

## Commodore Compatible “Hard Disk Drive” Alternatives – Compared to the Original 1541 Floppy

Feature / Function	Original 1541	CMD HD	CMD RL	IDE64 (v3.2)	MMC64	IECATA	1541-III	SD2IEC	1541EMU	64HDD
<b>Type</b>	Hardware	Hardware	Cartridge	Cartridge	Cartridge	Hardware	Hardware	Hardware	PC Software	PC Software
<b>C= support:</b>										
<b>C64</b>	Yes	Yes	Yes	Yes	Menu Only	Yes	Yes	Yes	Yes	Yes
<b>C128</b>	Yes	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes
<b>C16/+4</b>	Yes	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes
<b>VIC20</b>	Yes	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes
<b>Serial Cable (compatibility)</b>	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes - special	Yes – X/XE
<b>Parallel Cable Option Available</b>	Aftermarket Modification	Yes – needs CMD RL	N/a	N/a	N/a	-	-	-	-	Yes – Pwr/XE
<b>Optional ROM Upgrade</b>	Yes / carts	JiffyDOS US\$29	Built-in	Built-In	Built-In	-	-	-	Binary	PwrROM/cart
<b>Disk Image Support</b>	-	Imported D64	Imported D64	Extracted D64 only	Transfer D64 to real 1541	-	D64	D64, D71, D81,DNP	D64 only	D64, D71, D81, D2M
<b>Tape Image Support</b>	-	-	-	-	-	-	T64	-	-	T64
<b>File support:</b>										
<b>Read</b>	Yes	Yes	Yes	Yes	Menu Only	Yes	Yes	Yes	Yes	Yes
<b>Write</b>	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
<b>PRG, SEQ</b>	Yes	Yes	Yes	Yes	Menu Only	Yes	Yes	Yes	Yes	Yes
<b>REL</b>	Yes	Yes	Yes	Only OS	-	Not yet	Not yet	Limited	Yes	Not yet
<b>Direct Access</b>	Yes	Yes	Yes	v0.9	-	-	-	Yes	Yes	Yes
<b>Directory:</b>										
<b>Standard</b>	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
<b>Advanced</b>	Yes	Yes	Yes	???	-	Yes	???	???	Yes	Yes
<b>Command Channel</b>	Yes	Yes	Yes	Yes	-	Subset	Subset	Yes	Yes	Yes
<b>Compatibility:</b>										
<b>Fastloaders</b>	Yes	No***	-	-	-	No CPU	No CPU	Some	Depends**	Custom^^
<b>GEOS</b>	Yes	Yes^	Yes^	Yes %	-	-	-	-	Yes – D64	Yes^
<b>Cartridge</b>	Yes	Mostly	-	-	-	Not many	Not many	Some	Mostly	Mostly
<b>JiffyDOS</b>	Yes	Yes	Yes	Tolerant	Tolerant	Not	-	Yes	Depends**	Tolerant
<b>Max Capacity</b>	166kb	2GB, 254 partitions	16Mb, 31 partitions	2GB, two drives (??)	MMC/SD Limit	Up to 128GB	SD Cards	SD Cards	166kb	Only limited by PC used
<b>CDROM Support</b>	-	Yes – driver	N/a	Yes	-	Not yet	-	-	-	Yes
<b>User Subdirs</b>	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes
<b>User Partitions</b>	nil	254	31	16 on v0.9	nil	nil	nil	Hardware	nil	990
<b>Price US\$ (h/ware and s/ware)#</b>	eBay \$10 or more	\$249 + HDD	\$208 + RAM	\$149* + CF HDD / PSU	EUR50	Build yourself	50EURO	\$45 <sup>++</sup> +SDCard	Free	Free→\$59 for Professional

\* US\$149 from Modernity in Canada, or EURO136,00 on-line at Go64!

^ Disk driver required

\*\* LPT port latency is critical. My personal experience suggests many fast loaders lose synchronisation

\*\*\* Despite having a 6502 CPU, it runs at 2MHz and most programs I've tried crash as they were written for a 1MHz drive

# Items which cannot be self-made or used for other purposes. XE1541 cables can be purchased from US\$20; the 1541EMU cable is slightly more. Shipping extra, except for 64HDD which includes worldwide shipping.

++ bare board needing connections to cables and power, SD card for storage extra  
% Drive / CF card must be dedicated to GEOS only and GEOS requires a disk driver.  
^^ 64HDD custom command line prefix and cartridge versions supported