

Subject: First draft of edits for updating complex parts  
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 Reference: 04-384r1

1 **1 Introduction**

2 Assuming updating complex parts gets onto the J3 work plan, the reason for this paper is to get a  
 3 running start on the edits.

4 **2 Edits**

5 Edits refer to 04-007. Page and line numbers are displayed in the margin. Absent other instructions, a  
 6 page and line number or line number range implies all of the indicated text is to be replaced by associated  
 7 text, while a page and line number followed by + (-) indicates that associated text is to be inserted after  
 8 (before) the indicated line. Remarks are noted in the margin, or appear between [ and ] in the text.

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9 *or complex-part-designator* 103:12+

10 [Editor: Insert a new subclause:] 106:2+

11 **6.1.2 $\frac{1}{2}$  Complex variable parts**

12 A **complex part designator** is used to reference or define the real or imaginary part of a complex  
 13 variable, independently of the other part.

14 R614 $\frac{1}{2}$  *complex-part-designator* **is** *designator* % REAL  
 15 **or** *designator* % AIMAG

16 C615 $\frac{1}{2}$  (R614 $\frac{1}{2}$ ) The *designator* shall be of complex type.

17 If *complex-part-designator* is *designator*%REAL it designates the real part of *designator*. If it is *desig-*  
 18 *nator*%AIMAG it designates the imaginary part of *designator*.

**NOTE 6.6 $\frac{1}{2}$**

The following are examples of complex part designators:

```

impedance%real      !-- Same as REAL(impedance)
fft%aimag           !-- Same as AIMAG(fft)
x%aimag = 0.0       !-- Sets the imaginary part of X to zero
    
```

19 [Editor: "If it is a variable or function reference"  $\Rightarrow$  "If it is a complex part designator (6.1.2 $\frac{1}{2}$ ), its type 123:31  
 20 is real, and its kind and shape are those of the complex variable. If it is a function reference or a variable  
 21 that is not a complex part designator".]