Motorola S-Record Format

All Bytes (except for the first byte and the two line termination characters) are ASCII Codes of Hexadecimal Digits
i.e. they can take on the following values:

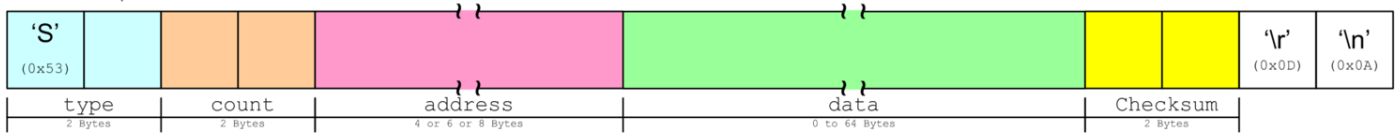
'0'	'1'	'2'	'3'	'4'	'5'	'6'	'7'	'8'	'9'	'A'	'B'	'C'	'D'	'E'	'F'
0x30	0x31	0x32	0x33	0x34	0x35	0x36	0x37	0x38	0x39	0x41	0x42	0x43	0x44	0x45	0x46

These characters when paired and interpreted as a hexadecimal value, display the count of remaining character pairs in the record. Values range from 0x03 (represented as '0' '3') to 0xFF (represented as 'F' 'F')

Record Type:
'0' or '1' or '2' or '3' or '5' or '7' or '8' or '9'

Carriage Return

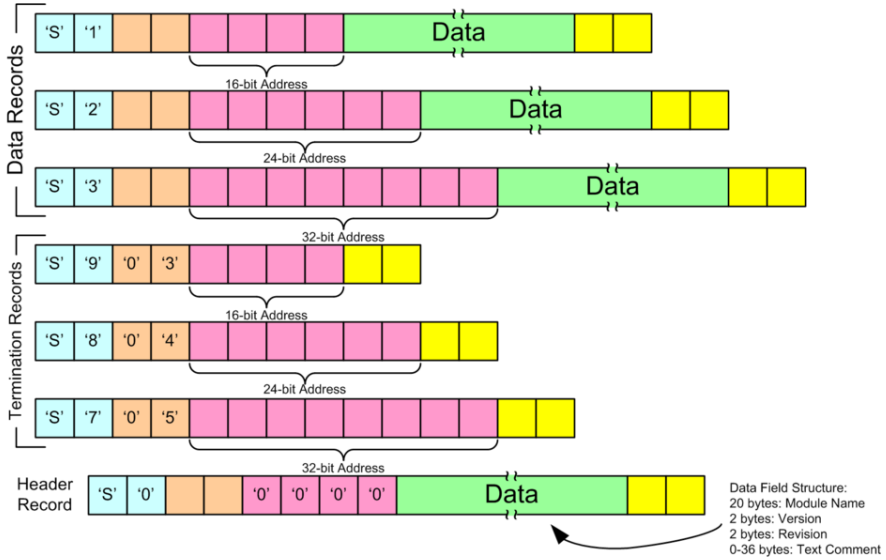
Line Feed



These characters grouped and interpreted as a hexadecimal value, display the address at which the data field is to be loaded into memory. The length of the field depends on the number of bytes necessary to hold the address. A 2-byte address uses 4 characters, a 3-byte address uses 6 characters, and a 4-byte address uses 8 characters.

These characters when paired and interpreted as hexadecimal values represent the memory loadable data or descriptive information.

These characters when paired and interpreted as a hexadecimal value display the least significant byte of the ones complement of the sum of the byte values represented by the pairs of characters making up the count, the address, and the data fields



Possible MOT File Contents

Header:	S0 record	S0 record	S0 record
Data:	S1… S1… S1… numerous S1 records	S2… S2… S2… numerous S2 records	S3… S3… S3… numerous S3 records
Record count (optional):	S5 record	S5 record	S5 record
Termination:	S9 record	S8 record	S7 record
	2 byte Addresses	3 byte Addresses	4 byte Addresses