



EVLPWD5T60 - Bill of materials

Reference	Part Value	Description	Package	Manufacturer	Part Number
C1	68uF/450V	THT Electrolytic Capacitor, Radial p7.5 d18h25	Diam. 18 mm, pitch 7.5 mm	Rubycon	450BXW68MEFC18X25 or equivalent
C2	N.M.	Film, Metallized Polypropylene	Dim. 4x13, pitch 10 mm	KEMET	R71MF31004030K or Equivalent
C3	33nF/630V	SMT multilayer Capacitor	Size 1210		
C4	4u7F/25V	SMD Aluminum Elect. Capacitor	Dim. 4x5.5 mm	Würth Elektronik	865230440001 or equivalent
C4A	N.M.	SMT ceramic capacitor	Size 0805		
C5	10uF/25V	SMD Aluminum Elect. Capacitor	Size C	Panasonic	EEE-1EA100SR or equivalent
C5A	N.M.	SMT ceramic capacitor	Size 1206		
C6,C7,C8,C10,C11,C15,C17,C19,C25,C28	33pF/25V	SMT Ceramic Capacitor	Size 0603		
C9,C13,C20,C22,C35,C36	100nF/25V	SMT Ceramic Capacitor	Size 0603		
C12,C42	47nF/25V	SMT Ceramic Capacitor	Size 0603		
C14	4.7uF/10V	SMT Ceramic Capacitor	Size 0805		
C16,C18,C29	2.2pF/25V	SMT Ceramic Capacitor	Size 0603		
C21,C23,C24,C26	N.M.	SMT ceramic capacitor	Size 0603		
C27,C30,C31	4.7pF/50V	SMT Ceramic Capacitor	Size 0603		
C32,C33,C34	10pF/25V	SMT Ceramic Capacitor	Size 0603		
C37,C38,C41	470nF/25V	SMT ceramic capacitor	Size 0603		
C39,C40	220nF/25V	SMT Ceramic Capacitor	Size 0603		
C43	2.2nF/25V	SMT Ceramic Capacitor	Size 0603		
D1	BZT52C3V3	Zener Diode 3.3 V	SOD-123		
D2,D3,D5,D6,D8,D9,D10,D12,D13,D14	BAT54J	40V, 300mA Small signal Schottky SMT Diode	SOD-323	STMicroelectronics	BAT54J/FILM or equivalent
D4,D7,D11	RFU02VSM6S	600V, 0.2A Super fast recovery diodes	TUMD2SM	ROHM Semiconductor	RFU02VSM6S or equivalent
D15,D16,D17	N.M.	Turbo 2 Ultrafast High-Voltage Rectifier	SMA	STMicroelectronics	STTH1L06A
JP1,JP4	CLOSED	SMT Jumper	Soldering pad		
JP2	OPEN	SMT Jumper	Soldering pad		
JP3,JP5,JP6	CLOSED 1-2	SMT Jumper	Soldering pad		
JP7	CLOSED 2-4	SMT Jumper	Soldering pads		
JP8,JP9	CLOSED	SMT Jumper	Size 0805		
JP10,JP11,JP12	N.M.				
J1	MORSV-508-2P_screw	Connector terminal block T.H. 2 positions 5.08 mm	Pitch 5.08 mm	Phoenix Contact	1715721 or equivalent
J2	MORSV-508-3P_screw	Terminal block T.H. 3 positions, 5.08 mm	Pitch 5.08 mm	Phoenix Contact	1715857 or equivalent
J3	MORSV-350-3P_screw	Terminal block T.H. 3 positions, 3.5 mm	Pitch 3.5 mm	Würth Elektronik	691214110003 or equivalent
J4	MOTOR CONN.	Header Vertical Connector 2x17 poles, pitch 2.54 mm	2x17 pins	TE Connectivity	3-1761603-1 or equivalent
J5	STRIP 1x13	Strip connector 13 pos, 2.54 mm	1x13 pins	Amphenol FCI	68000-413HLF or equivalent
J6	STRIP 1x5	Strip connector 5 pos, 2.54 mm	1x5 pins	Amphenol FCI	68000-405HLF or equivalent
R1,R3	3R3	SMT Resistor	Size 0603		
R2	1k	SMT Resistor	Size 1206		
R4,R5,R6,R10,R15,R23,R25,R30,R33,R35	1k	SMT Resistor	Size 0603		
R7,R9,R12,R14,R31,R41	20k	SMT Resistor	Size 0603		
R8,R11,R16,R22,R34,R43,R51,R54,R58	1.8k	SMT Resistor	Size 0603		
R13,R19,R42,R48,R49,R50,R68	10k	SMT Resistor	Size 0603		
R17,R18,R20,R60	0R	SMT Resistor	Size 0603		
R21	33k	SMT Resistor	Size 0603		
R24	10M	SMT Resistor	Size 0603		
R26,R27	470k	SMT Resistor	Size 1206		
R28	22k	SMT Resistor	Size 0603		
R29,R65	47k	SMT Resistor	Size 0603		
R32	6.49k	SMT Resistor	Size 0805		
R36,R37,R44,R45,R52,R53	180k	SMT Resistor	Size 1206		
R38,R39,R46,R55	1k	SMT Resistor	Size 0805		
R40,R47,R56	3.3k	SMT Resistor	Size 0603		
R57,R59,R61	N.M.	SMT Resistor	Size 0603		
R62,R63,R64	27R	SMT resistor	Size 0805		
R67,R69,R71	1k5	SMT Resistor	Size 0603		
R73,R74,R75	750m 1/2W 1%	SMT resistor	Size 1206	VISHAY	RCWE1206R750FKEA or Equivalent
TP1,TP2,TP3,TP4,TP5,TP6,TP7,TP8,TP10,TP12,TP13,TP14,TP15,TP16,TP17,TP18,TP19,TP20,TP21,TP22,TP23,TP24	N.M.	TP for Probe	Diam. 1.27, Hole 0.8mm		
TP9	TP-ANELLO_1mm-NERO	Black bead terminal, diam. 1.02mm	Diam. 2,54 , Hole 1mm	Vero Technologies	20-2137 or equivalent

TP11	TP-ANELLO_1mm-ROSSO	Red bead terminal, diam. 1.02mm	Diam. 2,54 , Hole 1mm	Vero Technologies	20-313137 or equivalent
U1,U3	TSV912IQ2T	Dual rail-to rail input/output 8 MHz operational amplifiers	DFN8 2x2	STMicroelectronics	TSV912IQ2T
U2	TS3021ILT	Rail-to-rail 1.8 V high-speed comparator	SOT23-5	STMicroelectronics	TS3021ILT
U4	PWD5T60	High-density power driver, High voltage three-phase bridge with integrated gate driver	Advanced QFN 12x12x1.0 mm	STMicroelectronics	PWD5T60 / TR
		P.C.B. EVLPWD5T60 Rev.1.0		STMicroelectronics	