

Cl **83A** SC **83A3.3.3** P **283** L **11** # **647**
Li, Mike Altera

Comment Type **TR** Comment Status **D**

Pulse width jitter (PWJ) is needed at about 8Gbps or above to avoid jitter amplification (JA) due to the lossy channel. If PWJ is not defined and bounded, nXAUI link will break in the presence of large PWJ.

SuggestedRemedy

PWJ needs to be defined and specified. I suggest that 802.3ba adopt the definition and vaule similiar to these of Fibre Channel 8X and PCIe Gen 3.

Proposed Response Response Status **W**

[Editor's note: commenter used tilde character to indicate "about or approx", this has been replaced with "about 8Gbps" since tilde is a special character used as delimiter by the comment tool"]

Cl **83A** SC **83A.3.4** P **286** L **4647** # **648**
Li, Mike Altera

Comment Type **TR** Comment Status **D**

The frequency spectrum content needs to be specified. Otherwise one may use a easy spectrum jitter input (e.g., low frequency dominated) to pass the receiver tolerance test, while such a receiver will fail in the presence of worst case jitter input spectrum (e.g., high-frequency DCD, ISI, Xtalk, or RJ) in real-world.

SuggestedRemedy

A technical proposal is needed and approved to address this important aspect for Rx.

Proposed Response Response Status **O**

Cl **83A** SC **83A** P **280** L **1** # **649**
Li, Mike Altera

Comment Type **TR** Comment Status **D**

BER for the nAUI link needs to be defined

SuggestedRemedy

A proposal on the BER for nXAUI is needed and approved.

Proposed Response Response Status **O**

Cl **83A** SC **83A.3.4** P **286** L **48** # **650**
Li, Mike Altera

Comment Type **TR** Comment Status **D**

Non-Eq jitter is NOT (TJ-ISI) and needs to be well-defined, and (TJ-ISI) needs to be removed.

SuggestedRemedy

remove TJ-ISI for non-EQ jitter and spell-out and exactly what is No-EQ jitter e.g., DCD, PJ, BUJ, RJ).

Proposed Response Response Status **O**

Cl **83A** SC **831.3.3** P **283** L **11** # **651**
Li, Mike Altera

Comment Type **TR** Comment Status **D**

Transmitter equalization is not defined. As such channel jitter will be specifiaced with the assumption that ISI is not compensated. This will eat the DJ margin of Tx and Rx while most of them today have the equalization capabilities.

Not defining equalization will result in expensive nXAUI specification, with ready silicon equalization unused.

SuggestedRemedy

Technical proposal is needed and approved to determine what type of equalization is best suitable for nXAUI channel (Tx, Rx, Tx+Rx) in terms of cost and performance.

Proposed Response Response Status **O**

Cl **83A** SC **83A.3.3** P **283** L **11** # **652**
Li, Mike Altera

Comment Type **TR** Comment Status **D**

Jitter transfer function (JTF) is not defined for Tx jitter definition/testing. This will grossly oversetimate the jitter, leaving the jitter margin created by clock and data receovery (CDR) unused, resulting in expensive nXAUI specification.

SuggestedRemedy

Technical proposal for JTF assoated with CDR is needed and approved.

Proposed Response Response Status **O**