

## RESPIRADOR HGGM-UC3M

Respirador HGGM-UC3M Revised: Wednesday, April 15, 2020

OT-2020-1501 Revision: 1.0

OFICINA TECNICA UNIVERSIDAD CARLOS III DE MADRID

Bill Of Materials November 6,2020 10:21:38

Item	Quantity	Reference	Value	Tolerance	Footprint	Vendor ID	Vendor PN
1	8	EVP_INS1,SO2,EVP_INS2, RASP,HOME,EV_INS,EV_ESP, ARD	MOLEX 2		CONN/MOLEX KK254/02/.100/.080	Digi-Key	WM4111-ND + 900-0022013027-ND + 2x WM1114-ND
2	1	BRD1	SPI HEADER		ARDUINO DUE (TH)		
3	1	BRD1	RIGHT HEADER		ARDUINO DUE (TH)		
4	1	BRD1	LEFT HEADER		ARDUINO DUE (TH)		
5	1	BRD2	DRV8825-BRD		DRV STEPPER MOTOR (TH)		
6	1	BZ1	BUZZER		BUZ/D.500/LS.300/.100/.044/IPC-7351 (2005)/NORMAL	Digi-Key	433-1048-ND
7	2	CH1,CH2	BLM41PG102SN1		L/SM/CHIP/1806/IPC-7351 (2005)/NORMAL	Digi-Key	490-1061-1-ND
8	7	C1,C2,C3,C4,C8,C9,C34	100uF	20%	CYL/D.400/LS.200/.076/.034/IPC-7351 (2005)/NORMAL	Digi-Key	4498PHBK-ND
9	2	C5,C10	1500pF/2kV		RAD/.720X.300/LS.600/.088/.042/IPC-7351 (2005)/NORMAL	Digi-Key	399-12552-ND
10	7	C6,C18,C20,C24,C28,C33, C35	100nF	10%	C/SM/0805/IPC-7351 (2005)/NORMAL	Digi-Key	490-8051-1-ND
11	9	C7,C11,C12,C13,C14,C15, C16,C27,C37	4u7	10%	C/SM/1206/IPC-7351 (2005)/NORMAL	Digi-Key	1276-2789-1-ND
12	1	C17	100nF	10%	R/SM/0805/IPC-7351 (2005)/NORMAL	Digi-Key	490-8051-1-ND
13	9	C19,C22,C25,C30,C31,C36, C39,C41,C42	100nF	10%	C/SM/0603/IPC-7351 (2005)/NORMAL	Digi-Key	490-16477-1-ND
14	3	C21,C23,C26	10nF	5%	C/SM/0603/IPC-7351 (2005)/NORMAL	Digi-Key	490-9666-1-ND
15	2	C29,C40	2u2	10%	C/SM/0603/IPC-7351 (2005)/NORMAL	Digi-Key	490-6418-1-ND
16	2	C32,C38	1nF	5%	C/SM/0603/IPC-7351 (2005)/NORMAL	Digi-Key	720-1652-1-ND
17	1	C43	100nF	10%	C/SM/0603/IPC-7351 (2005)/NORMAL	Digi-Key	
18	4	D1,D2,D3,D4	ES1D		SM/DO214AC/IPC-7351 (2005)/NORMAL	Digi-Key	ES1DFSCT-ND
19	3	SF1,SFE,EVMOT_ESP	MOLEX 4		CONN/MOLEX KK254/04/.100/.080	Digi-Key	WM4113-ND + WM2002-ND + 4x WM1114-ND
20	3	FIL1,FIL2,FIL3	BNX003-11		BNX002-01	Digi-Key	490-18607-ND
21	1	F1	RUEF400		DISC/.200X.080/LS.550X.150/.076/.040/IPC-7351 (2005)/NORMAL	Digi-Key	RUEF400HF-ND
22	1	F2	RKEF250		DISC/.200X.080/LS.550X.150/.076/.040/IPC-7351 (2005)/NORMAL	Digi-Key	RKEF250HF-ND
23	1	HS1	513201B02500G			Digi-Key	HS347-ND
24	2	HS2,HS3	513002B02500G			Digi-Key	HS403-ND
25	1	J1	MOLEX 6		CONN/MOLEX KK254/06/.100/.080	Digi-Key	WM4115-ND + WM2004-ND + 6x WM1114-ND
26	2	K1,K2	JUMPER 3		SIP.100/03/L.300/.064/.040	Digi-Key	952-2263-ND + 952-2881-ND
27	1	K3	HEADER 2X2		HEADER.100/2X02/.064/.040	Digi-Key	952-2119-ND + 952-2881-ND
28	4	K4,K5,K6,K7	JUMPER 3		SIP.100/03/L.300/.076/.040	Digi-Key	952-2263-ND + 952-2881-ND
29	4	LED1,LED2,LED3,LED4	LG R971		LED/SM/0805/IPC-7351 (2005)/NORMAL	Digi-Key	475-1410-1-ND
30	2	LED5,LED6	LH R974		LED/SM/0805/IPC-7351 (2005)/NORMAL	Digi-Key	475-1415-1-ND
31	1	L1	4.7uH		L/SM/CHIP/1212/IPC-7351 (2005)/NORMAL	Digi-Key	732-4866-1-ND
32	1	PS1	REC15E-2405SZ		DC-DC/REC15E-Z/.100/.100/.052/IPC-7351 (2005)/NORMAL	Digi-Key	945-3199-ND
33	1	Q1	MMBTA05LT		SM/SOT23/3/IPC-7351 (2005)/NORMAL	Digi-Key	MMBTA05LT1GOSCT-ND
34	4	Q2,Q3,Q4,Q5	BDX53B		TO220/VER/3/.080/.052/IPC-7351 (2005)/NORMAL	Digi-Key	497-7182-5-ND
35	1	R1	2k0	5%	R/SM/0805/IPC-7351 (2005)/NORMAL		
36	1	R2	4k3	5%	R/SM/1206/IPC-7351 (2005)/NORMAL		
37	2	R3,R8	1k3	5%	R/SM/0805/IPC-7351 (2005)/NORMAL		
38	1	R4	510R	5%	R/SM/0805/IPC-7351 (2005)/NORMAL		
39	2	R5,R6	1M80	1%	R/SM/0805/IPC-7351 (2005)/NORMAL		
40	1	R7	100R	5%	R/SM/1206/IPC-7351 (2005)/NORMAL		
41	7	R9,R10,R14,R15,R19,R32,R45	10k0	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		

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42	2 R11,R16	24k0	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
43	2 R12,R17	11k0	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
44	2 R13,R18	270k	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
45	1 R20	4k70	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
46	1 R21	8k20	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
47	1 R22	3k90	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
48	1 R23	150k	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
49	9 R24,R36,R43,R46,R47,R48, R49,R50,R51	1k	5%	R/SM/0603/IPC-7351 (2005)/NORMAL		
50	2 R25,R37	120k	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
51	2 R26,R38	3k0	5%	R/SM/1206/IPC-7351 (2005)/NORMAL		
52	1 R27	1M20	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
53	2 R28,R42	30k0	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
54	2 R29,R52	47R0	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
55	4 R30,R35,R55,R56	75k0	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
56	3 R31,R44,R58	20k0	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
57	4 R33,R34,R53,R54	1R00	1%	R/SM/2512/IPC-7351 (2005)/NORMAL	Digi-Key	541-1.00AAFCT-ND
58	3 R39,R40,R41	10k	5%	R/SM/0603/IPC-7351 (2005)/NORMAL		
59	1 R57	0R	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
60	1 R59	10k0	1%	R/SM/0603/IPC-7351 (2005)/NORMAL	Digi-Key	
61	1 R60	590k	1%	R/SM/0603/IPC-7351 (2005)/NORMAL	Digi-Key	541-590KHCT-ND
62	1 R61	NM	1%	R/SM/0603/IPC-7351 (2005)/NORMAL		
63	1 SPR	MOLEX 3		CONN/MOLEX KK254/03/.100/.080	Digi-Key	WM4112-ND + 900-0022013037-ND + 3x WM1114-ND
64	1 TVS1	SMCJ12A		SM/DO214AB/IPC-7351 (2005)/NORMAL	Digi-Key	SMCJ12ALFCT-ND
65	1 TVS2	SMCJ24A		SM/DO214AB/IPC-7351 (2005)/NORMAL	Digi-Key	SMCJ24ALFCT-ND
66	1 U1	LT3080		TO220/VER/5/.076/.048	Digi-Key	LT3080ET#PBF-ND
67	6 U2,U3,U4,U5,U8,U9	OPA192		SM/SOT23/5/IPC-7351 (2005)/NORMAL	Digi-Key	296-42105-1-ND
68	2 U6,U7	TLV1701		SM/SOT23/5/IPC-7351 (2005)/NORMAL	Digi-Key	296-47458-1-ND
69	2 12V,24V	MSTBA 2,5/ 2-G-5,08 - 1757242		CONN/CLEMA/ENCH/.200/02/MSTBA2,5/2-G-5,08-1757242	Digi-Key	277-1106-ND + 277-1011-ND