Standard Header (COMX <-> PC)

Address	Bytes	Address Description	Value	Value Description
0h	1	Command type	0	None
			1	Save
			2	Load
			3	Get first CAT content
			4	Get next CAT content
			5	CD - Change directory
			6	MKDIR
			7	RMDIR
			8	DEL
			9	Fetch time & date
			12h, 14h, 16h, 1Ah	Used in image header
			18h	COMP, Compare files
			19h	URL
			42h	DLOAD
			81h	Save and overwrite existing file
			82h	Load continue
			FFh	Cancel command
1h	18	Program or directory name		Name in ASCII characters
13h	1	Result	0	File found
			ADh, AEh, AFh	Used in image header
			F3h	URL not found
			F4h	No more data found
			F5h	Server error
			F6h	Network error
			F7h	File open
			F8h	File error
			F9h	File size > 8K
			FAh	File size > 64K
			FBh	File size < 8K
			FCh	File size < 64K
			FDh	File type error
			FEh	Address error
			FFh	File NOT found
14h	2	Actual file length (excl. header)		
16h	1	Program type	1	.comx machine code
			2	.comx 'old' regular save/load (for backward compatibility reasons only)

Offset	Size	Field	Code	Basic	Machine code	Data
			3	.comx F&M basic save/load		
			4	.comx 'old' and incorrect regular data load (for backward compatibility reasons only)		
			5	.comx regular data save/load		
			6	.comx regular save/load		
			7h to 9h	reserved for .comx format		
			10h	.bin		
			11h	.txt (memory dump)		
			12h	.img		
			13h	.ram		
			14h	.bin, .txt, img, .ram, .comx		
			20h	.comx.bak		
			21h	NVSAVE / nvram.bin		
			22h	SYSSAVE / system.bin		
			23h	NVSYNC		
			24h	URL		
			25h	URL INPUT		
			30h	.bin.bak		
			31h	.txt.bak		
			32h	.img.bak		
			33h	.ram.bak		
			34h	.bin.bak, .txt.bak, img.bak, .ram.bak, .comx.bak		
			b7 = 1	BLOAD/BSAVE active		
				Basic	Machine code	Data
17h	2	Start address		DEFUS	Start	String
19h	2	End address		EOP	End-1	Array
1Bh	2	Exec address		String/Array/EOD	Exec	EOD
1Ch	18	Filename 2		Name in ASCII characters (used for USB COMP)		
2Fh	1	Category		Not used		
30h	1	Case type	1	Standard COMX characters (upper case 'default')		
			2	Lower case 'default' standard COMX characters on 'SHIFT'		
			3	Upper case 'default' and lower case characters on 'SHIFT'		
			4	Lower case 'default' and upper case characters on 'SHIFT'		
31h	1	High byte start load				
32h	1	BLOAD/BSAVE type	30h	One RAM Bank x		
			31h	RAM Banks 8 to 15		
			32h	RAM Banks 8 to 15 Continue		
33h	2	BLOAD/BSAVE length	2			
35h	3	FW build number		FW build (3 ascii values)		

CD Header (PC -> COMX)

Address	Bytes	Address Description	Value	Value Description
0h	1	Result	FFh	Directory not found
1h	126	Full path		Path name in ASCII characters
Last byte	1	End code	0	

URL,"url" Header (COMX -> PC)

Address	Bytes	Address Description	Value	Value Description
0h	1	Command type	19h	USB URL
1h	126	URL		URL name in ASCII characters
Last byte	1	End code	0	

URL (x) and URLLINK (x) Header (COMX -> PC)

Address	Bytes	Address Description	Value	Value Description
0h	1	Command type	19h	USB URL
1h	1	Command	< 32	0 = Normal USB URL / LINK 1 = PAGE BACK 2 = GO TO HOME 3 = SET HOME 4 = GO TO BOOKMARK 5 = SET BOOKMARK 6 = HELP
2	2	Screen number	0-65535	USB URL: Data screen number
2	1	Bookmark	0-9	Bookmark number
2	1	Link	0-255	USB URLLINK: New link number, link number 0 = default page

CAT Header (PC -> COMX)

Address	Bytes	Address Description	Value	Value Description		
0h-1Bh				Entry 1 + x Every header contains 4 directory entries and is send until no more entries are available (entry number = 0)		
0h	1	Entry number	0	No more entries		
			1 – FEh	Directory entry number of specified file		
			FFh	Directory name		
1h	18	Program or directory name		Name in ASCII characters		
13h	1	Result	0	File found		
			ADh	Format error SS / SD		
			AEh	Format error SS / DD		
			AFh	Format error DS / SD		
			F5h - FEh	Used in standard header		
			FFh	File NOT found		
14h	1	Size	0 - FFh	File size if > 255 KB; otherwise 0		
16h	1	Program type	1	.comx machine code		
			2	.comx 'old' regular save/load (for backward compatibility reasons only)		
			3	.comx F&M basic save/load		
			4	.comx 'old' and incorrect regular data load (for backward compatibility reasons only)		
			5	.comx regular data save/load		
			6	.comx regular save/load		
			7h to 9h	reserved for .comx format		
			10h	.bin		
			11h	.txt (memory dump)		
			12h	.img		
			13h	.ram		
			20h	.bak		
				Basic	Machine code	Data
17h	2	Start address		DEFUS	Start	String
19h	2	End address		EOP	End-1	Array
1Bh	2	Exec address		String/Array/EOD	Exec	EOD
20h-3Bh				Entry 2 + x		
40h-5Bh				Entry 3 + x		
60h-7Bh				Entry 4 + x		

Image file Header (COMX <-> PC)

Address	Bytes	Address Description	Value	Value Description
0h	1	Command type	0 – 9	Used in standard header
			12h	Get track image file
			14h	Save track image file
			16h	Test image file
			18h	Used in standard header
			1Ah	Get track image file continue
			42h	Used in standard header
			81h – 82h	Used in standard header
			94h	Save track image and overwrite existing file
			FFh	Cancel command
1h	18	Program or directory name		Name in ASCII characters
13h	1	Result	0	File found
			ADh	Format error SS / SD
			AEh	Format error SS / DD
			AFh	Format error DS / SD
			F5h - FEh	Used in standard header
			FFh	File NOT found
14h	1	Density	0	Single
			1	Double
15h	1	Sides	0	Single
			1	Double
16h	1	Track type	0	First track
			1	Second until last -1
			2	Last track
17h	1	Drive & side	14H	Drive 1 & side 1
			34H	Drive 1 & side 2
			18H	Drive 2 & side 1
			38H	Drive 2 & side 2
18h	1	Track number	0 to 34	
19h	1	Side	0 or 1	
30h	1	Case type	1	Standard COMX characters (upper case 'default')
			2	Lower case 'default' standard COMX characters on 'SHIFT'
			3	Upper case 'default' and lower case characters on 'SHIFT'
			4	Lower case 'default' and upper case characters on 'SHIFT'