Microelectronic Authenticity and Security, Evaluation, and Research

Diganta Das University of Maryland <u>diganta@umd.edu</u>

DMEA was tasked under Section 843 of the 2019 NDAA with coordinating the establishment of a Pilot Program to test Machine-vision Technologies in the field of counterfeit microelectronic detection. Machine-vision technology includes systems which leverage side-channels and/or machine learning algorithms to assess the authenticity of a microelectronic device. DMEA has contracted CALCE at the University of Maryland to determine the technology readiness levels (TRL) of several such tools and to perform a double blind study for detection of differences between parts. We will review the scope of the blind study and the TRL assessment and what the industry can expect out of this study.