

REPAIRABLE MEMORY MODULE AND METHOD OF REPAIRING
THE SAME

ABSTRACT OF THE DISCLOSURE

A repairable memory module, such as a DRAM (dynamic random access mem-
5 ory) or a flash memory module, and a method of repairing memory modules are pro-
posed. Based on the repairable memory module, any failed memory ICs in the module
that are found before shipment or after use can be repaired through the use of a backup
memory IC. Fundamentally, when any failed memory ICs are found in the module, a set
of zero-ohm resistors are used to short-circuit a number of selected pairs of jumping pads
10 to thereby redirect the connections to the I/O (input/output) and column-address strobe
pins on the failed memory IC instead to the same nominal pins on the backup memory IC.
This allows the function of the failed ICs to be instead performed by the backup memory
chip.

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Fig. 5.

