

INDIGENIZATION (LOCAL DEVELOPMENT) OF ELECTRONIC COMPONENTS IN STRATEGIC SECTOR TOWARDS ACHIEVING SELF-RELIANCE

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Abstract

In this current digital era, electronic products have become an indispensable part of our lives and its demand is increasing due to rapid advances in technology. At present, India's electronic industry has a minuscule share at the global electronic market. In present scenario, the growth of the country strongly depends on self-reliance on various electronic components especially semiconductor integrated circuits. In order to establish self-reliance, indigenization (developing locally) of electronic components is the need of the nation. Perhaps the process of indigenization tends to be highly dynamic which in turn depends greatly on various aspects apart from several policy initiatives, which are ever evolving. Also, indigenization of electronic components imposes lot of constrains due to lack of quality product ecosystem in the country. Limited market involving huge investments makes industries reluctant to venture in this arena. Sustaining indigenous vendors is the biggest challenge especially for aerospace applications. Nevertheless, the country has the potential to become a global hub for components manufacturing due to availability of cost-effective skilled manpower, fast improving infrastructure and the push through various initiatives by the policy makers, thereby evolving an "**AtmaNirbhar**" (self-reliant) Bharat to reality. This paper describes an overview of country's electronic industry, opportunities towards indigenization and challenges, suggestive methodologies for mitigation of bottlenecks through hand-holding domestic industries and thereby ensuring high reliability devices for aerospace and other strategic sector applications.

Keywords: Indigenization, Self-reliance, Electronic Components, Aerospace, Manufacturing