# Model for Assessing the Quality of a Technical System Based on Complex Indicators

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#### key words

quality improvement, components, indicators, comprehensive assessment

In the face of constantly changing market conditions and global problems, the shortage of electronic components is becoming an acute problem for electronics manufacturers. This is caused due to an increase in demand for electronics and a decrease in production capacity due to restrictions imposed because of the pandemic, as well as because of various trade and political conflicts between countries. Shortages of certain components can cause delays, result in lost profits and damage a company's reputation. This is especially critical for manufacturers who places quality and reliability of their products first. The need to make informed decisions regarding the use of original and non-authentic components is becoming one of the main challenges for manufacturers. In the article I have discussed the three main scenarios for the use of various types of radio-electronic components in one product, affecting processes, production costs and the quality of the finished product.

### References

- 1. Tur A.S., Frolova E.A., Tushavin V.A., *Metrological support of innovative technologies. Materials of V Int. forum*, ed. by V.V. Okrepilov, St. Petersburg, *SUAI*, 2023, pp. 258–259.
- 2. Tur A.S., Frolova E.A., Tushavin V.A., Modeling and situational quality management of complex systems. Coll. of reports of IV All-Russian sc. conf., St. Petersburg, SUAI, 2023, pp. 230–233.
- 3. Tur A.S., etc, Innovatsionnoe priborostroenie, 2023, vol. 2, no. 6, pp. 52-57.
- 4. Tushavin V.A., Voprosy radioelektroniki, 2015, no. 1(1), pp. 53-60.
- 5. Yakovleva E.S., etc, *Vestnik Magnitogorskogo gosudarstvennogo tekhnicheskogo universiteta im. G.I. Nosova*, 2010, no. 2(30), pp. 67–68.

#### НОВАЯ КНИГА

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