

The card contains a 512 word FIFO between REMUS and VMX or VME.

Up to 15 RVMEX cards may be set at the same coarse-base-address. A hexadecimal switch on the front panel allows to differentiate the actual base-addresses of the individual RVMEX cards from 1 to F. This is at the same time the BRANCH NUMBER. Branch number zero corresponds to a broadcast address to which all cards respond to write functions. This allows the generation of REMUS functions on up to 15 branch drivers simultaneously. An EVENT count is sent together with the BRANCH NUMBER in order to verify the synchronization of data belonging to the same event.

3. MODULE DESCRIPTION

3.1 COST REGISTER

The Control and Status register controls the data flow and the type of operation of the module. See fig. 2. The COST can be accessed while autonomous REMUS to VMX transfers are taking place.

3.2 REMUS FUNCTION REGISTER

The REMUS function register is used to generate the REMUS functions on the branch. When the RVMEX is in TEST mode then the REMUS Functions are generated but only used inside the card.

When used as a SPY then the REMUS Functions are not generated by the RVMEX (even if programmed) but are spied from the REMUS BRANCH.

3.3 TEST REGISTER

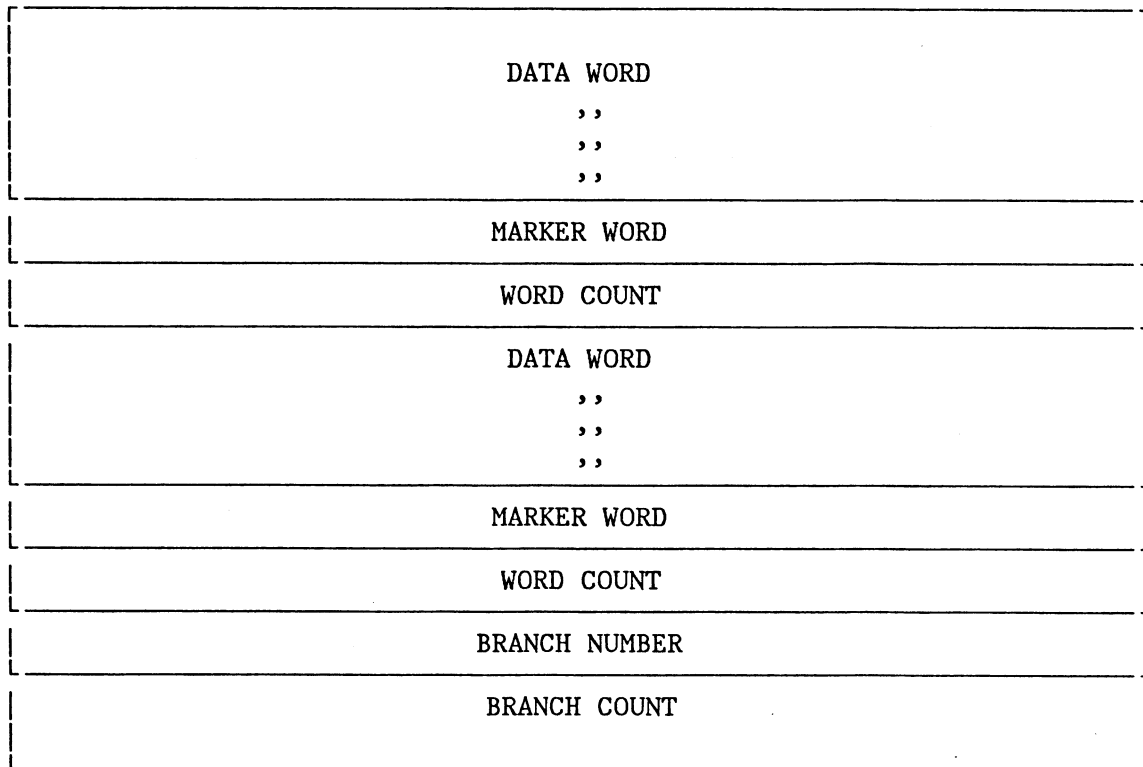
The TEST register can be used to simulate a REMUS branch. The same register serves as data register for REMUS write functions.

3.4 COUNTERS

The branch driver has to generate count words which have to be inserted in the REMUS data structure. Therefore a WORD COUNTER and a BRANCH COUNTER are part of the RVMEX hardware. A sequencer takes care of the correct insertion of the count words.

3.5 REMUS DATA BLOCK FORMAT

BLOCK FORMAT:



There are no reserved bits to distinguish between the different types of words used within a REMUS data block. Therefore the data has to be sorted out scanning backwards through the data block, knowing the total length (BRANCH COUNT) and the individual data block length (WORD COUNT). The last four words are always as indicated in the block format and the word before a WORD COUNT is always a MARKER WORD. DATA WORDS and MARKER WORDS are read from the REMUS BRANCH while WORD COUNT, BRANCH NUMBER and BRANCH COUNT are generated by the RVMEX. WORD COUNT and BRANCH COUNT are 16 bits wide and include themselves. The BRANCH NUMBER generated by the RVMEX has a special format, since it also contains data of an EVENT COUNTER.

4. ACKNOWLEDGEMENTS

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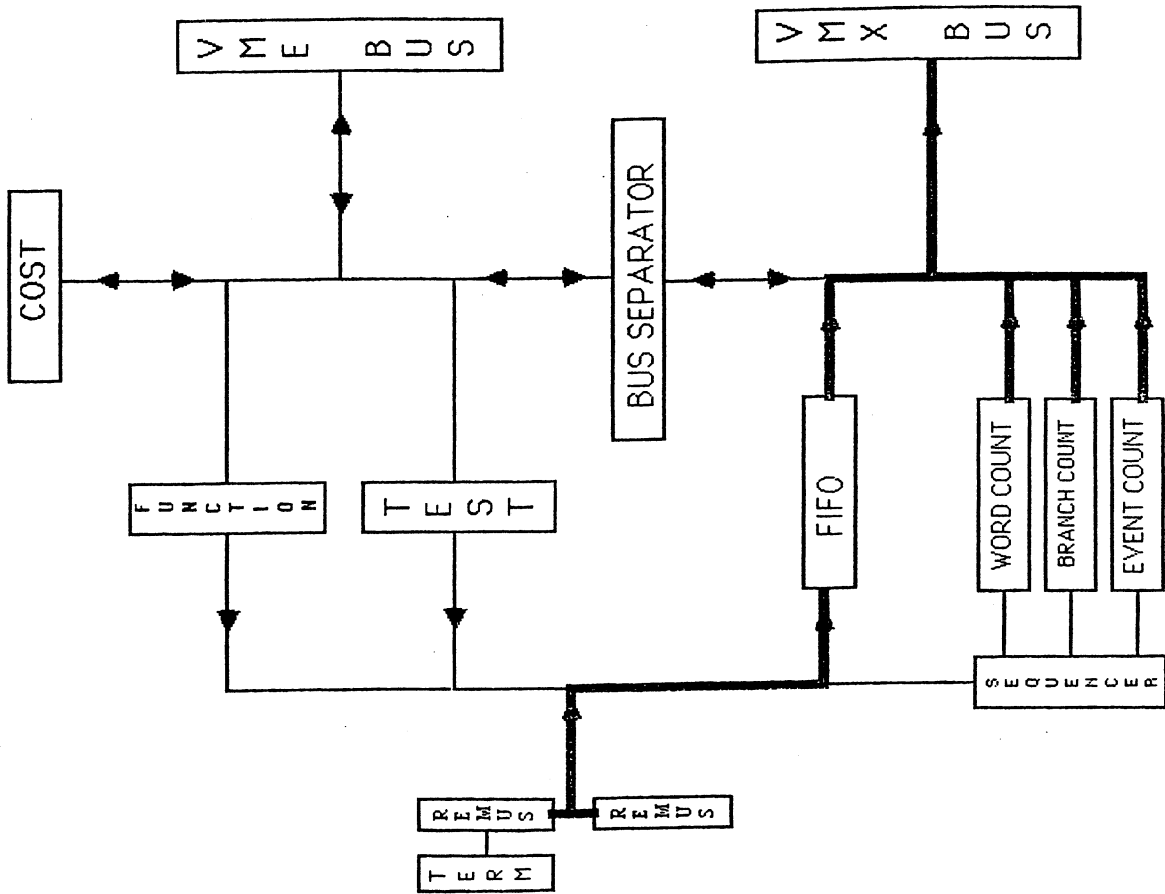


Fig. 2

REMUS → VMX

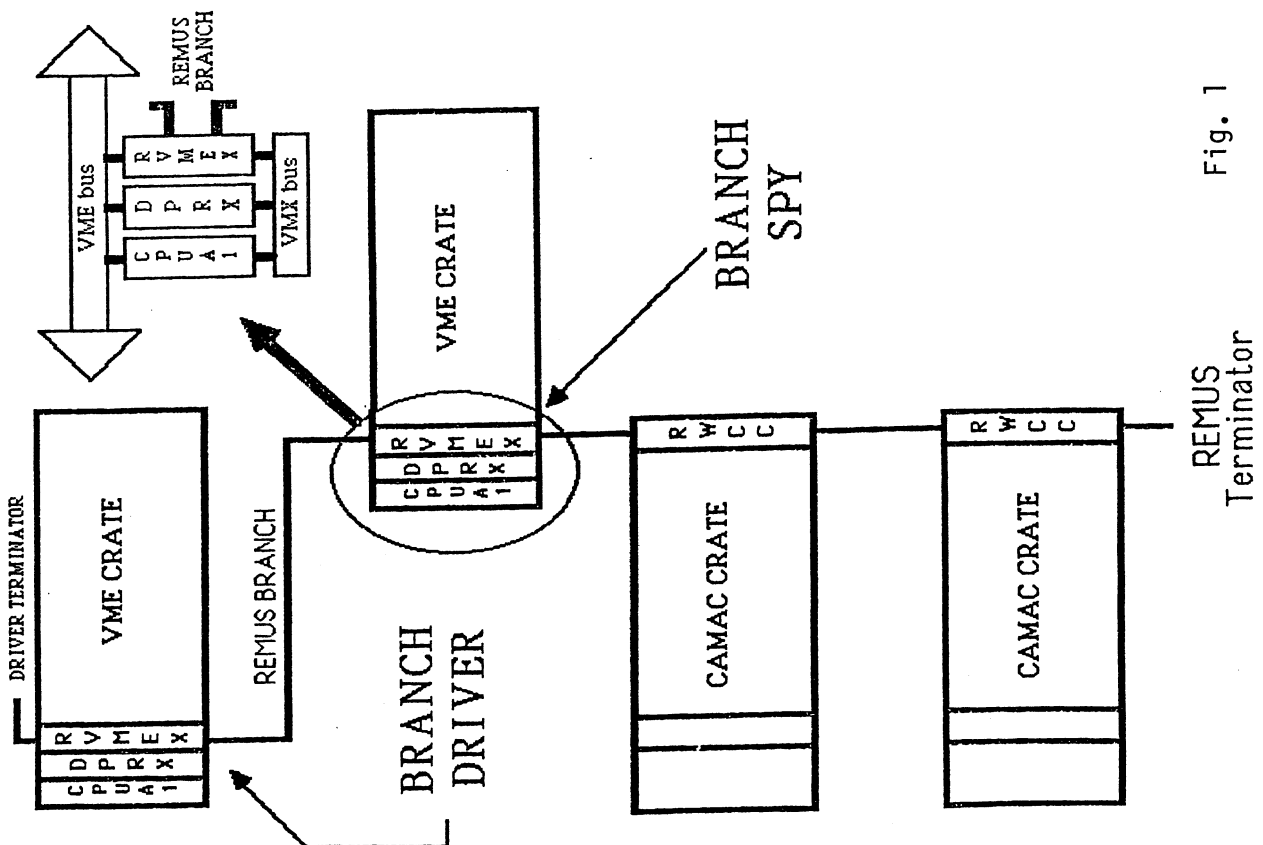


Fig. 1

REMUS Terminator