

Interpretation Number: 2-07/02 (Aperiodic operation of MDC)
Topic: Aperiodic operation of MDC
Relevant Clauses: 22.2.2.11
Classification: Unambiguous

Interpretation Request

I'm looking for some clarification about 802.3 (1998) clause 22, and I am hoping you can help, or direct me to where I can find more information.

Clause 22.2.2.11 states "MDC is an aperiodic signal that has no maximum high or low times."

This implies that MDC can be turned off. However, the resulting MMD behavior is unclear. For example, would an MDIO interface be compliant with the spec. if it were to require 2 additional MDC cycles, following a register write, before the MMD acted on the new data?

Interpretation for IEEE std 802.3-2002

The standard clearly states in subclause 22.2.2.11 that the MDC has no maximum high or low times and hence the MDC can be halted, if desired, at any time.

There is no requirement for an STA to send additional cycles following the last bit of a management frame on the MDIO, so a PHY may not get any additional cycles until the next MDIO operation is performed.

An MDIO interface that required 2 additional cycles before acting on the new data would not be compliant.