

DATA RECOVERY / HARD DISK TECHNICAL NOTES

Title: Electronics Failure on Maxtor Diamond Max Plus 9

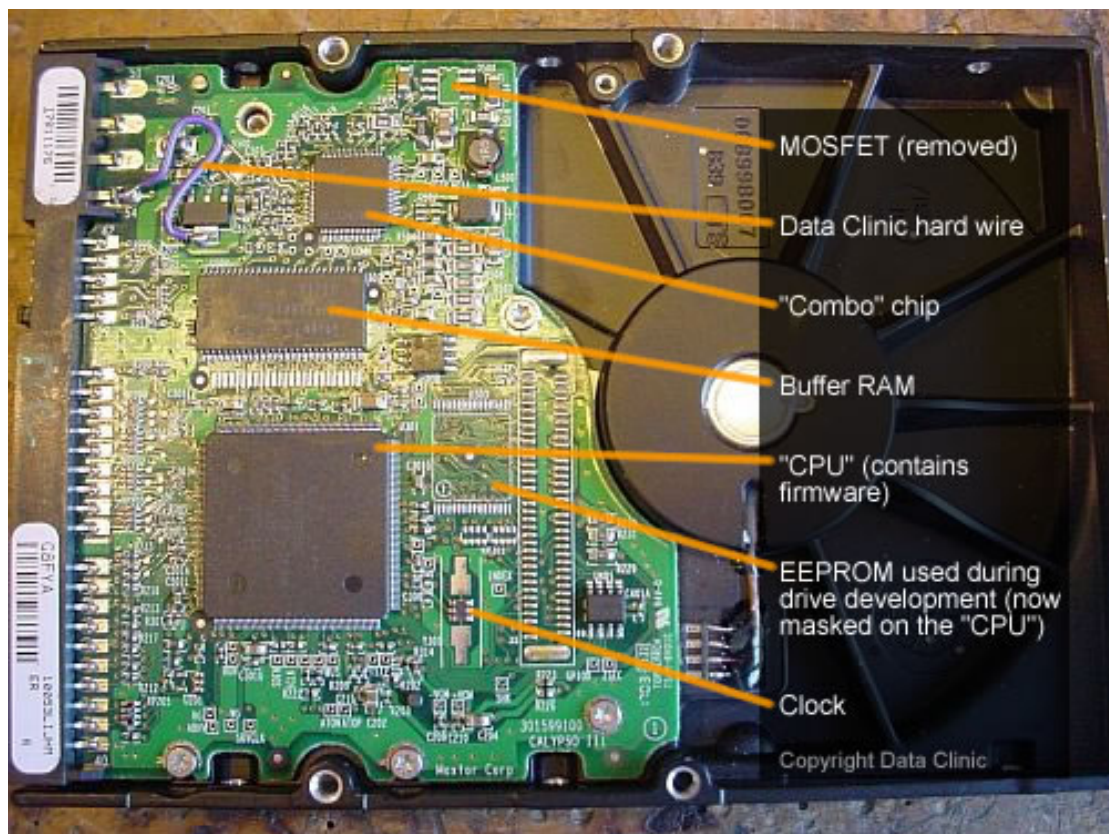
Drive: Maxtor Diamond Max Plus 9 (6Y080L0 series)

Controller Board: Multi-layer Calypso III, 7200rpm

Symptoms of Failure: Drive Dead

Notes: The Maxtor Diamond Max Plus 9 is a very popular drive that is subject to all the usual types of hard disk failure. In this example the primary cause of the failure was electronic.

The power to this drive is 3 phase & oxidation is a common cause of losing a phase. Loss of one or more phases will (in most conditions) cause the MOSFET to fail. This in turn will cause the "combo" chip to fail and secondary damage will also be sustained to (a) the board (b) further electronic components surrounding the MOSFET and "combo" chip (c) the read / write head chip. Electrical damage is not limited to the controller board as the read / write chip is located on the head assembly and to reach it requires the drive to be stripped down in a clean room.



Release Date: 25/09/04

Research: DataClinic (UK) and DataClinic (Italy)