

1581 Enhanced Bill of Materials

ABEL	VALUE	CODE	Description	Quantity	Mouser Part Number	Mouser Link
C1 - C14	100nF	Code 104	Ceramic Capacitor	14	594-K104M15X7RF53H5	https://www.mouser.ca/ProductDetail/Vishay-BC-Components/K104M15X7RF53H5?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
C15	10nF	Code 103	Ceramic Capacitor	1	594-K103K20X7RL5TH5	https://www.mouser.ca/ProductDetail/Vishay-BC-Components/K103K20X7RL5TH5?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
C16, C22	10uF Electrolytic		Electrolytic Polarized Capacitor	2	647-AKLE100K02ANA	https://www.mouser.ca/ProductDetail/Nichicon/KL1E100K02ANA?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
	47uF Electrolytic		Electrolytic Polarized Capacitor	1	647-UFW1E470MDD	https://www.mouser.ca/ProductDetail/Nichicon/UFW1E470MDD?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
				2	75-51SD47M025JA6E3	https://www.mouser.ca/ProductDetail/Vishay515D47M025JA6E3?qs=HdNzL5REbdfFqjOj00g%3D%3D
CN1			Male Pin Header	1		https://www.abey.com/itm/28207424311
CN2			2x17 (34 pin) Male Pin Header	1		https://www.abey.com/itm/322339062405
CN3, CN4	6 pin DIN		IEC Serial Port Connectors	2		https://www.abey.com/itm/174286381609?hash=item289437df6g;YmwAAoSawMetdyh
CN6	4 pin DIN		1541-I Style Power Connector	1		https://www.abey.com/itm/254570070244?hash=item3458800e4;gxHAAOSaw-undjyQj
J1, J3	1x2 male pin header			2		
CR4	1N4148		Diode	1	512-1N4148	https://www.mouser.ca/ProductDetail/onsemi-Fairchild/1N4148?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
EM1,2,3,4	270pf EM Filter			4	81-DSS1NB32A271Q91A	https://www.mouser.ca/ProductDetail/Murata-Electronics/DSS1NB32A271Q91A?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
FB1,2,3,4,5,6			Ferrite Beads	6	205-FT-3AMB4ARLY-PF	https://www.abey.com/itm/393879647053 You can scavenge ferrite beads from virtually any dead Commodore device board.
R1, R3, R9, R10, R11	47 ohm			5	660-MF14DCT52R47R0F	https://www.mouser.ca/ProductDetail/KOA-Speer/MF14DCT52R47R0F?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
R2, R4, R13, R14	1K			4	660-MF14DCT52A1001F	https://www.mouser.ca/ProductDetail/KOA-Speer/MF14DCT52A1001F?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
R5	2.7K			1	660-MF14DCT52R2701F	https://www.mouser.ca/ProductDetail/KOA-Speer/MF14DCT52R2701F?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
R12	620 ohm			1	660-MF14DCT52R6200F	https://www.mouser.ca/ProductDetail/KOA-Speer/MF14DCT52R6200F?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
R29	10K			1	660-MF14DCT52A1002F	https://www.mouser.ca/ProductDetail/KOA-Speer/MF14DCT52A1002F?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
RP1, RP3	7x1K		Resistor Network	2	660-MF14DCT52R1002F	https://www.mouser.ca/ProductDetail/KOA-Speer/MF14DCT52R1002F?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
			Resistor Network (alternate part)		652-4608H-1LF-1K	https://www.mouser.ca/ProductDetail/Bourns/4608H-101-102?Fqqs=kHfHwW-d4QeChCnCD1Uulr%3D%3D
					652-4608X-1LF-1K	https://www.mouser.ca/ProductDetail/Bourns/4608X-101-102?Fqqs=kHfHwW-d4QeChCnCD1Uulr%3D%3D
RP2	7x2-2K		Resistor Network	1	652-4608X-1LF-2.2K	https://www.mouser.ca/ProductDetail/Bourns/4608X-101-222?Fqqs=k25Bz3874P-JHfHfzPc2K2qpm%3D%3D
SW1	DIP Switch, 2 position		Device selector switch	1	490-DS02-254-1L-02BE	https://www.mouser.ca/ProductDetail/CUI-Devices/DS02-254-1L-02BE?qs=w1H7xH76zEz3wkyg%3D%3D
SW2	Power Switch		Salecom R8017L-RP2-1			https://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langId=-1&storeId=10001&catalogId=10001&productId=2267143
						(this switch is
U1	6502A R65C02 W65C02		JP1 Closed, JP3 Open JP1 Closed, JP3 Open JP1 Opened, JP3 Closed	1 n/a n/a	Old Stock ??? 955-W65C02SETPG-14	https://www.mouser.ca/ProductDetail/Western-Design-Center-WDC/W65C02SETPG-14?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
U2	27C256 27C512		When using SINGLE kernel When using DUAL kernel	n/a 1	Standard EPROM	
U3	AS6C2256-55PCN D4364C		JP2 closed JP2 open	1 n/a	913-AS6C2256-55PCN	https://www.mouser.ca/ProductDetail/913-AS6C2256-55PCN
U4	WD1770 WDV1L772			n/a 1	Old Stock ???	https://www.abey.com/itm/391994520438?hash=item54b1b376;g=ANQAAOSwdJannCM
U5	MOS8620			n/a	Old Stock	
U6	74LS139			1	595-SN74LS139AN	https://www.mouser.ca/ProductDetail/Texas-Instruments/SN74LS139AN?qs=3pr37ZAK%2FHW2T3DHzAw%3D%3D
U7	74LS500			1	595-SN74LS500N	https://www.mouser.ca/ProductDetail/Texas-Instruments/SN74LS500N?qs=pWSeSOWB66SwECF%252BEZFAl%3D%3D
U8, U12	7406			2	595-SN7406N	https://www.mouser.ca/ProductDetail/Texas-Instruments/SN7406N?qs=2A23G2D9L%2FcdpL%3D%3D
U9	74LS414			1	595-SN74LS414N	https://www.abey.com/itm/173670842672?hash=item268696;130;grFsAAOSwt-FZcA;g=
U10	74LS593			1	595-SN74LS593N	https://www.mouser.ca/ProductDetail/Texas-Instruments/SN74LS593N?qs=NlW4N%2B530u%2FmM%3D%3D
U11	7407			1	595-SN7407N	https://www.abey.com/itm/29368775626?hash=item446;27418a;g=SFgAAOSwWu2dg-o
U13	74LS241			1	595-SN74LS241N	https://www.mouser.ca/ProductDetail/Texas-Instruments/SN7407N?qs=GAEpMZMjA4hJ%252BjCSj7YRhw0xUz2b8gtLCNC3sFmk%3D
				1	595-SN74LS241N	https://www.mouser.ca/ProductDetail/Texas-Instruments/SN74LS241N?qs=J59KNW30VbxdZ04Bg%3D%3D
Y1	16M4z		Oscillator	1	815-ACO-16-EK	https://www.mouser.ca/ProductDetail/4BRACON/ACO-16000MHZ-EK?qs=r%252BjUWdCpCf2wJ%252BDr9yw%3D%3D
JP1 Closed, JP3 Open JP1 Opened, JP3 Closed	6502A or R65C02 W65C02					
JP2 Closed JP2 Opened	AS6C2256-55PCN D4363					
J1 Closed J1 Opened	WD1770 WD1772					
27C256/27256 27C512/27512			If you only want to use a single DOS ROM (leave J3 open) Use if you want to switch between two DOS ROMs (close J3 to toggle to alternate DOS ROM)			
J3						
Alternate Power	Apply 7.5-25VDC (polarity indicated on PCB) to power the 1581 in lieu of a factory power connection. 2-3 of J2 must be jumpered to route power to drive PCB.					
Alternate Power BOM						
PR1	uA7805		UC8413 / Korea [fixed positive voltage regulator]	1	595-UA7805CKCT	
C23	1000 uF 16V		Electrolytic Capacitor	1	598-10BTTA016M	
C24	4.7uF 50v		Electrolytic Capacitor	1	80-ES475M50A03KA	
J2	3pin straight header		male	1		
Other optional Connection Points						
1581D PWR	1x2 pin header		male (for linking power to second 1581 board in 1581D)	1		
1581D SW2	1x3 pin header		male (for linking device selection swith of second 1581 board in 1581D)	1		
IEC	1x6 pin header		male (for linking IEC to second 1581 board in 1581D)	1		