Meth8/VŁ4 on complex numbers (ℂ)

Complex numbers (ℂ) are generally defined by a component of the imaginary number as *i*^2 = (-*i**-*i*) = (*i***i*) = -1, where *i* = ± (-1)^0.5 .

We assume the apparatus and method of Meth8/VŁ4, where the designated proof value is T.

LET p = + (-1)^0.5; ~p = - (-1)^0.5; & And; + Or; = Equivalent to; > Imply.

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 (p&~p)=  p ;                    TFTF TFTF TFTF TFTF    (0.1)
 (p&~p)=~p ;                     FTFT FTFT FTFT FTFT    (0.2)

((p&~p)=  p)+ ((p&~p)=~p) ;      TTTT TTTT TTTT TTTT    (0.1+0.2)
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The complex number work-around is to abandon the connective Equivalent to as above and to use the Imply connective as below, where the consequent in the antecedent is the consequent of the literal as in Eqs. 2 and 3.

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 ( p>~p)>  p ;                   FTFT FTFT FTFT FTFT    (1)
 ( p>~p)>~p ;                    TTTT TTTT TTTT TTTT    (2)
 (~p> p)>  p ;                   TTTT TTTT TTTT TTTT    (3)
 (~p> p)>~p ;                    TFTF TFTF TFTF TFTF    (4)

(( p>~p)>  p)+ ((~p> p)>~p) ;    TTTT TTTT TTTT TTTT    (1+4)
(( p>~p)>~p)+ ((~p> p)>  p)  ;   TTTT TTTT TTTT TTTT    (2+3)
(( p>~p)>~p)& ((~p> p)>  p) ;    TTTT TTTT TTTT TTTT    (2&3)
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Eqs. (1+4)=(2+3)=(2&3).

This means Meth8/VŁ4 maps complex numbers (ℂ) using implication and not equivalence which serves to reason since complex numbers are imaginary and not real.