

### 92.2.4.6.1 Constants

All the relevant constants defined in 49.2.13.2.1 are inherited. In addition, the following items are defined.

SH\_CW\_PATTERN[0..30]

31 element array of codeword sync header bit counts, where each element is set to the value 1 except for elements number 28, 29, 30 and 31, which have the following values:

SH\_CW\_PATTERN[27]=0

SH\_CW\_PATTERN[28]=2

SH\_CW\_PATTERN[29]=2

SH\_CW\_PATTERN[30]=0

TYPE: array of 8-bit unsigned

### 92.2.4.6.2 Variables

All the relevant variables defined in 49.2.13.2.2 are inherited. In addition, the following items are defined.

sh\_valid[i]

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<0> + rx\_coded<1>) == SH\_CW\_PATTERN[i mod 31] and de-asserted otherwise.

TYPE: boolean array

cword\_lock

Boolean variable that is set to true when receiver acquires codeword delineation.

TYPE: boolean

### 92.2.4.6.3 Functions

All the relevant functions defined in 49.2.13.2.3 are inherited. In addition, the following items are defined.

Force(i)

Forces the sync header to the state that preserves FEC frame lock. Note that for parity blocks, the pattern is known a priori. For payload blocks, the first bit is forced to be the complement of the second bit. While this may duplicate a bit error, it will not propagate, as the FEC decoder discards the first bit before decoding. The Force(i) operation is presented below:

Force(i)

```
{  
  If (cword_lock == true)  
    If ( i > 26 )  
      If ( i == 30 )  
        rx_coded<0> = 1  
        rx_coded<1> = 1  
      else  
        rx_coded<0> = 0  
        rx_coded<1> = 0  
    else  
      rx_coded<0> = ! rx_coded<1>  
}
```