Laurel Message

From: SPG Date: 26 JUL 1979 0903-PDT

Subject: Change to IOP Module

To: Fairbairn

XEROX

We have incorporated the following change into the IOP Module as a result of investigation into Keyboard-Mouse sampling. The problem uncovered was that the 8748 in the Keyboard was expecting the T1 input(Start Transmission') to stay low until the 8748 could respond to the request to send data. Since this signal was driven by the UART on the IOP, it would normally only be active for one bit time (the Start bit) of a character containing zeroes. This would only be about 16 microseconds every 33milliseconds. The 8748 only looks at the line about once every 300 microseconds so many requests to send keyboard data were going unnoticed. This fix provides a flip-flop latch to store the Start Transmission request until the first character is received back from the Keyboard. Details follow:

1) Cut etch between 6G25 and P1-77 (Etch side).

2) Add wire from 6G25 to 10F13.
Add wire from 10F12 to 11F8.
Add wire from 10F14 to 9E6.
Add wire from 10F10 to P1-77.
Add wire from 10F15 to 10F1.
Add wire from 10F11 to 10G4.

Ron Freeman SPG

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cc: Horn
Tesler
Mann
Quarterman