1581 Enhanced Bill of Materials

LABEL	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=sGAEpiMZZMukHu%252BjC5l7YRhxlXvXZbr8qrLCNC3sFmk%3D
C15	10nf	Code 103 Ceramic Capacitor	1	594-K103K20X7RL5TH5	https://www.mouser.ca/ProductDetail/Vishay-BC-Components/K103K20X7RL5TH5?qs=u48theeAsGdoToV7MqpG2Q%3D%3D
C18, C22	10uf Electrolytic	Electrolytic Polarized Capacitor	2	647-UKL1E100KDDANA	https://www.mouser.ca/ProductDetail/Nichicon/UKL1E100KDDANA?qs=Ggb2QVoSPkfQU4zKa3s%252BOw%3D%3D
C20	47uf Electrolytic	Electrolytic Polarized Capacitor	1	647-UFW1E470MDD	https://www.mouser.ca/ProductDetail/Nichicon/UFW1E470MDD?qs=kArNe9LFxXl8%252BYfKlcgTBA%3D%3D
				75-515D476M025JA6AE3	https://www.mouser.ca/ProductDetail/Vishay/515D476M025JA6AE3?qs=HDhZcL5REibdxFcglOjO0g%3D%3D
CN1		Male Pin Header			https://www.ebay.com/ftm/282074243111
			1		
:N2		2x17 (34 pin) Male Pin Header	1		https://www.ebay.com/tm/322339082405
N3, CN4	6 pin DIN	IEC Serial Port Connectors	2		https://www.ebay.com/itm/174285381609?hash=item289437dfe9:g:YmwAAOSwMetddyih
:N6	4 pin DIN	1541-II Style Power Connector	1		https://www.ebay.com/itm/254570070244?hash=item3b458f00e4:g:xHIAAOSw-uhd0yoi
1, J3		1x2 male pin header	2		
:R4	1N4148	Diode	1	512-1N4148	https://www.mouser.ca/ProductDetail/onsemi-Fairchild/1N4148?qs=sGAEpiMZZMueQxo7L%2FBPyGk10WHQqz4M
MI1.2.3.4	270pf EMI Filter	Dioco	4	81-DSS1NB32A271Q91A	https://www.mouser.ca/ProductDetail/Murata-Electronics/DSS1NB32A271Q91A7cs=sGAEpilMZZ/MviAcTDbc5QTioMBdAP3Z%2F6w%2Fn48rkkQxA%3D
M1,2,3,4 B1,2,3,4,5,6	270pi EMI Fillei	Freeze Books	4	205-FT-3AMB4ARLY-PF	
31,2,3,4,5,6		Ferrite Beads	ь	205-F1-3AMB4ARLY-PF	You can scavenge ferrite beads from virtually any dead Commodore device board. https://www.ebay.com/fum/38879847053
1, R3, R9, R10, R11	47 ohm		5	660-MF1/4DCT52R47R0F	https://www.mouser.ca/ProductDetail/KOA-Speer/MF1-4DCT52R47R0F?qs=sGAEpiMZZMsPqMdJzcrNwuBnmYaxrx0HyN48aPYoMj8%3D
2. R4. R13. R14	1K		4	660-MF1/4DCT52A1001F	https://www.mouser.ca/ProductDetail/KOA-Speer/MF1-4DCT52A1001F?qs=sGAEpil/XZMsPqMdJzcrNwrhyl%252BtH98Oxt%2FRxxMeuUIY%3D
5	2.7K		1	660-MF1/4DCT52R2701F	https://www.mouser.ca/ProductDetail/KOA-Speer/MF1-4DCT52R2701F7gs=sGAEpiMZZMsPgMdJzcrNvuBnmYxxxx0HoBPk1f0JRUM%3D
12	620 ohm		4	660-MF1/4DCT52R6200F	https://www.mouser.caiProductDetail/KOA-Speer/MF1-4DCT52R6200F7gs=SGAEpM2ZN8F-qWod2crNwubmin-axxx0HBD9w294zwk%3D
29	10K		4	660-MF1/4DCT52R6200F	https://www.mouser.cairPoductDetailk/OA-Speer/MF1-HDC152A0020F7qs=6AEpiMCZMspQMiZicrNwecx8ismmwY78hyjLeMVY%5D https://www.mouser.cairPoductDetailk/OA-Speer/MF1-HDC152A1002F7qs=6AEpiMCZMspQMiZicrNwecx8ismmwY78hyjLeMVY%5D
Lo	IUN		1	660-MF1/4DCT52A1002F	ntps://www.mouser.cai/roductbetaiirk.OA-Speer/NF1-40U-152410UZF1qS=6S-0AEpinikZnistrqlwtuZcrinwideoksismmvr11sryj_envitYris-3U https://www.mouser.cai/roductbetaiirk.OA-Speer/NF1-40UC152410UZF1qS=6S-0AEpinikZnistrqlwtuArkis2S281850ENF-ubi0168aCm1k3D
P1, RP3	7x1K	Resistor Network	2	652-4608H-1LF-1K	https://www.mouser.ca/ProductDetail/Bourns/4608H-101-102LF?qs=kl-HrwwvD4QetChCD1UulrA%3D%3D
		Resistor Network (alternate part)		652-4608X-1LF-1K	https://www.mouser.ca/ProductDetail/Bourns/4608X-101-102LF?qs=kHHrwwvD4QexQjGTjHLZKg%3D%3D
P2	7x2.2K	Resistor Network	1	652-4608X-1LF-2.2K	https://www.mouser.ca/ProductDetail/Bourns/4608X-101-222LF?qs=%252BX874PJMffzp5PC2K2gpmA%3D%3D
W1	DIP Switch, 2 position	Device selector switch	1	490-DS02-254-1L-02BE	https://www.mouser.cai/ProductDetail/CUI-Devices/DS02-254-1L-02BE?qs=wnTisH77Xs?tEZE7xwk3yg%3D%3D
W2	Power Switch	Salecom R8017L-R21-2	·	400 0 000 204 12 0202	https://www.ebay.com/tim/402027881537
***	rower Switch	Salecom R8011L-R11-2-Q			https://www.jameco.com/webapp/vcs/stores/servlet/ProductDispla
		Saleculii Rou i IL-R i I-2-Q			mps.//www.janieco.com/weappwcs/soriespase-weder/routoLinsplac y/langida-/lastoreida-10001&catalogidi-10001&productid=2267143
					y range - reasonate - too recall and the factory switch but chea
i .	6502A	JP1 Closed, JP3 Open	1		Old Stock
	R65C02	JP1 Closed, JP3 Open	n/a		???
	W65C02	JP1 Opened, JP3 Closed	n/a	955-W65C02S6TPG-14	https://www.mouser.ca/ProductDetail/Western-Design-Center-WDC/W65C02S6TPG-14?qs=sGAEpiMZZMskC5GgilGuvqFi6wlhR0huA5ZdF21Z2WA%3D
!	27C256	When using SINGLE kernal	n/a		Standard EPROM
	27C512	When using DUAL kernal	1		Standard EPROM
3	AS6C62256-55PCN	JP2 closed	i	913-AS6C62256-55PCN	https://www.mouser.ca/ProductDetail/913-AS6C62256-55PCN
•	D4364C	JP2 open	n/a	/ WOODELEDO GOF ON	The state of the s
1	WD1770	or 2 upen	rival 4		
			1		https://www.ebay.com/itm/391994520438?hash=item5b44b1b376:g:ANQAAOSwdJJanmCM
	WD/VL1772		n/a		???
_			1		Old Stock
	MOS8520				https://www.mouser.ca/ProductDetail/Texas-Instruments/SN74LS139AN?qs=3pnr37ZAbK%2FhW2T3DHZDAw%3D%3D
6	74LS139		1	595-SN74LS139AN	
6 7			1 1	595-SN74LS139AN 595-SN74LS00N	https://www.mouser.ca/ProductDetail/Texas-Instruments/SN74LS00N?qs=spW5eSrOWB6G5wECF%252BEZFA%3D%3D
3 7	74LS139		1 1 2		
6 7	74LS139 74LS00		1 1 2	595-SN74LS00N	https://www.mouser.ca/ProductDetail/Texas-Instruments/SN74LS00N?qs=spl/V5eSrOWB6G5wECF%252BEZFA%3D%3D https://www.mouser.ca/ProductDetail/Texas-Instruments/SN7406N?qs=ZA235jQDftpLQYL%2FidpLLA%3D%3D
3 7 3, U12	74LS139 74LS00 7406		1 1 2	595-SN74LS00N 595-SN7406N	https://www.mouser.ca/Produc/Detail/Texas-Instruments/SN/4LS00N/qn=spW/5e50V8605wECP%258EZFA%3D%3D https://www.mouser.ca/Produc/Detail/Texas-Instruments/SN/408N/7g=2/2253_Ditpt_DV_1%ZFidpLLA%3D%3D https://www.mouser.ca/Produc/Detail/Texas-Instruments/SN/408N/7g=2/2253_Ditpt_DV_1%ZFidpLLA%3D%3D https://www.mbgv.com/dm/1736700426727hast=learne25896c150_grfsAn/OSW1F2C0460
3, 7 3, U12	74LS139 74LS00		1 1 2	595-SN74LS00N	htps://www.mouser.ca/ProductDealnifrease-hstruments/SNV4LS00NYqp=spWfse50VH80GWeCPH/2528EZF4K3DV;3D https://www.mouser.ca/ProductDealnifrease-hstruments/SNV46NYgp=2525250DtptC)v1V_3525DtptE,v1V_35V53D https://www.daby.com/dm/1745708426727hash-lame/28986c130g_rfsAv3Dwf1F2AZG6 https://www.daby.com/dm/1745708426727hash-lame/28986c130g_rfsAv3Dwf1F2AZG6 https://www.mouser.ca/ProductDealnifrease-hstruments/NV1514NYqp=44x6QCH488C9XDWf1AZG4
6 7 3, U12	74LS139 74LS00 7406 74LS14		1 1 2 1	595-SN74LS00N 595-SN7406N 595-SN74LS14N	https://www.mouser.ca/ProductDetail/Texas-Instruments/SN/4LS00N7qs=sp/W5e/S0/WB6/5w6CP/W2658EZP4K3D%3D https://www.mouser.ca/ProductDetail/Texas-Instruments/SN/4LS00N7qs=2A255QDftpL0V1_W2Figld_LAK3DW3D https://www.mouser.ca/ProductDetail/Texas-Instruments/SN/4LS1A4DSW1F2CAGD https://www.mouser.ca/ProductDetail/Texas-
6 7 3, U12 9	74LS139 74LS00 7406 74LS14 74LS93		1 1 2 1	595-SN74LS00N 595-SN7406N 595-SN74LS14N 595-SN74LS93N	htps://www.mouser.ca/ProductDeals/Texas-Instruments/SN/4LS00N7qp=spW/5e50V/8605wECP%/2528EZF/Ks0V;SD htps://www.mouser.ca/ProductDeals/Texas-Instruments/SN/4LS00N7qp=spW/5e50V/860Cp=25250Dtplc.VVVV_8525Dtplc.VVVV_8525Dtplc.VVVV_8525Dtplc.VVVV_8525Dtplc.VVVV_8525Dtplc.VVVV_8525Dtplc.VVVV_8525Dtplc.VVVVV_8525Dtplc.VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV
6 7 8, U12 9 10	74LS139 74LS00 7406 74LS14 74LS93 7407		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	595-SN74LS00N 595-SN7406N 595-SN74LS14N 595-SN74LS93N 595-SN74US93N	htps://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LS00NYqs=spW/56/S0/WB6GsWCCPY62S8EZF/Nk3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LS00NYqs-spW/56/S0DthctpU/1/%ZFidpLLA%3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LS1AVqs=1-NeSCpU/1/%ZFidpLLA%3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LS1AVqs=1-NeSCpU/1/MgrinkLg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs=1-NeSCpU/1/MgrinkLg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs=1-NeSCpU/1/MgrinkLg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs=1-NeSCpU/1/MgrinkLg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs=1-NeSCpU/1/Mgrinklg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs=1-NeSCpU/1/Mgrinklg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs=1-NeSCpU/1/Mgrinklg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs=1-NeSCpU/1/Mgrinklg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs=1-NeSCpU/1/Mgrinklg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs=1-NeSCpU/1/Mgrinklg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs-1-NeSCpU/1/Mgrinklg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs-1-NeSCpU/1/Mgrinklg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs-1-NeSCpU/1/Mgrinklg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs-1-NeSCpU/1/Mgrinklg/M3DYk3D https://www.mouser.ca/ProduciDetail/Texas-Instruments/SN/4LSIAVqs-1-NeSCpU/1/Mgrinklg/M3DYk3D
16 17 18, U12 19 110	74LS139 74LS00 7406 74LS14 74LS93		1 1 2 1 1 1	595-SN74LS00N 595-SN7406N 595-SN74LS14N 595-SN74LS93N	htps://www.mouser.ca/ProductDetail/Texas-Instruments/SN/4LSUDNYqu=spW/SeG/UV/BEGSWCE/Pi/22SEEZF/Nk3DV;SD htps://www.mouser.ca/ProductDetail/Texas-Instruments/SN/4GS/Pag-22SeSZDDIpkJ.CVVV;Spd.LA/SSD/SSJ.DDI htps://www.bay.com/dm/126708426727hash=lam:28986c130_grf=AA/DSVF+ZZ-DS htps://www.mouser.ca/ProductDetail/Texas-Instruments/SN/4LS1AYPq=XHAXQCCHSBCDVZ-DVMM/MLg/MS/DV;SD htps://www.mouser.ca/ProductDetail/Texas-Instruments/SN/4LS1AYPq=XHAXQCCHSBCDVZ-DVMM/MLg/MS/DV;SD htps://www.caby.com/dm/208877756287hash=lam:446127d18az_SFgAA/DSW/MJCZb-O htps://www.caby.com/dm/208877756287hash=lam:446127d18az_SFgAA/DSW/MJCZb-O
15 16 17 18, U12 19 110 111	74LS139 74LS00 7406 74LS14 74LS93 7407	Ozciliator	1 1 2 1 1 1	595-SN74LS00N 595-SN7406N 595-SN74LS14N 595-SN74LS93N 595-SN74US93N	htps://www.mouser.ca/ProduciDealir/Texas-is-struments/SN/41.SDN/17gs=5/W/SSG/W/SSG/SECE/PK/SDV/SD https://www.mouser.aproduciDealir/Texas-is-struments/SN/461/SDS/SSG/DiptSLOV17gs/SD(DiptSLOV17gs/SD(DiptSLOV17gs/SD(DiptSLOV17gs/SD)) https://www.mouser.aproduciDealir/Texas-is-struments/SN/4151/Nf2ps-44ksG(CH28BC)*CDN/ImmLg/Is3D/SD https://www.dbg.com/imm/SSGS77756267/hasi-islami445/721/Stg_SFg-MC/SSW/SSG/SD https://www.dbg.com/imm/SSGS77756267/hasi-islami445/721/Stg_SFg-MC/SSW/SSG/SD https://www.dbg.com/imm/SSGS77756267/hasi-islami445/721/Stg_SFg-MC/SSW/SSG/SD https://www.mouser.ca/ProduciDealir/Texas-is-struments/SN/41S241N7gs-USFN/W/HSGO/SDG/D https://www.mouser.ca/ProduciDealir/Texas-is-struments/SN/41S241N7gs-USFN/W/HSGO/SoSG/SDG/SDG/SDG/SDG/SDG/SDG/SDG/SDG/SDG/S
96 17 18, U12 19 110 111	74LS139 74LS00 7406 74LS14 74LS93 7407 74LS241	Oscillator	1 1 2 1 1 1 1	595-SN74LS00N 595-SN7406N 595-SN74LS14N 595-SN74LS93N 595-SN7407N 595-SN74LS241N	htps://www.mouser.ca/Produc/Detail/Texas-Isrtruments/SN/41.SU0NYqs=sp/W5eS/OW/B8G5w6CP/K2SSBEZP/K\S0\%3D https://www.mouser.ca/Produc/Detail/Texas-Isrtruments/SN/41.SU0NYqs=sp/W5eS/OW/B8G5w6CP/K2SSBEZP/K\S0\%3D https://www.mouser.ca/Produc/Detail/Texas-Isrtruments/SN/41.SH k1/Rps-Isrtruments/SN/41.SH k1/Rps-Isrtruments/SN/41/Rps-Isrtruments/SN/41/Rps-Isrtruments/SN/41/Rps-Isrtruments/SN/41/Rps-Isrtruments/SN/41/Rps-Isr
6 7 7 8, U12 9 110 111 13	74LS139 74LS00 7406 74LS14 74LS93 7407 74LS241	Oscillator	1 1 2 1 1 1 1	595-SN74LS00N 595-SN7406N 595-SN74LS14N 595-SN74LS93N 595-SN7407N 595-SN74LS241N	htps://www.mouser.ca/ProduciDealir/Texas-is-struments/SN/41.SDN/17gs=5/W/SSG/W/SSG/SECE/PK/SDV/SD https://www.mouser.aproduciDealir/Texas-is-struments/SN/461/SDS/SSG/DiptSLOV17gs/SD(DiptSLOV17gs/SD(DiptSLOV17gs/SD(DiptSLOV17gs/SD)) https://www.mouser.aproduciDealir/Texas-is-struments/SN/4151/Nf2ps-44ksG(CH28BC)*CDN/ImmLg/Is3D/SD https://www.dbg.com/imm/SSGS77756267/hasi-islami445/721/Stg_SFg-MC/SSW/SSG/SD https://www.dbg.com/imm/SSGS77756267/hasi-islami445/721/Stg_SFg-MC/SSW/SSG/SD https://www.dbg.com/imm/SSGS77756267/hasi-islami445/721/Stg_SFg-MC/SSW/SSG/SD https://www.mouser.ca/ProduciDealir/Texas-is-struments/SN/41S241N7gs-USFN/W/HSGO/SDG/D https://www.mouser.ca/ProduciDealir/Texas-is-struments/SN/41S241N7gs-USFN/W/HSGO/SoSG/SDG/SDG/SDG/SDG/SDG/SDG/SDG/SDG/SDG/S
6 7 7 3, U12 9 10 11 13	74LS139 74LS00 74LS14 74LS93 7407 74LS241 16M±z 6502A or R65C02	Oscillator	1 1 2 1 1 1 1	595-SN74LS00N 595-SN7406N 595-SN74LS14N 595-SN74LS93N 595-SN7407N 595-SN74LS241N	htps://www.mouser.ca/ProduciDealir/Texas-is-struments/SN/41.SDN/17gs=5/W/SSG/W/SSG/SECE/PK/SDV/SD https://www.mouser.aproduciDealir/Texas-is-struments/SN/461/SDS/SSG/DiptSLOV17gs/SD(DiptSLOV17gs/SD(DiptSLOV17gs/SD(DiptSLOV17gs/SD)) https://www.mouser.aproduciDealir/Texas-is-struments/SN/4151/Nf2ps-44ksG(CH28BC)*CDN/ImmLg/Is3D/SD https://www.dbg.com/imm/SSGS77756267/hasi-islami445/721/Stg_SFg-MC/SSW/SSG/SD https://www.dbg.com/imm/SSGS77756267/hasi-islami445/721/Stg_SFg-MC/SSW/SSG/SD https://www.dbg.com/imm/SSGS77756267/hasi-islami445/721/Stg_SFg-MC/SSW/SSG/SD https://www.mouser.ca/ProduciDealir/Texas-is-struments/SN/41S241N7gs-USFN/W/HSGO/SDG/D https://www.mouser.ca/ProduciDealir/Texas-is-struments/SN/41S241N7gs-USFN/W/HSGO/SoSG/SDG/SDG/SDG/SDG/SDG/SDG/SDG/SDG/SDG/S

JP2 Closed JP2 Opened AS6C62256-55PCN 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

Apply 7.5-25VDC (polarity indicated on PCB) to power the 1581 in leu of a factory power connection. 2-3 of J2 must be jumpered to route power to drive PCB.

Alternate Power I	BOM				
PR1	uA7805	UC8413 / Korea [fixed positive voltage regulator]	1	595-UA7805CKCT	
C23	1000 uF 16V	Electrolytic Capacitor	1	598-108TTA016M	
C24	4.7uF 50v	Electrolytic Capacitor	1	80-ESH475M050AC3KA	
J2	3pin straight header	male	1		
Other optional Co	onnection 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		