Dr. Timothy M. Hancock is a Principal Technical Fellow and Director of Microelectronics at Raytheon in the Advanced Technology Business where he is focused on the development and transition of GaN, phased-arrays, and 3DHI packaging. Prior to joining Raytheon, he was a program manager at the Defense Advanced Research Projects Agency (DARPA) within the Microsystems Technology Office (MTO) where his research interests included improving the dynamic range of RF hardware and increasing power efficiency in the face of increasing bandwidth requirements. He started programs in millimeter wave phased arrays, wideband tunable filters, signal cancellers and transceivers for electronic warfare applications as well as millimeter wave GaN maturation and next generation digital processor technology for RF array applications.

Prior to joining DARPA, he was an assistant leader of the RF Technology Group at MIT Lincoln Laboratory where he led technology & program development in microsystem technology that spanned material growth, device development and integrated circuit & system design for a wide variety of applications, including communication, radar, electronic support, remote sensing, and photonic/laser systems. In his first six years at MIT Lincoln Laboratory as a staff member, he developed low-power wireless devices and multiple-input, multiple-output (MIMO) communication systems, with his work focusing on integrated circuit design and wireless system design.

Dr. Hancock earned a BS degree in electrical engineering from the Rose-Hulman Institute of Technology and MS and PhD degrees in electrical engineering from the University of Michigan. He has published more than 30 papers, 2 patents and is a Senior Member of the IEEE where he has served on the technical program committee of the Radio Frequency Integrated Circuits (RFIC) Symposium for 10 years and the steering committee for the International Microwave Symposium (IMS) in 2009, 2019 and 2026 as the TPC Co-Chair and General Co-Chair. He was the 2010 inaugural recipient of the MIT Lincoln Laboratory Early Career Technical Achievement Award and in 2022, he received the DARPA Superior Public Service Medal and the DARPA “Results Matter” Award for technology transition.