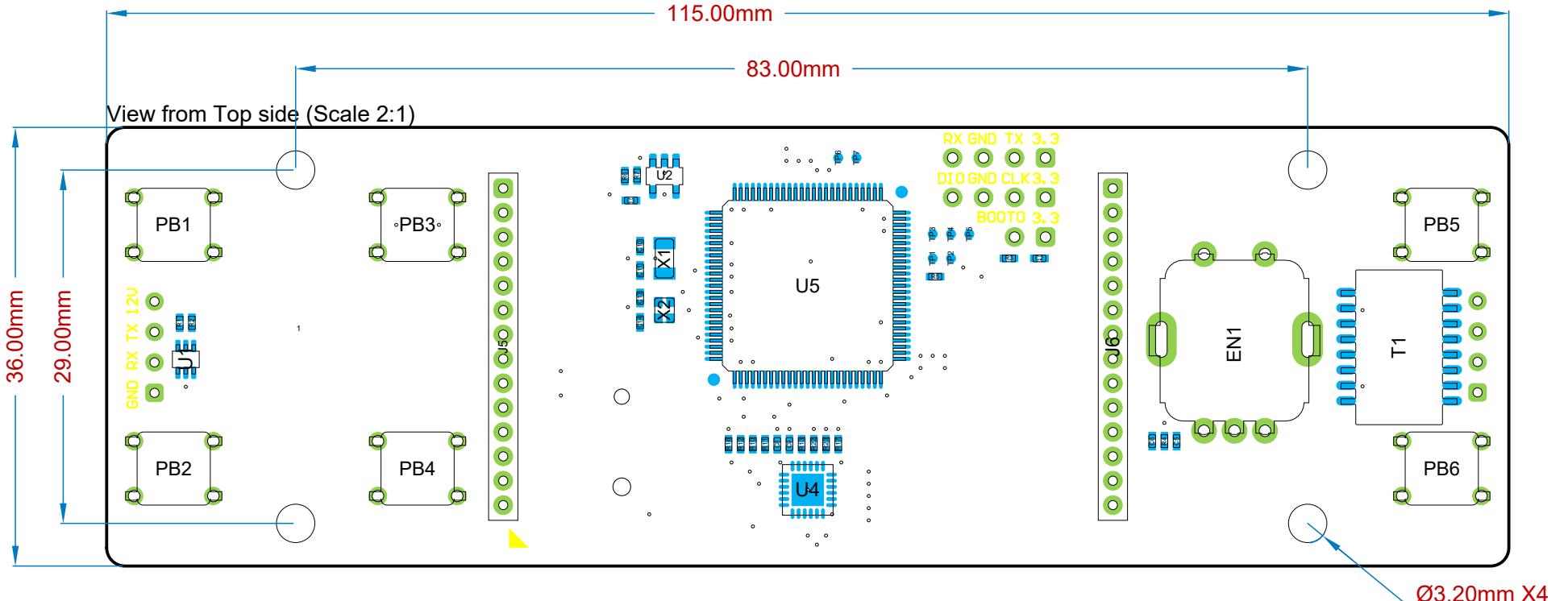
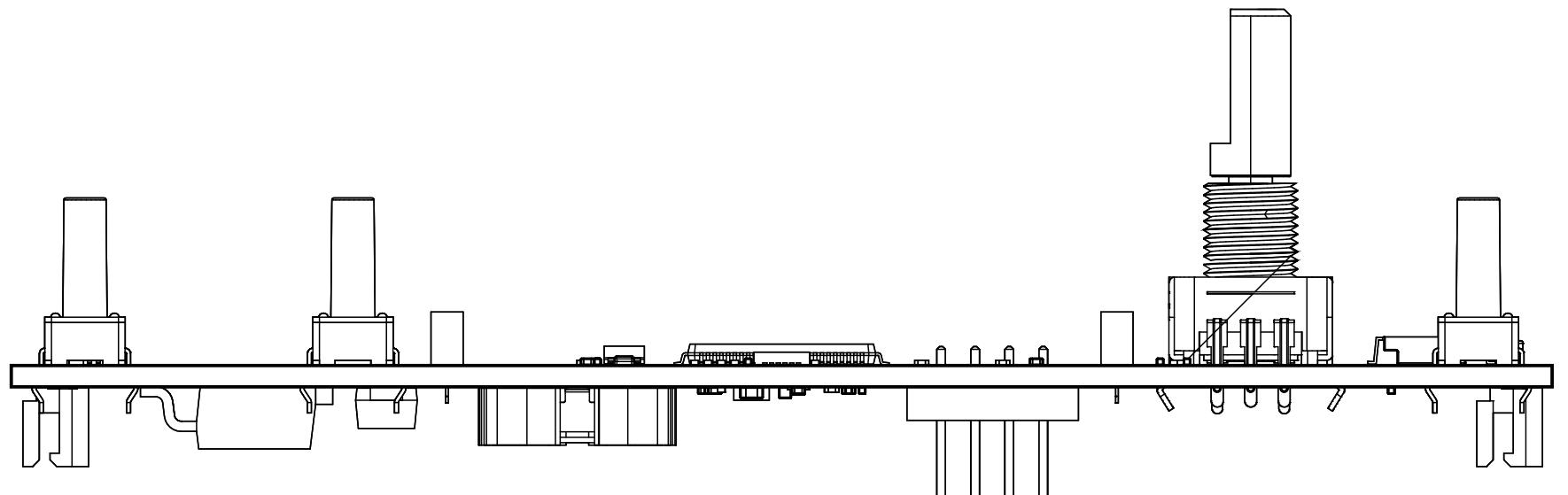


Designator	Comment	Footprint	Part Number	Part Description	Quantity
C1, C2, C3, C15, C16, C22, C23, C24, C25, C26, C27, C28, C31	100n	CAPC1005X55N	CC0402_100NF_50V_10%_X7R	SMD Multilayer Chip Ceramic Capacitor	13
C4	22u	CAPC3216X100N	CC1206_22UF_16V_20%_X5R	SMD Multilayer Chip Ceramic Capacitor	1
C5, C6	10n	CAPC1005X55N	CC0402_10NF_50V_10%_X7R	SMD Multilayer Chip Ceramic Capacitor	2
C7	330u	CAPMP7343X310N	CTE7343-31_330UF_6.3V_20%_LESR0025_KEM ET_T520	Low ESR 0R025 Tantalum Chip Capacitor	1
C8	470p	CAPC1005X55N	CC0402_470PF_50V_10%_X7R	SMD Multilayer Chip Ceramic Capacitor	1
C9, C29, C30	2.2u	CAPC1005X55N	CC0402_2.2UF_6.3V_20%_X5R	SMD Multilayer Chip Ceramic Capacitor	3
C10, C11	15p	CAPC1005X55N	CC0402_15PF_50V_5%_NPO	SMD Multilayer Chip Ceramic Capacitor	2
C12, C18, C19	22n	CAPC1005X55N	CC0402_22NF_16V_10%_X7R	SMD Multilayer Chip Ceramic Capacitor	3
C13, C14	6.8p	CAPC1005X55N	CC0402_6.8PF_50V_0.5PF_NPO	SMD Multilayer Chip Ceramic Capacitor	2
C17, C20, C21	4.7u	CAPC1608X87N	CC0603_4.7UF_10V_10%_X5R	SMD Multilayer Chip Ceramic Capacitor	3
D1	MBR140SFT1G	SOD-123FL	MBR140SFT1G	Schottky Power Rectifier	1
EN1	PEC11R-4220F-S0024	EN_BOURNS_PEC11R-4x20F-Sxxxx	EN_BOUNCE_PEC11R-4220F-S0024	12 mm Incremental Encoder, 24 pulses, Push Momentary Switch	1
J1, J7	SPOX	MOLEX_22-03-5045	MOLEX_22-03-5045	2.50mm Pitch SPOX Wire-to-Board Header, Vertical, Shrouded, 4 Circuits, Tin (Sn) Plating	2
J2, J3	Header 4	3M_2304-6111-TG	3M_2304-6111-TG	4 Contacts - Vertical Contacts Straight Strip Header Pitch 2.54	2
J4	Header 2	3M_2302-6111-TG	3M_2302-6111-TG	2 Contacts - Horizontal Contacts Straight Strip Header Pitch 2.54	1
J5, J6	Socket 14	3M_955114-6102-AR	3M_955114-6102-AR	14 Contacts - 2mm x 2 mm Straight, Boardmount Socket, 950 Serie	2
L1	2.2uH	INDC2520X100N	IND1008_2.2UH_20%_TDK_MLP2520S 2R2MT0S1	SMT Inductors	1
LD1	Red	LEDC1608X80N_RED	LED_OF-SMD1608R	Surface Mount Red LED (0603 Case)	1
LD2	Blue	LEDC1608X80N_BLUE	LED_OF-SMD1608B	Surface Mount Red LED (0603 Case)	1
LD3	Yellow	LEDC1608X80N_YELLOW	LED_OF-SMD1608Y	Surface Mount Red LED (0603 Case)	1
LD4	Green	LEDC1608X80N_GREEN	LED_OF-SMD1608G	Surface Mount Green LED (0603 Case)	1
LS1	Piezo	HPS13C	HPS13C	Piezo sound generator	1
PB1, PB2, PB3, PB4, PB5, PB6	Push Button	PB_E-SWITCH_TL1105HF100Q	PB_E-SWITCH_TL1105HF100Q	12VDC 50mA SPST Tactile Push-Button Switch	6
R1, R2, R4, R5, R13	100	RESC1005X40N	R0402_100R_1%_0.0625W_100PPM	General Purpose Thick Film Chip Resistor	5
R3, R9, R14	1k	RESC1005X40N	R0402_1K_1%_0.0625W_100PPM	General Purpose Thick Film Chip Resistor	3
R6, R7, R16	2k	RESC1005X40N	R0402_2K_1%_0.0625W_100PPM	General Purpose Thick Film Chip Resistor	3
R8, R23	270	RESC1005X40N	R0402_270R_1%_0.0625W_100PPM	General Purpose Thick Film Chip Resistor	2
R10, R11, R12	10	RESC1005X40N	R0402_10R_1%_0.0625W_200PPM	General Purpose Thick Film Chip Resistor	3
R15	1k5	RESC1005X40N	R0402_1K5_1%_0.0625W_100PPM	General Purpose Thick Film Chip Resistor	1
R17	12k	RESC1005X40N	R0402_12K_1%_0.0625W_100PPM	General Purpose Thick Film Chip Resistor	1
R18, R19, R20, R21	49R9	RESC1005X40N	R0402_49R9_1%_0.0625W_100PPM	General Purpose Thick Film Chip Resistor	4
R22	4k7	RESC1005X40N	R0402_4K7_1%_0.0625W_100PPM	General Purpose Thick Film Chip Resistor	1
SK1	BH500	EEMB_BH500	EEMB_BH500	Battery holder for CR and LIR series 1216 to 1220, 1225	1
T1	LF-H84P-1	XFMR_LF-H84P	PE-68678	10/100BASE-Tx PC Card LAN Magnetics Module	1
TP1, TP2, TP3, TP4, TP5, TP6, TP7	Test Point	TP_SMD_800	TP_SMD_0.8MM	0.8mm round SMD Pad	7
U1	NUP4202	SOT65P220X110-6N	NUP4202W1	ESD Protection Diode, Low Clamping Voltage	1
U2	24AA08	SOT95P280X145-5N	24AA08T-I/OT	8K Serial EEPROM	1
U3	LM1086IS-3.3	TO254P1435X464-4N-R1041X635	LM1086IS-3.3	3.3V 1.5A Low Dropout Positive Regulators	1
U4	LAN8720	QFN50P400X400X100-25N-S265	LAN8720A-CP-TR	Small Footprint RMII 10/100 Ethernet Transceiver with HP Auto-MDIX Support	1
U5	STM32F407VET6	QFP50P1600X1600X160-100N	STM32F407VET6	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	1
X1	32.768KHZ	OSCCC150X320X80-2N	32.768KHz_X-327NHT	Quartz Crystal ±20ppm	1
X2	24MHZ	OSCCC160X200X65-4N	24MHz_XRCGB24M000F3M00R0	± 30ppm at (25±3°C), -30°C to +85°C, 6pF, Ceramic SMD Crystal, Type HCR2016	1



View from Front side (Scale 2:1)



A

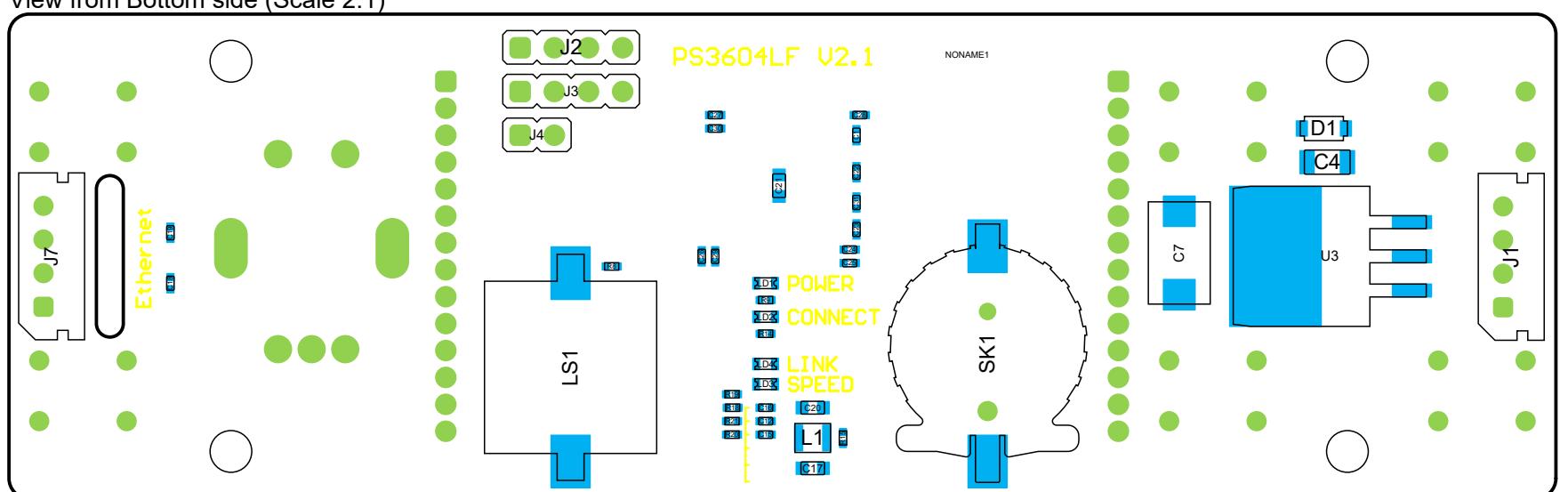
B

C

D

E

View from Bottom side (Scale 2:1)



A

B

C

D

E

