

Type	Component	Quantity/Prototype	Total Quantity	Specifications	price per unit	price per prototype	total	footprint	link
	ESP-32 WROOM -32E	1	2	8MB flash , PSRAM	₹250.56	₹250.56	₹501.12	ESP32WROOM32EN8R2.kicad_mod	https://mou.sr/3QnGe8u
	ESP32-WROVER-E (N8R8)	1	2	8MB flash , PSRAM	₹260.13	₹260.13	₹520.26	ESP32WROVEREN8R8.kicad_mod	https://mou.sr/433Jmgh
	MLX90640ESF-8A8-000-SP	1	2	32x24 pixels thermal IR array	₹2,524.74	₹2,524.74	₹5,049.48	MLX90640ESFBAB000SP.kicad_mod	https://mou.sr/430VAzY
	CH340K USB - UART controller	2	4	CH340K	₹63.00	₹126.00	₹252.00		https://mou.sr/40XPEoU
	Auto reset circuit	2	4	2N7002DW	₹32.19	₹64.38	₹128.76	SOT65P210X110-6N.kicad_mod	
	TP4056	5	10	Li-Ion charger IC	₹24.00	₹120.00	₹240.00	SOP127P600X175-9N.kicad_mod	https://amzn.in/d/84k3JlQ
	MIC5219-3.3YM5 3.3v LDO	4	8	3.3V LDO	₹100.00	₹400.00	₹800.00	SOT95P280X145-5N.kicad_mod	https://in.element14.com/microchip/mic5219-3-3ym5-tr/ldo-0-5vdo-0-5a-3-3v-1-5sot23/dp/2510252
	P - MOSFET	5	10	pmosfet	₹25.00	₹125.00	₹250.00	SOT23.kicad_mod	https://www.amazon.in/AO3401-A19T-SOT23-MOSFET-Channel/dp/B0D2GSLHMC
	dual N - MOSFET	5	10	dual n channel mosfet	₹25.00	₹125.00	₹250.00	SOT363.kicad_mod	https://in.element14.com/on-semiconductor/2n7002dw/mosfet-dual-n-ch-60v-0-23a-sot/dp/2464117
	TFT Display	2	4	ILI9341 TFT Display	₹488.00	₹976.00	₹1,952.00		Buy 2.4-inch SPI Interface 240x320 TFT Display Module Online
	SS8050-G Transistor	2	4	BJT NPN TRANSISTOR 1.5A 40V	₹25.23	₹50.46	₹100.92	TRANS_SS8050-G.kicad_mod	https://mou.sr/3U18ckd
	SS34 Diode	2	4	40 V, 3 A, Single, DO-214AB (SMC), 2 Pins, 500 mV	₹57.07	₹114.14	₹228.28	DIOM7959X265N.kicad_mod	https://in.element14.com/semi/ss34/diode-schottky-40v-3a-do-214/dp/1470970
	USB4215-03-A	1	2	USB Connectors USB C Receptacle, Short Body, USB2.0, 16Pin, Horizontal, SMT	₹52.20	₹52.20	₹104.40	GCT_USB4215-03-A_REVA.kicad_mod	https://mou.sr/3CUNhv6
	Korean Hroparts Elec TF-01A	2	4	1.85mm Card Slot MicroSD card (TF card) Self-bouncing SMD SD Card / Memory Card Connector ROHS	₹90.00	₹180.00	₹360.00	TF-01A.kicad_mod	https://www.lcsc.com/product-detail/SD-Card-Connectors_Korean-Hroparts-Elec-TF-01A_C81145.html
	SD card	1	2		₹549.00	₹549.00	₹1,098.00		https://encr.pw/duTkZ
	connector	2	4	1x2P 2P PH Tin 2 -25°C~+85°C 2A 1 2mm Copper alloy Standing paste SMD, P=2mm Wire To Board Connector ROHS	₹22.00	₹44.00	₹88.00	JST_PH_B2B-PH-SM4-TB_1x02-1MP_P2.00mm_Vertical	https://11nq.com/b03tV
	Connector(stemma)	2	4	1x4P 4P PH Tin 4 -Brass Direct Insert PlugIn,Wire To Board Connector ROHS (2mm)	₹15.00	₹30.00	₹60.00	JST_PH_B4B-PH-K_1x04_P2.00mm_Vertical	https://robu.in/product/b4b-ph-kfsn-jst-1x4p-4p-ph-tin-4-brass-direct-insert-plugInwire-to-board-connector-rohs2mm/
Capacitors	10uF Capacitor	8	16	Grade,MLCC,0603,X7T,10V,10uF,+-20%, 0.8mm	₹15.53	₹124.24	₹248.48	Capacitor_SMD:C_0603_1608Metric	CC0603KRX5R6BB106 YAGEO Capacitors DigikKey
	0.1uF Capacitor	8	16		₹8.63	₹69.04	₹138.08	Capacitor_SMD:C_0603_1608Metric	C0603C104J4RACTU KEMET Capacitors DigikKey
	470pF Capacitor	2	4		₹14.67	₹29.34	₹58.68	Capacitor_SMD:C_0603_1608Metric	GCM1885C1H471JA16D Murata Electronics Capacitors DigikKey
	2.2uF Capacitor	2	4		₹32.78	₹65.56	₹131.12	Capacitor_SMD:C_0603_1608Metric	CC0603KRX7R7BB225 YAGEO Capacitors DigikKey
	1uF Capacitor	2	4		₹8.63	₹17.26	₹34.52	Capacitor_SMD:C_0603_1608Metric	CC0603ZRY5V7BB105 YAGEO Capacitors DigikKey
LED's	LED Yellow	2	4		₹25.88	₹51.76	₹103.52	LED_SMD:LED_0603_1608Metric	150060YST73220 Würth Elektronik Optoelectronics DigikKey
	LED Blue	2	4		₹25.88	₹51.76	₹103.52	LED_SMD:LED_0603_1608Metric	150060BST73220 Würth Elektronik Optoelectronics DigikKey
	LED Red	2	4		₹25.88	₹51.76	₹103.52	LED_SMD:LED_0603_1608Metric	150060BST73220 Würth Elektronik Optoelectronics DigikKey
	470ohm resistor	2	4		₹11.31	₹22.62	₹45.24	Resistor_SMD:R_0603_1608Metric	https://mou.sr/4hl6eAb
Resistors	470K Resistor	2	4		₹13.05	₹26.10	₹52.20	Resistor_SMD:R_0603_1608Metric	https://mou.sr/3Qokemf
	10K Resistor	2	4		₹8.63	₹17.26	₹34.52	Resistor_SMD:R_0603_1608Metric	RK73H1JTTD1002F KOA Speer Electronics, Inc. Resistors DigikKey
	1K Resistor	2	4		₹8.63	₹17.26	₹34.52	Resistor_SMD:R_0603_1608Metric	ERJ-3EKF1001V Panasonic Electronic Components Resistors DigikKey
	10ohm Resistor	2	4		₹9.57	₹19.14	₹38.28	Resistor_SMD:R_0603_1608Metric	https://mou.sr/4hJpc9N
	4.7K Resistor	10	20		₹13.92	₹139.20	₹278.40	Resistor_SMD:R_0603_1608Metric	https://mou.sr/3XbLWgz
	1.3K Resistor	4	8		₹13.05	₹52.20	₹104.40	Resistor_SMD:R_0603_1608Metric	https://mou.sr/4i81pQf
	3.3K Resistor	2	4		₹20.88	₹41.76	₹83.52	Resistor_SMD:R_0603_1608Metric	https://mou.sr/3Qp0jD
	100K Resistor	8	16		₹13.92	₹111.36	₹222.72	Resistor_SMD:R_0603_1608Metric	https://mou.sr/436n7B
Switches	Switch 1	2	4	slide switch spdt	₹76.00	₹152.00	₹304.00	ESP32_TouchDown_lib:slide switch spdt	https://mou.sr/3XvC7UJ
	Switch 2	6	12	PTS645SL43SMTR92LF5	₹28.47	₹170.82	₹341.64	3x4x2:Tactile 3x4x2mm TS-A010	PTS645SL43SMTR92 LFS C&K Switches DigikKey
	Switch 3	10	20	Tactile 3x4x2mm TS-A010	₹55.00	₹550.00	₹1,100.00	3x4x2:Tactile 3x4x2mm TS-A010	https://mou.sr/3FicvEj
	Lithium polymer battery 300mah	1	2		₹95.00	₹95.00	₹190.00		https://www.rytronics.in/product/3-7v-300mah-602030-model-lipo-rechargeable-battery/?gad_source=1&qclid=Cj0KCQIA2oW:BhC2ARisADSIAWphclYNEV3W39oMRr1_TH8QHrIOGUduo6lLx7SoOKG0t-BoEXNTIAq89EALw_wcB