

DATA PROCESSING APPARATUS AND IMAGE FORMING APPARATUS

ABSTRACT

A data processing apparatus includes an operation unit, a writable and readable volatile register, a writable and readable nonvolatile memory, first and second writing units and a write-back unit. The operation unit performs an arithmetic operation and a logical operation. The writable and readable volatile register stores data used in the operations performed by the operation unit. The writable and readable nonvolatile memory stores the data in parallel with the volatile register. The data stored in the nonvolatile memory is the data stored in the volatile register. The first writing unit writes the data in the volatile register. The second writing unit writes the data in the nonvolatile memory in parallel with the first writing unit every time the data is written in the volatile register. The write-back unit writes back the data stored in the nonvolatile memory to the volatile register when a power supply is turned on.

[FIG. 1]