

ESP32 WROVER E IE DEV BOARD - BOM														
Ref	Description	Package/Mounting	Value	Quantity	Manufacturer	Manufacturer PN	Supplier	Supplier PN	Cost/Unit	Cost/Units	Stock	Basic/Extended	Notes	Sur quoi
RESISTORS														
R12, R13, R14, R22	SMD Resistor - 100mW - 75V - ±1%	0603	0R		UNI-ROYAL	0603WAF0000T5E	JLPCPB	C21189	\$0.001		3564258	Basic		MCLK, BCLK, LRC, DACDAT, ADCDAT, SD_CLK,
R16	SMD Resistor - 100mW - 75V - ±1%	0603	220R		UNI-ROYAL	0603WAF2200T5E	JLPCPB	C22962	\$0.001		626501	Basic		MIDI
R9	SMD Resistor - 100mW - 75V - ±1%	0603	1k		UNI-ROYAL	0603WAF1001T5E	JLPCPB	C21190	\$0.0006		16753299	Basic		USB-UART, DTR, RTS
R4, R10, R11	SMD Resistor - 100mW - 75V - ±1%	0603	2.2k		UNI-ROYAL	0603WAF220T5E	JLPCPB	C4190	\$0.001		1715159	Basic		SDA, SCL, PWRLED
R3, R5, R6, R15, R17	SMD Resistor - 100mW - 75V - ±1%	0603	10k		UNI-ROYAL	0603WAF1002T5E	JLPCPB	C25804	\$0.0009		24747436	Basic		SoC EN, CODEC_MODE, MIDI, USB-UART
R2, R7	SMD Resistor - 100mW - 75V - ±1%	0603	22k		UNI-ROYAL	0603WAF2202T5E	JLPCPB	C31850	\$0.001		1173427	Basic		USB-UART, Buck_FB
R8, R18, R19, R20, R21, R23	SMD Resistor - 100mW - 75V - ±1%	0603	47k		UNI-ROYAL	0603WAF4702T5E	JLPCPB	C25819	\$0.0011		2075553	Basic		USB-UART, SD_MISO, SD_MOSI, SD_CS, SD_VDD
R1	SMD Resistor - 100mW - 75V - ±1%	0603	100k		UNI-ROYAL	0603WAF1003T5E	JLPCPB	C25803	\$0.0011					Buck_FB
CAPACITORS														
C2	MLCC - 50V - C0G - ±5%	0603	22pF		SAMSUNG	CL10C2201B8NNNC	JLPCPB	C1653	\$0.0063		1024165	Basic		Buck_IN
C6, C10, C11, C14, C20, C21, C22	MLCC - 50V - X7R - ±10%	0603	100nF		YAGEO	CC0603KRX7R9BB104	JLPCPB	C14663	\$0.0024		39095945	Basic		SoC Decoupling, SoC EN, LDO, NR, MIDI, MUX, USB-UART
C5, C8	MLCC - 50V - X5R - ±10%	0603	1uF		SAMSUNG	CL10A105KB8NNNC	JLPCPB	C15849	\$0.005		7219052	Basic		SoC EN, LDO_IN,
C12, C13, C15, C16, C17, C18, C19	MLCC - 16V - X5R - ±10%	0603	4.7uF		SAMSUNG	CL10A475KO8NNNC	JLPCPB	C19666	\$0.0091		3461789	Basic		VBUS, CODEC_DCVDD, CODEC_DBVDD, CODEC_SPKVDD, CODEC_VMID, CODEC_AVDD
C7	MLCC - 25V - X5R - ±20%	0603	10uF		SAMSUNG	CL10A106MA8NRNC	JLPCPB	C96446	\$0.0234		2411817	Basic		SoC Decoupling, LDO_OUT
C1, C3, C4, C9	MLCC - 6.3V - X5R - ±20%	0603	22uF		SAMSUNG	CL10A226MQ8NRNC	JLPCPB	C59461	\$0.0091		3560382	Basic		Buck_IN
C23	MLCC - 6.3V - X5R - ±20%	0805	47uF		SAMSUNG	CL21A476MQYNNNE	JLPCPB	C16780	\$0.0229		952280	Basic		
INDUCTORS														
L1	Inductor - 1.8A - ±20% - 80mΩ	SMD 3.5x3x2.1mm	2.2uH		YTYCOIN	CD32YP0302-2R2M	JLPCPB	C492258	\$0.0345		3403	Extended		Buck_LX
FERRITE BEAD														
FB1	120R Ferrite Bead - 800mA - 1 - 80mΩ - ±25%	0603	120R@100MHz		MURATA	BLM18AG12ISND	JLPCPB	C76892	\$0.0084		125056	Extended		VBUS
FB2	600R Ferrite bead - 1.3A - 1 - 150mΩ - ±25%	0603	600R@100MHz		SUNLORD	UP21608U601-1R3TF	JLPCPB	C97000	\$0.0062		52889	Extended		SD_VDD
INTEGRATED CIRCUITS														
U1	ESP32 Wrover E ou IE				ESPRESSIF									
U2	USB UART converter	QFN-28-EP(5x5)			SILICON LABS	CP2102N-A02-QQFN28R	JLPCPB	C964632	\$2.7348		1935	Extended		
U3	Audio codec	WQFN-32-EP(5x5)			CIRRUS LOGIC	WM8978CGEPL/RV	JLPCPB	C323850	\$5.2422		2007	Extended		
U5	Hex inverter - Schmitt Trigger	SOIC-14			NEXPERIA	74HC04D.653	JLPCPB	C5590	\$0.1847		40611	Basic		MIDI
U4	Optocoupler	SMD-8P			EVERLIGHT	6N137S1(TA)	JLPCPB	C110020	\$0.3395		41136	Basic		MIDI
U6	Multiplexer	SOIC-24-300mil			TEXAS INSTRUMENTS	CD74HC4067	JLPCPB	C496123	\$1.1127		1660	Extended		MUX
POWER														
VR2	200mA - 70dB@100Hz, 43dB@100kHz 180mV@200mA Fixed 3.3V	SOT-23-5			TEXAS INSTRUMENTS	TPS79333DBVR	JLPCPB	C9840	\$0.58		7489	Extended		
VR1	Step-down DC-DC Converters	SOT-23-5			SILERGY CORP	SY8089AAAC	JLPCPB	C78988	\$0.2143		22022	Extended		
F1	Resettable fuse - 9V - 200mA - 100A - 500mA	0805			RUILON	SMD0805P020TF	JLPCPB	C20976	\$0.059		5719	Extended		VBUS
D3	Switching diode - 75V - 400mW - Single 1.25V@150mA	SOD-123			SEMTECH	1N4148W	JLPCPB	C81598	\$0.0104		1712239	Basic		MIDI
D2	ESD Protection	SOT-143			MSKSEMI	SP0503BAHTG	JLPCPB	C3029025	\$0.0947		11360	Extended		USB-UART
Q1, Q2	NPN Transistor	SOT-23			JSCJ	MMBT3904	JLPCPB	C20526	\$0.0106		3339955	Basic		
D1	20mA 518nm Emerald 120° 110mW 0603 Light Emitting Diodes (LED)	0603			Everlight Elec	19-217/GHC-YRIS2/3T	JLPCPB	C72043	\$0.0264		1656424	Basic		
MECHANICALS														
SW1	SPST - NO - 50mA -100mΩ - 160gf - 12V	SMD 5.1mm 1.5mm			XKB CONNECTIVITY	TS-1187A-B-A-B	JLPCPB	C318884	\$0.0152		240536	Basic		SoC EN
J2	Deck MicroSD card (TF card)	SMD			SOFNG	TF-15x15	JLPCPB	C111196	\$0.20		14229	Extended		
J1	USB 2.0 1 Surface Mount 5 Female Micro-B SMD	SMD			HRS(Hirose)	ZX62D-B-5PAR(30)	JLPCPB	C132350	\$0.32		78342	Extended		