

THE FOLLOWING TEXT REPRESENTS THE "BRIEF" DESCRIPTION OF HOW THE DENSITY CODE FIELD IN THE MODE PARAMETERS BLOCK DESCRIPTOR SHOULD OPERATE.

For the MODE SELECT command, the density code field of the sequential-access device block descriptor indicates the density selected by the initiator for use in subsequent read and write operations. For devices capable of automatic density recognition, the density code selected by the initiator may be overridden by the target for a subsequent read operation if the selected value does not match the current recorded density of the medium.

For the MODE SENSE command, the density code field reflects the current operating density of the device. For some devices, the default density code value returned in response to a MODE SENSE command may change dynamically to match the most recently selected density.

The value for the density_code field in response to a MODE SENSE command is as described below:

- 1) Following a UNIT ATTENTION condition for a power on or hard reset, report the default or only density.
- 2) Following a UNIT ATTENTION condition for a not ready to ready transition:
 - a) report the default or only density if the target cannot determine the density or if no attempt has been made to determine the density.
 - b) report the current recorded density if the target can automatically determine the density from the medium.
- 3) Following a successful read operation at or after beginning-of-medium, report a density code value reflecting the recorded density as provided by the preceding MODE SELECT command or as automatically determined from the medium by the target.
- 4) Following an unsuccessful read operation at beginning-of-medium, the reported density code value is:
 - a) as described for item 2 if no preceding MODE SELECT command has been issued for the currently mounted volume.
 - b) as provided by the last successful MODE SELECT command for the currently mounted volume.
- 5) Following a successful write operation at beginning-of-medium, the reported density code value is:
 - a) as provided by the last successful MODE SELECT command for the currently mounted volume.
 - b) as described for item 2 if no preceding MODE SELECT command has been issued for the currently mounted volume.
- 6) Following a successful unload operation, while not ready, report the most recent density code value as determined by items 2-5 above.