IBM 3158 or 3158-3 Processing Unit

3158	3158-3	Main Storage Capacity
I, AP1, or MP1	U31, A31, or M31	524,288 bytes (512K)
J, AP2, or MP2	U32, A32, or M32	1,048,576 bytes (1,024K)
J1, AP3, or MP3	U33, A33, or M33	1,572,864 bytes (1,536K)
K, AP4, or MP4	U34, A34, or M34	2,097,152 bytes (2,048K)
KJ, AP5, or MP5	U35, A35, or M35	3,145,728 bytes (3,072K)
L, AP6, or MP6	U36, A36, or M36	4,194,304 bytes (4,096K)
LJ or AP7	U37, A37, or M37	5,242,880 bytes (5,120K)
LK or AP8	U38, A38, or M38	6,291,456 bytes (6,144K)

(Notes 6 and 7)

3158

	Byte Multiplexer Subchannels						Block Multiplexer Subchannels	
Channel 0 Nonsharing Option**	Channel 0* Sharing Option		Channel 4 Nonsharing Option**	Channel 4* Sharing Option			Nonshared	Shared
	Nonshared	Shared		Nonshared	Shared			
256	120	8	256	120	8		480	16

3158-3

	Byte Multiplexer Subchannels per Channel 0 or 4		Block Multiplexer Subchannels		
Without Sharing	With Sharing		Without Sharing	With Sharing	
				Shared	Nonshared
256	256 nonshared, less 16 or 32 for each subchannel configured for sharing.		480* or 736	32* or 40	480* or 736, less 1 for each shared subchannel.

* True only when channel 4 is installed as the second byte multiplexer channel.
** The sharing or nonsharing option is wired to the user's specification by service personnel at installation time.

Legend:

Indicates Standard Facility

Indicates Optional Feature

† Applies to IBM 3052 Attached Processing Unit also.

Options (circles / boxes):

- System/370 Universal Instruction Set †
- CPU Timer †
- Dynamic Address Translation †
- Interval Timer †
- Store and Fetch Protection †
- System/370 Instruction Enhancements †
- Program Event Recording †
- Extended Control Mode †
- Channel Indirect Data Addressing
- Byte-Oriented Operand †
- Time-of-Day Clock with Clock Comparator †
- Channel Retry
- Instruction Command Retry †
- Multiprocessor Instructions † (Multiproc. Models)
- Command Retry
- Integrated Storage Controls (ISC) #4650
- 7070/7074 Compatibility † #7117
- Extended-precision Floating Point † #3700
- Two-channel Switch for ISC #7905
- Virtual Machine Assist #8740
- Remote Switch Attachment #6148
- ISC Control Store Extension #2150
- Power Warning #5760
- Emergency Power-off #3621, #3622, #3625
- Staging Adapter For ISC #7220
- Expanded Control Store #2151
- Register Expansion #6111
- OS/DOS Compatibility † #5450
- Direct Control † #3274
- 1401/1440/1460, 1410/7010 Compatibility † #3950
- Channel-to-Channel Adapter (Note 1) #1850

Channel boxes:

- First Byte Multiplexer Channel (Ch 0) — I/O Interface (Notes 2 and 3)
- Block Multiplexer Channel (Ch 1) — I/O Interface (Notes 2 and 4)
- Block Multiplexer Channel (Ch 2) — I/O Interface (Notes 2 and 4)
- Block Multiplexer Channel (Ch 3) #1433 — I/O Interface (Notes 2 and 4)
- Block Multiplexer Channel (Ch 4) #1434 (Ch 3 is prerequisite) — I/O Interface (Notes 2 and 4)
- either, not both
- Second Byte Multiplexer Channel (Ch 4) #4990 (Ch 3 is prerequisite) — I/O Interface (Notes 2 and 3)
- Block Multiplexer Channel (Ch 5) #1435 (Chs 3 and 4 prerequisite) — I/O Interface (Notes 2 and 4)
- 3213 Printer Attachment #7840 (Note 5)
- 3056 Remote Console Attachment #7820

Notes:

1. The channel-to-channel adapter (one per system, attached to byte or block multiplexer channel) permits interconnection of two channels. One control unit position on the Model 158 channel can connect to one control unit position on any other System/370 or System/360 channel. Only one adapter is needed per connection; it counts as one control unit on both channels.
2. Attaches as many as eight control units; available subchannels are shown on chart.
3. Operates in either burst mode or byte mode; multiplexing capability on bytes, groups of bytes, or blocks.
4. Operates in burst mode only; multiplexing capability on blocks or multiple blocks. Available subchannels are shown on chart.
5. The 3213-1 Printer is optional in display mode, mandatory in printer-keyboard mode.
6. A multiprocessing system consists of two multiprocessing models of 3158 or 3158-3 connected by a 3058 Multisystem Unit. The storage capacities of both CPUs must be equal and no more than 4,096K in any system using two 3158s; they need not be equal in a system using two 3158-3s if the main storage of each CPU is other than 512K or 1,536K. Maximum main storage capacity is 8,192K.
7. An attached processor system consists of an IBM 3052 Attached Processing Unit (with an IBM 3056 Remote System Console) connected to a Model A-series 3158. The 3052 contains no main storage or channels.