil	4,1
10		Bottom Layer	Copper	1,40mil	
11		Bottom Solder	Solder Resist	0,40mil	3,5
12		Bottom Overlay			
13		Bottom Paste			
	Height : 22,31mil				

Design Rules Verification Report

Filename : D:\Professional\Project\GitHub\Arduino Nano\Arduino_Nano\PCB1.PcbDoc

Warnings 0
Rule Violations 0

Warnings	
Total	0

Rule Violations	
Clearance Constraint (Gap=4mil) (All),(All)	0
Short-Circuit Constraint (Allowed=No) (All),(All)	0
Un-Routed Net Constraint ((All))	0
Modified Polygon (Allow modified: No), (Allow shelved: No)	0
Width Constraint (Min=6mil) (Max=20mil) (Preferred=6mil) (All)	0
Power Plane Connect Rule(Relief Connect)(Expansion=20mil) (Conductor Width=10mil) (Air Gap=10mil) (Entries=4)	0
Hole Size Constraint (Min=1mil) (Max=100mil) (All)	0
Hole To Hole Clearance (Gap=6mil) (All),(All)	0
Minimum Solder Mask Sliver (Gap=4mil) (All),(All)	0
Silk To Solder Mask (Clearance=4mil) (IsPad),(All)	0
Silk to Silk (Clearance=6mil) (All),(All)	0
Net Antennae (Tolerance=0mil) (All)	0
Height Constraint (Min=0mil) (Max=1000mil) (Prefered=500mil) (All)	0
Total	0