

NAME

srec_brecord – Freescale MC68EZ328 Dragonball bootstrap record format

DESCRIPTION

This data format is understood by Freescale MC68EZ328 Dragonball series processors on their internal UART.

Lines

Each line contains hexadecimal data, each byte represented by two hexadecimal nybbles in upper case. Characters not in this set, but larger than 0x30 (e.g. lower case) will be ignored, less than 0x30 (e.g. CR or LF) are considered record terminators. Comments are problematic; don't try this at home.

Fields

Each line contains a 4-byte address (big endian), a 1-byte length-and-mode, and then data bytes as dictated by the length. There is **no** checksum. A zero length record is an execution start address record, non-zero length records are data.

1	2	3	4	5	6	7	8	9	10	...	<i>n</i>
Address								Length		Data	

The length-and-mode byte is formatted as follows:

7	6	5	4	3	2	1	0
Mode		R	Length				

Mode These bits are ignored by SRecord in input (00 = bytes, 01 = half words, 10 is reserved, 11 = long words). These bits are always zero on output by SRecord.

R This bit indicates a data read rather than a data write; SRecord does not accept input files with this bit set, and will not set it on output.

Length The length of the records data bytes. It does not include the address or length bytes. The maximum payload of a record is 31 bytes of data.

Size Multiplier

In general, binary data will expand in sized by at least 2.35 times when represented with this format.

EXAMPLE

Here is an example b-record format file. It contains the data "Hello, World" to be loaded at address 0.
000000000D48656C6C6F2C20576F726C640A

SEE ALSO

http://www.freescale.com/files/32bit/doc/ref_manual/MC68VZ328UM.pdf

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srec_cat version 1.47

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