

SOLUTIONS CUBED

Electronics Prototyping, Custom Design, Product Development

Motor Mind C Errata Document

1.0 Revision 0x0C (decimal 12) And Below Firmware – The following errors can be found in revision 0x0C and below firmware.

1.1 Checksum in reply packets to read formed incorrectly

Problem – When executing a read command the reply packet does not include the Address value as part of the checksum calculation. For example, the response to a Read command that reads the Firmware register, from a MMC with an address of 0x01 should be,

0x01, 0x01, 0x0C, 0x0E

Where address = 0x01, length of response = 0x01, firmware register contents = 0x0C, and the checksum = 0x0E.

The actual response from the MMC is,

0x01, 0x01, 0x0C, 0x0D

The address of the MMC is not included in the checksum calculation.

Work Around – Have Master units ignore the address of the MMC when verifying the checksum in a reply packet. In other words, calculate the checksum starting with the length of the message byte, and ending with the byte just prior to the checksum returned by the MMC.