What is the name of the following structure?

$$\begin{array}{ccc} CH_3-CHBr-CH-CCI-C_2H_5\\ I & I\\ CH_3 & C_2H_5 \end{array}$$

Answer: This structure has a few mistakes. To show them, we will enumerate the main carbon chain:

First mistake is, that second atom of carbon has 5 bonds (with first and third carbon atoms, methyl group and with hydrogen and bromine atoms). And the second is, that fourth atom of carbon has only 3 bonds (with third and fifth carbon atoms, and with chlorine atom). Every carbon atom always should have 4 bonds. The correct structure will be:

According to the IUPAC nomenclature system, this compound is called 2-bromo-4-chloro-4-ethyl-3-methylhexane.