Comment	Description	Designator	Footprint	LibRef	Quantity	Board	RS VPN	Farnell VPN	Mouser VPN	PCDIGA VPN	price	price total
C 10-F 000F MI CC FOV V7D	·			Conneitor CMD					CO2 CC00FKDV7D0DD102			
C 10nF 0805 MLCC 50V X7R	Capacitores de cerâmica multicamada MLCC - SMD/SMT 10nF 50V X7R 10%	C19, C20, C21, C22	CAPC_0805	Capacitor SMD	2	inversor			603-CC805KRX7R9BB103		0,099	0,40 €
C 10nF 0805 MLCC 50V X7R	Capacitores de cerâmica multicamada MLCC - SMD/SMT 10nF 50V X7R 10% Capacitores de ceramica multicamada MLCC - SMD/SM1 10uF 25V X5R +/-10% 0805	C4, C11, C14	CAPC_0805	Capacitor SMD	3	controlo			603-CC805KRX7R9BB103		0,099	0,30 €
C 10uF 0805 MLCC 25V X5R	Gen Purp	C1, C2, C3, C18, C23, C26, C29	CAPC_0805	Capacitor SMD	7	inversor			963-TMK212BBJ106KG-T		0,162	1,13 €
C 10uF 0805 MLCC 25V X5R	Capacitores de ceramica multicamada MLCC - SMD/SMT 10uF 25V XSR +/-10% 0805 Gen Purp	C1, C2, C5, C6, C7, C8, C9, C12, C15	CAPC 0805	Capacitor SMD		controlo			963-TMK212BBJ106KG-T		0,162	1,46 €
		C1, C2, C3, C4, C5, C6, C7, C8, C9, C10,	-									
C 10uF 1206 MLCC 50V X5R	Capacitores de cerâmica multicamada MLCC - SMD/SMT 1206 50V 10uF 20% X5R	C11, C12	CAPC_1206	Capacitor SMD	12	middlePCB			963-UMK316BBJ106ML-T		0,31	3,72 €
C 10uF 2917 TANT 50V	Condensadores de tântalo - revestimento sólido de SMD 50V 10uF 10% ESR=0.80hms Capacitores de ceramica multicamada MLCC - SMD/SMT WCAP-CSGP 100UpF 0805 10%	C4, C5, C6, C7, C8, C9, C16, C17, C24	CAPC_2917	tantalum_CAP	g	inversor			80-T491D106K050AT		1,58	14,22 €
C 1nF 0805 MLCC 50V X7R	50V MLCC	C10, C11, C12, C13, C14, C15	CAPC_0805	Capacitor SMD	6	inversor			710-885012207086		0,08	0,48 €
C 1uF 0805 MLCC 50V X5R	Capacitores de cerâmica multicamada MLCC - SMD/SMT 0805 50V 1uF 20% X5R	C3, C10, C13	CAPC_0805	Capacitor SMD	3	controlo			963-UMK212BJ105MG-T		0,153	0,46 €
C 470-F DDC TH C201/	B32653A6474K000 - DC Film Capacitor, 0.47 μF, 630 V, Metallized PP, ± 10%, B32653							0751343				
C 470nF PPCap TH 630V	Series	C_bus5	Snubber_cap_0.47uF	CAPACITOR_dcbus		inversor		9751343			2,18	2,18 €
C 470uF EleCap TH 450V	Capacitores eletrolíticos de alumínio - terminal de pressão 450V 470uF 20% Tol.	C_bus1, C_bus2, C_bus3, C_bus4	Capacitor_DCBUS	CAPACITOR_dcbus	4	inversor			661-ESMR451N471MR40S		6,28	25,12 €
C1uF 0805 MLCC 50V X5R	Capacitores de cerâmica multicamada MLCC - SMD/SMT 0805 50V 1uF 20% X5R	C25, C27, C28	CAPC_0805	Capacitor SMD	3	inversor			963-UMK212BJ105MG-T		0,153	0,46 €
IC Amplso BIPOL AMC1200	Amplificadores de isolamento 4kV peak Iso Amp	U5, U8, U9	SOIC8	AMC1200	3	controlo			595-AMC1200BDWVR		4,62	13,86 €
IC Amplso UNI AMC1311	Amplificadores de isolamento A 595-AMC1311DWV	U4, U5	AMC1311 - SOIC8	AMC1311	2	inversor			595-AMC1311DWVR		5,55	11,10 €
IC CC 30A SO-8	Sensores de Corrente de Montagem de Painel Hall Effect IC LF 30A 66 mV/A	CC1, CC2, CC3	CC6303_SOP8	Current_Sensor_cc6303	3	inversor			630-ACHS-7123-000E		3,47	10,41 €
IC CC/CC 1W 5V	Conversores CC/CC com isolação 1W 5Vin 5Vout 200mA SIP7	U3	DC/DC_ISO	DC/DC_ISO	1	inversor			919-RFB-0505S		1,4	1,40 €
IC CC/CC 1W 5V	Conversores CC/CC com isolação 1W 5Vin 5Vout 200mA SIP7	U3, U6, U7	DC/DC_ISO	DC/DC_ISO	3	controlo			919-RFB-0505S		1,4	4,20 €
IC DC/DC 12V	Conversores CC/CC sem isolação 15-36Vin 12Vout 1.0A VSIP Encapsulated	U7	DC/DC - OKI-78SR-E	DC/DC - R-78E3.3	1	middlePCB			580-OKI78SR12/1W36EC		5,31	5,31 €
IC DC/DC 15V ISO	Conversores CC/CC com isolação 6W 18-36Vin 15Vout 400mA DIP24 Iso	U1	MeanWell SCWNo6	MEANWELL - SCWN06	1	middlePCB			709-SCWN06B-15		8,26	8,26 €
IC DC/DC 3V3	Conversores CC/CC sem isolação 3.3V 500MA OUT THRU	U2	DC/DC - R-78E3.3	DC/DC - R-78E3.3	1	middlePCB			919-R-78E3.3-0.5		2,43	2,43 €
IC DC/DC 5V	Conversores CC/CC sem isolação 7-36Vin 5Vout 1.5A VSIP Encapsulated	U3, U4	DC/DC - OKI-78SR-E	DC/DC - R-78E3.3	2	middlePCB			580-OK78SR5/1.5W36EC		5,31	10,62 € 0,27 €
IC DIO generic	Diodos - Fins gerais, energia, comutação Hi Conductance Fast	D1, D2, D3	Diode_th	Diode	3	inversor			512-1N4148TR		0,09	0,27 €
IC Driver 5A Dual ENA IX4340	Drivers de portas Dual 5A Gate Driver IC	U5, U8, U10	SOIC-MIC4126	Driver - IX4340	3	middlePCB			747-IX4340NETR		0,891	2,67 €
IC DUAL MOS DRIVER MIC412	6 Drivers de portas 1.5A Dual High Speed MOSFET Driver with Low Thermal Impedance	U12	SOIC-MIC4126	MOS_DRIVER-MIC4126	1	middlePCB			998-MIC4126YME		0,756	0,76 €
IC IGBT IPM IKCM30F60GA	Controladores e drivers de Motor/Movimento/Ignição IFPS MODULES	U2	ikcm30f60ga	IKCM30F60GA	1	inversor			726-IKCM30F60GDXKMA1		16,25	16,25 €
IC ISO SI8660	Isoladores digitais 1 kV 6-channel digital isolator	U6, U9	SOIC127P610X155-16N	ISO SI8660		middlePCB			634-SI8660BA-B-IS1		1,82	3,64 €
IC LED 1206	LEDs padrão - SMD GREEN WATER CLEAR	D1, D2, D3, D4	DIODE_1206	LED		middlePCB			604-APT3216SGC		0,387	1,55 €
IC NAND HEF4011	Portas lógicas QUADRUPLE 2-INPUT NAND GATE	U1, U2, U4	SOIC-14N	HEF4011	3	controlo			771-HEF4011BTD-T 653-G6DN-1A-LDC5		0,296 1,59	0,89 €
IC Relay 5A 5V 5x20mm	Relés para uso geral 1 form A w/ 5VDC Coil-standard type "KII_XMC45_RELAX_LITE_VT - Evaluation Board, XMC4500 MCU, Detachable On-Board	U11, U13	Relay - G6DN	Relay - G6DN	-	middlePCB			653-G6DIN-TA-LDC5		1,59	3,18 €
IC XMC4500 Relax LITE	Debugger, USB Powered "	XMC1	XMC4500	XMC4500	1	controlo	251-8418	2443552			14,628	14,63 €
IND RLS-126	Indutores fixos Line Inductors for RECOM Power Supply	L1, L2, L3, L4	Inductor - RLS-126	Inductor	4	middlePCB			919-RLS-126		0,549	2,20 €
olhal		+VDC2, -VDC2	Olhal	olhal		inversor					0,00 €	
P 2p 5mm	Bloques de terminales de PCB de perfil estándar RS de 5,0 mm	+VDC1, -VDC1, U1, V1, W1	connector1x2_parafuso	gen_purpose_conn_1x2	5	inversor	000 000				0,24	1,20 €
P 2p 5mm P 2p 5mm	Bloques de terminales de PCB de perfil estándar RS de 5,0 mm Bloques de terminales de PCB de perfil estándar RS de 5,0 mm	1, Input L-N1, K1, K2 P7, P8, P9	connector1x2_parafuso connector1x2_parafuso	gen_purpose_conn_1x2 gen_purpose_conn_1x2	2	middlePCB controlo	896-6696 896-6696				0,24	0,96 € 0,72 €
			_	3 -, 1	-		030 0030					
P 4p 2.54 MOL FAN	2	P12	HEADER 4p molex	Header 4p molex	1	middlePCB			538-47053-3000		0,405	0,41 €
P 8p 2.54 SR DW 3P	Distribuidores e Alojamento de Fios CGrid Hrd SRDW THo le 8ckt	P1, P2, P3, P4, P5, P6, P7, P8	MOLEX_3p_105431_1103	Header 3		inversor			538-87937-0800		0,621	4,97 €
P 8p 2.54 SR DW 3P P 8p 2.54 SR DW 8P	Distribuidores e Alojamento de Fios CGrid Hrd SRDW THo le 8ckt Distribuidores e Alojamento de Fios CGrid Hrd SRDW THo le 8ckt	P1, P2, P3, P4, P5, P6, P7, P8 P9, P10, P11, P13	MOLEX_3p_105431_1103 Header 8x1 8.5mm	Header 3	+	middlePCB middlePCB			538-87937-0800 538-87937-0800		0,621 0,621	4,97 € 2,48 €
P 8p 2.54 SR DW 8P	Distribuidores e Alojamento de Pios CGrid Hrd SRDW THO le ockt Distribuidores e Alojamento de Fios CGrid Hrd SRDW THO le 8ckt	P1, P2, P3, P4, P5, P6	Header 8x1 8.5mm	jumper_8p jumper_8p		controlo			538-87937-0800		0,621	3,73 €
R 0 1/8W 0805	Resistores de Filme Espesso - SMD 1/8Watt 0ohms Commercial Use	R15	RESC_0805	Resistor	1	inversor			71-CRCW08050000Z0EAC		0,09	0,09 €
R 0 1/8W 0805	Resistores de Filme Espesso - SMD 1/8Watt 0ohms Commercial Use	R6, R7, R8, R9, R11	RESC_0805	Resistor		middlePCB			71-CRCW08050000Z0EAC		0,09	0,45 €
		R1, R2, R3, R4, R5, R6, R7, R8, R9, R10,										
R 0 1/8W 0805	Resistores de Filme Espesso - SMD 1/8Watt 0ohms Commercial Use	R11, R12, R13, R17, R31, R39, R45	RESC_0805	Resistor	17	controlo			71-CRCW08050000Z0EAC		0,09	1,53 €
R 0039 3W 6432 1%	MCLRP12F1WRR039 - SMD Current Sense Resistor, 0.039 ohm, LRP Series, 2512 [6432 Metric], 3 W, ± 1%, Metal Strip	D7 D0 D0	RESC6432X09M	Parietor		inversor		2828259			0,271	0,81 €
R 10 1/8W 0805 1%	Resistores de Filme Espesso - SMD 1/8Watt 10ohms 1% Commercial Use	R7, R8, R9 R5, R10	RESC_0805	Resistor Resistor	3	inversor middlePCB		2020239	71-CRCW080510R0FKEAC		0,09	0,81€
	·											
R 100 1/8W 0805 1%	Resistores de Filme Espesso - SMD 1/8Watt 100ohms 1% Commercial Use	R1, R2, R3, R4, R5, R6, R10, R12, R13	RESC_0805	Resistor	9	inversor			71-CRCW0805100RFKEAC		0,09	0,81 €
		R34, R35, R36, R37, R38, R40, R41, R42, R43, R44, R50, R51, R52, R53, R54, R55,										
		R56, R57, R58, R59, R60, R61, R62, R63,										
R 100k 1/8W 0805 .1%	Resistores de Filme Fino - SMD 100 Kohm .1% 0805 25PPM	R64, R65, R66, R67, R68, R69	RESC_0805	Resistor	30	controlo			284-APC0805B100KN		0,126	3,78 €
R 150 1/8W 0805 1%	Resistores de Filme Espesso - SMD 1/8watt 150ohms 1% 100ppm	R1	RESC_0805	Resistor	1	middlePCB			71-CRCW0805-150-E3		0,09	0,09 €
R 150R 1/8W 0805 1%	Resistores de Filme Espesso - SMD 1/8watt 150ohms 1% 100ppm	R25	RESC_0805	Resistor	1	inversor			71-CRCW0805-150-E3		0,09	0,09 €
R 1k2 1/8 0805 1%	Resistores de Filme Espesso - SMD 1/8watt 1.2Kohms 1%	R4	RESC_0805	Resistor	1	middlePCB			71-CRCW08051K20FKEA		0,09	0,09 €

R 1k8 1/8W 0805 1%	Resistores de Filme Espesso - SMD ResA-AS 0805 1k8 1% 125mW TC100	R11	RESC_0805	Resistor	1	inversor	652-CR0805AFX1801EAS		0,09	0,09 €
R 2k7 1/8 0805 1%	Resistores de Filme Espesso - SMD 1/8watt 2.7Kohms 1% 100ppm	R2	RESC_0805	Resistor	1	middlePCB	71-CRCW0805-2.7K-E3		0,09	0,09 €
R 30k 1/8W 0805 1%	Resistores de Filme Espesso - SMD 0805 30Kohms 1% AEC-Q200	R20, R21, R22, R23, R26, R27, R28, R29, R30, R31, R32, R33	RESC_0805	Resistor	12	inversor	667-ERJ-6ENF3002V		0,09	1,08 €
R 330 1/8 0805 .1%	Resistores de Filme Fino - SMD CPF 0805 330R 0.1% 25PPM 1K RL	R32, R46, R47	RESC_0805	Resistor	3	controlo	279-CPF0805B330RE1		0,126	0,38 €
R 330 1/8 0805 1%	Resistores de Filme Espesso - SMD 1/8Watt 330ohms 1% Commercial Use	R19, R24	RESC_0805	Resistor	2	inversor	71-CRCW0805330RFKEAC		0,09	0,18 €
R 330 1/8 0805 1%	Resistores de Filme Espesso - SMD 1/8Watt 330ohms 1% Commercial Use	R3	RESC_0805	Resistor	1	middlePCB	71-CRCW0805330RFKEAC		0,09	0,09 €
R 3K 1/8W 0805 1%	Resistores de Filme Espesso - SMD 1/8watt 3Kohms 1% 100ppm	R14	RESC_0805	Resistor	1	inversor	71-CRCW0805-3K-E3		0,09	0,09 €
R 3k6 1/8W 0805 .1%	Resistores de Filme Fino - SMD 1/8W 3.6K ohm .1% 25ppm	R33, R48, R49	RESC_0805	Resistor	3	controlo	603-RT0805BRD073K6L		0,387	1,16 €
R 3k6 1/8W 0805 1%	Resistores de Filme Espesso - SMD 1/8watt 3.6Kohms 1%	R16	RESC_0805	Resistor	1	inversor	71-CRCW08053K60FKEA		0,09	0,09 €
R 49k9 1/8W 0805 1%	Resistores de Filme Espesso - SMD 1/8Watt 49.9Kohms 1% Commercial Use	R17, R18	RESC_0805	Resistor	2	inversor	71-CRCW080549K9FKEAC		0,09	0,18 €
R 5k1 1/8W 0805 .1%	Resistores de Filme Fino - SMD 0805 5.1Kohm 1/8W .1% 25ppm	R14, R15, R16, R21, R22, R23, R27, R28	RESC_0805	Resistor	8	controlo	667-ERA-6AEB512V		0,324	2,59 €
R 7k5 1/8W 0805 .1%	Resistores de Filme Fino - SMD 7.5K OHM .1% 25ppm	R18, R19, R20, R24, R25, R26, R29, R30	RESC_0805	Resistor	8	controlo	66-PCF08C7.5KB		0,135	1,08 €
X COOLER H412R	Cooler CPU Cooler Master Hyper H412R	X?	COOLER	cooler	1	inversor		Cooler CPU Cooler Master Hyper H412R	. 22,90	22,90 €
									TOTAL	220,90 €