

## ESP32 Based Gene

Component Count: 64		
Individual Components:		
Item	Reference(s)	Value
<b>OLED 128 x 64</b>	Brd1	SSD1306
<b>Battery Holder</b>	BT1	BAT 20MM PTH
<b>Capacitors</b>	C1	1 UF
	C2	10UF
	C3	0.1 UF
	C4	0.1 UF
	C5	0.1 UF
	C6	470 pF
	C7	2.2 uF
	C8	10UF
	C9	0.1 UF
	C10	10UF
	C11	0.1 UF
<b>Diodes</b>	D1	1N4001
	D2	B_LED
	D3	1N4001
	D4	PWR_LED
<b>Connectors &amp; Pin Header</b>	J1	PWR
	J2	Switch_Conn
	J3	Soil_Moisture
	J4	LED_CONN
	J5	Pump_Conn
	J6	BH1750
	J7	HTUI2D
	J8	Prog_Header
	J9	CONN_10
	J10	DHT22
	J11	DS18B20
<b>Buzzer</b>	LS1	BUZ-PTH
<b>ESP32 Wroom</b>	MOD1	ESP32-WROOM
<b>Transistors</b>	Q1	MMBT2222A2
	Q2	MMBT2222A2
	Q3	MMBT2222A2
	Q4	MMBT2222A2
	R1	1k
	R2	10k
	R3	10k
	R4	10k
	R5	470e
	R6	470e
	R7	1k
	R8	10k
	R9	10k
	R10	10k

# Plant\_Water\_System

Resistors	R11	10k	
	R12	10k	
	R13	10k	
	R14	470e	
	R15	10k	
	R16	805	
	R17	805	
	R18	10k	
	R19	805	
	R20	805	
	R21	10k	
	R22	10k	
	R23	470e	
	R24	470e	
Switches	S1	ON/OFF	
	S3	Boot	
	S4	EN	
ICs Reg, RTC)	(Voltage	U1	MIC5219-3v3
		U2	DS3231M
		U3	AMS1117-3.3

## eric IoT\_Deployment board

Footprint	Field4
SSD1306:128x64OLED	
Batteries:BATTCOM_20MM_PTH	BATT-09031
805	CAP-08064
Capacitors:EIA3216	CAP-00811
805	CAP-08064
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805	CAP-08064
Capacitors:EIA3216	CAP-00811
805	CAP-08064
Capacitors:EIA3216	CAP-00811
805	CAP-08064
Diode_SMD:D_0805_2012Metric	
LED:LED-1206	DIO-09911
Diode_SMD:D_0805_2012Metric	
LED:LED-1206	DIO-09911
Connectors:JST-2-PTH	CONN-09863
Connector_JST:JST_EH_B3B-EH-A_1x03_P2.50mm_Vertical	CONN-13230
Connector_JST:JST_EH_B3B-EH-A_1x03_P2.50mm_Vertical	CONN-13230
Connector_JST:JST_EH_B3B-EH-A_1x03_P2.50mm_Vertical	CONN-13230
Connectors:JST-2-PTH	CONN-09863
Connector_JST:JST_EH_B4B-EH-A_1x04_P2.50mm_Vertical	CONN-13251
Connector_JST:JST_EH_B4B-EH-A_1x04_P2.50mm_Vertical	CONN-13251
Connector_PinHeader_2.54mm:PinHeader_1x06_P2.54mm_Vertical	
Connector_PinHeader_1.27mm:PinHeader_1x10_P1.27mm_Vertical	XXX-00000
Connector_JST:JST_EH_B3B-EH-A_1x03_P2.50mm_Vertical	CONN-13230
Connector_JST:JST_EH_B3B-EH-A_1x03_P2.50mm_Vertical	CONN-13230
Electromechanical:BUZZER-12MM	COMP-08253
RF_Module:ESP32-WROOM-32	
Silicon-Standard:SOT23-3	TRANS-08049
Silicon-Standard:SOT23-3	TRANS-08049
Silicon-Standard:SOT23-3	TRANS-08049
Silicon-Standard:SOT23-3	TRANS-08049
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# Plant\_Water\_System

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Switches:SWITCH_SPDT_PTH_11.6X4.0MM	SWCH-08261
Button_Switch_SMD:SW_SPST_FSMSM	SWCH-09213
Button_Switch_SMD:SW_SPST_FSMSM	SWCH-09213
Package_TO_SOT_SMD:SOT-23-5	
Package_SO:SOIC-16W_7.5x10.3mm_P1.27mm	
Package_TO_SOT_SMD:SOT-223-3_TabPin2	