

Changing Dynamics in Semiconductor Industry



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14th September - D&R IPSoC 2017

Chip Industry Till Now Technology Driven Volume Game

Chip Industry Going Forward



Application Driven Variety Game





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Changing Dynamics

- Maturing Industry
 - Increased Outsourcing with increased project complexity
 - Just-in-Time methodology
 - Emergence of industry standards
 - Increased Competition & Consolidation
 - Highly Cost Sensitive Increase in reuse
 - Innovation in packaging/manufacturing

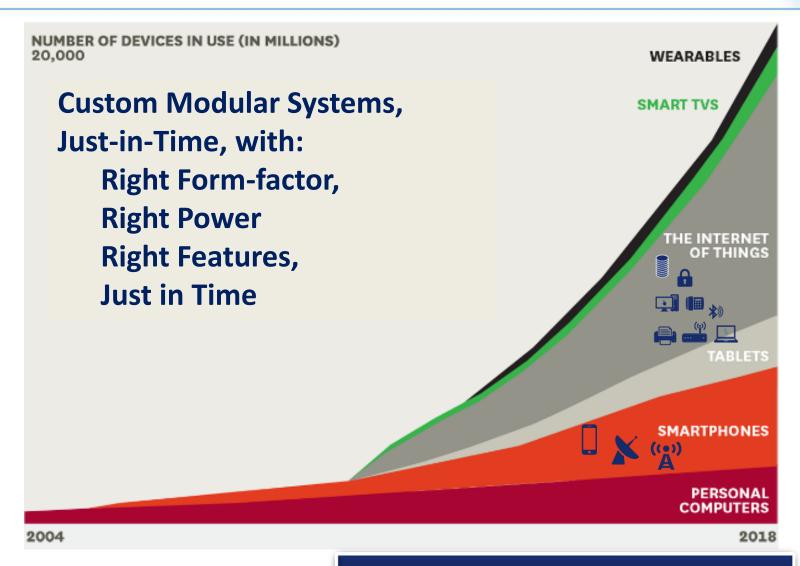
Trends

- Tightly Knit Partnership model
- Blurring lines between IP/Sub-Subsystem/Hardware/Software
- Geographic concentration of design & manufacturing
- Newer application areas deep learning, data center networking



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Variety Explosion

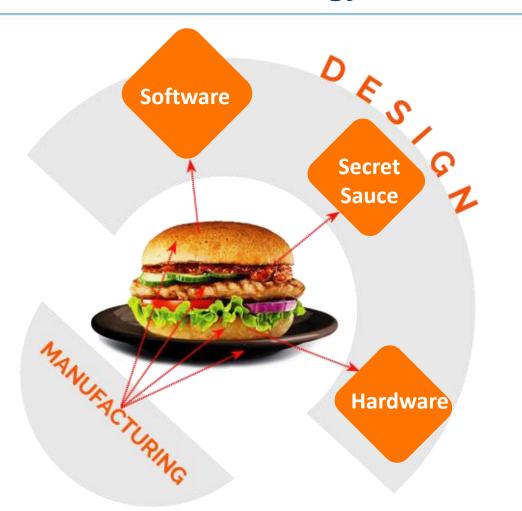


Source: https://hbr.org/2014/11/digital-ubiquity-how-connections-sensors-and-data-are-revolutionizing-business

EXPLOSION IN INTER-CONNECTED SYSTEMS



Boundaries in Technology?





Software & Hardware, Design & Manufacturing, Products & Services



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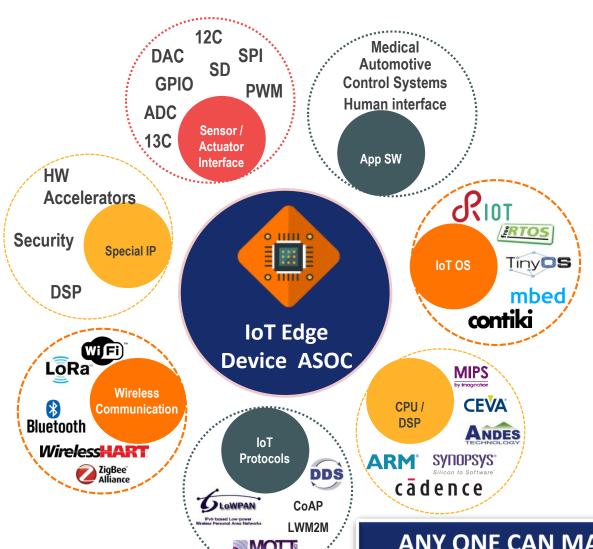
Boundaries in Technology?







ASOC Ecosystem



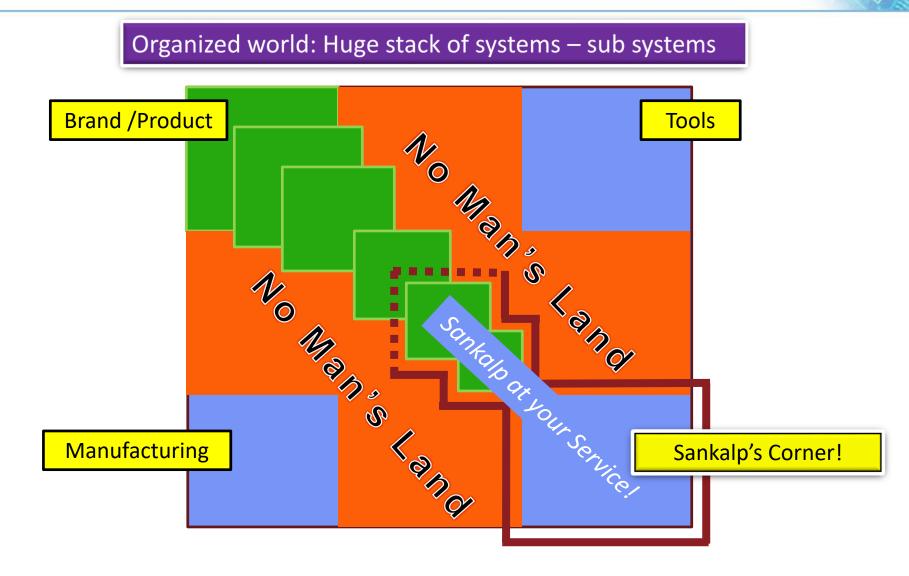
Application
Specific
System
(mostly)
on a Chip
(ASOC)

Multiple
Choices
for
Sub-systems
and system
Integrators

ANY ONE CAN MAKE AN ASOC



Semiconductor Landscape → Looking forward





ASoC Realization Services

