CONVERTER 12V TO 5V

- RST power 4G: IO23
- Control: IO25, IO26
- Input: IO18, IO19

MCU

ESP32-WROOM-32

Title	HP621-4G
Size: A3	Number:04	Revision:Ver.1121
Date: 11/06/2025	Time: 5:36:54 PM	Sheet 1 of 1
File: E:\THUC_TAP_CONG_TY_D&L\PCB\3. NODE\2.NODE_ESP8266\2. NODE SENSOR\DK-MayGiat V0525\DK-MayGiat V052

ALTIUM

Comment	Description	Designator	Footprint	LibRef	Quantity
Header 7		4	HEADER x7	Header 7	1
Test point		4.2V	TEST_POINT_VIA	Test point	1
Test point		5V	TEST_POINT_VIA	Test point	1
Test point		12V	TEST_POINT_VIA	Test point	1
AMS1117-3V3	AMS1117-3.3V 1A SC	AMS1	AMS1117	AMS1117-3V3	1
220uF/25V/Aluminur	Aluminum Capacitor	C1	CAP_ALU_SIZEE	CAP_ALU_220uF_25V	1
100uF/25V/Aluminur	Aluminum Capacitor	C2	CAP_ALU_SIZEE	CAP_ALU_220uF_25V	1
1uF/16V/1210	Ceramic Capacitor 10	C3	CAP 1210(3225)	CAP_CER_10uF_16V	1
1uF/16V/1210	Ceramic Capacitor 10	C4	CAP 1210(3225)	CAP_CER_10uF_16V	1
100uF/25V/Aluminur	Aluminum Capacitor	C5	CAP_ALU_SIZEE	CAP_ALU_220uF_25V	1
220uF/25V/Aluminur	Aluminum Capacitor	C6	CAP_ALU_SIZEE	CAP_ALU_220uF_25V	1
1uF/16V/1210	Ceramic Capacitor 10	C7	CAP 1210(3225)	CAP_CER_10uF_16V	1
100nF/0603	Ceramic Capacitor 10	C8	CAP 0603(1508)	CAP_CER_10uF_16V	1
100uF/6.3V	Tantalum SMD capac	C9	CAP_TAN_1210(3528	CAP_TANTA_100uF_	1
22uF/00805	Ceramic Capacitor 10	C10	CAP 0603(1508)	CAP_CER_10uF_16V	1
100nF/0603	Ceramic Capacitor 10	C11	CAP 0603(1508)	CAP_CER_10uF_16V	1
100nF/0603	Ceramic Capacitor 10	C12	CAP 0603(1508)	CAP_CER_10uF_16V	1
100nF/0603	Ceramic Capacitor 10	C13	CAP 0603(1508)	CAP_CER_10uF_16V	1
SS34-A	Diode LS 1A 1000V D	D1	1N4007	1N4007	1
SS34-A	Diode LS 1A 1000V D	D2	1N4007	1N4007	1
SS34-A	Diode LS 1A 1000V D	D3	1N4007	1N4007	1
B340A	Diode LS 1A 1000V D	D5	1N4007	1N4007	1
B340A	Diode LS 1A 1000V D	D6	1N4007	1N4007	1
ESP32-WROOM-32		ESP1	ESP32-WROOM-32U	ESP32-WROOM-32	1
2.6A/15V/SMD1812		F1	SMD 1812	Fuse	1
Test point		GND	TEST_POINT_VIA	Test point	1
LED_RED	LED Red	IN1	LED0805RED	LED_RED	1
LED_RED	LED Red	IN2	LED0805RED	LED_RED	1
Terminal	Terminal	J1	Teminal 4P 90EDG 3.	Terminal x4	1
Terminal	Terminal	J2	Teminal 4P 90EDG 3.	Terminal x4	1
47uH 3A DIP 8x10mm		L1	Inductor SMD 12x12	Inductor	1
47uH 3A DIP 8x10mm		L2	Inductor SMD 12x12	Inductor	1
FB	FERRITE BEAD 600 O	L3	Inductor SMD 0805	Inductor	1
FB	FERRITE BEAD 600 O	L4	Inductor SMD 0805	Inductor	1
LM2596S-5V	LM2596S-5V	LM1	LM2596S TO263-5	LM2596S-5V	1
LM2596S-5V	LM2596S-5V	LM2	LM2596S TO263-5	LM2596S-5V	1
LED_RED	LED Red	OU2	LED0805RED	LED_RED	1
LED_RED	LED Red	OUT1	LED0805RED	LED_RED	1
LED_RED	LED Red	POW	LED0805RED	LED_RED	1
S8050	NPN	Q1	2SC1815-SMD	2SC1815	1
2.2K	Resistor 0603	R1	RES 0603(1608)	Resistor 0603	1
1K	Resistor 0603	R2	RES 0603(1608)	Resistor 0603	1
1K	Resistor 0603	R3	RES 0603(1608)	Resistor 0603	1
10K	Resistor 0603	R4	RES 0603(1608)	Resistor 0603	1
330R	Resistor 0603	R5	RES 0603(1608)	Resistor 0603	1
10K	Resistor 0603	R6	RES 0603(1608)	Resistor 0603	1
10K	Resistor 0603	R7	RES 0603(1608)	Resistor 0603	1
330R	Resistor 0603	R8	RES 0603(1608)	Resistor 0603	1
10K	Resistor 0603	R9	RES 0603(1608)	Resistor 0603	1
10R	Resistor 0603	R10	RES 0603(1608)	Resistor 0603	1
330R	Resistor 0603	R11	RES 0603(1608)	Resistor 0603	1
330R	Resistor 0603	R12	RES 0603(1608)	Resistor 0603	1
330R	Resistor 0603	R13	RES 0603(1608)	Resistor 0603	1
330R	Resistor 0603	R14	RES 0603(1608)	Resistor 0603	1
330R	Resistor 0603	R15	RES 0603(1608)	Resistor 0603	1
100R	Resistor 0603	R16	RES 0603(1608)	Resistor 0603	1
100R	Resistor 0603	R17	RES 0603(1608)	Resistor 0603	1
100R	Resistor 0603	R18	RES 0603(1608)	Resistor 0603	1
100R	Resistor 0603	R19	RES 0603(1608)	Resistor 0603	1
100R	Resistor 0603	R20	RES 0603(1608)	Resistor 0603	1
100R	Resistor 0603	R21	RES 0603(1608)	Resistor 0603	1
330R	Resistor 0603	R22	RES 0603(1608)	Resistor 0603	1
330R	Resistor 0603	R23	RES 0603(1608)	Resistor 0603	1
330R	Resistor 0603	R24	RES 0603(1608)	Resistor 0603	1
100R	Resistor 0603	R25	RES 0603(1608)	Resistor 0603	1
100R	Resistor 0603	R26	RES 0603(1608)	Resistor 0603	1
100R	Resistor 0603	R27	RES 0603(1608)	Resistor 0603	1
100R	Resistor 0603	R28	RES 0603(1608)	Resistor 0603	1
LED_BLUE	LED Blue	RXD	LED0805BLUE	LED_BLUE	1
LED_BLUE	LED Blue	TXD	LED0805BLUE	LED_BLUE	1
STWD100xxWY3F	Supervisor Open Drai	U1	STWD100xxWY3F	STWD100xxWY3F	1
TLP291-1K	Transistor Output Op	U2	TLP219-4Pin	TLP291	1
TLP291-1K	Transistor Output Op	U3	TLP219-4Pin	TLP291	1
TLP291-1K	Transistor Output Op	U4	TLP219-4Pin	TLP291	1
TLP291-1K	Transistor Output Op	U5	TLP219-4Pin	TLP291	1
Header 6		UL1	HEADER x6	Header 6	1
10D390K		VR1	Varistor 10DXXXk	Cap Metal Oxide Var	1
Header 2		wd1	HEADER x2	Header 2	1
LED_BLUE	LED Blue	WIR	LED0805BLUE	LED_BLUE	1