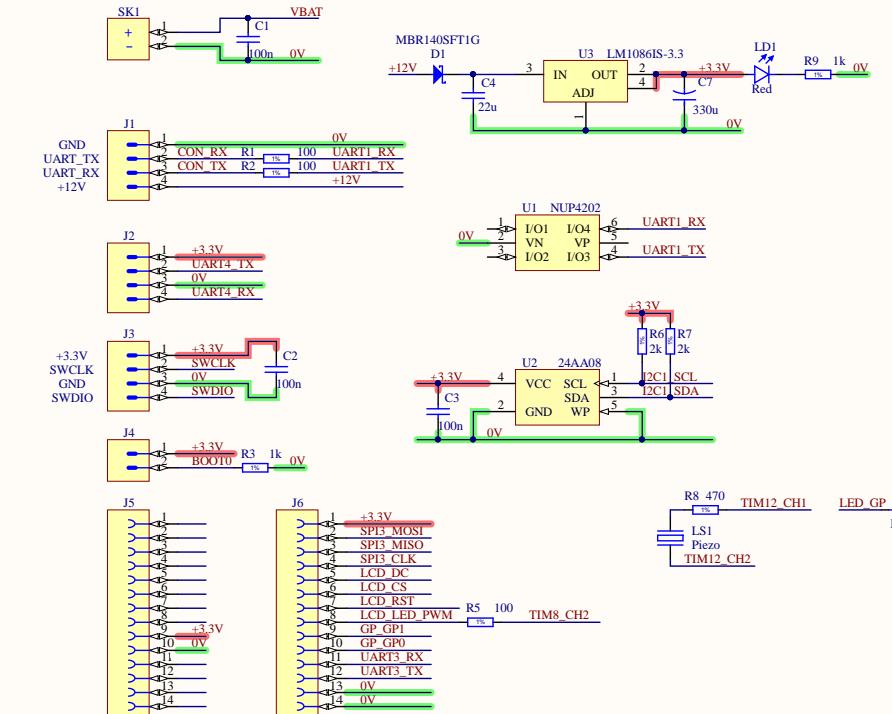
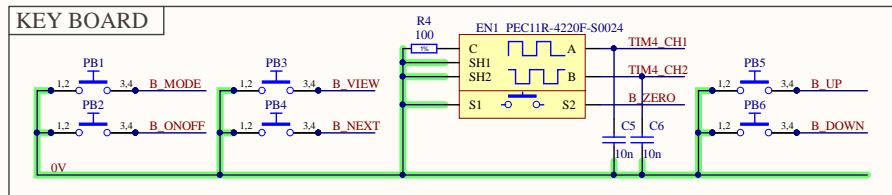
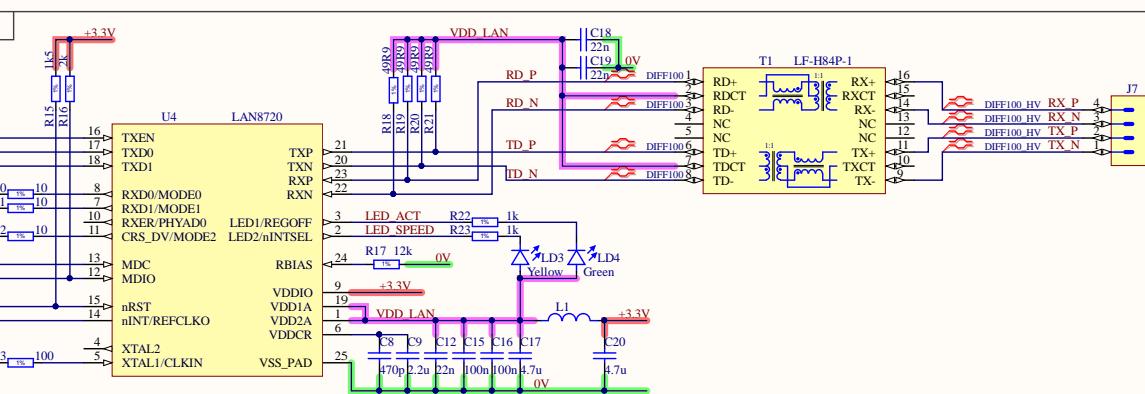
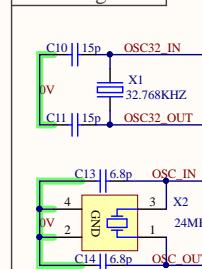


**KEY BOARD****Ethernet PHY****MCU Signals**

TP1: RCC\_MCO1  
TP2: RCC\_MCO2  
TP3: USB\_OTG\_FS\_DP  
TP4: USB\_OTG\_FS\_DM  
TP5: USB\_OTG\_FS\_ID  
TP6: CAN1\_RX  
TP7: CAN1\_TX  
TP8: RCC\_MCO1  
TP9: RCC\_MCO2  
TP10: USB\_OTG\_FS\_VBUS  
TP11: USB\_OTG\_FS\_ID  
TP12: USB\_OTG\_FS\_DM  
TP13: USB\_OTG\_FS\_DP  
TP14: CAN1\_RX  
TP15: CAN1\_TX  
TP16: CAN2\_RX  
TP17: CAN2\_TX  
TP18: SWCLK  
TP19: VREF+  
TP20: VSSA  
TP21: VREF-  
TP22: VDDA  
TP23: PA0/WKUP  
TP24: PA1  
TP25: PA2  
TP26: PA3  
TP27: PA4  
TP28: PA5  
TP29: PA6  
TP30: PA7  
TP31: PA8  
TP32: PA9  
TP33: PA10  
TP34: PA11  
TP35: PA12  
TP36: PA13  
TP37: PA14  
TP38: PA15  
TP39: PA16  
TP40: PA17  
TP41: PA18  
TP42: PA19  
TP43: PA20  
TP44: PA21  
TP45: PA22  
TP46: PA23  
TP47: PA24  
TP48: PA25  
TP49: PA26  
TP50: PA27  
TP51: PA28  
TP52: PA29  
TP53: PA30  
TP54: PA31

U5 STM32F407VET6	
B_ONOFF	PE2 100 +3.3V
B_NEXT	PE3 99 0V
B_VIEW	PE4 98
B_MODE	PE5 97
VBAT	PE6 96 I2C1_SDA
VBAT	PE7 95 I2C1_SCL
OSC32_IN	PC13 94 BOOT0
OSC32_OUT	PC14 93 UART1_RX
OSC32_OUT	PC15 92 UART1_TX
0V	PC16 91 SPI3_MOSI
+3.3V	PC17 90 SPI3_CLK
OSC_IN	PC18 89 PH0_OSC_IN
OSC_OUT	PC19 88 PH1_OSC_OUT
NRST	PC20 87 LCD_DC
	PC21 86 LCD_CS
	PC22 85 LCD_RST
	PC23 84 PCO
	PC24 83 PD4
	PC25 82 PD3
	PC26 81 PD2
	PC27 80 PD1
	PC28 79 PD0
	PC29 78 PC1
	PC30 77 PC2
	PC31 76 PC3
	PC32 75 PC4
	PC33 74 PC5
	PC34 73 PC6
	PC35 72 PC7
	PC36 71 PC8
	PC37 70 PC9
	PC38 69 PC10
	PC39 68 PC11
	PC40 67 PC12
	PC41 66 PC13
	PC42 65 PC14
	PC43 64 PC15
	PC44 63 PC16
	PC45 62 PC17
	PC46 61 PC18
	PC47 60 PC19
	PC48 59 PC20
	PC49 58 PC21
	PC50 57 PC22
	PC51 56 PC23
	PC52 55 PC24
	PC53 54 PC25
	PC54 53 PC26
	PC55 52 PC27
	PC56 51 PC28
	PC57 50 PC29
	PC58 49 PC30
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	PC60 47 PC32
	PC61 46 PC33
	PC62 45 PC34
	PC63 44 PC35
	PC64 43 PC36
	PC65 42 PC37
	PC66 41 PC38
	PC67 40 PC39
	PC68 39 PC40
	PC69 38 PC41
	PC70 37 PC42
	PC71 36 PC43
	PC72 35 PC44
	PC73 34 PC45
	PC74 33 PC46
	PC75 32 PC47
	PC76 31 PC48
	PC77 30 PC49
	PC78 29 PC50
	PC79 28 PC51
	PC80 27 PC52
	PC81 26 PC53
	PC82 25 PC54
	PC83 24 PC55
	PC84 23 PC56
	PC85 22 PC57
	PC86 21 PC58
	PC87 20 PC59
	PC88 19 PC60
	PC89 18 PC61
	PC90 17 PC62
	PC91 16 PC63
	PC92 15 PC64
	PC93 14 PC65
	PC94 13 PC66
	PC95 12 PC67
	PC96 11 PC68
	PC97 10 PC69
	PC98 9 PC70
	PC99 8 PC71
	PC100 7 PC72
	PC101 6 PC73
	PC102 5 PC74
	PC103 4 PC75
	PC104 3 PC76
	PC105 2 PC77
	PC106 1 PC78
	PC107 0 PC79

Title **PS3604LF**

Size: A3

Revision: 2.0

Date: 2018-09-19

Time: 1:51:39

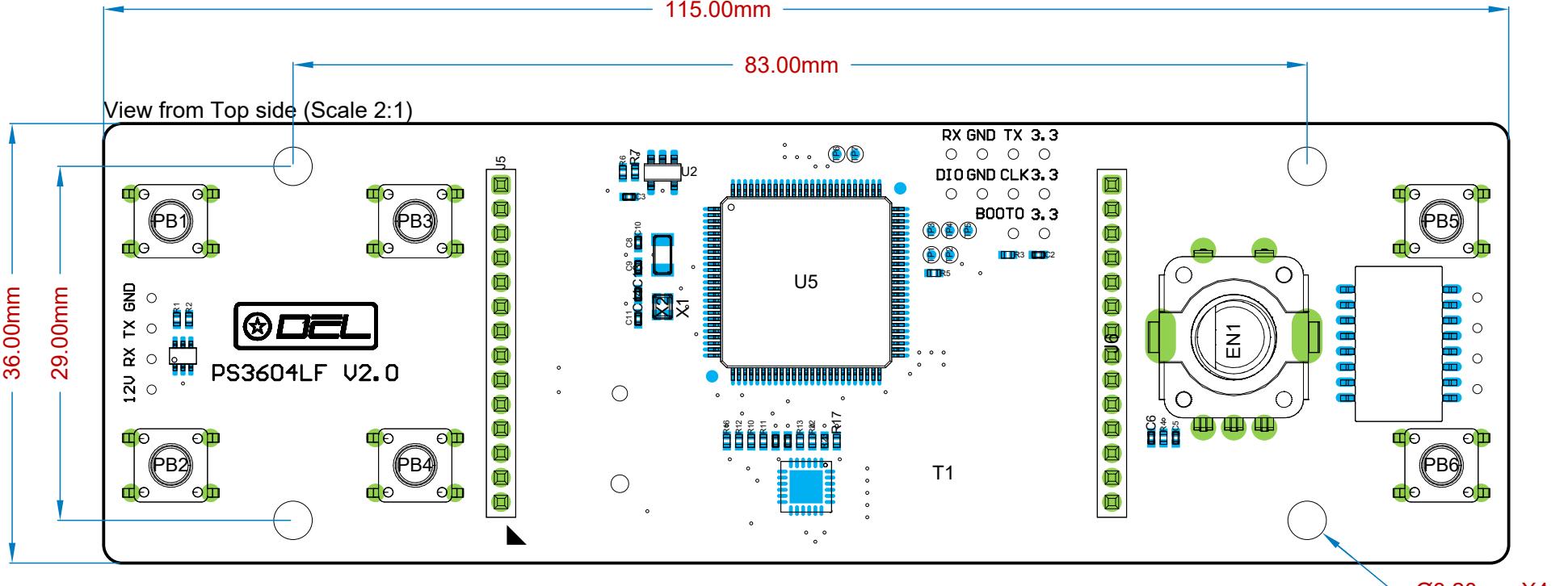
Sheet 1 of 1

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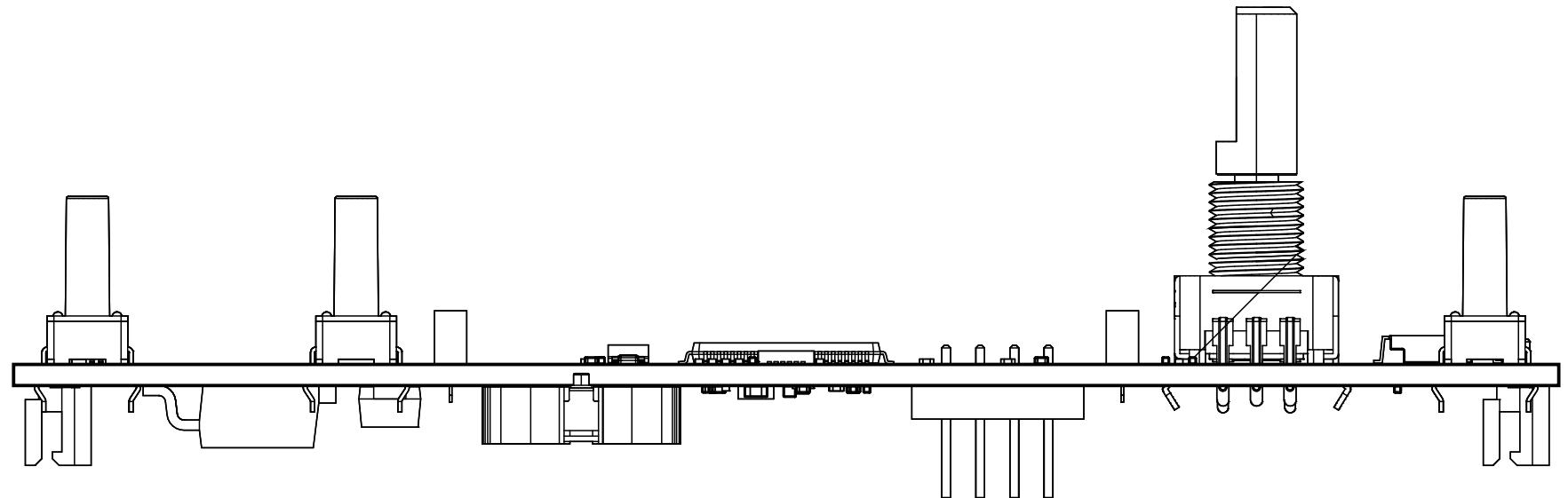
Ukraine  
Kharkiv  
Storozhenko Roman

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Designator	Part Description	Footprint	Part Number	Quantity
U4	Small Footprint RMII 10/100 Ethernet Transceiver with HP Auto-MDIX Support	QFN50P400X400X100-25N-S265	LAN8720A-CP-TR	1
U3	3.3V 1.5A Low Dropout Positive Regulators	TO254P1435X464-4N-R1041X635	LM1086IS-3.3	1
U5	ARM Cortex-M4 32b MCU+FPU, 210DMIPS, up to 1MB Flash/192+4KB RAM, USB OTG HS/FS, Ethernet, 17 TIMs, 3 ADCs, 15 comm interfaces & camera	QFP50P1600X1600X160-100N	STM32F407VET6	1
SK1	Battery holder for CR and LIR series 1216 to 1220, 1225	EEMB_BH500	EEMB_BH500	1
J4	2 Contacts - Horizontal Contacts Straight Strip Header Pitch 2.54	3M_2302-6111-TG	3M_2302-6111-TG	1
J1, J7	2.50mm Pitch SPOX Wire-to-Board Header, Vertical, Shrouded, 4 Circuits, Tin (Sn) Plating	MOLEX_22-03-5045	MOLEX_22-03-5045	2
J2, J3	4 Contacts - Vertical Contacts Straight Strip Header Pitch 2.54	3M_2304-6111-TG	3M_2304-6111-TG	2
J5, J6	14 Contacts - 2mm x 2 mm Straight, Boardmount Socket, 950 Serie	3M_955114-6102-AR	3M_955114-6102-AR	2
X2	$\pm 30\text{ppm}$ at $(25 \pm 3^\circ\text{C})$ , -30°C to +85°C, 6pF, Ceramic SMD Crystal, Type HCR2016	OSCCC160X200X65-4N	24MHZ_XRCGB24M00_0F3M00R0	1
EN1	12 mm Incremental Encoder, 24 pulses, Push Momentary Switch	EN_BOURNS_PEC11R-4x20F-Sxxxx	EN_BOUCHE_PEC11R-4220F-S0024	1
U1	ESD Protection Diode, Low Clamping Voltage	SOT65P220X110-6N	NUP4202W1	1
U2	8K Serial EEPROM	SOT95P280X145-5N	24AA08T-I/OT	1
L1	SMT Inductors	INDC2520X100N	IND1008_2.UH_20%_TDK_MLP2520S2R2MT0S1	1
LD1	Surface Mount Red LED (0603 Case)	LEDC1608X80N_RED	LED_OF-SMD1608R	1
LD2	Surface Mount Red LED (0603 Case)	LEDC1608X80N_BLUE	LED_OF-SMD1608B	1
LD3	Surface Mount Red LED (0603 Case)	LEDC1608X80N_YELLOW	LED_OF-SMD1608Y	1
LD4	Surface Mount Green LED (0603 Case)	LEDC1608X80N_GREEN	LED_OF-SMD1608G	1
C1, C2, C3, C15, C16, C22, C23, C24, C25, C26, C27, C28, C31	SMD Multilayer Chip Ceramic Capacitor	CAPC1005X55N	CC0402_100NF_50V_10%.XTR	13
C4	SMD Multilayer Chip Ceramic Capacitor	CAPC3216X100N	CC1206_22UF_16V_20%.X5R	1
C5, C6	SMD Multilayer Chip Ceramic Capacitor	CAPC1005X55N	CC0402_10NF_50V_10%.XTR	2
C8	SMD Multilayer Chip Ceramic Capacitor	CAPC1005X55N	CC0402_470PF_50V_10%.XTR	1
C9, C29, C30	SMD Multilayer Chip Ceramic Capacitor	CAPC1005X55N	CC0402_2.2UF_6.3V_20%.X5R	3
C10, C11	SMD Multilayer Chip Ceramic Capacitor	CAPC1005X55N	CC0402_15PF_50V_5%.NPO	2
C12, C18, C19	SMD Multilayer Chip Ceramic Capacitor	CAPC1005X55N	CC0402_22NF_16V_10%.XTR	3
C13, C14	SMD Multilayer Chip Ceramic Capacitor	CAPC1005X55N	CC0402_6.8PF_50V_0.5PF_NPO	2
C17, C20, C21	SMD Multilayer Chip Ceramic Capacitor	CAPC1608X87N	CC0603_4.7UF_10V_10%.X5R	3
LS1	Piezo sound generator	HPS13C	HPS13C	1
C7	Low ESR 0R025 Tantalum Chip Capacitor	CAPMP7343X310N	CTE7343-31_330UF_6.3V_20%.L_ESR0025_KEMET_T520	1
PB1, PB2, PB3, PB4, PB5, PB6	12VDC 50mA SPST Tactile Push-Button Switch	PB_E-SWITCH_TL1105HF100Q	PB_E-SWITCH_TL1105HF100Q	6
X1	Quartz Crystal $\pm 20\text{ppm}$	OSCCC150X320X80-2N	32.768KHz_KX-327NH	1
R1, R2, R4, R5, R13	General Purpose Thick Film Chip Resistor	RESC1005X40N	R0402_100R_1%.0.0625W_100PPM	5
R3, R9, R14, R22, R23	General Purpose Thick Film Chip Resistor	RESC1005X40N	R0402_1K_1%.0.0625W_100PPM	5
R6, R7, R16	General Purpose Thick Film Chip Resistor	RESC1005X40N	R0402_470R_1%.0.0625W_100PPM	3
R8	General Purpose Thick Film Chip Resistor	RESC1005X40N	R0402_10R_1%.0.0625W_100PPM	1
R10, R11, R12	General Purpose Thick Film Chip Resistor	RESC1005X40N	R0402_10R_1%.0.0625W_200PPM	3
R15	General Purpose Thick Film Chip Resistor	RESC1005X40N	R0402_1K5_1%.0.0625W_100PPM	1
R17	General Purpose Thick Film Chip Resistor	RESC1005X40N	R0402_12K_1%.0.0625W_100PPM	1
R18, R19, R20, R21	General Purpose Thick Film Chip Resistor	RESC1005X40N	R0402_49R9.1%.0.0625W_100PPM	4
D1	Schottky Power Rectifier	SOD-123FL	MBR140SFT1G	1
T1	10/100BASE-Tx PC Card LAN Magnetics Module	XFMR_LF-H84P	XFMR_LF-H84P-1	1
TP1, TP2, TP3, TP4, TP5, TP6, TP7	0.8mm round SMD Pad	TP_SMD_900	TP_SMD_0.8MM	7



View from Front side (Scale 2:1)



A

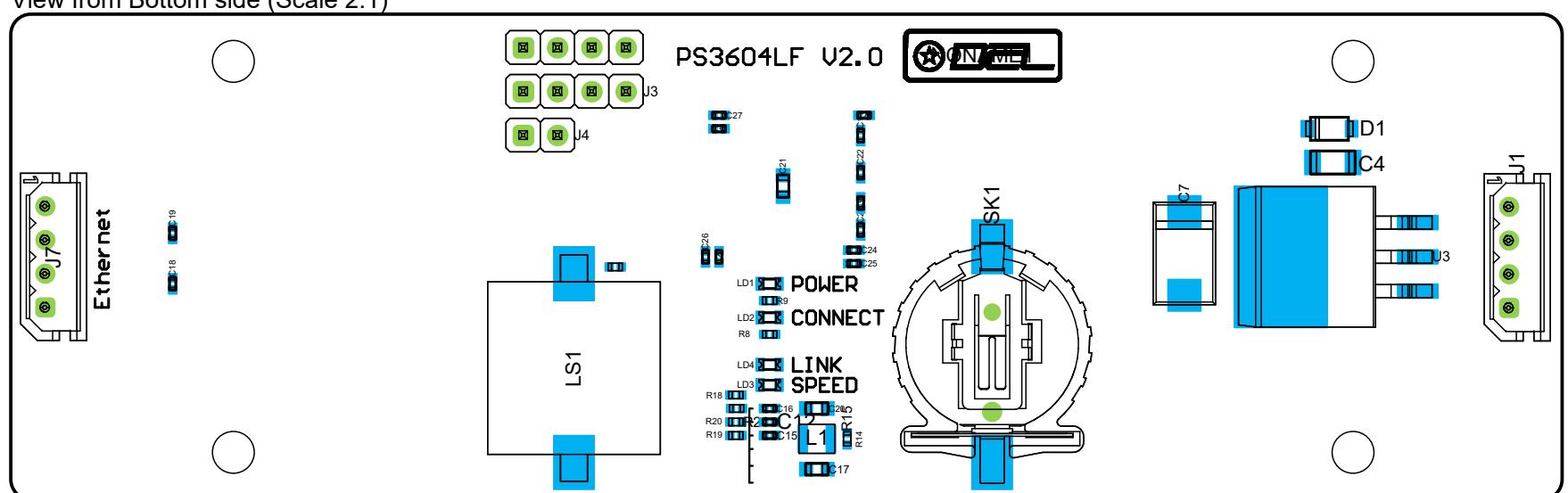
B

C

D

E

View from Bottom side (Scale 2:1)



A

B

C

D

E

