

## Array Declarations

P802.3av D3.2 Comment 71

Comment:

“[Submitted on behalf of Piers Dave]

Justify or remove [] in inbuffer[] Also 76.3.3.3.1 outbuffer[]”

The editors examined D3.2 and found three styles in use:

arrays with no subscripts (see FIFO\_DD)

arrays with angle brackets (see CurrentBlock<65:0>)

arrays with square brackets (see inbuffer[])

The editors recommend no changes to the following arrays defined in D3.2

FIFO_DD	defined on:	pg 131	line 12	18 use instances
FIFO_II	defined on:	pg 149	line 44	17 use instances
data_rx	defined on:	pg 176	line 48	35 use instances
data_tx	defined on:	pg 176	line 53	61 use instances
m_sdu_rx	defined on:	pg 177	line 17	10 use instances
m_sdu_ctl	defined on:	pg 177	line 25	21 use instances
SH_CW_PATTERN[0..30]	defined on:	pg 141	line 17	6 use instances

The editors recommend the following action for each of these 9 arrays defined in D3.2

CurrentBlock <65:0> defined on: pg 136 line 36 2 use instances

**Current:**

CurrentBlock <65:0>

TYPE: array

The last 66-bit block received. This variable has an initial value of 0.

**Recommendation: remove space before “<” and change type to “66-bit vector”:**

CurrentBlock<65:0>

TYPE: 66-bit vector

The last 66-bit block received. This variable has an initial value of 0.

PreviousBlock<65:0> defined on: pg 137 line 10 2 use instances

**Current:**

PreviousBlock <65:0>

TYPE: array

The 66-bit block received previous to the current block. This variable has an initial value of 0.

**Recommendation: remove space before “<” and change type to “66-bit vector”**

PreviousBlock<65:0>

TYPE: 66-bit vector

The 66-bit block received previous to the current block. This variable has an initial value of 0.

SH\_CW\_PATTERN[0..30] defined on: pg 141 line 17 6 use instances

**Current:**

SH\_CW\_PATTERN[0..30]

TYPE: array of 8-bit unsigned

31 element array of codeword sync header bit counts, where each element is set to the value 1 except for:

Value:

SH\_CW\_PATTERN[27]=0

SH\_CW\_PATTERN[28]=2

SH\_CW\_PATTERN[29]=2

SH\_CW\_PATTERN[30]=0

**Recommendation: remove square brackets in definition.**

SH\_CW\_PATTERN

TYPE: array of 8-bit unsigned

31 element array of codeword sync header bit counts, where each element is set to the value 1 except for:

Value:

SH\_CW\_PATTERN[27]=0

SH\_CW\_PATTERN[28]=2

SH\_CW\_PATTERN[29]=2

SH\_CW\_PATTERN[30]=0

inbuffer[] defined on: pg 136 line 52 4 use instances

**Current:**

inbuffer[]  
TYPE: array  
An array of 2040 bits.

**Recommendation: remove square brackets and change type to “bit array”**

inbuffer  
TYPE: bit array  
An array of 2040 bits.

outbuffer[] defined on: pg 144 line 27 3 use instances

**Current:**

outbuffer[]  
TYPE:  
An array of 2040 bits.

**Recommendation: remove square brackets and change type to “bit array”**

outbuffer  
TYPE: bit array  
An array of 2040 bits.

sh\_valid[i] defined on: pg 141 line 41 9 use instances

(note this variable has two declared types "boolean" and "boolean array". TYPE: boolean should be deleted.

**Current:**

sh\_valid[i]  
TYPE: boolean  
Indication that is set true if received block rx\_coded has valid sync header bits for the supposed current position in the FEC codeword. That is, sh\_valid[i] is asserted if  $(rx\_coded\langle 0 \rangle + rx\_coded\langle 1 \rangle) = SH\_CW\_PATTERN[i \bmod 31]$  and de-asserted otherwise.  
TYPE: boolean array

**Recommendation: remove “[i]” and “TYPE: boolean, move “TYPE: Boolean array” below name.**

sh\_valid  
TYPE: Boolean array  
Indication that is set true if received block rx\_coded has valid sync header bits for the supposed current position in the FEC codeword. That is, sh\_valid[i] is asserted if  $(rx\_coded\langle 0 \rangle + rx\_coded\langle 1 \rangle) = SH\_CW\_PATTERN[i \bmod 31]$  and de-asserted otherwise.

transmitEnable[j] defined on: pg 178 line 31 10 use instances

**Current:**

transmitEnable[j]

TYPE: Boolean

These variables are used to control the transmit path in a Multipoint MAC Control instance at the OLT. Setting them to on indicates that the selected instance is permitted to transmit a frame. Setting it to off inhibits the transmission of frames in the selected instance. Only one of transmitEnable[j] should be set to on at a time.

**Recommendation: remove “[j]”, change TYPE to “TYPE: Boolean array, change description as below.**

transmitEnable

TYPE: Boolean array

This array contains one element per each Multipoint MAC Control instance. Elements of this array are used to control the transmit path in the Multipoint MAC Control instance at the OLT. Setting an element to on indicates that the selected instance is permitted to transmit a frame. Setting it to off inhibits the transmission of frames in the selected instance. Only one element of transmitEnable should be set to on at a time.

transmitInProgress[j] defined on: pg 178 line 39 7 use instances

**Current:**

transmitInProgress[j]

TYPE: Boolean

This variable indicates that the Multipoint MAC Control instance *j* is in a process of transmitting a frame.

**Recommendation: remove “[j]”, change TYPE to “TYPE: Boolean array, change description as below.**

transmitInProgress

TYPE: Boolean array

This array contains one element per each Multipoint MAC Control instance. The element *j* of this array set to on indicates that the Multipoint MAC Control instance *j* is in a process of transmitting a Frame.

transmitPending[j] defined on: pg 178 line 43 9 use instances

**Current:**

transmitPending[j]

TYPE: Boolean

This variable indicates that the Multipoint MAC Control instance *j* is ready to transmit a frame.

**Recommendation: remove “[j]”, change TYPE to “TYPE: Boolean array, change description as below.**

transmitPending

TYPE: Boolean array

This array contains one element per each Multipoint MAC Control instance. The element *j* of this array set to on indicates that the Multipoint MAC Control instance *j* is ready to transmit a frame.