ON Semiconductor

PRODUCT BULLETIN
Generic Copy

17-AUG-2001

SUBJECT: ON Semiconductor Product Bulletin #11689

TITLE: 10/100EP016 Data Sheet Update

EFFECTIVE DATE: 18-Aug-2001

AFFECTED PRODUCT DIVISION: Broadband Products Div

ADDITIONAL RELIABILITY DATA: None

SAMPLES: No

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Office or Bernie Weir <RXFN50@onsemi.com>

DISCLAIMER:
ON Semiconductor considers this change approved unless specific conditions of acceptance are provided in writing. To do so, contact your local ON Semiconductor sales office.

DESCRIPTION AND PURPOSE:
The 10/100EP016 is an 8 bit programmable counter. The Rev 6/April 2001 data sheet stated a typical operating frequency of 3000 MHz. This information is in error. The device has two modes of operation, one as a free running binary counter and the other as a programmable up counter. Below are the typical operating frequencies for the different modes: Free running binary mode (TCLD=0), where the typical input operating frequency is >1500 MHz. Programmable Counter (TCLD=1, Even Count - Divide By 2), where the typical input operating frequency is 1400 MHz. Programmable Counter (TCLD=1, Odd Count - Divide By 3), where the typical input operating frequency is 850 MHz. Note - divide by 2 and 3 examples are used to indicate worst case performance. In the programmable counter mode, a parallel data word is loaded and the device counts up to the all 1's state (defined as terminal count). The terminal count is detected and must propagate through the device to allow the parallel data word to be reloaded. This must occur before the next clock cycle or the counter will miscount. As indicated by the counter performance, there is an internal propagation delay difference between the even and odd mode count that limits the product performance. ON Semiconductor requests customers review their designs that use the 10/100EP016 device, to make sure this in not an issue with products in development or production. The device does meet all the guaranteed electrical specifications published in the data sheet and there have been no design or production changes of this product. To obtain the latest copy of the datasheet, Rev7/July 2001, please visit the ON Semiconductor website at http://www.onsemi.com.

AFFECTED DEVICE LIST (WITHOUT SPECIALS)

PART
MC100EP016FA
MC100EP016FAR2
MC10EP016FA
MC10EP016FAR2