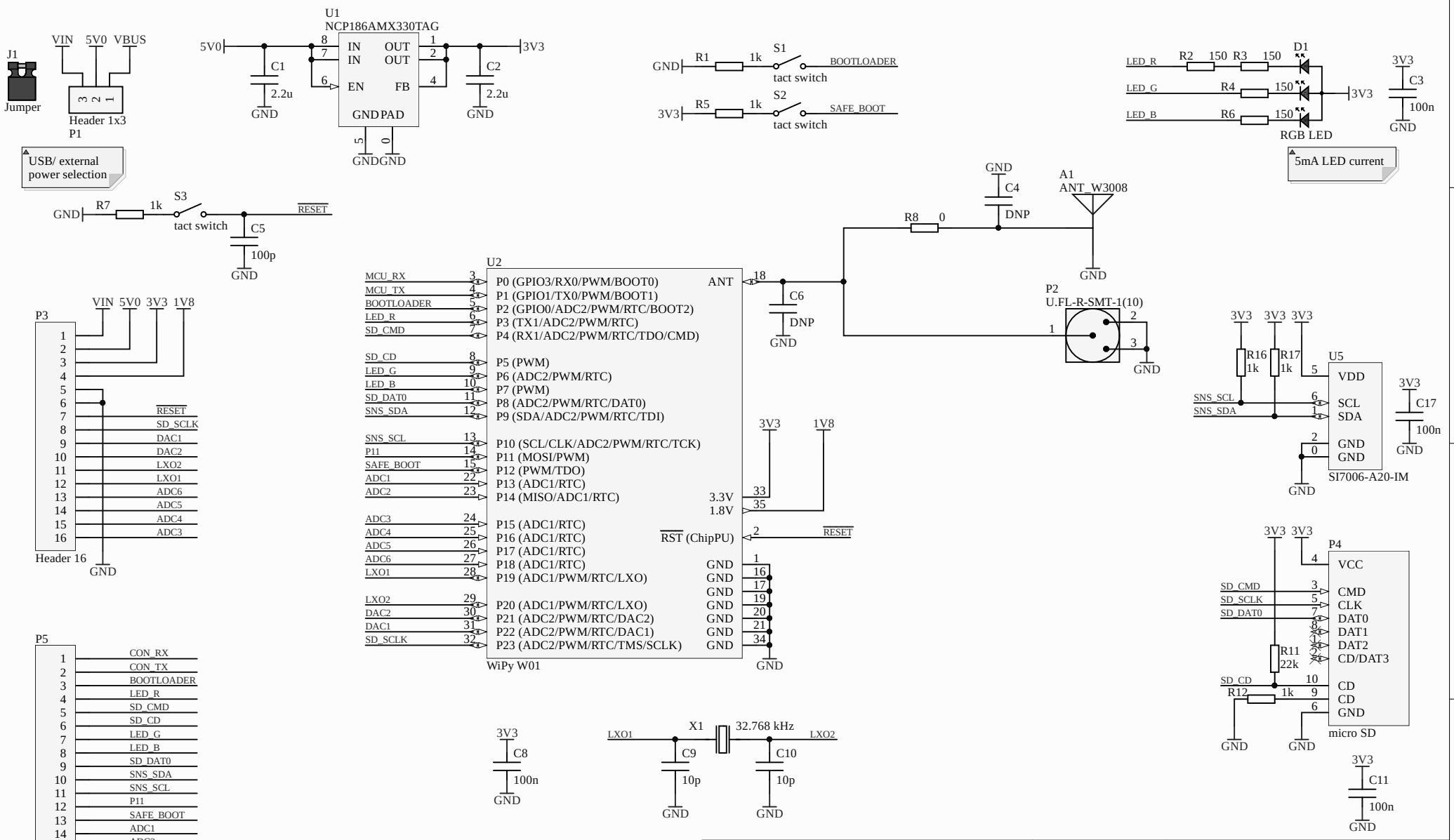
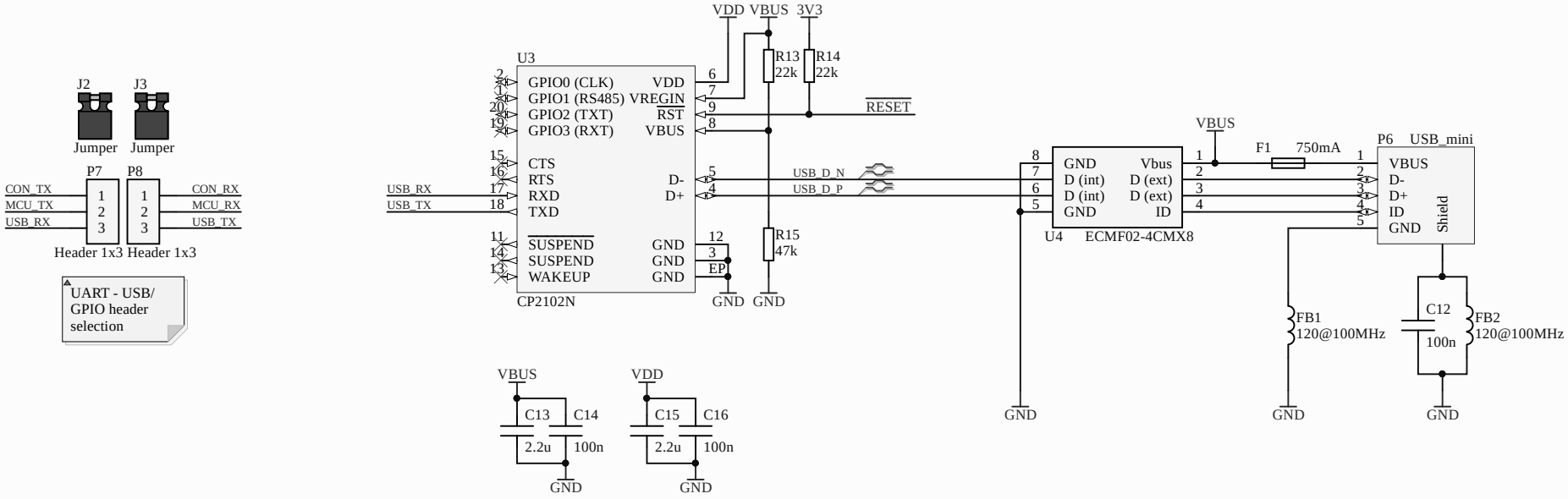
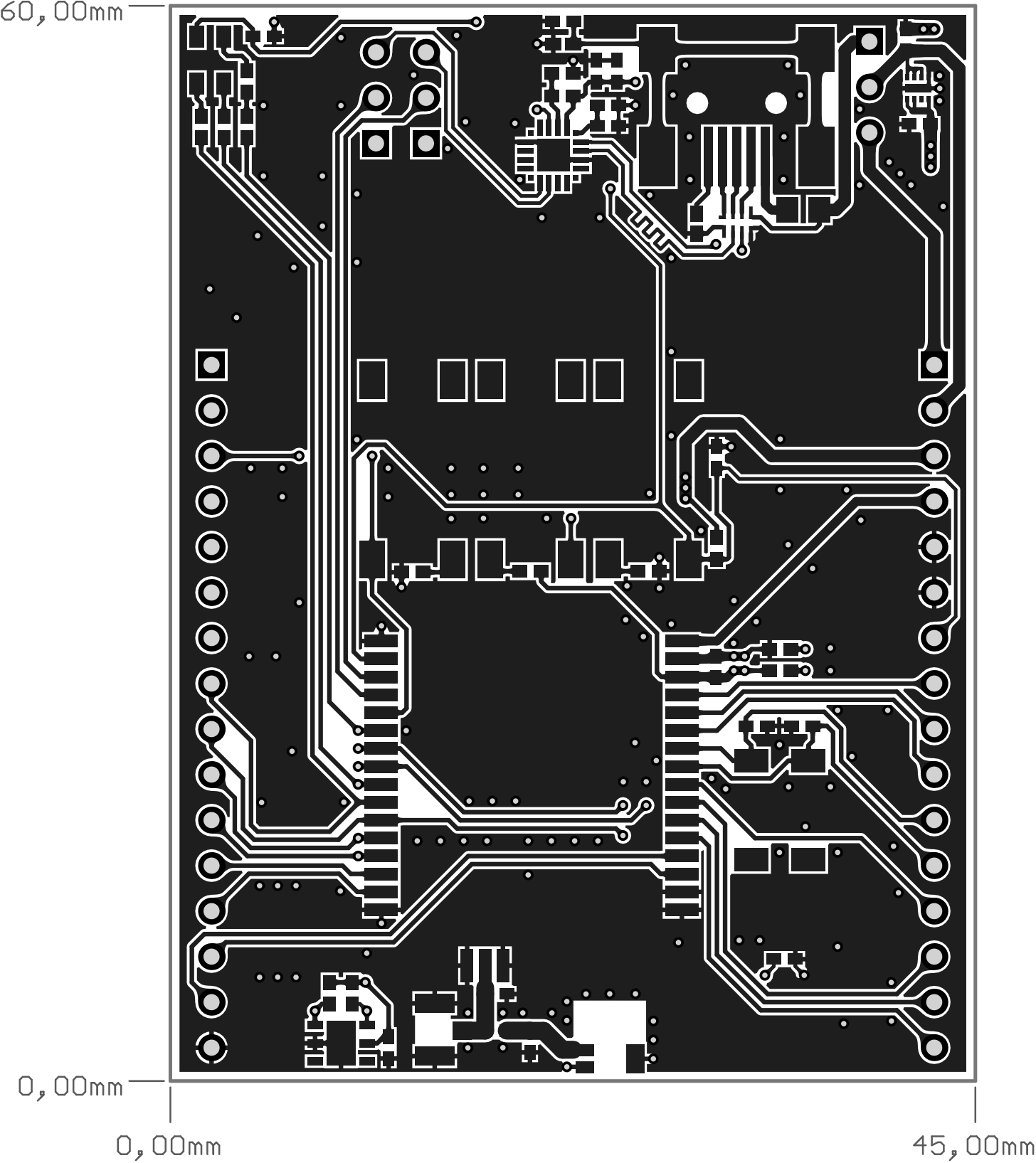


Project:	WiPy_uEval.PrjPCB	Revision:	1.0	*Koło Naukowe Systemów Scalonych 00-665 Warszawa Nowowiejska 15/19*
File:	main.SchDoc	Sheet:	1	
Variant:	[No Variations]	Total Sheet:	2	
Author:	Krzysztof Belewicz	Modified:	2018-10-21	



Project:	WiPy_uEval.PrjPCB	Revision:	1.0	*Koło Naukowe Systemów Scalonych 00-665 Warszawa Nowowiejska 15/19*
File:	USB.SchDoc	Sheet:	2	
Variant:	[No Variations]	Total Sheet:	2	
Author:	Krzysztof Belewicz	Modified:	2018-10-21	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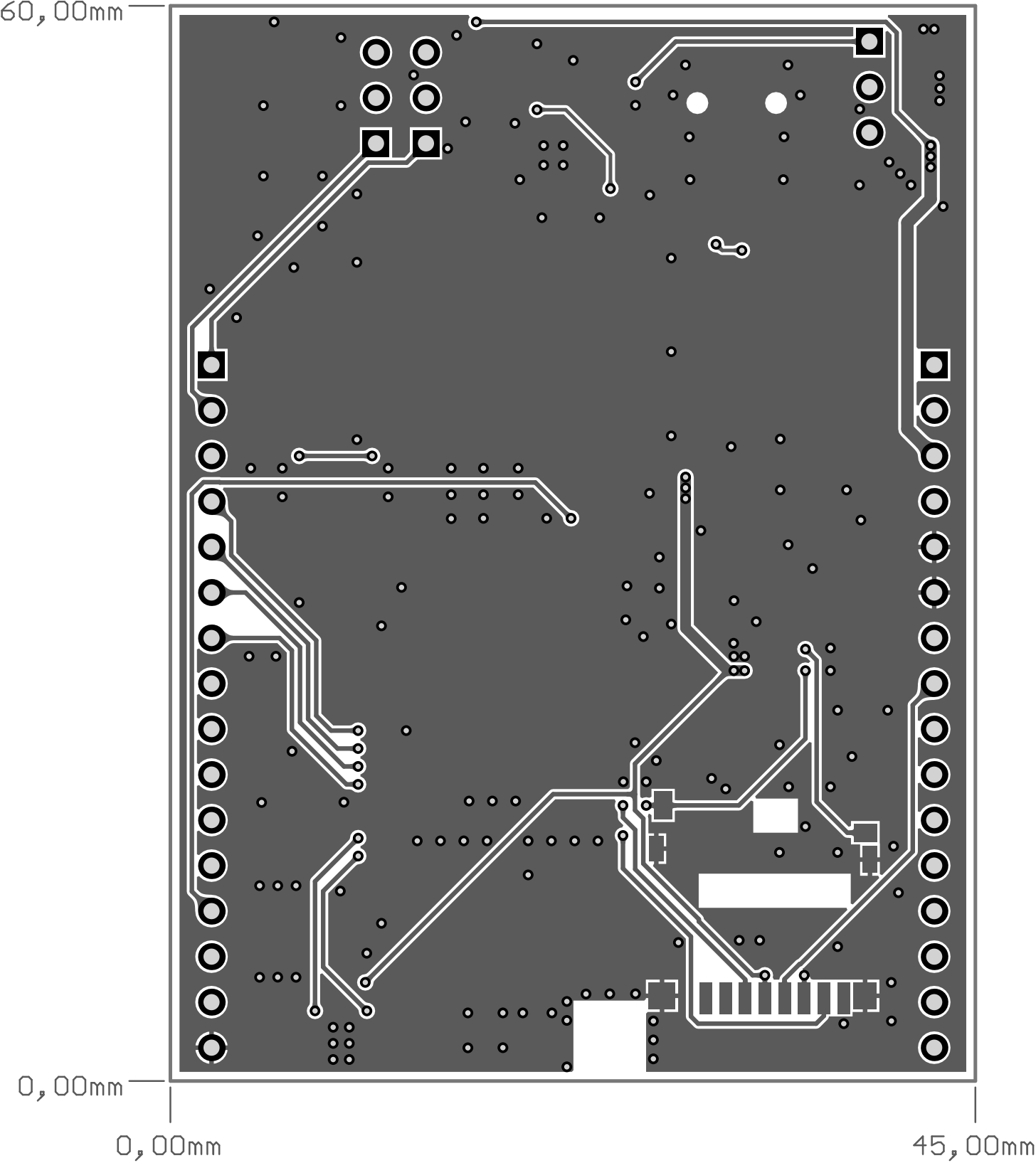
0,00mm
45,00mm


60,00mm
0,00mm
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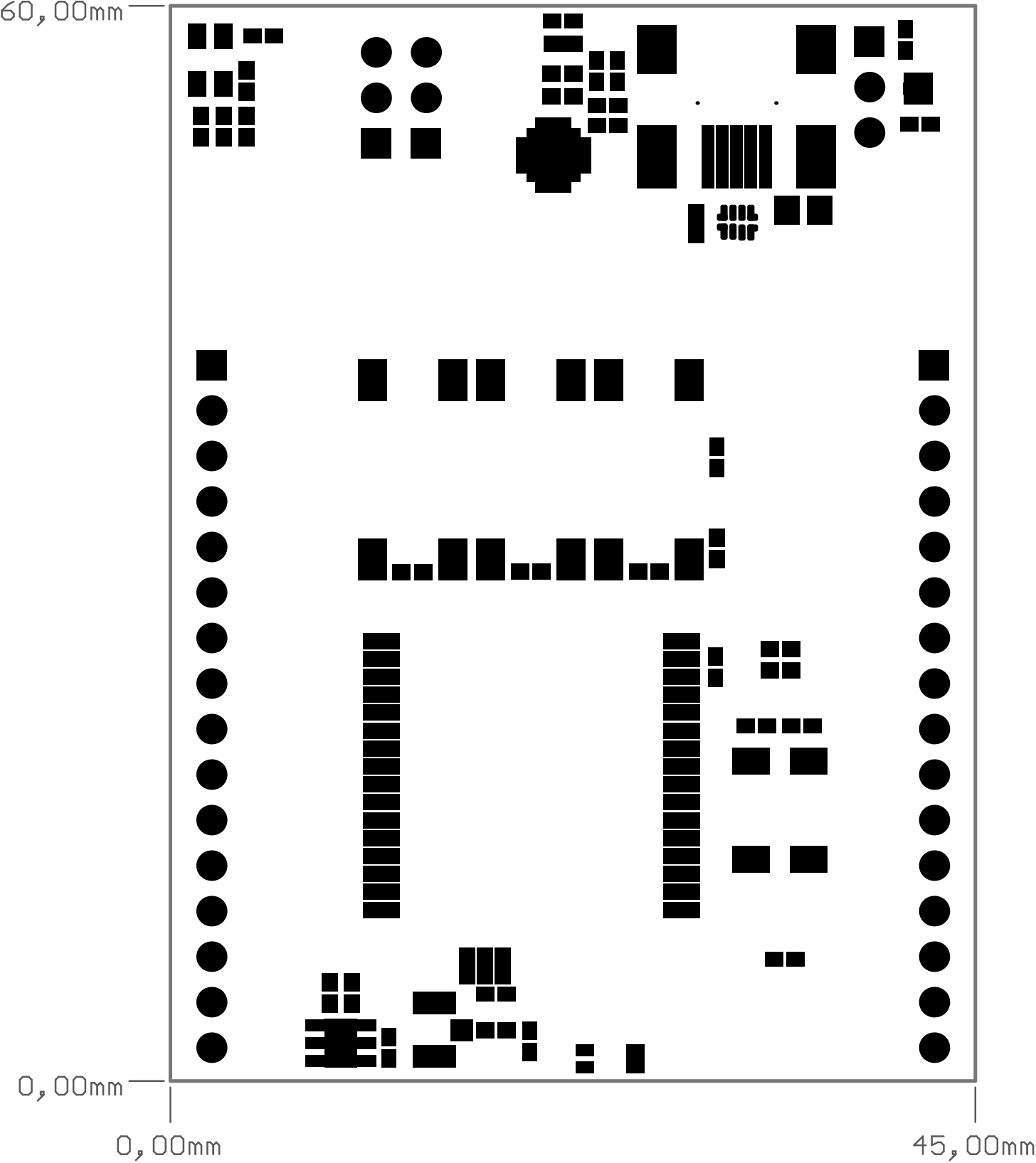
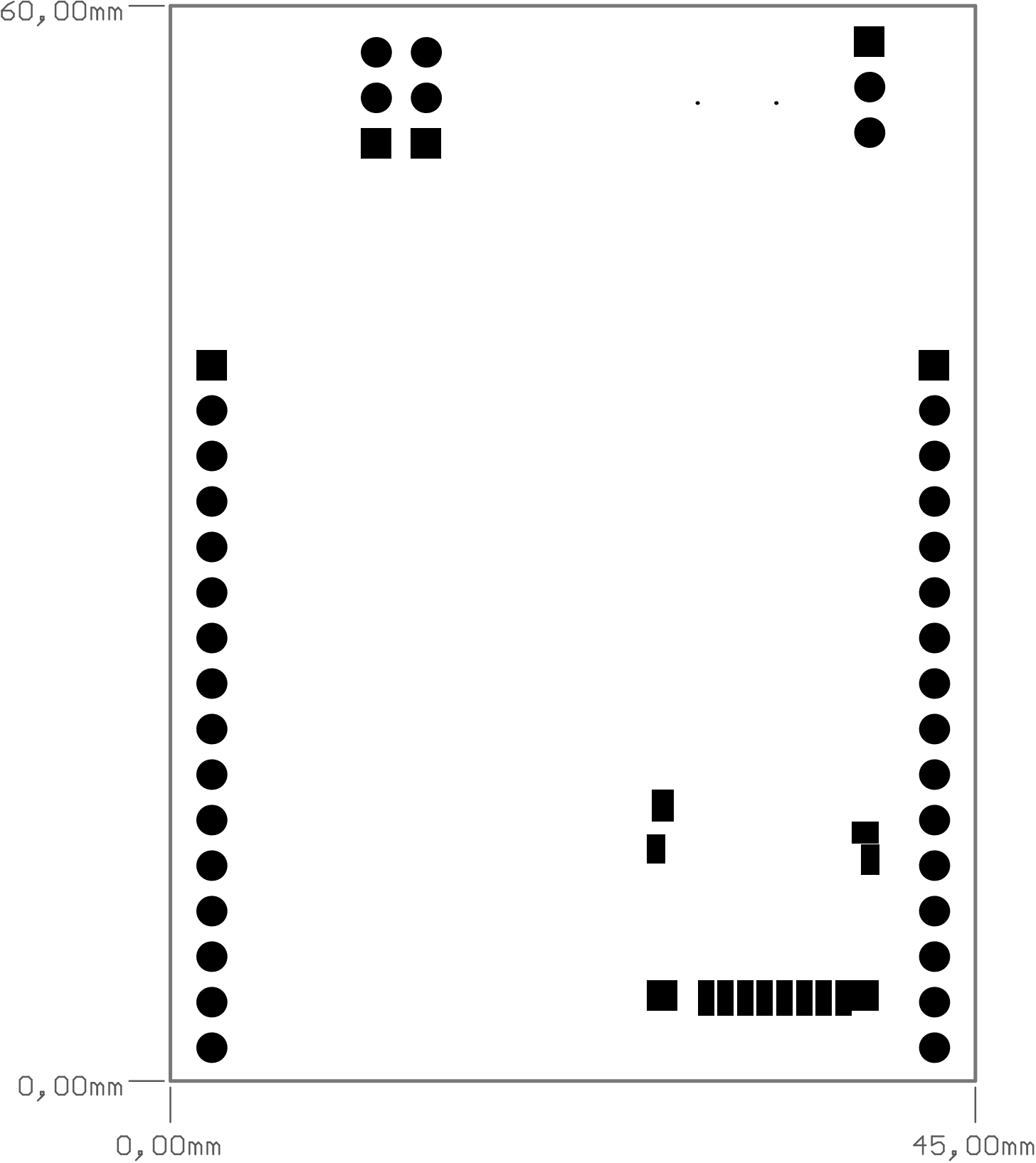
45,00mm


60,00mm
0,00mm
0,00mm
45,00mm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0,00mm
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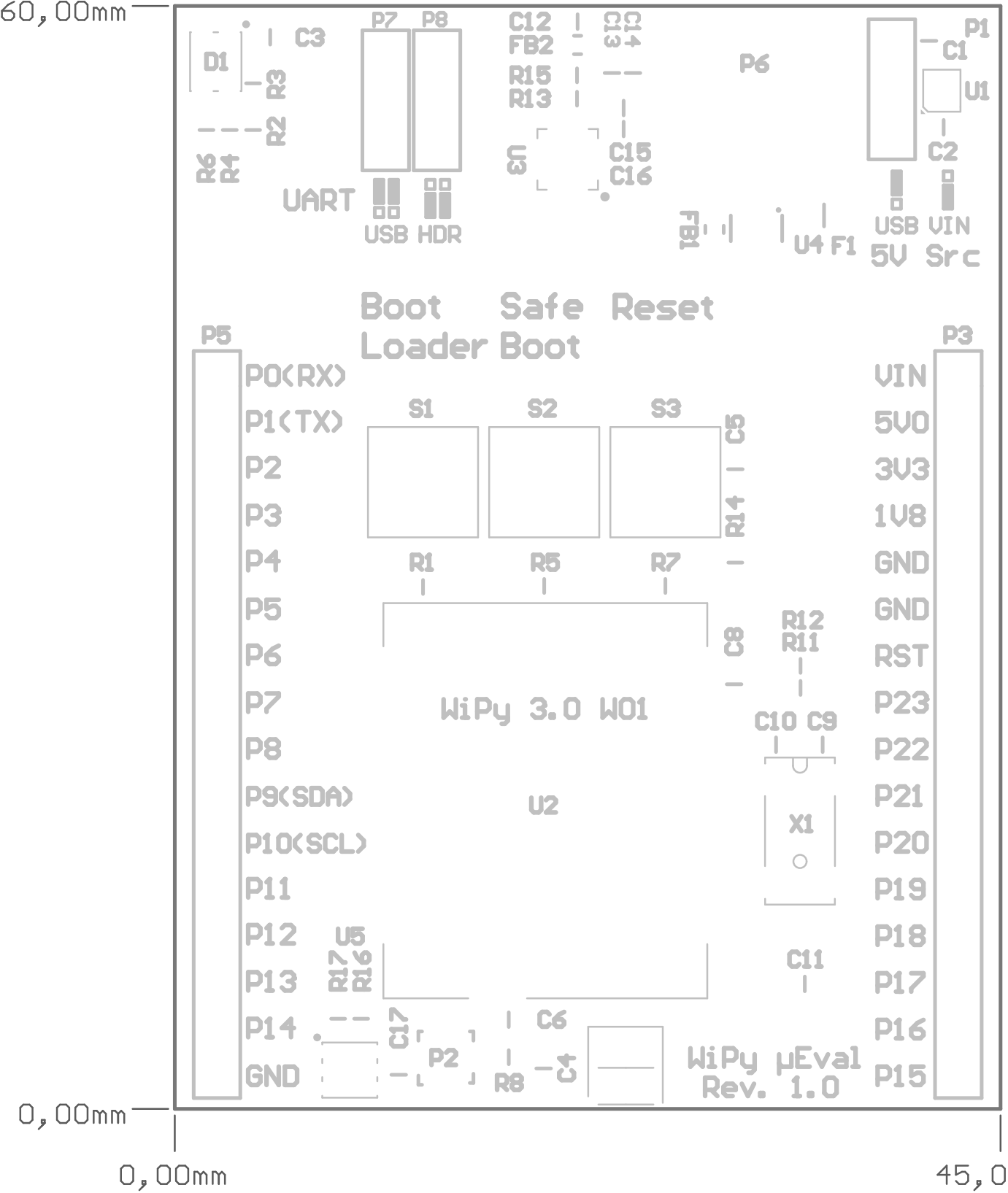
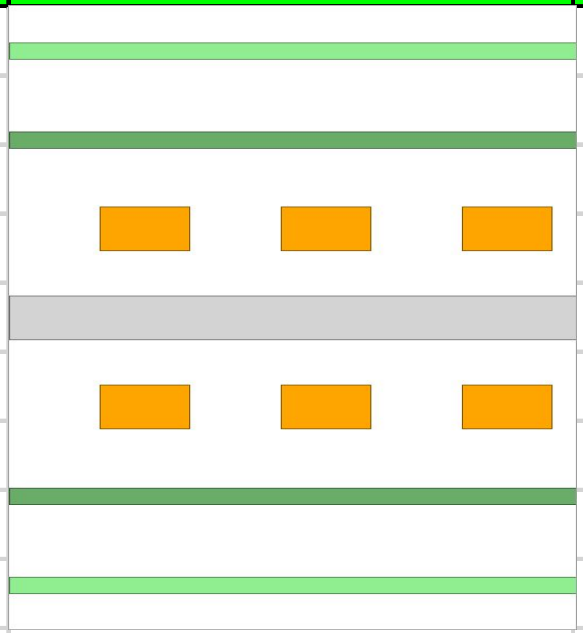
45,00mm

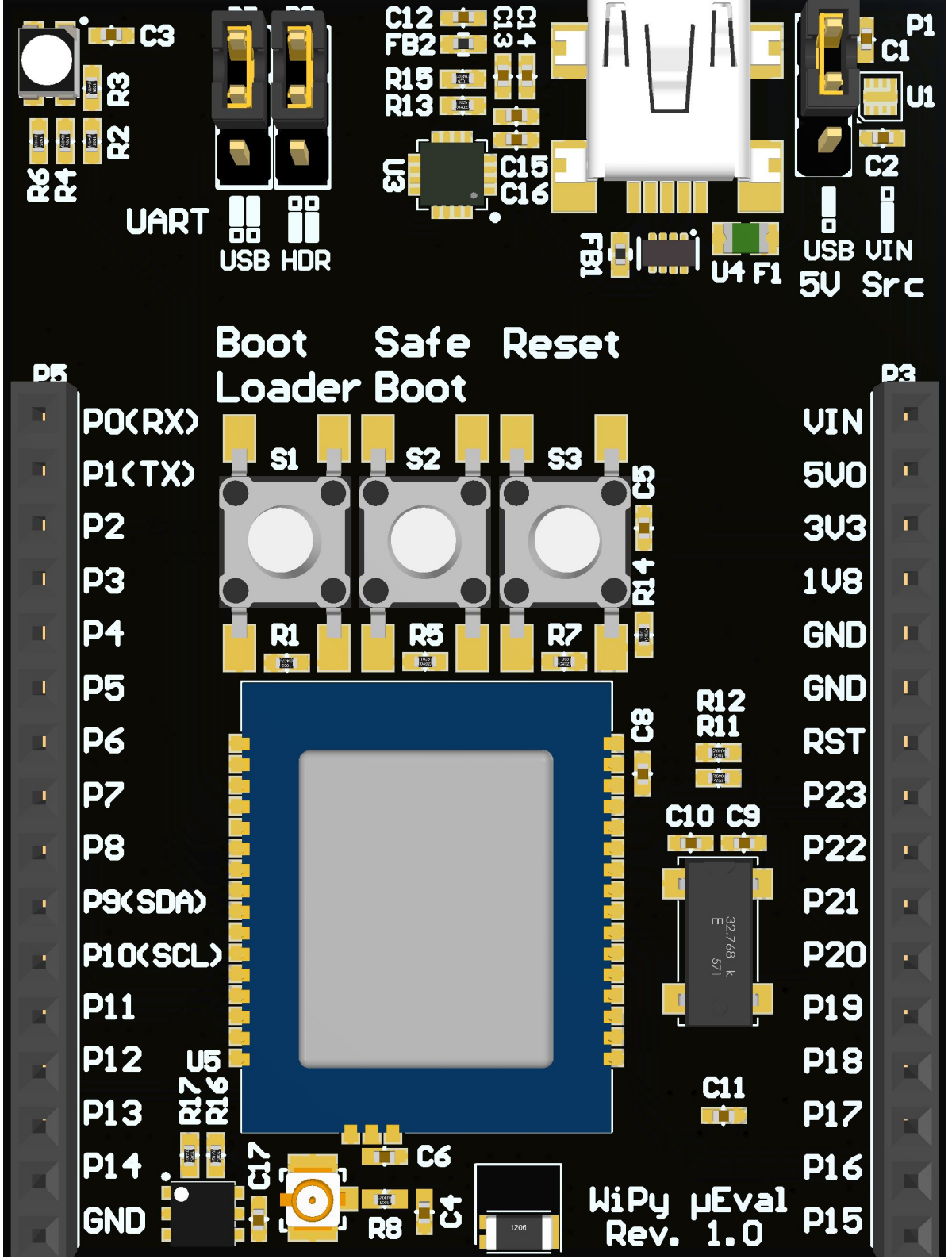

60,00mm
0,00mm
0,00mm
45,00mm
D1
C3
R3
R2
R6
R4
P7
P8
UART
USB HDR
C12
FB2
R15
R13
C13
C14
U3
C15
C16
P6
P1
C1
U1
C2
USB VIN
FB1
U4
F1
5V Src
Boot Safe Reset
Loader Boot
P5
P3
P0(RX)
P1(TX)
P2
P3
P4
P5
P6
P7
P8
P9(SDA)
P10(SCL)
P11
P12
P13
P14
GND
S1
S2
S3
C5
R14
R1
R5
R7
C8
R12
R11
WiPy 3.0 W01
C10 C9
U2
X1
C11
U5
R17
R16
C17
P2
C6
R8
C4
WiPy µEval
Rev. 1.0
VIN
5V0
3V3
1V8
GND
GND
RST
P23
P22
P21
P20
P19
P18
P17
P16
P15

60,00mm
0,00mm
0,00mm
45,00mm
SSID: wlpy-wlan-XXXX
PASS: www.pycom.io
Telnet port 23
FTP un-encrypted
User: micro
Pass: python
p4

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 1	FR-4	61,02mil	4,8
6		Bottom Layer	Copper	1,40mil	
7		Bottom Solder	Solder Resist	0,40mil	3,5
8		Bottom Overlay			
9		Bottom Paste			
	Height : 64,62mil				

Designator	Description	Value	Tolerance	MaxVoltage	Quantity	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1	Manufacturer 2	Manufacturer Part Number 2	Supplier 2	Supplier Part Number 2
A1	Bluetooth / WLAN / WiFi Ceramic Chip Antenna W x L x H (3.2 x 1.6 x 1.1 mm)				1	Pulse Electronics	W3008	Farnell	2897223	Pulse Electronics	W3008	Mouser	673-W3008
C1, C2, C13, C15	0402 SMD Capacitor	2.2u	10%	6.3V	4	Murata	GRT155C80J225KE01D	Farnell	2672104	MURATA	GRT155C80J225KE01D	Farnell	2672104
C3, C8, C11, C12, C14, C16, C17	0402 SMD Capacitor	100n	10%	16V	7	Multicomp	MC0402B104K100CT	Farnell	2627343	Multicomp	MC0402B104K100CT	Farnell	2627343
C4, C6	0402 SMD Capacitor	DNP			2								
C5	0402 SMD Capacitor	100p	10%	25V	1	Multicomp	MC0402B101K250CT	Farnell	1758898	AVX	04025A101JAT2A	TME	04025A101JAT2A
C9, C10	0402 SMD Capacitor	10p	5%	50V	2	Vishay	VJ0402A100JXACW1BC	Farnell	2896329	VISHAY	VJ0402A100FXACW1BC	TME	VJ0402A100FXACW1BC
D1	LED; SMD; 3528,PLCC4; RGB; 3,5x2,8x1,9mm; 115°; 20mA; Common anode				1	Broadcom	ASMB-MTB1-0A3A2	Farnell	2401106	BROADCOM	ASMB-MTB1-0A3A2	TME	ASMB-MTB1-0A3A2
F1	PTC Fuse 500mA				1	ECE	SR075-06	TME	SR075-06				
FB1, FB2	Ferrite Bead	120@100MHz	25%		2	Murata	BLM15PD121SN1D	Farnell	2443229	Murata	BLM15PD121SN1D	Farnell	2443229
J1, J2, J3	1x2, 2.54mm Black header jumper				3	NINIGI	JUMPER-B	TME	JUMPER-B				
P1, P7, P8	Pin header, 1x3, 2.54mm				3	CONNFLY	DS1021-1*3SF1-1	TME	ZL201-03G				
P2	Hirose UFL connector				1	Hirose	U.FL-R-SMT-1(10)	Farnell	1688077	Hirose	U.FL-R-SMT-1(10)	RSComponents	557-981
P3, P5	Header, 16-Pin				2	Samtec	SSQ-116-23-F-S	Mouser	200-SSQ11623FS	Samtec	SSQ-116-23-F-S	Farnell	2283824
P4	Memory Card Connectors Micro SD 8 Pin PCB Gold				1	Amphenol Commercial	114-00841-68	Farnell	2666772	Amphenol Commercial	114-00841-68	Mouser	523-114-00841-68
P6	Gniazdo; USB B mini; SMT; poziome; V: USB 2.0; złocony				1	ADAM TECH	MUSB-B5-S-RA-TSMT-CS1	TME	MUSB-B5-S-RA-SMT				
R1, R5, R7, R12, R16, R17	0402 Film SMD Resistor	1k	1%		6	TE Connectivity Neohm	CRG0402J1K0	Farnell	1174154	VISHAY	CRCW04021K00FKTDBC	TME	CRCW04021K00FKTDBC
R2, R3, R4, R6	0402 Film SMD Resistor	150	1%		4	TE Connectivity	CRGCQ0402F150R	Farnell	2861390	YAGEO	RC0402FR-07150R	TME	RC0402FR-07150R
R8	0402 Film SMD Resistor	0	1%		1	Panasonic	ERJ-2GE0R00X	Farnell	ERJ2GE0R00X				
R11, R13, R14	0402 Film SMD Resistor	22k	1%		3	TE Connectivity	CRGCQ0402F22K	Farnell	2861416	VISHAY	CRCW040222K0FKTDBC	TME	CRCW040222K0FKTDBC
R15	0402 Film SMD Resistor	47k	1%		1	TE Connectivity	CRGCQ0402F47K	Farnell	2861420	ROYAL OHM	0402WGF4702TCE	TME	SMD0402-47K-1%
S1, S2, S3	TACT; SPST-NO; 2 position; 0,05A/12VDC; SMT				3	Schurter	1301.9319	Farnell	1217771	Schurter	1301.9319	TME	1301.9319
U1	3.3V 1A LDO Voltage Regulator	3.3V			1	ON Semiconductor	NCP186AMX330TAG	Farnell	2507590				
U2	Wireless LAN Module, I2C, I2S, SPI, UART, M2M, Internet of Things				1	Pycom	W01	Farnell	2834998	Pycom	W01	Mouser	365-W01
U3	USB Interface IC USBXpress - USB to UART Bridge QFN20				1	Silicon Labs	CP2102N-A01-GQFN20	Farnell	2577277	Silicon Labs	CP2102N-A01-GQFN20	Mouser	634-CP2102NA01GQFN20
U4	STMicroelectronics Common Mode Filter with ESD protection, USB compatible				1	STMicroelectronics	ECMF02-4CMX8	Farnell	2629721				
U5	I2C HUMIDITY AND TEMPERATURE SENSOR				1	Silicon Labs	SI7006-A20-IM	Farnell	2473658	Silicon Labs	SI7006-A20-IM	Mouser	634-SI7006-A20-IM
X1	Standard Clock Oscillators 32,768kHz 20ppm -40C +85C				1	Epson	Q13MC30610003MC-30632.768KHZ12.5PF	Farnell	1216208	Epson Timing	MC306 32.768000KHZ 12.5PF	Farnell	1216208


C3
R3
R2
R6
R4
UART
USB HDR
C12
FB2
R15
R13
C13
C14
C15
C16
U3
P1
C1
U1
C2
FB1
U4
F1
USB VIN
5V Src
Boot Safe Reset
Loader Boot
P5
P0(RX)
P1(TX)
P2
P3
P4
P5
P6
P7
P8
P9(SDA)
P10(SCL)
P11
P12
P13
P14
GND
S1
S2
S3
C5
R14
R1
R5
R7
C8
R12
R11
C10
C9
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E 571
C11
U5
R17
R16
C17
C6
C4
R8
1206
WiPy μEval
Rev. 1.0
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RST
P23
P22
P21
P20
P19
P18
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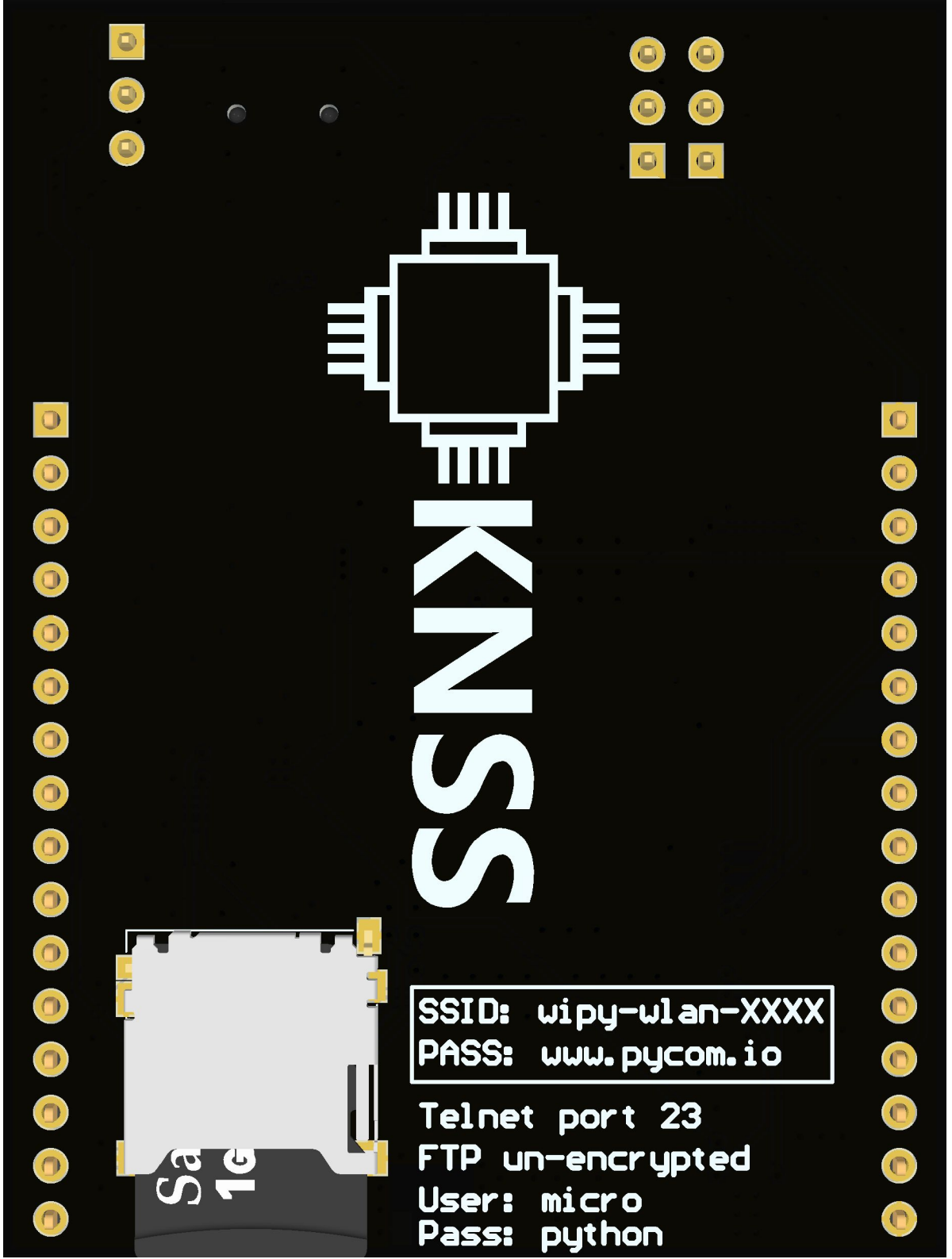
P15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Pass: python