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ISBN: 978-3-031-00901-3      paperback

ISBN: 978-3-031-02029-2      ebook

DOI 10.1007/978-3-031-02029-2

A Publication in the Springer series

*SYNTHESIS LECTURES ON EMERGING ENGINEERING TECHNOLOGIES*

Lecture #5

Series Editor: Kris Iniewski, *Redlen Technologies, Inc.*

Series ISSN

# The Digital Revolution

Bob Merritt

Convergent Semiconductors

*SYNTHESIS LECTURES ON EMERGING ENGINEERING  
TECHNOLOGIES #5*

## ABSTRACT

As technologists, we are constantly exploring and pushing the limits of our own disciplines, and we accept the notion that the efficiencies of new technologies are advancing at a very rapid rate. However, we rarely have time to contemplate the broader impact of these technologies as they impact and amplify adjacent technology disciplines.

This book therefore focuses on the potential impact of those technologies, but it is not intended as a technical manuscript. In this book, we consider our progress and current position on arbitrary popular concepts of future scenarios rather than the typical measurements of cycles per second or milliwatts. We compare our current human cultural situation to other past historic events as we anticipate the future social impact of rapidly accelerating technologies.

We also rely on measurements based on specific events highlighting the breadth of the impact of accelerating semiconductor technologies rather than the specific rate of advance of any particular semiconductor technology.

These measurements certainly lack the mathematic precision and repeatability to which technologists are accustomed, but the material that we are dealing with—the social objectives and future political structures of humanity—does not permit a high degree of mathematic accuracy.

Our conclusion draws from the concept of Singularity. It seems certain that at the rate at which our technologies are advancing, we will exceed the ability of our post-Industrial Revolution structures to absorb these new challenges, and we cannot accurately anticipate what those future social structures will resemble.

## KEYWORDS

Makimoto's Wave, Moore's Law, Singularity, artificial intelligence (AI), artificial emotions (AE), robotics, Industrial Revolution, digital revolution, brain-machine interface, uncanny valley, noosphere, braingate, DARPA

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# Acknowledgments

I would like to acknowledge the wonderful support and encouragement of Dr. Tsugio Makimoto, as well as the contributions and assistance of my business partner Mrs. Sherry Garber.

Bob Merritt  
January 2016